

## COMPILATION OF ISOTOPIC DATES FROM ANTARCTICA

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This compilation of radiometric data from Antarctica contains abstracted information from 400 publications, resulting in nearly 2500 separate entries. Each entry, or "date listing", gives basic information of the sample site as well as the dating method and the age(s) of the sample analysed. The date list differs from those routinely published in Radiocarbon because we included not only radiocarbon but all dating methods.

Fifty-six percent of the entries describe potassium-argon dates whereas 18 percent are derived from radiocarbon determinations. Rubidium-strontium accounts for 15 percent of the total and all other dating methods comprise the remaining 11 percent.

### Nature of contents

The date list consists of three parts:

1. A master list (LIST 1, which was completed through 1982 with partial coverage of 1983 and 1984) of published isotopic dates on rocks, minerals, sediments, organic remains and lake waters of Antarctica. The date listings are grouped into broad geographic areas (Figure 1; Table 1) and arranged systematically by latitude and longitude, as reported in the reference source(s) or as assigned by ourselves.
2. A separate list (LIST 2) of apparent radiocarbon "dates" on modern (known age) organisms, sea water, and lake water from the same geographic areas. This second list is arranged in the same order as the first list.
3. A bibliography of reference sources for the date lists.

### LIST 1:

Ages were determined by one of the following dating methods: potassium-argon ( $^{40}\text{K}$ - $^{40}\text{Ar}$ ;  $^{40}\text{Ar}$ - $^{39}\text{Ar}$  total gas release, incremental heating and isochron methods); radiocarbon ( $^{14}\text{C}$ ); fission track ( $^{238}\text{U}$ ); lead isotopic methods ( $^{207}\text{Pb}$ - $^{206}\text{Pb}$  common lead;  $^{207}\text{Pb}$ - $^{204}\text{Pb}$ ,  $^{206}\text{Pb}$ - $^{204}\text{Pb}$  isochron approach;  $\text{Pb}$ -alpha); uranium-lead ( $^{238}\text{U}$ - $^{206}\text{Pb}$  and  $^{235}\text{U}$ - $^{207}\text{Pb}$  and the associated  $^{207}\text{Pb}$ - $^{206}\text{Pb}$  independent dating, concordia and isochron methods); thorium-lead ( $^{232}\text{Th}$ - $^{208}\text{Pb}$ ); rubidium-strontium ( $^{87}\text{Rb}$ - $^{87}\text{Sr}$ ); samarium-neodymium ( $^{147}\text{Sm}$ - $^{143}\text{Nd}$ ) and uranium-thorium disequilibrium ( $^{234}\text{U}$ - $^{230}\text{Th}$ ). Additional details are given in Table 2. These methods were applied to a great variety of sample materials (Table 3).

Each mainland geographic area includes the smaller islands and ice shelves proximate to it, with the exception of islands and ice shelves which

define geographic areas in themselves. Ocean sites within approximately 250 kilometers of the Antarctic coast or its associated islands are also included in the compilation as distinct "geographic areas".

The specific form of each date listing depends on the information available in the reference source(s), and our approximations and inferences. For example, we have assigned approximate geographic coordinates to sample sites when this information is not reported in the reference source(s). Also, in the instances in which different references report divergent information on the same sample (e.g. different coordinates, locations, calculated dates, or sample material), we generally elected to list the information contained in the most recent publication source. We often include the alternative information presented by the other reference source(s) in parenthetical comments that follow the date listing.

In many instances, different publications report a date for what appears to be the same sample although no sample number is explicitly stated. Listing every unlabelled sample separately would greatly extend the length of the date lists. Our dilemma was to avoid a host of repetitions without assuming too much about the identity of the samples beyond the information reported in the reference source(s). We have tried to list each truly different sample only once. Our inferences are stated in the parenthetical comments at the end of each date listing (see format explanation below).

For references that are published in a language other than English, the included information depends on the extent of our translation efforts.

For these reasons and because even the data extracted directly and entirely from one reference source has often been greatly abbreviated to conform to the date list format, we feel that these listings should serve only as a guide to the original references. The reference source(s) should be consulted before referring to any of these listed dates, especially in the cases in which our inferences contributed to the date listing.

To limit the extent of the literature search, isotopic dating of ice and Antarctic meteorites is not included. The compilation does contain "unpublished data" cited in the literature, but dates reported only in unpublished masters and doctoral theses have not been included.

#### LIST 2:

The separate list of radiocarbon dates on modern (known age) Antarctic materials is pertinent to the question of the magnitude of the "correction factor" for radiocarbon reservoir deficiency. Such a factor must be applied to the conventional radiocarbon dates of Antarctic materials in the first list. Many radiocarbon analyses from outside the geographic extent of this compilation also apply to this problem, for example BR058, GAR58, HAY75, QMO83, OST80, STI66, and STU69 (for an explanation of the bibliographic code, see the next paragraph).

# **BIBLIOGRAPHY:**

The reference bibliography is arranged systematically by code. The first three letters of the code are from the primary author's last name, the two numbers reflect the year of publication, and the final letter (if any) distinguishes articles with otherwise identical codes. When a reference was originally published in a language other than English and an English translation was published in a later year, the earlier date is used in the reference code.

The bibliography generally lists only the references used in the compilation. However, other references with identical information or "preliminary" information occasionally are listed. References that have been used in place of some or all of the information presented in another reference are denoted in parenthetical comments after the listing of the latter reference in the bibliography.

## Explanation of date list format

Each date listing has the following general form:

|            |            |       |                                               |                       |       |          |   |    |
|------------|------------|-------|-----------------------------------------------|-----------------------|-------|----------|---|----|
| 1          | 2          | 4     | 5                                             | 6                     | 7     | 8        | 9 | 11 |
| 70°50S     | 167°50E RM | 363±2 | MY(TS 2)                                      | KAL7                  | BT    | Granite; |   |    |
| Cape Moore |            |       | Yule Batholith,                               | Admiralty Intrusives. | KRE81 | TES81    |   |    |
|            |            |       | (ages of diff. sieve fractions also in KRE81) |                       |       |          |   |    |
| 3          |            | 10    | 12                                            |                       |       |          |   |    |

An asterisk following any information in the date list indicates that this information is further explained in the parenthetical comments (12) at the end of the date listing. Each numbered section of the date listing is explained below:

1. SAMPLE COORDINATES are listed in degrees and minutes unless otherwise noted. When more than one sample location is involved in an age determination (e.g. Rb-Sr whole-rock isochrons), either a range of coordinates is listed that encompasses all the sample sites or the average coordinates for the sample sites are listed. Samples with ranges of coordinates are usually entered into the date list sequence according to their average coordinates.

2. THE SOURCE FOR THE LISTED COORDINATES is one of the following codes:

AR The reported coordinates are approximate.

G We have approximated the coordinates for the reported sample location, using the 1981 gazetteer of "Geographic Names of the Antarctic" (see ALB81 in the bibliography).

- M We have approximated the coordinates for the reported sample location, using available U.S. Geological Survey maps, American Geographical Union Folio Series maps, or National Institute of Polar Research Antarctic Series maps.
- R The coordinates are listed as specifically reported.
- RM We have approximated the coordinates using the map presented, or referred to, by the reference source(s). U.S. Geological Survey maps, American Geographical Union Folio Series maps, or National Institute of Polar Research Antarctic Series maps may have helped to assign more precise coordinates to a sample site.

3. THE SAMPLE LOCATION is listed as specifically reported, although often substantially abbreviated. Listed information is compressed as much as possible (e.g., "SW, Lake Henderson" means "southwest of Lake Henderson"). A list of abbreviations used for location names and other words in the date lists is presented in Table 4.

Locations which we have inferred are listed within parentheses. Names of locations are listed in quotations if they are not assigned specific coordinates by the reference source(s) and are not listed in the gazetteer of "Geographic Names of the Antarctic" (ALB81).

An "RM" following the sample location indicates that the sample is shown on a map (or photograph) in the reference source. We use this code when we have inferred the name of a sample location from a map (or photograph) in the reference source, or when the map (or photograph) shows a more precise location for the sample than denoted by the listed sample coordinates or sample location.

4. THE SAMPLE AGE is listed as stated in the reference source(s). Multiple dates may be listed, as explained for specific dating methods listed in Table 2.

5. THE SCALE OF THE DATE AND OTHER TERMS used in conjunction with the date are assigned one of the following codes:

BP before present (AD 1950 for radiocarbon)

c. circa

$\delta^{14}\text{C}$   
 $\Delta^{14}\text{C}$   
 $\text{d}^{14}\text{C}$

} reported  $^{14}\text{C}$  activity (symbols are defined in STU77A)

GT greater than

KY kiloyears ( $10^3$  yr)

LT less than

MY megayears ( $10^6$  yr)



6. THE SAMPLE LAB AND/OR FIELD NUMBER is listed as stated in the reference source(s). When a publication contains two labels for one sample (such as a "lab" and a "field number"), both numbers are listed and set apart by a semicolon. If the listed date is based on several samples, the numbers of all samples are listed and set apart by commas. "(?)" indicates that no sample number is reported.

For Rb-Sr isochrons, U-Pb isochrons, and U-Pb concordia plots based on more than a few samples, no number designation is usually listed. However, if the isochron or chord is based on samples with sequential numbers, the number of the first sample may be listed in quotation marks.

7. THE REPORTED DATING METHOD, DECAY CONSTANTS ( $\lambda$ ), HALF LIVES ( $T_{1/2}$ ), AND OTHER CONSTANTS are listed as one of the codes presented in Table 2.

8. THE DATED SAMPLE MATERIAL is listed as a two-letter code (Table 3).

9. THE SAMPLE DESCRIPTION is abridged from information presented in one reference source or from the combined information of more than one reference source.

10. STRATIGRAPHIC/GEOLOGIC INFORMATION is listed as stated in the reference source(s). Stratigraphy inferred by the reference source(s) from the age-determination itself is listed in parentheses. A dash indicates that no stratigraphic or additional geologic information is reported in the reference source(s). This section is not included in a listing when inappropriate.

11. REFERENCE CODE(S) are listed for all references from which information was extracted. The earliest reference to report on the sample and any recent reference that contains a current interpretation of the sample date will also usually be listed.

12. PARENTHETICAL COMMENTS at the end of a date listing may state any discrepancies in the reported information on the sample. We have also used this section to specify when a date is from "unpublished data" or from "personal communication," as stated in the reference source(s).

The abbreviation "infer=" signifies that we have inferred that two or more pieces of non-identical information in the literature (relating to sample date, material, description, dating method, etc.) refer to the same sample and, therefore, are listed as one entry in the compilation. Conversely, the phrase "may be equal to" signifies that, although we suspect that samples presented by different reference sources may actually be the same, we have listed the samples separately in the compilation.

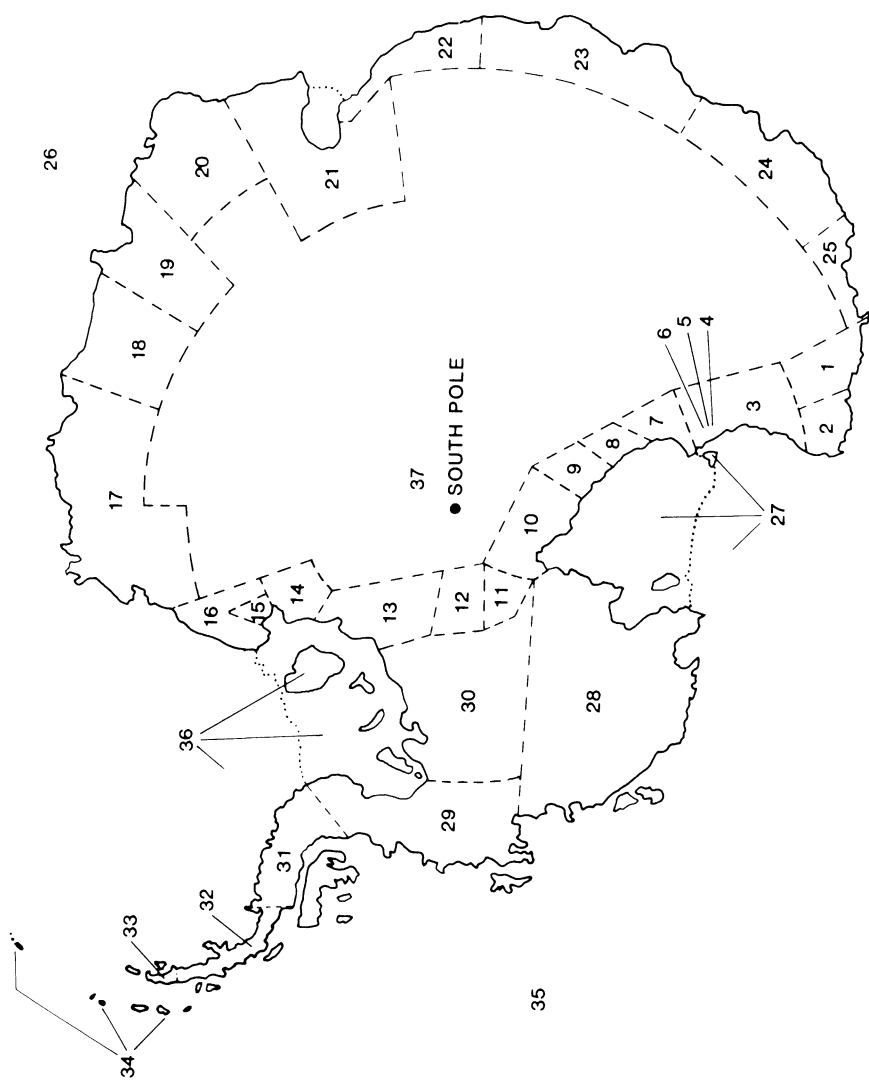


Fig 1. "Geographic Areas" of the Antarctic Date Lists.

TABLE 1. LIST OF GEOGRAPHIC AREAS

1. Victoria Land, north of 73°00S, west of Rennick Glacier
2. Victoria Land, north of 73°00S, east of Rennick Glacier
3. Victoria Land, south of 73°00S to 78°00S, excluding some dry valley areas (see geographic areas 4-6)
4. Victoria Valley and associated dry valleys north of Olympus Range in Victoria Land
5. Wright Valley and Bull Pass, Victoria Land
6. Taylor Valley, Victoria Land, from Taylor Glacier to Gneiss Point
7. Transantarctic Mountain area, from 78°00S to Byrd Glacier
8. Transantarctic Mountain area, from Byrd Glacier to Nimrod Glacier
9. Transantarctic Mountain area, from Nimrod Glacier to Beardmore Glacier
10. Queen Maud Mountain area
11. Horlick Mountain area
12. Thiel Mountain area
13. Pensacola Mountain area
14. Shackleton Range area
15. Theron Mountain area
16. Coats Land, excluding Theron Mountains
17. Queen Maud Land, from Stancomb-Wills Glacier through New Schwabenland
18. Queen Maud Land, vicinity of Sør Rondane and Belgica Mountains
19. Queen Maud Land, east of the Belgica Mountains
20. Enderby Land
21. Mac. Robertson Land -- Lambert Glacier -- American Highland area
22. Ingrid Christensen Coast to Cape Filchner, Wilhelm II Coast
23. Queen Mary Coast and Wilkes Land west of 120°00E
24. Wilkes Land east of 120°00E
25. George V Coast
26. Ocean sites within c. 250 km. of the East Antarctic coast, excluding Ross Sea
27. Ross Ice Shelf, McMurdo Sound, and Ross Sea; Black, White, Ross, and Franklin Islands
28. Marie Byrd Land
29. Ellsworth Land, north of 77°00S
30. Ellsworth Land, south of 77°00S, including Whitmore Mountain area
31. Palmer Land
32. Graham Land, excluding Trinity Peninsula
33. Trinity Peninsula
34. South Shetland Islands and South Orkney Islands
35. Ocean sites within c. 250 km. of the West Antarctic coast, excluding Weddell Sea
36. Filchner Ice Shelf, Ronne Ice Shelf, Weddell Sea, and associated islands
37. Central East Antarctica

TABLE 2. CODES FOR REPORTED DATING METHODS, DECAY CONSTANTS ( $\lambda$ ), HALF-LIVES ( $T_{1/2}$ ), AND OTHER CONSTANTS

| CODES:          | DATING METHODS AND CONSTANTS:                                                                                                                                                                                                                                          |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | <u><math>^{40}\text{Ar}</math>-<math>^{39}\text{Ar}</math> method:</u>                                                                                                                                                                                                 |
| A/A             | No additional information on technique or values of constants is reported.                                                                                                                                                                                             |
| AAF             | Total fusion age. Values of constants are not reported.                                                                                                                                                                                                                |
| AAI             | Isochron age. Values of constants are not reported.                                                                                                                                                                                                                    |
| AAP             | Plateau or incremental age. Values of constants are not reported.                                                                                                                                                                                                      |
| AAT             | Total gas release age. Values of constants are not reported.                                                                                                                                                                                                           |
| AAF1,AAI1, etc. | "1" after the dating method indicates that the constants have values as presented in Steiger and Jäger, 1977 (STE77 in the bibliography) and as listed below for "KA17".                                                                                               |
| AAF2,AAI2, etc. | "2" after the dating method indicates that the constants have values as presented in Steiger and Jäger, 1977 (STE77 in the bibliography) and as listed below for "KA17". The technique of Dalrymple and Lanphere, 1971 (DAL71 in the bibliography) is explicitly used. |
| AAF3,AAI3, etc. | "3" after the dating method indicates that the constants have values as listed below for "KA12". The technique of Dalrymple and Lanphere, 1971 (DAL71 in the bibliography) is explicitly used.                                                                         |
| K/A,KA1, etc.   | Please note that codes are primarily listed in alphabetical order. Additional potassium-argon entries are listed on the following pages.                                                                                                                               |
|                 | <u><math>^{14}\text{C}</math> method:</u>                                                                                                                                                                                                                              |
| 14C             | Value of $^{14}\text{C}$ half-life is not reported.                                                                                                                                                                                                                    |
| 14C1            | $T_{1/2} = 5568$ yr                                                                                                                                                                                                                                                    |
| 14C2            | $T_{1/2} = 5570$ yr                                                                                                                                                                                                                                                    |
| 14C3            | $T_{1/2} = 5730$ yr                                                                                                                                                                                                                                                    |

(TABLE 2 CONTINUED)

14CC1, 14CC2, etc. Additional "C" indicates that a reservoir correction has been applied to the reported sample age. The size of the correction is stated in the parenthetical comments at the end of the date listing.

Fission track method:

FTK Values of constants are not reported.

FT1 Constants have values as presented in Steiger and Jäger, 1977 (STE77 in the bibliography) and as listed below for "UP5, UP\_C5, UP\_I5". Value of  $\lambda_f(^{238}\text{U})$  is not reported.

FT2 Constants are the same as for "FT1" above. In addition:  $\lambda_f(^{238}\text{U}) = 6.85 \times 10^{-17} \text{ yr}^{-1}$ .

$^{40}\text{K}$ - $^{40}\text{Ar}$  method:

Multiple dates may be listed if replicate analyses were done on the same sample.

K/A No additional information on values of constants is reported.

KA1  $\lambda_k = 6.02 \times 10^{-11} \text{ yr}^{-1}$

KA2  $\lambda_e(^{40}\text{K}) = 5.85 \times 10^{-11} \text{ yr}^{-1}$

KA3  $T_{1/2} = 1.885 \times 10^9 \text{ yr}$   
 $^{40}\text{K}/\text{K} = 1.19 \times 10^{-4}$

KA4  $\lambda_\beta = 4.7 \times 10^{-10} \text{ yr}^{-1}$   
 $\lambda_e = 0.585 \times 10^{-10} \text{ yr}^{-1}$   
 $^{40}\text{K}/\text{K} = 1.22 \times 10^{-4}$

KA5  $\lambda_\beta = 4.72 \times 10^{-10} \text{ yr}^{-1}$   
 $\lambda_e = 0.550 \times 10^{-10} \text{ yr}^{-1}$   
 $^{40}\text{K}/\text{K} = 1.22 \times 10^{-4}$

KA6  $\lambda_\beta = 4.72 \times 10^{-10} \text{ yr}^{-1}$   
 $\lambda_e = 0.557 \times 10^{-10} \text{ yr}^{-1}$

KA7  $\lambda_\beta = 4.72 \times 10^{-10} \text{ yr}^{-1}$   
 $\lambda_e = 0.58 \times 10^{-10} \text{ yr}^{-1}$   
 $^{40}\text{K}/\text{K} = 1.19 \times 10^{-4}$

KA8  $\lambda_\beta = 4.72 \times 10^{-10} \text{ yr}^{-1}$   
 $\lambda_e = 0.584 \times 10^{-10} \text{ yr}^{-1}$

(TABLE 2 CONTINUED)

|                         |                                                                                                                                                                                                                                         |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| KA9                     | $\lambda_{\beta} = 4.72 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda_e = 0.584 \times 10^{-10} \text{ yr}^{-1}$<br>$^{40}\text{K}/\text{K} = 1.19 \times 10^{-4}$                                                                       |
| KA10                    | $\lambda_{\beta} = 4.72 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda_e = 0.584 \times 10^{-10} \text{ yr}^{-1}$<br>$^{40}\text{K}/\text{K} = 1.22 \times 10^{-4}$                                                                       |
| KA11                    | $\lambda_{\beta} = 4.72 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda_e = 0.585 \times 10^{-10} \text{ yr}^{-1}$                                                                                                                         |
| KA12                    | $\lambda_{\beta} = 4.72 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda_e = 0.585 \times 10^{-10} \text{ yr}^{-1}$<br>$^{40}\text{K}/\text{K} = 1.19 \times 10^{-4}$                                                                       |
| KA13                    | $\lambda_{\beta} = 4.72 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda_e = 0.585 \times 10^{-10} \text{ yr}^{-1}$<br>$^{40}\text{K}/\text{K} = 1.22 \times 10^{-4}$                                                                       |
| KA14                    | $\lambda_{\beta} = 4.76 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda_e = 0.585 \times 10^{-10} \text{ yr}^{-1}$                                                                                                                         |
| KA15                    | $\lambda_{\beta} = 4.76 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda_e = 0.598 \times 10^{-10} \text{ yr}^{-1}$<br>$^{40}\text{K}/\text{K} = 1.21 \times 10^{-4}$                                                                       |
| KA16                    | $\lambda_{\beta} = 4.80 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda_e = 0.585 \times 10^{-10} \text{ yr}^{-1}$                                                                                                                         |
| KA17                    | $\lambda_{\beta} = 4.962 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda_e = 0.581 \times 10^{-10} \text{ yr}^{-1}$<br>$^{40}\text{K}/\text{K} = 1.167 \times 10^{-4}$<br>atomic ratio $^{40}\text{Ar}/^{36}\text{Ar}$ atmospheric = 295.5 |
| <u>Pb-alpha method:</u> |                                                                                                                                                                                                                                         |
| P/a                     | No additional information on values of constants is reported.                                                                                                                                                                           |
| Pal                     | c (a constant dependent on the sample Th/U ratio) = 2485.                                                                                                                                                                               |
| <u>Pb-Pb method:</u>    |                                                                                                                                                                                                                                         |
| P/P                     | $^{207}\text{Pb}/^{206}\text{Pb}$ or "Pb-Pb" date. Values of constants are not reported.                                                                                                                                                |
| PP1, PP2, etc.          | $^{207}\text{Pb}/^{206}\text{Pb}$ date. The number following "PP" indicates that constants have values as listed below for the U-Pb code with the same number.                                                                          |

(TABLE 2 CONTINUED)

|                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| PP_I                           | $^{207}\text{Pb}/^{204}\text{Pb} - ^{206}\text{Pb}/^{204}\text{Pb}$ isochron age. The "blank space" contains the number of points that define the isochron (e.g. "PP5I" indicates that the listed date is based on a 5-point isochron).                                                                                                                                                                                                            |
| PP_I1, PP_I2, etc.             | Same as for "PP_I". In addition, the final number indicates that the constants have values as listed below for the U-Pb codes with the same number.                                                                                                                                                                                                                                                                                                |
| PPM                            | $^{207}\text{Pb}/^{206}\text{Pb}$ common-lead "model" age that assumes a single or multistage history. If four dates are listed, they correspond to $^{206}\text{Pb}/^{204}\text{Pb}$ , $^{207}\text{Pb}/^{204}\text{Pb}$ , $^{208}\text{Pb}/^{204}\text{Pb}$ , and $^{207}\text{Pb}/^{206}\text{Pb}$ common-lead "model" ages, respectively.                                                                                                      |
| PPM1, PPM2, etc.               | Same as for PPM. In addition, the final number indicates that the constants have values as listed below for the U-Pb code with the same number.<br><br><u><math>^{87}\text{Rb}-^{87}\text{Sr}</math> method:</u>                                                                                                                                                                                                                                   |
| R/S                            | No additional information on technique or value of decay constant is reported.                                                                                                                                                                                                                                                                                                                                                                     |
| RSM                            | "Model" age determination that assumes an initial $^{87}\text{Sr}/^{86}\text{Sr}$ ratio. The value of the decay constant is not reported.                                                                                                                                                                                                                                                                                                          |
| RSM1, RSM2, etc.               | "Model" age determination that assumes an initial $^{87}\text{Sr}/^{86}\text{Sr}$ ratio. The final number indicates that the decay constant is assigned one of the following values in the reference:<br><br>RSM1: $\lambda = 1.386 \times 10^{-11} \text{ yr}^{-1}$<br>RSM2: $\lambda = 1.39 \times 10^{-11} \text{ yr}^{-1}$<br>RSM3: $\lambda = 1.42 \times 10^{-11} \text{ yr}^{-1}$<br>RSM4: $\lambda = 1.47 \times 10^{-11} \text{ yr}^{-1}$ |
| RSM1/_., etc.<br>RSM2/_., etc. | Same as "RSM1, RSM2, etc." above. The "blank spaces" contain the initial $^{87}\text{Sr}/^{86}\text{Sr}$ ratio assumed in the reference (e.g. "RSM1/0.7040").                                                                                                                                                                                                                                                                                      |
| RSI                            | Isochron age. The value of the decay constant is not reported.                                                                                                                                                                                                                                                                                                                                                                                     |
| RSI1, RSI2, etc.               | Isochron age. The final number indicates that the decay constant has a value as listed above under "RSM1, RSM2, etc."                                                                                                                                                                                                                                                                                                                              |

(TABLE 2 CONTINUED)

|                             |                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| RS_I1/_.,<br>RS_I2/_., etc. | Same as "RSI1,RSI2,etc." above. The "blank space" following "RS" contains the number of points that define the isochron; the "blank spaces" following the slash contain the initial $^{87}\text{Sr}/^{86}\text{Sr}$ ratio calculated in the reference (e.g. "RS14I1/0.7030±0.0002"). An initial ratio that we have approximated from a graph in the reference source is listed in parentheses. |
| RSR,RSR1,<br>RS_R1/_., etc. | "Reference isochron" date. The code format is analogous to the format above for Rb-Sr isochrons. The initial $^{87}\text{Sr}/^{86}\text{Sr}$ ratio explicitly assumed in the reference follows the slash.<br><br><u><math>^{147}\text{Sm}</math>-<math>^{143}\text{Nd}</math> method:</u>                                                                                                      |
| S/N                         | No additional information on technique or value of decay constant is reported.                                                                                                                                                                                                                                                                                                                 |
| SNM                         | Reported as a "model" age. The value of the decay constant is not reported.                                                                                                                                                                                                                                                                                                                    |
| SNMC                        | $T_{\text{CHUR}}$ "model" age. The value of the decay constant is not reported.                                                                                                                                                                                                                                                                                                                |
| SNMD                        | $T_{\text{M}}$ "model" age. The value of the decay constant is not reported.                                                                                                                                                                                                                                                                                                                   |
| SNM1,SNMC1,SNMD1            | "Model" age as denoted above. The final "1" indicates that: $\lambda(^{147}\text{Sm}) = 6.54 \times 10^{-12} \text{ yr}^{-1}$ .                                                                                                                                                                                                                                                                |
| SNI/_.,<br>SNI1/_.          | Isochron age. A "1" following "SNI" indicates that: $\lambda(^{147}\text{Sm}) = 6.54 \times 10^{-12} \text{ yr}^{-1}$ . The "blank spaces" following the slash contain the calculated initial $^{143}\text{Nd}/^{144}\text{Nd}$ ratio, if reported.<br><br><u>U-Pb method:</u>                                                                                                                 |
| U/P                         | Three ages are listed corresponding to $^{206}\text{Pb}/^{238}\text{U}$ , $^{207}\text{Pb}/^{235}\text{U}$ , and $^{207}\text{Pb}/^{206}\text{Pb}$ isotopic determinations respectively. No additional information on values of constants is reported. ("UP1", "UP2", etc. listed below refer to this technique.)                                                                              |
| UPC,UP_C                    | If two ages are listed, they correspond to the lower and upper intercepts, respectively, of a chord on a concordia diagram. The "blank space" contains the number of points that define the chord. One age listed corresponds to the upper intercept of a chord whose lower intercept is zero, unless one age is listed with the code "UP0C". This code                                        |



(TABLE 2 CONTINUED)

|                 |                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                 | indicates that the listed date is a concordant or nearly concordant determination irregardless of the lower intercept.                                                                                                                                                                                                                                                                         |
| UPI,UP_I        | Three isochron ages are listed corresponding to the sequence listed for "U/P" above; the "blank space" contains the number of points that define the isochrons.                                                                                                                                                                                                                                |
| UP1,UP_C1,UP_I1 | Dating technique, respectively, as denoted above. The final "1" indicates that:<br>$\lambda(^{238}\text{U}) = 1.537 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda(^{235}\text{U}) = 9.722 \times 10^{-10} \text{ yr}^{-1}$<br>$^{238}\text{U}/^{235}\text{U} = 137.7$                                                                                                                           |
| UP2,UP_C2,UP_I2 | Dating technique, respectively, as denoted above. The final "2" indicates that:<br>$\lambda(^{238}\text{U}) = 1.537 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda(^{235}\text{U}) = 9.72 \times 10^{-10} \text{ yr}^{-1}$<br>$^{238}\text{U}/^{235}\text{U} = 137.8$                                                                                                                            |
| UP3,UP_C3,UP_I3 | Dating technique, respectively, as denoted above. The final "3" indicates that:<br>$\lambda(^{238}\text{U}) = 1.54 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda(^{235}\text{U}) = 9.72 \times 10^{-10} \text{ yr}^{-1}$                                                                                                                                                                        |
| UP4,UP_C4,UP_I4 | Dating technique, respectively, as denoted above. The final "4" indicates that:<br>$\lambda(^{238}\text{U}) = 1.54 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda(^{235}\text{U}) = 9.72 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda(^{232}\text{Th}) = 4.99 \times 10^{-11} \text{ yr}^{-1}$<br>$^{238}\text{U}/^{235}\text{U} = 137.8$                                                        |
| UP5,UP_C5,UP_I5 | Dating technique, respectively, as denoted above. The final "5" indicates that:<br>$\lambda(^{238}\text{U}) = 1.55125 \times 10^{-10} \text{ yr}^{-1}$ or<br>$1.5513 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda(^{235}\text{U}) = 9.8485 \times 10^{-10} \text{ yr}^{-1}$<br>$^{238}\text{U}/^{235}\text{U} = 137.88$                                                                        |
| UP6,UP_C6,UP_I6 | Dating technique, respectively, as denoted above. The final "6" indicates that:<br>$\lambda(^{238}\text{U}) = 1.55125 \times 10^{-10} \text{ yr}^{-1}$ or<br>$1.5513 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda(^{235}\text{U}) = 9.8485 \times 10^{-10} \text{ yr}^{-1}$<br>$\lambda(^{232}\text{Th}) = 4.9475 \times 10^{-11} \text{ yr}^{-1}$<br>$^{238}\text{U}/^{235}\text{U} = 137.88$ |

(TABLE 2 CONTINUED)

|                                              |                                                                                                                                                                                                                                                                                            |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                              | <u><math>^{234}\text{U}</math>-<math>^{230}\text{Th}</math> method:</u>                                                                                                                                                                                                                    |
| U/T                                          | No additional information on values of constants is reported.                                                                                                                                                                                                                              |
| UT1                                          | $^{230}\text{Th}$ half-life = 75,000 yr                                                                                                                                                                                                                                                    |
|                                              | <u>U,Th-Pb method:</u>                                                                                                                                                                                                                                                                     |
| UTP                                          | Four ages are listed corresponding to $^{206}\text{Pb}/^{238}\text{U}$ , $^{207}\text{Pb}/^{235}\text{U}$ , $^{208}\text{Pb}/^{232}\text{Th}$ , and $^{207}\text{Pb}/^{206}\text{Pb}$ isotopic determinations, respectively. No additional information on values of constants is reported. |
| UTPC,UTP_C                                   | Analogous to "UPC,UP_C" listed above.                                                                                                                                                                                                                                                      |
| UTPI,UTP_I                                   | Analogous to "UPI,UP_I" listed above.                                                                                                                                                                                                                                                      |
| UTP1,UTP_C1,<br>UTP_I1,UTP2,<br>UTP_C2, etc. | Dating technique as denoted above. The final number indicates that the constants have values as listed above for the U-Pb code with the same number.                                                                                                                                       |

TABLE 3. CODES FOR SAMPLE MATERIALS

|    |                                   |    |                                             |
|----|-----------------------------------|----|---------------------------------------------|
| AD | Andesine                          | LW | Lake water                                  |
| AL | Algae                             | MA | Marble                                      |
| AM | Amphibole                         | MC | Muscovite                                   |
| AN | Anorthoclase                      | MG | Magnophorite (amphibole)                    |
| AP | Apatite                           | MI | Mica                                        |
| AR | Aragonite                         | ML | Morainic loam                               |
| AT | Allanite                          | MN | Microlite                                   |
| AW | Acidified sea water               | MO | Moss                                        |
| BH | Biotite and hornblende            | MS | Minerals or mineral separates               |
| BN | Bone                              | MU | Muscle                                      |
| BT | Biotite                           | MZ | Monzonite                                   |
| CA | Carbonate or "carbonate material" | OC | Organic carbon                              |
| CD | Carbon dioxide                    | OM | Organic material                            |
| CH | Chloride                          | OR | Orthoclase                                  |
| CL | Chlorite                          | PB | Lead                                        |
| CO | Collagen                          | PE | Peat                                        |
| CS | Carbonate sediments               | PG | Phlogophite                                 |
| CV | Chevkinite                        | PH | Pyroxene and hornblende                     |
| DS | Diatomaceous ocean sediments      | PL | Plagioclase                                 |
| EP | Epidote                           | PO | Polycrase                                   |
| ES | Elephant seal remains             | PQ | Penguin remains                             |
| EV | Evaporites                        | PR | Perrierite                                  |
| EX | Euxenite                          | PY | Pyroxene                                    |
| FD | Feldspar                          | QZ | Quartz                                      |
| FG | Fluvial-glacial material          | RI | Riebeckite (amphibole)                      |
| FI | Fish                              | SC | Soil carbonate                              |
| FL | Flesh                             | SE | Seal remains                                |
| FO | Foraminiferal ooze                | SH | Shells                                      |
| FT | Foram tests                       | SM | Shell material                              |
| FU | Fuchsite                          | SN | Sanidine                                    |
| GA | Galena                            | SO | Soil                                        |
| GB | Green and blue-green algae        | SP | Sphene                                      |
| GO | Guano                             | SW | Seaweed                                     |
| GP | Gypsum                            | WB | Whole body material                         |
| GS | Glass                             | WD | Wood                                        |
| GU | Glaucofane concentrate            | WF | Whole rock and feldspar                     |
| HB | Hornblende                        | WK | Whole rock and potassium feldspar           |
| IC | Dissolved inorganic carbon        | WM | Whole rock and mineral separates            |
| KF | Potassium feldspar                | WR | Whole rock                                  |
| LE | Leucite                           | YX | "Yttrobritholite (?), xenotime (?), others" |
| LI | Lichen                            | ZR | Zircon                                      |

TABLE 4.  
ABBREVIATIONS IN THE DATE LISTS\*

|         |                                                   |             |                        |
|---------|---------------------------------------------------|-------------|------------------------|
| adj     | adjusted                                          | mor         | moraine                |
| alt     | altitude                                          | N           | north or northern      |
| approx  | approximated                                      | nr          | near                   |
| a.s.l.  | above sea level                                   | Nun or nun  | Nunatak or nunataks    |
| assoc   | associated                                        | Pen         | Peninsula              |
| ba      | basin                                             | pers. comm. | personal communication |
| btwn    | between                                           | Pks         | Peaks                  |
| c       | circa                                             | poss        | possibly               |
| calc    | calculated                                        | Ps          | Pass                   |
| cen     | central                                           | ques        | questionable           |
| cgl     | conglomerate                                      | Ra          | Range                  |
| contemp | contemporaneous                                   | Rdg         | Ridge                  |
| coords  | coordinates                                       | recalc      | recalculated           |
| corr    | corrected or<br>correction                        | res         | reservoir              |
| d       | depth                                             | rev         | revised                |
| diff    | different                                         | Rk          | Rock                   |
| drain.  | drainage                                          | RM          | reference map          |
| dscrip  | description                                       | rpt         | report                 |
| E       | east or eastern                                   | rptd        | reported               |
| est     | estimated                                         | S           | south or southern      |
| eval    | evaluation                                        | samp        | sample(s)              |
| fac     | facies                                            | sec         | section                |
| ft      | feet                                              | sed         | sediment               |
| infer=  | "we infer this<br>listing is<br>equivalent to..." | Sht         | Sheet                  |
| info    | information                                       | SM          | sample material        |
| IR      | initial $^{87}\text{Sr}/^{86}\text{Sr}$<br>ratio  | ss          | sandstone              |
| L       | Lake                                              | sta         | station                |
| lac     | lacustrine                                        | std         | standard               |
| LI      | lower intercept                                   | Strm        | Stream                 |
| lm      | limestone                                         | UI          | upper intercept        |
| lo      | lower                                             | unpubl      | unpublished            |
| loc     | location                                          | up          | upper                  |
| m       | meters                                            | V or Val    | Valley                 |
| Mas     | Massif                                            | vic         | vicinity               |
| mat.    | sample material                                   | volc        | volcanic               |
| meta    | metamorphic                                       | W           | west or western        |
|         |                                                   | w/          | with                   |
|         |                                                   | w/o         | without                |
|         |                                                   | wt          | weight                 |

\*Additional abbreviations and codes are listed in Tables 2 and 3, and in the text under "The source for the listed coordinates" and "The scale of the date and other terms".

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LIST 1

|                                       |                                                                                                                                                                                                          |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GEOGRAPHIC AREA 1:                    | VICTORIA LAND, NORTH OF 73°00S, WEST OF RENNICK GLACIER<br>(samples from west to east by coordinates)                                                                                                    |
| 69°13S 156°00E AR<br>"Mt. Berg"       | 516 MY(K.1241 <sup>zh</sup> )KA17 WR Phyllite;<br>Robertson Bay Group. RAV64 STA59 TES81<br>(info. in RAV64: 530 MY, KA6; info. in PIC63:<br>512 MY, KA16; infer loc.=Berg Mountains)                    |
| 69°13S 156°00E AR<br>"Mt. Berg"       | 468 MY(S.18 <sup>b</sup> )KA17 WR Quartz-albite vein in phyllite;<br>Robertson Bay Group. RAV64 STA59 TES81<br>(info. in RAV64: 480 MY, KA6; info. in PIC63:<br>461 MY, KA16; infer loc.=Berg Mountains) |
| 69°05S 157°30E R<br>Babushkin Island  | 463 MY(K.1244 <sup>k</sup> )KA16 WR Muscovite granite vein;<br>Granite Harbour Intrusives. GAI69 PIC63 RAV64 STU70<br>(info. in RAV64: 480 MY, KA6, loc.=Wilson Hills)                                   |
| 69°05S 157°30E R<br>Babushkin Island  | 434 MY(K.1244 <sup>k</sup> )KA16 WR Granite gneiss;<br>Wilson Group. GAI69 PIC63 RAV64 STU70<br>(info. in RAV64: 450 MY, KA6, descrpt.=migmatized<br>two-mica gneiss, loc.=Wilson Hills)                 |
| 69°08S 157°35E R<br>Archer Point      | 458 MY(K.1244 <sup>a</sup> )KA16 WR Biotite gneiss;<br>Wilson Group. GAI69 PIC63 RAV64 STU70<br>(info. in RAV64: 475 MY, KA3, descrpt.=migmatized<br>two-mica gneiss, loc.=Wilson Hills)                 |
| 69°16S 158°45E R<br>Aviation Islands  | 420 MY(GA 385)KA10 BT Granitic vein;<br>Granite Harbour Intrusives. GAI69 PIC63 RAV64 STU70<br>(info. in WEB64: 69°06S 158°36E;<br>info. in GAI69: mat.=WR)                                              |
| 69°34S 158°56E R<br>Parkinson Peak    | 450 MY(GA 384)KA10 WR Biotite gneiss;<br>Wilson Group. GAI69 WEB64 STU70<br>(info. in WEB64: BT, 69°34S 158°44E)                                                                                         |
| 69°48S 159°10E R<br>Manna Glacier     | 565 MY(??)K/A WR Foliated granodiorite vein;<br>wilson Group. GAI69 STU70<br>(infer=BT sample in STU70; pers. comm. Ravich and<br>Krylov; ?KA6, as in RAV64)                                             |
| 69°42S 159°19E R<br>Fergusson Glacier | 495 MY(??)K/A WR Granodiorite;<br>Granite Harbour Intrusives GAI69 STU70<br>(pers. comm. Ravich and Krylov; ?KA6, as in RAV64)                                                                           |
| 69°53S 159°40E R<br>Mt. Ellery        | 500 MY(??)K/A WR Foliated adamellite;<br>Granite Harbour Intrusives. GAI69 STU70<br>(pers. comm. Ravich and Krylov; ?KA6, as in RAV64)                                                                   |
| 71°33S 160°23E G<br>Thompson Spur RM  | 477±2.5 MY(DA 8)KA17 MC Migmatite;<br>(Granite Harbour Intrusives). KRE81 TES81                                                                                                                          |
| 71°33S 160°23E G<br>Thompson Spur RM  | 474.5±2.5 MY(DA 8)KA17 BT Migmatite;<br>(Granite Harbour Intrusives). KRE81 TES81                                                                                                                        |
| 71°33S 160°23E G<br>Thompson Spur RM  | 472±3 MY(DA 13)KA17 BT Metasediment;<br>(Granite Harbour Intrusives). KRE81 TES81<br>(ages of diff. sieve fractions also in KRE81)                                                                       |
| 71°38S 160°30E G<br>Schroeder Spur RM | 473.5±2.5 MY(DA 3)KA17 MC Migmatite;<br>(Granite Harbour Intrusives). KRE81 TES81                                                                                                                        |
| 71°38S 160°30E G<br>Schroeder Spur RM | 473±2.5 MY(DA 3)KA17 MC Migmatite;<br>(Granite Harbour Intrusives). KRE81 TES81                                                                                                                          |
| 71°38S 160°30E G<br>Schroeder Spur RM | 478.5±1.5 MY(DA 5)KA17 BT Granite;<br>(Granite Harbour Intrusives). KRE81 TES81<br>(ages of diff. sieve fractions also in KRE81)                                                                         |

- 71°38S 160°30E G  
Schroeder Spur RM
- 71°38S 160°30E G  
Schroeder Spur RM
- 71°38S 160°30E G  
Schroeder Spur
- 71°38S 160°30E G  
Schroeder Spur
- 71°35S 161°40E RM  
Morozumi Range
- 71°35S 161°40E RM  
Morozumi Range
- 71°35S 161°40E RM  
Morozumi Range
- 71°35S 161°40E RM  
Morozumi Range
- 70°14S 161°51E R  
Znamensky Island
- 71°39S 161°55E G  
Main massif,  
Morozumi Range
- 71°39S 161°55E G  
Main massif,  
Morozumi Range
- 71°39S 161°55E G  
Main massif and 10 km.  
S., Morozumi Range
- 71°24S 162°00E G  
Litell Rocks
- 471.5±3 MY (DA 5) KAl7 BT Granite;  
(Granite Harbour Intrusives). KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)
- 472±2.5 MY (DA 9) KAl7 BT Tonalite dike;  
(Granite Harbour Intrusives). KRE81 TES81
- 510±36 MY RS3I3/0.7116 WR Granites;  
(Granite Harbour Intrusives). KRE81 VET83
- 495±10 MY RS5I3/0.7125 WR Granites, pegmatite,  
migmatite; (Granite Harbour Intrusives). KRE81  
VET83
- 478.5±2 MY (MO 1) KAl7 BT Granite;  
(Granite Harbour Intrusives). KRE81 TES81
- 467±2 MY (MO 3) KAl7 BT Granite;  
(Granite Harbour Intrusives). KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)
- 479±2 MY (MO 6) KAl7 MC Granite;  
(Granite Harbour Intrusives). KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)
- 479±2 MY (MO 6) KAl7 BT Granite;  
(Granite Harbour Intrusives). KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)
- 318 MY (S.19) KAl6 WR Granodiorite;  
(Admiralty Intrusives). GAI69 PIC63 RAV64 STU70  
(info. in RAV64: 330 MY, KA6, dscript.=biotite  
plagiogranite)
- 484±63 MY RS4I3/0.716 WR 4 of 5 granites;  
(Granite Harbour Intrusives). KRE81  
(tentative isochron)
- 515±28 MY RS5I3/0.7136 WR Granites and an aplite;  
(Granite Harbour Intrusives). KRE81 VET83  
(tentative isochron)
- 478±14 MY RS3I3/0.7092 WR Granite and leucogranites;  
(Granite Harbour Intrusives). KRE81 VET83  
(tentative isochron)
- 90-120 MY (#'s?) KAl7 WR Altered volcanics;  
(Ferrar Dolerite?). KRE81  
(geol. significance of dates unknown)



GEOGRAPHIC AREA 2:

VICTORIA LAND, NORTH OF 73°00S, EAST OF RENNICK GLACIER  
(samples from west to east by coordinates)

|                        |                                                   |
|------------------------|---------------------------------------------------|
| 70°44S 162°07E R       | 283.8±5 MY(NZKA 20)KA12 WR Basic lava flow;       |
| Frolov Ridge           | Sledgers Formation, Bowers Group. DOW74 HUL72     |
| 71°30S 162°40E RM      | 479±2.5 MY(LA 2)KA17 BT Diorite;                  |
| Lanternman Range       | (Granite Harbour Intrusives). KRE81 TES81         |
| 71°20S 163°05E R       | 414±3 MY(3871TR;S29)KA9 WR Slate;                 |
| Mt. Jamroga            | Sledgers Group, Bowers Supergroup. ADA82A         |
| 71°20S 163°05E R       | 413±3 MY(3872TR;S30)KA9 WR Slate;                 |
| Mt. Jamroga            | Sledgers Group, Bowers Supergroup. ADA82A         |
| 71°20S 163°05E R       | 416±3 MY(3873TR;S32)KA9 WR Slate;                 |
| Mt. Jamroga            | Sledgers Group, Bowers Supergroup. ADA82A         |
| 71°20S 163°15E R       | 413±3 MY(6294TR;H8)KA9 WR Siltstone;              |
| Helix Pass             | (Mariner Group?), Bowers Supergroup. ADA82A       |
| 71°20S 163°15E R       | 394±3 MY(6294TR;S43)KA9 WR Siltstone;             |
| 4 km WSW of Helix Ps.  | Mariner Group, Bowers Supergroup. ADA82A          |
| 71°32S 163°17E R       | 417±3 MY(3878TR;S52)KA9 WR Slate;                 |
| Cen. Sec., Reilly Rdg. | (Mariner Gp. Correlative), Bowers Supergp. ADA82A |
| 71°32S 163°17E R       | 388±3 MY;380±3 MY(3880TR;S55)KA9 WR Slate;        |
| Cen.Sec., Reilly Rdg.  | (Mariner Gp. Correlative), Bowers Supergp. ADA82A |
|                        | (mean age=384 MY)                                 |
| 71°32S 163°17E R       | 380±3 MY(3882TR;S57)KA9 WR Slate;                 |
| Cen.Sec., Reilly Rdg.  | (Mariner Gp. Correlative), Bowers Supergp. ADA82A |
| 71°32S 163°17E R       | 400±3 MY(3884TR;S59)KA9 WR Slate;                 |
| Cen.Sec., Reilly Rdg.  | (Mariner Gp. Correlative), Bowers Supergp. ADA82A |
| 71°34S 163°22E R       | 413±3 MY(3875TR;S44)KA9 WR Slate;                 |
| S. end, Reilly Rdg.    | (Mariner Gp. Correlative), Bowers Supergp. ADA82A |
| 71°34S 163°22E R       | 402±3 MY(3877TR;S49)KA9 WR Slate;                 |
| S. end, Reilly Rdg.    | (Mariner Gp. Correlative), Bowers Supergp. ADA82A |
| 70°22S 163°22E R       | 313 MY(S.22)KA16 WR Granodiorite;                 |
| Sputnik Island,        | (Admiralty Intrusives). GAI69 PIC63 RAV64 STU70   |
| Ob' Bay                | (info. in RAV64: 325 MY, KA6, dscript.=biotite    |
|                        | plagiogranite)                                    |
| 71°17S 163°25E R       | 474±3 MY(3895TR;RB13)KA9 WR Slate;                |
| Head of Leap Year      | Robertson Bay Group. ADA82A                       |
| and Graveson Gls.      |                                                   |
| 71°28S 163°26E R       | 401±3 MY(3870TR;S19A)KA9 WR Slate;                |
| N side, Sledgers Gl.   | (Sledgers Group?), Bowers Supergroup. ADA82A      |
| 71°40S 163°27E R       | 451±3 MY(3904hb; W13)KA9 HB Amphibolitic gneiss;  |
| Husky Pass             | Wilson Group. ADA82A                              |
| 71°39S 163°29E R       | 479±3 MY(3905bi 152-422 μ;W15)KA9 BT Granodiorite |
| Husky Pass             | gneiss; Wilson Group. ADA82A                      |
| 71°50S 163°30E RM      | 490.5±2.5 MY(LA 3)KA17 BT Diorite;                |
| Lanternman Range       | (Granite Harbour Intrusives). KRE81 TES81         |
| 71°35S 163°36E R       | 441±3 MY(6293TR;S2)KA9 WR Siltstone;              |
| Molar Massif, N. Sec.  | Sledgers Group, Bowers Supergroup. ADA82A         |
| 71°43S 163°36E R       | 355±3 MY; 355±3 MY(3903hb;W11)KA9 HB Amphibolitic |
| S. side, Husky Pass    | gneiss; Wilson Group. ADA82A                      |
| 71°43S 163°36E R       | 467±3 MY(3962mu 152-853 μ;W12)KA9 MC Granodiorite |
| S. side, Husky Pass    | gneiss; Wilson Group. ADA82A                      |
| 71°30S 163°37E R       | 361±3 MY(6206TR;J13-8)KA9 WR Gray Slate;          |
| NW end, Mirabito Ra.   | Robertson Bay Group. ADA82A                       |
| 71°38S 163°37E R       | 467±3 MY;467±3 MY(3868TR;S13)KA9 WR Slate;        |
| Molar Massif           | Sledgers Group, Bowers Supergroup. ADA82A         |

- 72°35S 163°39E R  
Cen. Sec., Molar Mas.  
72°10'30"S 163°40E R  
Mt. Camelot  
71°44S 163°40E R  
S. side, Husky Pass  
71°28S 163°40E R  
N. side, Leap Year Gl.
- 71°47S 163°41E R  
Upper Zenith Glacier  
71°47S 163°41E R  
Upper Zenith Glacier  
71°47S 163°42E R  
Upper Zenith Glacier  
71°47S 163°42E R  
Upper Zenith Glacier
- 71°47S 163°42E R  
Upper Zenith Glacier  
71°27S 163°42E R  
N. side, Leap Year Gl.  
71°26S 163°42E R  
N. side, Leap Year Gl.  
71°27S 163°42E R  
N. side, Leap Year Gl.  
71°27S 163°43E R  
N. side, Leap Year Gl.  
71°40S 163°44E R  
SW rdg., Molar Massif  
71°30S 163°49E R  
Leap Year Glacier  
71°28S 163°51E R  
N side, head of  
Champness Glacier  
71°48'30"S  
163°51'30"E R  
5-1/2 Mi.S, Husky Ps.  
71°28S 163°52E R  
N side, head of  
Champness Glacier  
72°26S 163°56E R  
Gallipoli Heights,  
Evans Névé  
71°31S 163°57E R  
N side, Ian Peak  
71°32S 164°00E R  
2 km SE of Ian Pk.  
71°28S 164°14E R  
SW of Copperstain Rdg  
72°22S 164°28E R  
2.5 km SW of Mt Staley
- 453+3 MY(6207TR;2M85)KA9 WR Slate;  
Sledgers Group, Bowers Supergroup. ADA82A  
384.4±5.1 MY(NZKA 108)KA12 BT Porphyritic biotite  
adamellite; Freyberg Adamellite. ADA75 DOW74  
474+3 MY(3902bi;W7)KA9 BT Granodiorite gneiss;  
Wilson Group. ADA82A  
444+3 MY;450+3 MY(3887TR;RB4)KA9 WR Slate;  
Robertson Bay Group. ADA82A  
(mean age=447 MY)  
483+3 MY(3898bi;W1)KA9 BT Granodiorite gneiss;  
Wilson Group. ADA82A  
483+3 MY(3898mu;W1)KA9 MC Granodiorite gneiss;  
Wilson Group. ADA82A  
466+3 MY(3899bi;W2)KA9 BT Granodiorite gneiss;  
Wilson Group. ADA82A  
455+3 MY; 450+3 MY(3900bi;W2)KA9 BT Amphibolitic  
gneiss; Wilson Group. ADA82A  
(mean age=453 MY)  
476+3 MY(3901mu;W4a)KA9 BT Granodiorite gneiss;  
Wilson Group. ADA82A  
495+4 MY(3888TR;RB5)KA9 WR Slate;  
Robertson Bay Group. ADA82A  
482+3 MY(3896TR;RB14)KA9 WR Slate;  
Robertson Bay Group. ADA82A  
491+3 MY(3897TR;RB15)KA9 WR Slate;  
Robertson Bay Group. ADA82A  
468+3 MY(3889TR;RB6)KA9 WR Slate;  
Robertson Bay Group. ADA82A  
450+3 MY(6187TR;2M83)KA9 WR Slate;  
Sledgers Group, Bowers Supergroup. ADA82A  
501+4 MY(3885TR;RB1)KA9 WR Slate;  
Robertson Bay Group. ADA82A  
491+4 MY(3892TR;RB9)KA9 WR Slate;  
Robertson Bay Group. ADA82A
- 136.5±2.0 MY(NZKA 21)KA12 WR Dolerite;  
Ferrar Dolerite. DOW72 HUL72
- 490+4 MY(3891TR;RB8)KA9 WR Slate;  
Robertson Bay Group. ADA82A
- 375+40 MY(315&316)RS2I2/0.7057 WR Porphyritic rhyo-  
lite; Gallipoli Porphyries. GAI69 FAU70  
(=#'s C/76 and C/78 of Carryer, respectively)  
448+3 MY(3890TR;RB7)KA9 WR Phyllite, greenschist  
facies; Robertson Bay Group. ADA82A  
476+3 MY(3893TR;RB10)KA9 WR Slate;  
Robertson Bay Group. ADA82A  
350.2±5 MY(NZKA 19)KA12 BT Granodiorite;  
Champness Granodiorite. DOW74 HUL72  
330+7 MY(24397)K/A BT Biotite granodiorite;  
Salamander Granodiorite. IAI74

|                                                     |                                                                                                                                                                                                       |
|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 70°31S 164°30E R<br>Zykov Glacier                   | 424 MY (K.1245a) KA17 WR Micaceous phyllite;<br>Robertson Bay Group. GAI69 PIC63 RAV64 TES81<br>(info. in GAI69: 420 MY, KA16; info. in RAV64:<br>435 MY, KA6, loc.="Mount Zykov")                    |
| 70°31S 164°30E R<br>Zykov Glacier                   | 414 MY (S.21) KA17 WR Micaceous schist;<br>Robertson Bay Group. GAI69 PIC63 RAV64 TES81<br>(info. in GAI69: 410 MY, KA16; info. in RAV64: 425<br>MY, KA6, dsrpt.=phyllite, loc.="Mount Zykov")        |
| 71°10S 164°40E RM<br>Everett Range                  | 362+2 MY (EV 1) KA17 BT Granite;<br>Everett Massif, Admiralty Intrusives. KRE81 TES81<br>(ages of diff. sieve fractions also in KRE81)                                                                |
| 71°10S 164°40E RM<br>Everett Range                  | 358+3 MY (EV 6) KA17 BT Granite;<br>Everett Massif, Admiralty Intrusives. KRE81 TES81<br>(ages of diff. sieve fractions also in KRE81)                                                                |
| 71°10S 164°40E RM<br>Everett Range                  | 363.5+4 MY (EV 6) KA17 HB Granite;<br>Everett Massif, Admiralty Intrusives, KRE81 TES81                                                                                                               |
| 71°10S 164°40E RM<br>Everett Range                  | 360.5+1.5 MY (EV 8) KA17 BT Granite;<br>Everett Massif, Admiralty Intrusives, KRE81 TES81<br>(ages of diff. sieve fractions also in KRE81)                                                            |
| 71°10S 164°40E RM<br>Everett Range                  | 360+4 MY (EV 8) KA17 HB Granite;<br>Everett Massif, Admiralty Intrusives. KRE81 TES81                                                                                                                 |
| 71°10S 164°40E RM<br>Everett Range                  | 359+4 MY (EV 11) KA17 BT Granite;<br>Everett Massif, Admiralty Intrusives. KRE81 TES81<br>(ages of diff. sieve fractions also in KRE81)                                                               |
| 71°10S 164°40E RM<br>Everett Range                  | 363+3.5 MY (EV 11) KA17 HB Granite;<br>Everett Massif, Admiralty Intrusives. KRE81 TES81                                                                                                              |
| 71°15S 164°45E R<br>Lillie Glacier                  | 300 MY (#?) K/A WR Granodiorite;<br>(Admiralty Intrusives). GAI69 STU70                                                                                                                               |
| 71°10S 165°E RM<br>Everett Range                    | 360 MY RSR3/0.711, 0.713 WR 6 granitic and 2 leuco-<br>granitic samples; Everett Massif, Admiralty In-<br>trusives. KRE81 TES81<br>(samples fall between 2 360-MY-reference lines)                    |
| 72°57S 165°05E R<br>Retreat Hills                   | 460.7+6 MY (NZKA 24; P36357) KA12 BT Schist;<br>Retreat Hills Schist. HUL72 NAT71                                                                                                                     |
| 72°16S 165°22E R<br>6 km WNW Pyramid "Rk."          | 421+3 MY (6292TR; P5) KA9 WR Red siltstone;<br>Camp Ridge Quartzite, Leap Year Gp. ADA82A<br>(infer loc.=Pyramid Peak)                                                                                |
| 72°43.8S 165°27.7E R<br>Eroded cone, N.<br>Pleiades | 0.003+0.014 MY (YU-McM-P56=25306) KA9 WR Trachyte;<br>McMurdo Volcanic Group. ARM78<br>(infer=#25706, dsrpt.=peralkaline K-trachyte,<br>loc.=S. side of Targete Cone, in KYL82)                       |
| 72°44.8S 165°28.5E R<br>Mount Pleiones              | 0.012+0.04 MY (YU-McM-37081) KA9 WR Streaky trachybasalt<br>flow; McMurdo Volcanic Group. ARM78<br>(infer=#37081 (=25662), dsrpt.=Ne-tristanite, loc.<br>=Cone C2, 1.4 km. W. of Mt. Atlas, in KYL82) |
| 72°45.1S 165°29.1E R<br>Mount Pleiones              | 0.02+0.04 MY (YU-McM-P20=25271=P37083) KA9 WR Trachy-<br>andesite dike; McMurdo Volcanic Group. ARM78<br>(infer=#25671, loc.=NW side of cone 3, Mt. Atlas,<br>in KYL82)                               |
| 71°45S 165°30E R<br>S of Austin Peak                | 492+4 MY (6203TR; J9-17) KA9 WR Gray-green slate;<br>Robertson Bay Group. ADA82A                                                                                                                      |
| 71°45S 165°30E R<br>S of Austin Peak                | 491+4 MY (6204TR; J10-7) KA9 WR Gray-green slate;<br>Robertson Bay Group. ADA82A                                                                                                                      |
| 72°14S 165°32E R<br>4 km NNW Pyramid Pk.            | 499+3 MY (3661TR; P13) KA9 WR Red siltstone;<br>Robertson Bay Group. ADA82A                                                                                                                           |

- 72°45.0S 165°35.4E R  
Cone 1, Mount  
Pleiones  
70°44S 165°44E G  
(Gregory Bluff area)  
70°39S 166°02E R  
Nella Island  
0.04±0.05 MY(YU-MCM-P15=25266)KA9 WR Basalt flow;  
McMurdo Volcanic Group. ARM78  
(infer=#25666, descrpt.=tristanite, in KYL82)  
393±20 MY RS4I3/0.7136±0.0013 WR Granite;  
Gregory Bluff Pluton, Admiralty Intrusives. VET83  
344 MY(GA 742)KA10 BT Adamellite;  
(Admiralty Intrusives). GAI69 STU70 WEB64  
(info. in WEB64: 70°37S 166°05E; revised in  
TES81: 351 MY, KA17)  
70°39S 166°03E R  
Thala Island  
356 MY(GA 743)KA10 BT Adamellite;  
(Admiralty Intrusives). GAI69 STU70 WEB64  
(info. in WEB64: 70°37S, 166°06E; revised in  
TES81: 363 MY, KA17)  
70°37S 166°05E G  
Thala Island RM  
366±2 MY(TH 1)KA17 BT Granite;  
Yule Batholith, Admiralty Intrusives. KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)  
72°35S 166°08E R  
4 km NW of Mt McCarthy  
70°40S 166°50E RM  
Missen Head  
476±3 MY(3280TR;MGL/RB2)KA9 WR Argillite;  
Robertson Bay Group. ADA82A  
365.5±1.5 MY(TS 106)KA17 BT Granite;  
Yule Batholith, Admiralty Intrusives. KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)  
70°41S 166°55E G  
Unger Island  
70°45S 167°E RM  
vic. Yule Bay  
320-390 MY(#'s?)KA17 WR Altered volcanics;  
--. KRE81  
70°45S 167°E RM  
vic. Yule Bay  
364±27 MY RS4I3/0.715±0.002 WR Granitic rocks;  
Yule Batholith, Admiralty Intrusives. KRE81 TES81  
(tentative isochron)  
70°45S 167°24E G  
Sentry Rocks RM  
353±17 MY RS3I3/0.714±0.002 WR Granitic rocks;  
Yule Batholith, Admiralty Intrusives. KRE81 TES81  
(tentative isochron)  
70°42S 167°29E G  
"Birthday Ridge"  
(Novosad I.) RM  
71°57S 167°30E R  
Upper Tucker Gl.  
366.5±1.5 MY(TS 104)KA17 BT Granite;  
Yule Batholith, Admiralty Intrusives. KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)  
361±1.5 MY(TS 102)KA17 BT Granite;  
Yule Batholith, Admiralty Intrusives. KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)  
385 MY(#?)K/A WR Granodiorite;  
Tucker Granodiorite. GAI69 STU70  
(pers. comm. Ravich & Krylov; ?KA6, as in RAV64)  
70°44S 167°39E G  
Hughes Island RM  
367±1.5 MY(TS 103)KA17 BT Granite;  
Yule Batholith, Admiralty Intrusives. KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)  
70°50S 167°50E RM  
Cape Moore  
363±2 MY(TS 2)KA17 BT Granite;  
Yule Batholith, Admiralty Intrusives. KRE81 TES81  
(ages of diff. sieve fractions also in KRE81)  
72°35S 169°20E RM  
Lower Tucker Glacier  
72°31S 169°46E G  
Football Saddle RM  
72°19S 170°13E G  
W. end, Seabee Hook  
363±2 MY(TU 1)KA17 BT Granodiorite;  
Admiralty Intrusives. KRE81 TES81  
357.5±2 MY(TS 1)KA17 BT Granite;  
Admiralty Intrusives. KRE81 TES81  
72°36.1S 170°16.9E R  
Cape Wheatstone  
71°35S 170°20E RM  
W slope, Adare Pen.  
145 BP(NZ 187)14C PQ Flattened body, Adelie chick,  
base of 38 cm tk. guano layer;--. HAR58 HAR64  
(revised from 1210±70 BP(#R384,1958) in HAR58)  
5.35±0.12 MY(Yu-MCM-A 249B)KA9 WR Basalt pillow;  
McMurdo Volcanic Group. ARM78  
7.35±0.12 MY(JO 115a)KA17 WR Phonol. tephrite;  
Adare volcanics, unit E. KRE81 TES81

|                       |                                                 |
|-----------------------|-------------------------------------------------|
| 71°35S 170°20E RM     | 7.08±0.11 MY(Jo 116)KA17 WR Phonol. tephrite;   |
| W slope, Adare Pen.   | Adare volcanics, unit E. KRE81 TES81            |
| 71°35S 170°20E RM     | 1.14±0.05 MY(Jo 148)KA17 WR Phonol. tephrite;   |
| W slope, Adare Pen.   | Adare volcanics, unit E. KRE81 TES81            |
| 71°35S 170°20E RM     | 6.77±0.05 MY(Jo 113c)KA17 WR Phonolite;         |
| W slope, Adare Pen.   | Adare volcanics, unit D. KRE81 TES81            |
| 71°35S 170°20E RM     | 8.28±0.05 MY(Jo 119)KA17 WR Phonolite;          |
| W slope, Adare Pen.   | Adare volcanics, unit D. KRE81 TES81            |
| 71°35S 170°20E RM     | 8.12±0.06 MY(Jo 141a)KA17 WR Phonolite;         |
| W slope, Adare Pen.   | Adare volcanics, unit D. KRE81 TES81            |
| 71°35S 170°20E RM     | 8.01±0.07 MY(Jo 185)KA17 WR Phonolite;          |
| W slope, Adare Pen.   | Adare volcanics, unit D. KRE81 TES81            |
| 71°35S 170°20E RM     | 7.69±0.05 MY(Jo 186)KA17 WR Phonolite;          |
| W slope, Adare Pen.   | Adare volcanics, unit D. KRE81 TES81            |
| 71°35S 170°20E RM     | 11.9±0.2 MY(Jo 106)KA17 WR Leucobasalt;         |
| W slope, Adare Pen.   | Adare volcanics, unit C. KRE81 TES81            |
| 71°35S 170°20E RM     | 11.74±0.10 MY(Jo 107)KA17 WR Quartz andesite;   |
| W slope, Adare Pen.   | Adare volcanics, unit C. KRE81 TES81            |
| 71°35S 170°20E RM     | 13.24±0.12 MY(Jo 110a)KA17 WR Leucobasalt;      |
| W slope, Adare Pen.   | Adare volcanics, unit C. KRE81 TES81            |
| 71°35S 170°20E RM     | 9.88±0.07 MY(Jo 154a)KA17 WR Phonol. tephrite;  |
| W slope, Adare Pen.   | Adare volcanics, unit C. KRE81 TES81            |
| 72°23.2S 170°20.3E RM | 6.4±0.4 MY(Yu-McM-A 247G)KA9 WR Massive basalt; |
| 8 km S of Cape Hallet | McMurdo Volcanic Group. ARM78                   |
| 71°58.6S 170°40.5E RM | 2.21±0.5 MY(Yu-McM-A 233D)KA9 WR Basalt pillow; |
| Cape Roget            | McMurdo Volcanic Group. ARM78                   |

## GEOGRAPHIC AREA 3:

VICTORIA LAND, SOUTH OF 73°00'S TO 78°00'S, EXCLUDING  
SOME DRY VALLEY AREAS (SEE GEOGRAPHIC AREAS 4-6)  
(samples from north to south by coordinates)

- 73°01'S 161°15'E G  
"Bleak Peak"  
Sequence Hills  
73°03'S 165°50'E R  
NE rdg, Mt. Supernal  
73°03'S 165°50'E R  
NE rdg, Mt. Supernal  
73°10.1'S 164°35.4'E R  
Mount Overlord  
73°10.1'S 164°35.4'E R  
Mount Overlord  
73°10.1'S 164°35.4'E R  
Mount Overlord  
73°11'S 162°55'E G  
Mesa Range  
73°15'S 167°0'E RM  
SW side, Mariner Gl.,  
E. of Meander Gl.  
73°22.8'S 164°08.3'E R  
Nathan Hills
- 73°28'S 163°52'E R  
Stewart Heights  
73°29'S 162°20'E G  
Illusion Hills  
73°29.3'S 169°34.6'E R  
Coulman Island  
73°46.8'S 163°39.4'E R  
Hades Terrace  
74°10.4'S 164°29.7'E R  
Baker Rocks  
74°10.5'S 164°41.8'E R  
Mount Melbourne  
74°13.8'S 164°43.7'E R  
Baker Rocks  
74°15'S 163°57'E AR  
W side, Campbell Gl.  
74°20.8'S 164°41.2'E R  
Mount Melbourne  
74°20.9'S 164°41.2'E R  
Mount Melbourne  
74°30'S 165°28.4'E R  
S of Willow Nunatak  
74°51'S 163°48'E G  
"Hells Gate Ice  
Shelf"  
74°54'S 163°39'E G  
edge, Nansen Ice Sht.  
(Inexpressible I) RM
- 770+20 MY (289)RSM2/0.7040 WR Qtz-biotite schist;  
Rennick Group. FAU70
- 346.7+5 MY (NZKA 23;P36358A)KA12 BT Bt-hb-granite;  
Supernal Granite. HUL72 NAT71  
320.6+5 MY (NZKA 23;P36358B)KA12 HB Bt-hb-granite;  
Supernal Granite. HUL72 NAT71  
6.8+0.14 MY (YU-McM-35412)KA9 WR Trachyandesite;  
McMurdo Volcanic Group. ARM78  
8.1+1.7 MY (YU-McM-35413)KA9 WR Trachyandesite;  
McMurdo Volcanic Group. ARM78  
7.2+0.14 MY (YU-McM-37085)KA9 WR Trachybasalt;  
McMurdo Volcanic Group. ARM78  
174.2+1.0 MY (#?)AAP Lava flow from base of range;  
Kirkpatrick Basalts. MCI82  
9+1 MY (ETT)RS2I3/0.7148 WR,CL Granite;  
pluton. STU83
- 18.0+0.7 MY (YU-McM-35416)KA9 WR Olivine basalt;  
McMurdo Volcanic Group. ARM78  
(believed anomalously old by supplier, S. Nathan)  
454.2+6 MY (NZKA 22;P36359)KA12 BT Granite;  
Cosmonaut Granite. HUL72 NAT71  
530+13 MY (234)RSM2/0.7040 WR Mc-bt-granite;  
Campbell Plutonics. FAU70  
7.0+0.5 MY (YU-McM-A 220C)KA9 WR Latite pillow in  
palagonite breccia; McMurdo Volcanic Group. ARM78  
4.3+0.2 MY (YU-McM-35421)KA9 WR Xenocrystic basalt;  
McMurdo Volcanic Group. ARM78  
0.19+0.04 MY (YU-McM-35422)KA9 Trachybasalt;  
McMurdo Volcanic Group. ARM78  
0.25+0.06 MY (YU-McM-24918)KA9 WR Trachyte;  
McMurdo Volcanic Group. ARM78  
0.72+0.10 MY (YU-McM-35425)KA9 WR Olivine basalt;  
McMurdo Volcanic Group. ARM78  
407.9+6 MY (NZKA 25;P36356)KA12 BT Granite in boulder;  
Dickason Granite. HUL72 NAT71  
0.08+0.015 MY (YU-McM-37175)KA9 WR Trachyandesite;  
McMurdo Volcanic Group. ARM78  
0.01+0.02 MY (YU-McM-34912)KA9 WR Trachyte glass;  
McMurdo Volcanic Group. ARM78  
2.4+0.1 MY (YU-McM-MM1d)KA9 WR Olivine basalt;  
McMurdo Volcanic Group. ARM78  
2450+40 BP (L4C 75-22; QL-176)14C1 Sed. mixed with  
shells; —. KEL79A  
(data amended by M. Stuiver)  
7020+60 BP (QL-174)14C1 SH Adamussium colbecki, from a  
recent moraine. STU81

|                                           |                                                                                                                                                                                                                                                                         |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 75°57S 158°20E R<br>Gorgon Peak           | 162.8±2.3 MY; 159.7 MY (78220) AAP1; AAF1 WR Dolerite;<br>Ferrar Supergroup. KYL81B<br>(mean age with #78038 is 165±2.4 MY)                                                                                                                                             |
| 75°57S 158°31E R<br>Ambalada Peak         | 175.8±3.0 MY (78217) AAP1 WR Basalt;<br>Ferrar Supergroup. KYL81B                                                                                                                                                                                                       |
| 76°00S 160°35E R*<br>The Mitten           | 167.3±2.5 MY (78034) AAP1 WR Dolerite;<br>Ferrar Supergroup. KYL81B<br>(*text coords. = "75°00S" inferred misprint; mean<br>age with #78220 is 165±2.4 MY)                                                                                                              |
| 76°40S 159°40E G<br>Allan Hills RM        | 185.0±4 MY (H-5) KA17 WR Massive dolerite;<br>intrusive into Beacon Sandstone. HAL82                                                                                                                                                                                    |
| 76°40S 159°40E G<br>Allan Hills RM        | 183.7±4 MY (H-5) KA17 WR Massive dolerite;<br>intrusive into Beacon Sandstone. HAL82                                                                                                                                                                                    |
| 76°40S 159°40E G<br>Allan Hills RM        | 188.8±4 MY (H-8) KA17 WR Basalt dike;<br>intrudes Mawson Diamictite. HAL82                                                                                                                                                                                              |
| 76°40S 159°40E G<br>Allan Hills RM        | 189.7±4 MY (H-8) KA17 WR Basalt dike;<br>intrudes Mawson Diamictite. HAL82                                                                                                                                                                                              |
| 76°40S 159°40E G<br>Allan Hills RM        | 184.3±4 MY (H-8) KA17 WR Basalt dike;<br>intrudes Mawson Diamictite. HAL82                                                                                                                                                                                              |
| 76°40S 159°40E G<br>Allan Hills RM        | 185.7±3.4 MY (H-8) AAP2 WR Basalt dike;<br>intrudes Mawson Diamictite. HAL82<br>(other ages of age spectra data also in HAL82)                                                                                                                                          |
| 76°53S 159°24E G<br>Carapace Nun., S. RM  | 164.3±3 MY (H-31) KA17 WR Basalt flow;<br>10 m above Carapace Nunatak sandstone. HAL82                                                                                                                                                                                  |
| 76°53S 159°24E G<br>Carapace Nun., S. RM  | 166.5±3 MY (H-31) KA17 WR Basalt flow;<br>10 m above Carapace Nunatak sandstone. HAL82                                                                                                                                                                                  |
| 76°53S 159°24E G<br>Carapace Nun., S. RM  | 157.5±3 MY (H-31) KA17 WR Basalt flow;<br>10 m above Carapace Nunatak sandstone. HAL82                                                                                                                                                                                  |
| 76°53S 159°24E G<br>Carapace Nun., N. RM  | 151.0±3 MY (H-32) KA17 WR Basalt pillow;<br>above Carapace Nunatak sandstone. HAL82                                                                                                                                                                                     |
| 76°53S 159°24E G<br>Carapace Nun. N. RM   | 152.3±3 MY (H-32) KA17 WR Basalt pillow;<br>above Carapace Nunatak sandstone. HAL82                                                                                                                                                                                     |
| 76°53S 159°24E G<br>Carapace Nun., N. RM  | 182.8±3.5 MY (H-32) AAP2 WR Basalt pillow;<br>above Carapace Nunatak sandstone. HAL82<br>(other ages of age spectra data also in HAL82)                                                                                                                                 |
| 77°00S 162°32E R<br>Granite Harbor        | 486±15 MY (25) RSM2/0.709 BT Granite;<br>Irizar granite. DEU64                                                                                                                                                                                                          |
| 77°00S 162°32E R<br>Granite Harbor        | 475±80 MY (25) RSM2/0.709 FD Granite;<br>Irizar granite. DEU64                                                                                                                                                                                                          |
| 77°00S 162°30E R<br>Granite Harbor        | 535±120 MY (30) RSM2/0.709 WR Aplite;<br>assoc. with #25 from Irizar granite. DEU64                                                                                                                                                                                     |
| 77°27S 161°56E R<br>main rdg, Olympus Ra. | 345±12 MY (1) RSM2/0.709 BT Schist;<br>Asgard formation. DEU64                                                                                                                                                                                                          |
| 77°27S 161°56E R<br>main rdg, Olympus Ra. | 338±12 MY (1) RSM2/0.709 BT Schist;<br>Asgard formation. DEU64                                                                                                                                                                                                          |
| 77°30S 162°00E M<br>Victoria Land         | c. 580 MY RS4I2/(btwn 0.70 and 0.71) WR Pegmatoid,<br>Basement Sill, Solitary Rocks; pegmatoid, New<br>Mountain Sill; granite, Irizar Granite, Taylor<br>Valley; aplite, assoc. with Irizar Granite, Granite<br>Harbor. COM68<br>(ques. geol. significance of isochron) |

|                                           |                                                                                                                                                                                                                       |
|-------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 77°33S 160°08E R<br>Mount Fleming         | 500 MY; 500+ MY RSR/(below 0.707) FD+QZ 4 size-fractions of till; —. FAU81A<br>(2 samples fit isochron, 2 plot above; oldest date derivable is 1460 MY; 2 FD samples from ss clasts in till also plot above isochron) |
| 77°33S 160°06E G<br>SW flank, Mt. Fleming | 238+4 MY RS4I3/0.71000+0.00038 FD Size fractions from basal till and sandstone clasts in till; overlies Mt. Fleming Fm., Beacon Supergroup. TAY83 (provenance age)                                                    |
| 77°33S 160°06E G<br>SW flank, Mt. Fleming | 499 MY RS2I3/0.7085 FD Fine size fractions from basal till; overlies Mt. Fleming Fm. TAY83 (provenance age)                                                                                                           |
| 77°45S 161°00E M<br>S. Victoria Land      | 151+18 MY RS9I2/(btwn 0.710 and 0.715) WR Hypersthene Tholeiites: Lake Vanda Sill, (Wright Valley); Basement Sill, Solitary Rocks; Emmanuel Sill, Emmanuel Gl.; shared strat.=Ferrar Dolerite. COM68                  |
| 77°45S 163°20E RM<br>Lower Ferrar Valley  | 9860+160 BP(QL-995)14C1 AL Layer in place in silt bed in delta 62 m alt.; on Ross Sea drift. STU81                                                                                                                    |
| 77°45S 163°20E RM<br>Lower Ferrar Valley  | 10,000+40 BP(QL-1036)14C1 AL Layer in place in silt bed in delta 43 m alt.; on Ross Sea drift. STU81                                                                                                                  |
| 77°48S 161°10E G<br>Solitary Rocks*       | 153.9 MY (GA 1462)KA8 PL Pegmatoid hypersthene tholeiite; Basement Sill. COM68<br>(*based on Table 2; infer "Lake Vanda Sill" (Wright Valley) in Table 1 is misprint)                                                 |
| 77°48S 161°10E G<br>Solitary Rocks*       | 156.4 MY (GA 1462)KA8 PL Pegmatoid hypersthene tholeiite; Basement Sill. COM68<br>(*based on Table 2; infer "Lake Vanda Sill" (Wright Valley) in Table 1 is misprint)                                                 |
| 77°48S 161°10E G<br>Solitary Rocks*       | 169.2 MY (GA 1462)KA8 PH Pegmatoid hypersthene tholeiite; Basement Sill. COM68<br>(*based on Table 2; infer "Lake Vanda Sill" (Wright Valley) in Table 1 is misprint)                                                 |
| 77°48S 161°10E G<br>Solitary Rocks*       | 164.5 MY (GA 1462)KA8 PH Pegmatoid hypersthene tholeiite; Basement Sill. COM68<br>(*based on Table 2; infer "Lake Vanda Sill" (Wright Valley) in Table 1 is misprint)                                                 |
| 77°52S 164°24E RM<br>near Blue Glacier    | 12,330+50 BP(QL-1146)14C1 GB Layer, in place in lac. delta, 255 m alt.; nr limit, Ross Sea drift. STU81                                                                                                               |
| 77°54S 164°32E RM<br>near Hobbs Glacier   | 700+50 BP(QL-75)14C1 GB Mat, 16 m alt.; on or near surface of ice-cored Ross Sea drift. STU81                                                                                                                         |
| 77°54S 164°32E RM<br>near Hobbs Glacier   | 550+30 BP(QL-76)14C1 GB Mat, 9 m alt.; on or near surface of ice-cored Ross Sea drift. STU81                                                                                                                          |
| 77°54S 164°32E RM<br>near Hobbs Glacier   | 1600+50 BP(QL-86)14C1 GB Mat, 46 m alt.; on or near surface of ice-cored Ross Sea drift. STU81                                                                                                                        |
| 77°54S 164°29E RM<br>near Hobbs Glacier   | 1190+70 BP(QL-90)14C1 GB Mat, 126 m alt.; on or near surface of ice-cored Ross Sea drift. STU81                                                                                                                       |
| 77°54S 164°31E RM<br>near Hobbs Glacier   | 2540+50 BP(QL-91)14C1 GB Mat, 75 m alt.; on or near surface of ice-cored Ross Sea drift. STU81                                                                                                                        |
| 77°54S 164°30E RM<br>near Hobbs Glacier   | 2880+80 BP(QL-93)14C1 GB Mat, 38 m alt.; on or near surface of ice-cored Ross Sea drift. STU81                                                                                                                        |
| 77°54S 164°28E RM<br>near Hobbs Glacier   | 800+100 BP(Y-2391)14C1 GB Mat, 130 m alt.; on or near surface of ice-cored Ross Sea drift. STU81                                                                                                                      |
| 77°54S 164°32E RM<br>near Hobbs Glacier   | 1340+100 BP(Y-2392)14C1 GB Mat, 38 m alt. on or near surface of ice-cored Ross Sea drift. STU81                                                                                                                       |



|                                           |                                                                                                                          |
|-------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 77°54S 164°32E RM<br>near Hobbs Glacier   | 350+80 BP(Y-2393)14C1 GB Mat, 40 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                        |
| 77°54S 164°28E RM<br>near Hobbs Glacier   | 1720+100 BP(Y-2395)14C1 GB Mat, 158 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                     |
| 77°54S 164°28E RM<br>near Hobbs Glacier   | 4030+160 BP(Y-2396)14C1 GB Mat, 129 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                     |
| 77°54S 164°29E RM<br>near Hobbs Glacier   | 9490+140 BP(Y-2399)14C1 GB Mat, 134 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                     |
| 77°54S 164°28E RM<br>near Hobbs Glacier   | 800+80 BP(Y-2400)14C1 GB Mat, 150 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                       |
| 77°54S 164°28E RM<br>by Hobbs Glacier     | 2640+100 BP(I-3018)14C AL Contorted, with mirabilite<br>in moraine of Koettlitz Gl.;—. BLA68                             |
| 77°54S 164°33E RM<br>near Hobbs Glacier   | 1980+60 BP(QL-73)14C1 GB Mat, 13 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                        |
| 77°55S 164°33E RM<br>near Hobbs Glacier   | 900+50 BP(QL-78)14C1 GB Mat, 5 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                          |
| 77°55S 164°29E RM<br>near Hobbs Glacier   | 3160+70 BP(QL-87)14C1 GB Mat, 65 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                        |
| 77°55S 164°33E RM<br>near Hobbs Glacier   | 1030+40 BP(QL-88)14C1 GB Mat, 8 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                         |
| 77°55S 164°29E RM<br>near Hobbs Glacier   | 2460+50 BP(QL-89)14C1 GB Mat, 110 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                       |
| 77°55S 164°31E RM<br>near Hobbs Glacier   | 2800+50 BP(QL-92)14C1 GB Mat, 72 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                        |
| 77°55S 164°33E RM<br>near Hobbs Glacier   | 3300+90 BP(QL-94)14C1 GB Mat, 26 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                        |
| 77°55S 164°31E RM<br>near Hobbs Glacier   | 3930+140 BP(Y-2394)14C1 GB Mat, 91 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                      |
| 77°55S 164°32E RM<br>near Hobbs Glacier   | 2010+80 BP(Y-2397)14C1 GB Mat, 62 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                       |
| 77°55S 164°28E RM<br>near Hobbs Glacier   | 1980+80 BP(Y-2398)14C1 GB Mat, 157 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                      |
| 77°55S 164°28E RM<br>near Hobbs Glacier   | 6100+140 BP(Y-2401)14C1 GB Mat, 100 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                     |
| 77°55S 164°29E RM<br>near Hobbs Glacier   | 2680+120 BP(Y-2402)14C1 GB Mat, 99 m alt.; on or near<br>surface of ice-cored Ross Sea drift. STU81                      |
| 77°55S 164°28E M<br>front, Hobbs Glacier  | 3740+210 BP(??)14C2 SE Lobodontini from mirabilite;<br>—. SIE68<br>(SIE68: age=3125+210 BP if res.corr.=615+100BP)       |
| 77°55S 164°28E RM<br>front, Hobbs Glacier | 12,200+1000 BP(I-3019)14C1 OM Petid, assoc. with mira-<br>bilite, basal moraine of Hobbs Gl.;—. BLA68                    |
| 77°55S 164°28E RM<br>front, Hobbs Glacier | 2800+100 BP(I-3020)14C AL Contorted, with mirabilite<br>in moraine of Koettlitz Gl.;—. BLA68                             |
| 77°56S 164°24E RM<br>Salmon Stream        | 8800+50 BP(QL-1160)14C1 GB Layer, 122 m alt., in place<br>in silt bed in lac. delta;—. STU81                             |
| 77°56S 164°24E RM<br>Salmon Stream        | 4720+50 BP(QL-1161)14C1 GB Layer, 78 m alt.; in place<br>in silt bed in lac. delta;—. STU81                              |
| 77°57S 162°00E RM<br>Table Mountain       | 524+115 MY RS4I3/0.7132+0.0068 FD Size fractions<br>from till; possible Cenozoic. FAU81                                  |
| 77°57S 164°42E R<br>front, Hobbs Glacier  | 5900+140 BP(L-462C)14C1 Algiferous sand, ablation<br>drift, moraine of Koettlitz Gl.;—. OLS61<br>(infer=#L-462 in PEW58) |

77°59S 164°10E R  
in front of Davis Gl.

250±150 BP (L-627) 14C1 SE Flipper, crabeater, on the  
ground, 1170 ft. alt. OLS61 PEW62

(OLS61: age=1450 BP w/o corr. based on #L-570)

77°59S 164°20E R  
Garwood Valley

2480±120 BP (L-462A) 14C1 PE Algal, in glacial sand and  
gravel, moraine of Koettlitz Gl.;—. OLS61 PEW58  
(OLS61: loc.="Hobbs Valley")

## GEOGRAPHIC AREA 4:

VICTORIA VALLEY AND ASSOCIATED DRY VALLEYS NORTH OF  
OLYMPUS RANGE IN VICTORIA LAND (samples from west  
to east by coordinates)

|                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 77°20S 161°08E R<br>N of L. Vashka     | 163 MY (GA 153) KA9 PY Dolerite from lower sheet;<br>Ferrar Dolerite. MCD63                                                                                                                                                                                                                                                                                                                                                      |
| 77°20S 161°08E R<br>N. of L. Vashka    | 162 MY (GA 152) KA8 PL Dolerite from lowest sill;<br>Ferrar Dolerite. EVE62.                                                                                                                                                                                                                                                                                                                                                     |
| 77°25S 161°45E R<br>SW of L. Vida      | 162 MY (GA 250) KA9 PL Dolerite from middle sheet;<br>Ferrar Dolerite. MCD63                                                                                                                                                                                                                                                                                                                                                     |
| 77°22S 161°51E R<br>DVDP 6, by L. Vida | 172+23 MY, 193+23 MY, 170+24 MY, 176+25 MY (ANGN-1) FT1<br>Zr Gneiss; olympus granite gneiss. VOC78 VOC81<br>(VOC81: mean age=180+24 MY)                                                                                                                                                                                                                                                                                         |
| 77°22S 161°51E R<br>DVDP 6, by L. Vida | 123+16 MY (ANGN-1) FT1 AP Gneiss;<br>olympus granite gneiss. VOC78 VOC81                                                                                                                                                                                                                                                                                                                                                         |
| 77°22S 161°51E R<br>DVDP 6, by L. Vida | 558+83 MY, 444+75 MY, 517+90 MY (ANGR-1) FT1 ZR Granite;<br>vida granite. VOC78 VOC81<br>(VOC81: mean age=500+83 MY)                                                                                                                                                                                                                                                                                                             |
| 77°22S 161°51E R<br>DVDP 6, by L. Vida | 48+12 MY (ANGR-1) FT1 AP Granite;<br>vida granite. VOC78 VOC81                                                                                                                                                                                                                                                                                                                                                                   |
| 77°22S 161°51E R<br>DVDP 6, by L. Vida | 513 MY, 602 MY, 947 MY (ANGN-1) UP5 ZR Gneiss;<br>484 MY, 512 MY, 633 MY " "<br>474 MY, 479 MY, 497 MY " "<br>455 MY, 465 MY, 507 MY " "<br>olympus granite gneiss. VOC81<br>(ages are discordant, LI=462+6 MY, UI=2555+330 MY)                                                                                                                                                                                                  |
| 77°22S 161°51E R<br>DVDP 6, by L. Vida | 318 MY, 332 MY, 419 MY (ANGR-1C) UP5 ZR Granite;<br>316 MY, 332 MY, 441 MY* " "<br>281 MY, 299 MY, 433 MY " "<br>300 MY, 318 MY, 446 MY (ANGR-1D) UP5 ZR Granite;<br>306 MY, 324 MY, 444 MY " "<br>295 MY, 313 MY, 445 MY " "<br>303 MY, 322 MY, 452 MY " "<br>vida granite. VOC81<br>(*correction made by us in inferred misprint;<br>ages are discordant, LI=-0.000979, UI=433 MY; if<br>LI constrained to 0 MY, UI=447+34 MY) |
| 77°22S 161°51E R<br>DVDP 6, by L. Vida | 242+31 MY (V6-37) RS3I2/0.7082+0.0027 WR,BT,PL Para-<br>gneiss; basement complex. STU75A VOC81<br>(VOC81; age=235+31 MY using RS3, strat.=olympus<br>granite gneiss; STU75A: true age more than 500 MY)                                                                                                                                                                                                                          |
| 77°22S 161°51E R<br>DVDP 6, by L. Vida | 486+14 MY (V6-173 & V6-300) RS5I2/0.7098+0.0007 WM<br>quartz monzonite; basement complex. STU75A VOC81<br>(VOC81: age=475+14 MY using RS3, strat.=vida<br>granite)                                                                                                                                                                                                                                                               |
| 77°23S 161°52E R<br>S. of L. Vida      | 210 MY (GA 246) KA9 BT Granodiorite;<br>Admiralty system. MCD63                                                                                                                                                                                                                                                                                                                                                                  |
| 77°23S 161°57E G<br>10 m above L. Vida | 13,400+330 BP (74-33) UT1 CA Algal 1 m, deltaic beds;<br>--. HEN79<br>(232Th corrected age=8000 BP; infer =#ER33, age=<br>8.5+0.3 KY, Old Delta, L. Vida in UNI75)                                                                                                                                                                                                                                                               |
| 77°23S 161°57E G<br>Lake Vida          | 26+14 KY (ER27) U/T -- (Lacustrine CA or GP), Old<br>Delta; --. UNI75                                                                                                                                                                                                                                                                                                                                                            |

77°23S 161°57E G 11,075±151 BP (Wk58) 14C CA Lac., algal l m, deltaic  
 10 m above L. Vida beds; —. HEN79  
 (for comparison with #74-33)  
 77°24S 162°E R 159 MY (GA 249) KA9 PL Dolerite from lower sheet;  
 SE of L. Vashka Ferrar Dolerite. MCD63  
 77°23S 162°E R 185 MY (GA 147) KA9 BT Granodiorite;  
 SE of L. Vida Admiralty system. MCD63  
 77°23S 162°E R 222 MY (GA 149) KA9 OR Silicic dike;  
 SE of L. Vida intrusive into Admiralty system. MCD63  
 77°23S 162°E R\* 211 MY (GA 251) KA9 BT Silicic dike;  
 SE of L. Vida Admiralty system. MCD63  
 (\*infer dscript. for "GA 247" is for this sample)  
 77°23S 162°00E G 68±4 MY to 157±7 MY (?) FTK AP Basement samples. GLE83  
 Victoria Valley\* (\*and Wright Valley—also listed in Geog. Area 5)  
 77°25S 162°05E AR 549±15 MY, 564±18 MY, 598±25 MY (?) UPl ZR Fraction;  
 S. wall, Victoria Val. 506±15 MY, 526±18 MY, 611±25 MY " "  
 521±15 MY, 535±18 MY, 598±25 MY " "  
 Olympus Granite-gneiss. DEU66  
 (Ages are discordant; best chord LI=0, UI=610 MY;  
 if LI=160 MY, then UI=640 MY.; recalc. in SKI83 as  
 UI=588.5±12.5 MY if LI=0)

| GEOGRAPHIC AREA 5:                         | WRIGHT VALLEY AND BULL PASS, VICTORIA LAND (samples from west to east by coordinates)                                                |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------|
| 77032S 161005E RM<br>N Fork, Wright Valley | 780 BP(R. 809/2)14CC SK Seal No. 36;<br>on the surface. BAR67<br>(age based on std.= -140 o/oo; corr.=c.1200 yrs)                    |
| 77035S 161005E RM<br>S Fork, Wright Valley | 560 BP(R. 809/3)14CC FL Adeline PQ, <u>Pygoscelis</u><br><u>adeliae</u> ;—. BAR67<br>(age based on std.= -140o/oo; corr.=c.1200 yrs) |
| 77034S 161010E R<br>Don Juan Pond vic.     | 1210+120 BP(?)14C SE Carcass of crabeater ( <u>Lobodon</u><br><u>carcinophagus</u> ). YAM67 DOR81                                    |
| 77016S 161015E R<br>Wright Valley          | 190.8+6.6 MY; 181.2 MY (77060)AAP1; AAF1 WR Dolerite;<br>Ferrar Supergroup. KYL81B                                                   |
| 77032S 161030E R<br>S shore, L. Vanda      | 481+15 MY (6)RSM2/0.709 BT Gneiss;<br>Olympus granite-gneiss. DEU64                                                                  |
| 77032S 161030E R<br>S shore, L. Vanda      | 494+15 MY (8)RSM2/0.709 BT Gneiss;<br>Olympus granite-gneiss. DEU64                                                                  |
| 77032S 161033E G<br>in Lake Vanda          | 13600+1000 BP(?)U/T CA Assoc. with gypsum, 55 cm<br>level of core near hole H;—. GUM74<br>(may=#ERL3, same loc.)                     |
| 77032S 161033E G<br>in Lake Vanda          | LT 2000 BP(?)U/T CA Assoc. with gypsum, 15 cm level<br>of core near hole H;—. GUM74                                                  |
| 77032S 161033E G<br>in Lake Vanda          | 13.6+0.9 KY (ERL3)U/T 1st EV, L. Vanda Core K;<br>—. UNI75<br>("Th contamination"; may=#? of GUM74 from 55 cm)                       |
| 77032S 161033E G<br>in Lake Vanda          | 9.5+1.6 KY (ER25)U/T 1st EV, L. Vanda deep core;<br>—. UNI75<br>("a little Th.")                                                     |
| 77032S 161033E G<br>in Lake Vanda          | 13.6+0.5 KY (ER26)U/T 2nd EV, L. Vanda deep core;<br>—. UNI75<br>("a little Th.")                                                    |
| 77032S 161033E G<br>in Lake Vanda          | 3.3+2.2 KY (ER32)U/T (EV) L. Vanda deep core 166 cm;<br>—. UNI75<br>("too little material, Th contamination")                        |
| 77032S 161033E G<br>near L. Vanda          | 100 BP(R. 809/1)14CC SK Seal No. 7;<br>on the surface. BAR67<br>(age based on std.= -140 o/oo; corr.=c.1200 yrs)                     |
| 77032S 161033E G<br>in Lake Vanda          | 0+150 BP (ML 692)14C LW 25 m. depth. JON 71<br>("age is probably 20 to 70 years")                                                    |
| 77032S 161033E G<br>in Lake Vanda          | 2130+80 BP (ML 691)14C LW 60 m. depth. JON 71<br>(at 9 m. depth, counts=10x modern; at 54 m. depth,<br>counts=2.5x modern)           |
| 77032S 161033E G<br>nr Lake Vanda          | c.3000 BP(?)14C AL Circa upper lake shore lines;<br>—. WIL69                                                                         |
| 77032S 161033E G<br>shore of Lake Vanda    | 2080+90 BP(?)14C AL Elevated beach 41 m. above lake<br>level on 12/2/70;—. YOS75                                                     |
| 77032S 161033E G<br>shore of Lake Vanda    | 2120+90 BP(?)14C AL Elevated beach 36 m. above lake<br>level on 12/2/70;—. YOS75                                                     |
| 77032S 161033E G<br>shore of Lake Vanda    | 2430+100 BP(?)14C AL Elevated beach 34 m. above lake<br>level on 12/26/68;—. YOS75                                                   |
| 77032S 161033E G<br>shore of Lake Vanda    | 2920+120 BP(?)14C AL Elevated beach 29 m. above lake<br>level on 12/26/68;—. YOS75                                                   |
| 77032S 161033E G<br>shore of Lake Vanda    | 2590+100 BP(?)14C AL Elevated beach 24 m. above lake<br>level on 12/26/68;—. YOS75                                                   |

77032S 161033E G  
shore of Lake Vanda  
77032S 161033E G  
shore of Lake Vanda  
77032S 161033E G  
shore of Lake Vanda  
77032S 161033E G  
shore of Lake Vanda  
77032S 161033E G  
shore of Lake Vanda  
77032S 161033E G  
shore of Lake Vanda  
77032S 161040E RM  
NE of Lake Vanda  
77032S 161040E RM  
NE of Lake Vanda  
77032S 161040E RM  
NE of Lake Vanda  
77032S 161050E RM  
floor, Wright Valley  
77032S 161050E RM  
floor, Wright Valley  
  
77031S 161050E G  
Wright Valley RM  
  
77031S 161050E G  
Wright Valley RM  
  
77031S 161050E G  
Wright Valley  
  
77031S 161050E G  
Wright Valley\*  
77030S 161052E G  
Prospect Mesa  
  
77030S 161052E G  
Prospect Mesa  
  
77030S 1620E AR  
N side, Wright Val.  
2 km E, Bull Pass RM  
  
77030S 1620E AR  
N side, Wright Val.  
c.2 km E, Bull Pass

2210+90 BP(??)14C AL Elevated beach 18 m. above lake level on 12/26/68;—. YOS75  
1930+110 BP(??)14C AL Elevated beach 11 m. above lake level on 12/26/68;—. YOS75  
1810+90 BP(??)14C AL Elevated beach 11 m. above lake level on 12/2/70;—. YOS75  
1280+90 BP(??)14C AL Elevated beach 5 m. above lake level on 12/2/70;—. YOS75  
2760+100 BP(??)14C AL Elevated beach 2 m. above lake level on 12/26/68;—. YOS75  
1990+130 BP(??)14C AL Elevated beach 0.3 m. above lake level on 12/2/70;—. YOS75  
2130+90 BP(??)14C AL Elevated beach 25 m. above lake level on 12/27/68;—. YOS75  
2000+100 BP(??)14C AL Elevated beach 22 m. above lake level on 12/27/68;—. YOS75  
2060+54 BP(??)14C AL Elevated beach 22 m. above lake level on 12/27/68;—. YOS75  
150 MY(??)FTK BT Ferrar Dolerite. SHI67  
  
200 MY(??)FTK BT Vida Granite. SHI67  
  
520 MY(??)FTK BT Dais Granite. SHI67  
  
GT 35,000 BP(L-645)14C SH Pecten shells, fossiliferous gravel; Pecten Glaciation. NIC65  
GT 800 KY(??)U/T Pecten shells, fossiliferous gravel; Pecten Glaciation. NIC65  
(pers. comm., Broecker; radium-uranium measurements suggest same date, pers. comm. Turber, NIC71)  
499+43 MY RS912/0.7109+0.0007 WR Granite to granodiorite; Olympus granite-gneiss and Dais granite.FAU74  
481+44 MY RS1012/0.7104+0.0008 WK Granite to granodiorite, porphyry; Vida granite and Vanda porphyry. FAU74  
490+14 MY RS1512/0.7109 WF Olympus granite-gneiss, Dais granite, and Vida granite. JON69  
(infer = 2 RSI sample suites of FAU74 above)  
68+4 MY to 157+7 MY(??)FTK AP Basement samples. GLE83  
(\*and Victoria Val. — also listed in Geog. Area 4)  
460+95 MY (F-80-2)RS513/0.70869+0.00096 FD,"WR" Size Fractions from sediment; Jason Diamicton. TAY83  
(provenance date; "WR" from 1-2 mm size fraction)  
762+90 MY (F-80-3)RS413/0.70534+0.00093 FD Size fractions from Peleus till. TAY83  
(provenance date)  
4.1+0.2 MY(??)FT2 MI Size fractions, soil;  
on bench carved during Vanda glacial. JAC77  
(ages of size fractions in each horizon also listed in JAC77; date on parent rock given below)  
151.2 MY(??)FT2 BT Granite from outcrop near soil MI site listed above; Olympus granite-gneiss. JAC77  
(parent rock for above listed soil)

|                                                        |                                                                                                                                                                                                                     |
|--------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 77°30S 162°04E R<br>N wall, Wright Valley              | 477±15 MY (29)RSM2/0.709 BH Porphyry dyke;<br>In Olympus granite-gneiss. DEU64                                                                                                                                      |
| 77°30S 162°04E R<br>N wall, Wright Val.                | 942±80 MY (29)RSM2/0.709 FD Porphyry dyke;<br>In Olympus granite-gneiss. DEU64<br>(determined from ages of 956 MY, 940 MY, and 931 MY)                                                                              |
| 77°30S 162°04E R<br>N wall, Wright Valley              | 1000±80 MY (29)RSM2/0.709 WR Porphyry dyke;<br>in Olympus granite-gneiss. DEU64<br>(from ages of 1030 MY, 960 MY, and 1003 MY;<br>eval. in JON 67)                                                                  |
| 77°30S 162°04E R<br>N wall, Wright Valley              | 495±15 MY (22)RSM2/0.709+0.004 BT Granodiorite;<br>Theseus granodiorite. DEU64                                                                                                                                      |
| 77°30S 162°08E R<br>N wall, Wright Valley              | 435±25 MY (21)RSM2/0.709+0.004 BT Pegmatite;<br>In Olympus granite-gneiss. DEU64                                                                                                                                    |
| 77°31.6S 162°09.3E R<br>cone nr Bartley Gl.            | 3.75±0.2 MY (YU-MCM-WV3)KA9 WR Basalt;<br>McMurdo Volcanic Group. ARM78<br>(infer is rev. age for #?, 3.9±0.3 MY in NIC71<br>and #?, 3.6 ±0.3 MY in DEN68; loc. info. divergent;<br>info. also in FLE72 and JAC77)  |
| 77°32S 162°10E M<br>W Bartley Glacier                  | 1970±95 BP (#?)L4C SE In the face of a small terrace;<br>Alpine I glaciation. BEH70                                                                                                                                 |
| 77°28S 162°16E R<br>N wall, Wright Val.                | 494±15 MY (2)RSM2/0.709+0.004 BT Schist;<br>Asgard Formation. DEU64                                                                                                                                                 |
| 77°30S 162°20E M<br>W side, Meserve Gl.                | 3.4±0.6 MY (LMJ-1)K/A WR Basalt;<br>Debris at 1 m depth, Alpine II moraine. FLE72 BEH74                                                                                                                             |
| 77°30S 162°20E M<br>W side, Meserve Gl.                | 3.4±0.1 MY (LMJ-2)K/A WR Basalt;<br>Debris at surface, Alpine II moraine. FLE72 BEH74                                                                                                                               |
| 77°30S 162°20E M<br>W. Meserve Gl. basin               | 2.5±0.3 MY (LMJ-3)K/A WR Basalt, of cone;<br>McMurdo volcanics. FLE72 BEH74                                                                                                                                         |
| 77°30S 162°20E M<br>S. wall, Wright Valley             | 4.2±0.2 MY (LMJ-4)K/A WR Basalt, smaller & more westerly<br>of 2 cones; 2nd Loop cone, McMurdo volcanics.<br>FLE72 BEH74                                                                                            |
| 77°30S 162°20E M<br>near Meserve Gl.                   | 470±7 MY RS4I2/0.7119±0.0006 WK Porphyry;<br>Vanda porphyry dikes. JON67                                                                                                                                            |
| 77°29.2S 162°24.0E R<br>cone near Goodspeed<br>Glacier | 3.50±0.2 MY (YU-MCM-WV 2E)KA9 WR Basalt;<br>McMurdo Volcanic Group. ARM78<br>(infer is rev. age for #?, 3.7±0.3 MY in NIC71<br>and #?, 3.5±0.3 MY in DEN68; loc. info. divergent;<br>info. also in FLE72 and JAC77) |
| 77°29S 162°33E R<br>N spur, Mt. Loke                   | 479±15 MY (17)RSM2/0.709 BT Porphyritic granite;<br>Dais granite. DEU64                                                                                                                                             |
| 77°29S 162°33E R<br>N spur, Mt. Loke                   | 495±15 MY (17)RSM2/0.709 BT Porphyritic granite;<br>Dais granite. DEU64                                                                                                                                             |
| 77°24S 162°45E R<br>N wall, nr Mt. Doorly              | 487±15 MY (18)RSM2/0.709 BT Porphyritic granite;<br>Dais granite. DEU64                                                                                                                                             |

## GEOGRAPHIC AREA 6:

TAYLOR VALLEY, VICTORIA LAND, FROM TAYLOR GLACIER TO GNEISS POINT (samples from west to east by coordinates)

- 77046.0S 162007.9E R above Taylor Gl. 1.84+0.11 MY (YU-McM-26)KA9 WR Lava cascade from ridge crest; McMurdo Volcanic Group. ARM78
- 77045.9S 162008.4E R above Taylor Gl. 1.53+0.06 MY (YU-McM-27)KA9 WR Welded spatter from cinder cone; McMurdo Volcanic Group. ARM78
- 77046.2S 162008.4E R above Taylor Gl. 2.00+0.06 MY (YU-McM-29)KA9 WR Lava cascade from ridge crest; McMurdo Volcanic Group. ARM78
- 77042S 162014E G (nr Rhone Glacier) 300+40-25 KY (390)U/T (CA) —; Rhone Gl. section. UNI78
- 77044.4S 162015.0E R above Taylor Gl. 1.94+0.12 MY (YU-McM-24)KA9 WR Flow capping till and covered by erratics; McMurdo Volcanic Gp. ARM78
- 77044S 162015E M nr snout, Taylor Gl. 2.6+0.2 MY ("3")KA9 WR Basalt from a lateral moraine; postdates extensive glaciation. ARM68 (in progress rept; superceded by dating in ARM78)
- 77044S 162015E RM 17,790+70 BP (QL-1257)14C1 GB 144 m alt., layer in silt bed in delta; (Glacial Lake Washburn). STU81
- L. Bonney drainage ba. 77043S 162015E RM 16,470+250 BP (QL-1046)14C1 GB 116 m alt., layer in silt bed in delta; (Glacial Lake Washburn). STU81
- L. Bonney drainage ba. 77042.2S 162015.7E R E. of Rhone Gl. 1.79+0.13 MY (YU-McM-23)KA9 WR Massive flow on flank of cinder cone; McMurdo Volcanic Group. ARM78
- 77041.8S 162015.9E R E of Rhone Gl. 2.00+0.18 MY (YU-McM-20)KA9 WR Bomb on cinder cone nr summit; McMurdo Volcanic Group. ARM78 (infer=#?, 1.8+0.2m in DEN68)
- 77046S 162017E G (nr Calkin Glacier) 250+15 KY (76-25)U/T (CA) —; Calkin delta. UNI78
- 77043S 162020E M (btwn Hughes and (Bonney Reigel Gls.) 136+3 KY, 140+10 KY (383)U/T (CA) (Lac. sediment) clasts in "till between Hughes and Bonney Reigel." UNI78
- 77043S 162020E M (btwn Hughes and Bonney Reigel Gls.) 240-40+70 KY, 318+12 KY (384)U/T (CA) (Lac.sed.) clasts in "till between Hughes and Bonney Reigel." UNI78
- 77043S 162020E M nr west lobe, L. Bonney 203+10 KY (74-24)UTI CA Platy lacustrine, lag; (possibly Taylor II Glaciation). HEN79 (infer=#ER24 in UNI75)
- 77043S 162020E M nr west lobe, L. Bonney 210+10 KY (74-19)UTI CA Platy lacustrine, lag; (possibly Taylor II Glaciation) HEN79 (infer=#ER19 in UNI75)
- 77043S 162020E M nr west lobe, L. Bonney 198+10 KY (74-20)UTI CA Platy lacustrine, lag; (possibly Taylor II Glaciation). HEN79 (infer=#ER20 in UNI75)
- 77043S 162020E M nr west lobe, L. Bonney 197+8 TY (74-23)UTI CA Platy lacustrine, lag; (possibly Taylor II Glaciation). HEN79 (infer=#ER23 in UNI75)
- 77044S 162020E RM L. Bonney drainage ba. 21,200+200 BP (QL-1246)14C1 GB 113 m alt., layer in silt bed in delta; (Glacial Lake Washburn). STU81
- 77044S 162020E RM L. Bonney drainage ba. 17,530+70 BP (QL-1247)14C1 GB 102 m alt., layer in silt bed in delta; (Glacial Lake Washburn). STU81
- 77043S 162020E M West Lobe, L. Bonney 15,450+1650 BP (NZ2702/1)14C IC Bottom waters; postdates Taylor II glaciation. HEN77
- 77041.3S 162022.5E R by Matternhorn Gl. 3.33+0.10 MY (YU-McM-16)KA9 WR Basalt; McMurdo Volcanic Group. ARM78 (infer=#?, 3.3+0.2 MY, in DEN68)



|                        |                                                                                                       |
|------------------------|-------------------------------------------------------------------------------------------------------|
| 77043S 162025E RM      | 19,300±800 BP (QL-1256) 14C1 GB 89 m alt., layer in silt bed in delta; (Glacial Lake Washburn). STU81 |
| L. Bonney drainage ba. |                                                                                                       |
| 77044S 162025E RM      | 18,700±80 BP (QL-1248) 14C1 GB 186 m alt., layer in silt bed in delta; (Glacial Lake Washburn). STU81 |
| L. Bonney drainage ba. |                                                                                                       |
| 77044S 162025E RM      | 18,170±70 BP (QL-1137) 14C1 GB 205 m alt., layer in silt bed in delta; (Glacial Lake Washburn). STU81 |
| L. Bonney drainage ba. |                                                                                                       |
| 77043S 162025E RM      | 13,980±60 BP (QL-1255) 14C1 GB 99 m alt., layer in silt bed in delta; (Glacial Lake Washburn). STU81  |
| L. Bonney drainage ba. |                                                                                                       |
| 77042S 162025E R       | GT 300 BP (L-462E) 14CC1 SE Fur from carcass. OLS61                                                   |
| in ice of L. Bonney    | (w/o corr. factor, age=1500±150 BP)                                                                   |
| 77043S 162025E G       | 1.97±0.12 KY (74-29) UT1 AR Shallow core;                                                             |
| East Lobe, L. Bonney   | (possibly Taylor I glaciation). HEN79                                                                 |
|                        | (232Th corr. age=0.800 KY; infer=#ER29 in UNI 75)                                                     |
| 77043S 162025E G       | 4.09±0.43 KY (74-30) UT1 GP Shallow core;                                                             |
| East Lobe, L. Bonney   | (possibly Taylor I Glaciation). HEN79                                                                 |
|                        | (232Th corr. age=0.90 TY; infer=#ER30 in UNI75)                                                       |
| 77043S 162025E G       | 1.80±0.14 KY (74-56) UT1 AR Shallow core;                                                             |
| East Lobe, L. Bonney   | (possibly Taylor I Glaciation). HEN79                                                                 |
|                        | (232Th corr. age=1.10 KY; infer=#ER56 in UNI75)                                                       |
| 77043S 162025E G       | 1.90±0.12 KY (74-57) UT1 AR Shallow core;                                                             |
| East Lobe, L. Bonney   | (possibly Taylor I glaciation). HEN79                                                                 |
|                        | (232Th corr. age=0.60 KY; infer=#57 in UNI75)                                                         |
| 77043S 162025E G       | 10.00±0.60 KY (74-58) UT1 GP Shallow core;                                                            |
| East Lobe, L. Bonney   | (possibly Taylor I Glaciation). HEN79                                                                 |
|                        | (232Th corr. age=0.1 KY; infer=#ER58 in UNI75)                                                        |
| 77043S 162025E G       | 5.60±0.19 KY (74-90) UT1 AR Varves 48 cm down core 11,                                                |
| East Lobe, L. Bonney   | sed. depth c. 1.6 m; (poss. Taylor I Glac.). HEN79                                                    |
|                        | (232Th corr. age=1.98±0.28 KY; infer=#ER90 in UNI75)                                                  |
| 77043S 162025E G       | GT 400±1SD KY (386) U/T (CA) Lake Bonny till. UNI78                                                   |
| (nr Lake Bonney)       | ("No Th recovery")                                                                                    |
| 77043S 162025E G       | GT 290±2SD KY (387) U/T (CA) Lake Bonny till. UNI78                                                   |
| (nr Lake Bonney)       |                                                                                                       |
| 77043S 162025E G       | 2.55±0.56 MY; 2.44±0.18 MY (?) K/A WR Trachybasalt,                                                   |
| E of L. Bonney         | dyke?, 400 m alt.; McMurdo volcanic province. KUR78                                                   |
| 77043S 162025E G       | 2.53±0.20 MY (?) K/A WR Trachybasalt, vent, 750 m                                                     |
| E of L. Bonney         | alt.; McMurdo volcanic province. KUR78                                                                |
| 77041.8S 162025.3E R   | 3.38±0.14 MY (YU-McM-19) KA9 WR Basalt, covered with                                                  |
| nr Matterhorn Gl.      | erratics; McMurdo Volcanic Group. ARM78                                                               |
| 77040-43S 162030-45E R | 2045±140 BP (M-1919) 14C2 SK Desiccated Weddell seal,                                                 |
| Suess Gl, L. Bonney,   | side away from ground. CRA68                                                                          |
| Nussbaum Riegel        |                                                                                                       |
| 77040-43S 162030-45E R | 2490±140 BP (M-1981) 14C2 MU Weddell seal, weathered                                                  |
| Suess Gl, L. Bonney,   | side of thorax. CRA72B                                                                                |
| Nussbaum Riegel        | (same animal as M-1919)                                                                               |
| 77040-43S 162030-45E R | 845±100 BP (M-1912) 14C2 SE Desiccated Crabeater                                                      |
| Suess Gl, L. Bonney,   | flipper, side next to ground. CRA68                                                                   |
| Nussbaum Riegel        |                                                                                                       |
| 77040-43S 162030-45E R | 870±100 BP (M-1913) 14C2 SE Desiccated Crabeater                                                      |
| Suess Gl, L. Bonney,   | flipper, in contact with ground. CRA68                                                                |
| Nussbaum Riegel        |                                                                                                       |
| 77040-43S 162030-45E R | 1200±120 BP (M-1914) 14C2 SE Desiccated Crabeater                                                     |
| Suess Gl, L. Bonney,   | flipper, side away from ground. CRA68                                                                 |
| Nussbaum Riegel        |                                                                                                       |

- 77040-43S 162030-45E R 1045+120 BP (M-1915)14C2 SE Desiccated Crabeater  
Suess Gl., L. Bonney, flipper, on side away from ground. CRA68  
Nussbaum Riegel
- 77040-43S 162030-45E R 2150+200 BP (M-1916)14C2 SE Desiccated Crabeater  
Suess Gl., L. Bonney, flipper, on side away from ground. CRA68  
Nussbaum Riegel
- 77040-43S 162030-45E R 1155+120 BP (M-1917)14C2 SE Skin and tissue from  
Suess Gl., L. Bonney, remnants of carcass on side of hill. CRA68  
Nussbaum Riegel
- 77040-43S 162030-45E R 1845+140 BP (M-1918)14C2 SK Desiccated Crabeater  
Suess Gl., L. Bonney, seal, side away from ground. CRA68  
Nussbaum Riegel
- 77040S 162033E G 90+2.4 KY (75-26)UT1 CA Nodules in silt;  
by Lacroix Gl. snout (possibly btwn Taylor I and II Glac.). HEN79
- 77040S 162033E G 74+1.6 KY (76-14)UT1 CA Lac., on moraine mound;  
nr Lacroix Gl. (possibly btwn Taylor I and II Glac.). HEN79
- 77040S 162033E G 350+40 KY (76-13)UT1 CA Cement in sands, base of  
(nr Lacroix Gl.) Lacroix sec.; (possibly Taylor III Glac.). HEN79
- 77040S 162033E G 300+200 KY (76-11)UT1 CA Lac., clast, in delta;  
below Lacroix Gl. (possibly Taylor III Glac.). HEN 79
- 77040S 162033E G 320-40+50 KY (76-10)UT1 CA Lac., clast, in moraine;  
in front of Lacroix Gl. (possibly Taylor III Glac.). HEN79
- 77040S 162033E G 220+10 KY (76-17)UT1 CA Lacustrine, lag on terrace;  
nr Lacroix Gl. (poss. Taylor II Glac.). HEN79
- 77040S 162033E G 188+35 KY (76-38)UT1 CA Lacustrine, lag;  
S of Lacroix Gl. (poss. Taylor II Glac.). HEN79
- 77044.2S 162033.6E R 3.11+0.09 MY (YU-McM-12)KA9 WR Basalt on valley wall;  
W of Solas Gl. McMurdo Volcanic Group. ARM78
- 77042.6S 162033.9E R 2.66+0.06 MY (YU-McM-10')KA9 WR Same basalt flow as  
in front of Solas Gl. YU-McM-10; McMurdo Volcanic Group. ARM78
- 77042.5S 162034.1E R 3.00+0.10 MY (YU-McM-10)KA9 WR Basalt flow;  
in front of Solas Gl. McMurdo Volcanic Group. ARM78  
(infer=#?, 3.0+0.2 MY in DEN68)
- 77044.3S 162034.1E R 2.95+0.07 MY (YU-McM-13)KA9 WR Dike on valley wall;  
W of Solas Gl. McMurdo volcanic Group. ARM78
- 77042S 162035E RM 17,640+90 BP (QL-1258)14C1 GB 73 m alt., layer in silt  
L. Bonney drainage ba. bed in delta; (Glacial Lake Washburn). STU81
- 77043S 162035E M 660+300 BP (W-851)14C SE Well-preserved carcass, 365  
1 mi. E of L. Bonney Ft. a.s.l.;—. PEW62
- 77043S 162036E G 2.3+0.9 MY ("2")KA9 WR Basalt from scoria pile;  
by Solas (=Sollas) Gl. btwn advances of Solas Glacier. ARM68  
(in progress rept; superceded by dating in ARM78)
- 77043.1S 162038.4E R 4.64+0.12 MY (YU-McM-7)KA9 WR Core of dike or cinder  
E of Solas Gl. cone plug; McMurdo Volcanic Group. ARM78
- 77043.2S 162038.6E R 4.5+0.7 MY (YU-McM-8)KA9 Dike exposed by erosion;  
E of Solas Gl. McMurdo Volcanic Group. ARM78
- 77040S 162039E G 92+2.0 KY (76-7)UT1 CA-cemented silts from dry basin;  
W of "L. Henderson" (poss. btwn Taylor I and II Glac.). HEN79  
(=Mummy Pond?)
- 77040S 162039E G 90.5+1.4 KY (76-6)UT1 CA-cemented silts at margin  
W of "L. Henderson" of basin; (poss. btwn Taylor I and II Glac.). HEN79  
(=Mummy Pond?)

|                                                                 |                                                                                                                                                             |
|-----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 77°40S 162°39E G<br>SW "L. Henderson"<br>(=Mummy Pond?)         | 95+4.5 KY (75-22)UT1 CA Bedded lacustrine;<br>(poss. btwn Taylor I and II Glac.). HEN79                                                                     |
| 77°40S 162°39E G<br>W of "L. Henderson"<br>(=Mummy Pond?)       | 95+1.6 KY (74-36)UT1 CA Platy lacustrine, lag;<br>(poss. btwn Taylor I and II Glac.). HEN79                                                                 |
| 77°40S 162°39E G<br>SW of "L. Henderson"<br>(=Mummy Pond?)      | 100+3 KY (75-18)UT1 CA Bedded lacustrine;<br>(poss. btwn Taylor I and II Glac.). HEN79                                                                      |
| 77°40S 162°39E G<br>saddle by "L. Henderson"<br>(=Mummy Pond?)  | 120+6 KY (76-5)UT1 CA Lacustrine, encasing dropped<br>boulder; (poss. btwn Taylor I and II Glac.). HEN79<br>("Possibly same as 75-18.")                     |
| 77°40S 162°39E G<br>delta into "L. Henderson"<br>(=Mummy Pond?) | 70+1.4 KY (76-4)UT1 CA Lacustrine, 15 m below surface;<br>(poss. btwn Taylor I and II Glac.). HEN79                                                         |
| 77°40S 162°39E G<br>delta into "L. Henderson"<br>(=Mummy Pond?) | 210+15 KY (76-1)UT1 CA Lacustrine, clast;<br>(poss. Taylor II Glac.). HEN79                                                                                 |
| 77°40S 162°39E G<br>(nr Lacroix Gl.)                            | 161+2 KY (394)U/T (CA) Lacroix section II. UNI78<br>(not included in dating summary of HEN79)                                                               |
| 77°39S 162°40E M<br>btwn Suess Gl. and<br>"L. Henderson"        | 80+2.8 KY (75-8)UT1 CA Upper massive horizon, Suess<br>Strm. Sec.; (poss. btwn Taylor I and II Glac.).<br>HEN79                                             |
| 77°39S 162°40E M<br>btwn Suess Gl. and<br>"L. Henderson"        | 98+1.7 KY (75-11)UT1 CA Lac., encasing boulder, Suess<br>Strm. Sec.; (poss. btwn Taylor I and II Glac.) HEN79                                               |
| 77°39S 162°40E M<br>btwn Suess Gl. and<br>"L. Henderson"        | 127+5 KY (75-1)UT1 CA Nodules in silt, Suess Stream;<br>(poss. btwn Taylor I and II Glac.). HEN79                                                           |
| 77°39S 162°40E M<br>btwn Suess Gl. and<br>"L. Henderson"        | 125+2.5 KY (75-2)UT1 CA Nodules in silt, Suess stream;<br>(poss. btwn Taylor I and II Glac.). HEN79                                                         |
| 77°39S 162°40E M<br>btwn Suess Gl. and<br>"L. Henderson"        | 200+10 KY (75-13)UT1 CA Clast in CA silt, Suess Strm;<br>(poss. Taylor II Glac.). HEN79                                                                     |
| 77°41'30S 162°40E R<br>SW Mt. Nussbaum                          | 1855+160 BP (TAM-15;MIN-1)14C1 BN,SK,FL Mummified<br>cFab-eater seal, moraine surface, 793+25 m alt.<br>NOA64<br>(corr. age=500 BP relative to seal TAM-14) |
| 77°40S 162°40E R<br>W Nussbaum Riegel                           | 474.6+9 MY (NZKA 16)KA12 BT Country rock;<br>Olympus granite-gneiss. HUL72                                                                                  |
| 77°40S 162°40E R<br>W Nussbaum Riegel                           | 448.0+6 MY (NZKA 17)KA12 WR Lamprophyre dyke;<br>intrudes Olympus granite-gneiss. HUL72                                                                     |
| 77°40S 162°40E R<br>W Nussbaum Riegel                           | 454.0+6 MY (NZKA 18)KA12 WR Lamprophyre dyke;<br>intrudes Olympus granite-gneiss. HUL72                                                                     |
| 77°39S 162°40E M<br>(btwn Suess Gl. and<br>Mummy Pond)          | 185+10 KY (ER75-7)U/T (CA) Suess Stream Section;<br>---. UNI75<br>(not included in dating summary of HEN79)                                                 |
| 77°43S 162°40E M<br>4 km E of L. Bonney                         | 2.8+0.2 MY ("1")KA9 WR Basalt complex on bedrock bench;<br>overridden by Taylor Glacier advance. ARM68<br>(in progress rept; superceded by dating in ARM78) |
| 77°43S 162°40E R<br>(Taylor Valley)                             | 520+30 MY (AS-1)KA13 BT Lamprophyric dike;<br>basement rocks. PEA63                                                                                         |

- 77041S 163040E R  
Mt. Nussbaum
- 77041.4S 162040.8E R  
far below Marr Gl.
- 77039S 162042E RM  
beside Suess Gl.
- 77041.8S 162042.OE R  
below Marr Gl.
- 77042.OS 162042.7E R  
below Marr Gl.
- 77040S 162045E R  
W slope, Mt Nussbaum
- 77040S 162045E R  
Taylor Valley
- 77038S 162050E G  
S of L. Hoare
- 77038S 162050E G  
Lake Hoare
- 77038S 162050E G  
S of L. Hoare
- 77038S 162051E G  
S of L. Hoare
- 77038'01.9S  
162051'13.OE R  
DVDP 12
- 77038'01.9S  
162051'13.OE R  
DVDP 12
- 77038'01.9S  
162051'13.OE R  
DVDP 12
- 77038'01.9S  
162051'13.OE R  
DVDP 12
- 77038'01.9S  
162051'13.OE R  
DVDP 12
- 77038'01.9S  
162051'13.OE R  
DVDP 12
- 77038'01.9S  
162051'13.OE R  
DVDP 12
- 77037S 162059E G  
Canada Glacier
- 77037S 162059E G  
Canada Glacier
- 77037S 163000E G  
N wall, Taylor Valley
- 77037S 163000E G  
central Taylor Valley
- 77037S 163000E G  
edge, Taylor Valley
- 77037S 163000E G  
Taylor Valley
- 1250+100 BP (L-462B) 14CC1 SE Hide, lying on glacial  
drift, 1630 ft. alt. OLS61 PEW59  
(corr. per seal L-570; w/o corr., age=2550+100 BP)
- 2.87+0.15 MY (YU-McM-6) KA9 WR Basalt on steep wall;  
McMurdo Volcanic Group. ARM78
- 3110+40 BP (QL-1162) 14C1 AL Freshwater, in lac. sed. in  
moraine; "Alpine II" or "Alpine I." STU78
- 2.89+0.10 MY (YU-McM-3) KA9 WR Basalt flow;  
McMurdo Volcanic Group. ARM78
- 2.93+0.10 MY (YU-McM-1) KA9 WR Basalt flow, caps hill;  
McMurdo Volcanic Group. ARM78
- 425+20 MY (ATZ-1) KA13 BT Monzonite gneiss;  
Basement rocks. ANG62 PEA63
- 458+20 MY (ATZ-2) KA13 BT Lamprophyric dyke;  
Basement rocks. ANG62 PEA63
- 400-100+200 KY (ER75-28) U/T CA Biscuit lag;— . UNI75  
(not included in dating summary of HEN79)
- 92+2.5 KY (250) U/T (CA) Lag;— . UNI78  
(not included in dating summary of HEN79)
- 87+2.6 KY (75-29) UT1 CA lacustrine, lag;  
(poss. btwn Taylor I and II Glac.). HEN79
- 214+10 KY (75-27) UT1 CA lacustrine, lag;  
(poss. Taylor II Glac.). HEN79
- 255+40 KY (76-52) UT1 CA Clasts, 24.66-70 m down;  
(poss. Taylor II Glac.). HEN79  
(coords. from DVDP Bulletin No. 5)
- 160+13 KY (76-53) UT1 CA Clasts, 38.51 m down;  
(poss. Taylor II Glac.). HEN79  
(coords. from DVDP Bulletin No. 5)
- 300-40+50 KY (75-16) UT1 CA Lacustrine, 57.99-58.00;  
(poss. Taylor II Glac.). HEN79  
(coords. from DVDP Bulletin No. 5)
- 260+40 KY (76-54) UT1 Calcareous-cemented Diamicton,  
95.44-46 m; (poss. Taylor III Glac.). HEN79  
("postdates deposition"; coords.: DVDP Bull. 5)
- 300+25 KY (76-55) UT1 CA lacustrine, clasts, 111.18-  
111.26 m; (poss. Taylor III Glac.). HEN79  
(coords. from DVDP Bulletin No. 5)
- GT 400 KY (76-61) UT1 CA Disturbed lac. CA-silt  
varves, 142.35-142.40 m; (poss. predates Taylor III  
Glac.)  
HEN79  
(in radiometric equil.; coords: DVDP Bull. No. 5)
- 295-30+40 KY (265) U/T (CA) lag;— . UNI78  
(not part of summary rept of HEN79)
- 240-45+60 KY (422) U/T CA Clast;— . UNI78  
(not part of summary rept of HEN79)
- 120+3 KY (76-9) UT1 CA Lacustrine, lag on terrace;  
(poss. btwn Taylor I and II Glac.). HEN79
- 75+2.6 KY (76-8) UT1 CA Lacustrine, draping moraine  
mound; (poss. btwn Taylor I and II glac.). HEN79
- 11.0 MY (K-176) KA6 WR Basalt exposed in granite-  
gneiss; Cenozoic volcanics. POL76
- 82+5 KY (76-2) U/T CA Pedogenic clast;— . UNI78  
(not included in dating summary of HEN79)

|                       |                                                         |
|-----------------------|---------------------------------------------------------|
| 77037S 163000E G      | 142+5 KY(76-12)U/T CA Taylor Lake sed.;— . UNI78        |
| Taylor Valley         | (not included in dating summary of HEN79)               |
| 77038S 163006E RM     | 12,530+260 BP(QL-991)14C1 GB 88 m alt., in lac. sed. on |
| by Canada Glacier     | moraine draped on Canada Gl. alpine moraine;            |
|                       | (Glacial Lake Washburn). STU81                          |
| 77038S 163006E RM     | 12,200+600 BP(QL-1032)14C1 GB 60 m alt., in silt bed in |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77038S 163006E RM     | 12,100+500 BP(QL-1033)14C1 GB 65 m alt., in silt bed in |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77038S 163006E RM     | 10,950+70 BP(QL-1250)14C1 GB 67 m alt., in silt bed in  |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77038S 163006E RM     | 10,800+65 BP(QL-1147)14C1 GB 20 m alt., in silt bed in  |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77038S 163006E RM     | 14,600+400 BP(QL-1030)14C1 GB 20 m alt., in silt bed in |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77040S 163007E RM     | 17,050+60 BP(QL-1253)14C1 GB 224 m alt. in silt bed in  |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77040S 163007E RM     | 16,920+230 BP(QL-992)14C1 GB 224 m alt., in silt bed in |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77038S 163007E RM     | 16,500+700 BP(QL-1034)14C1 GB 118 m alt., in silt bed   |
| L. Fryxell drain. ba. | in lac. delta; (Glacial Lake Washburn). STU81           |
| 77038S 163007E RM     | 15,100+800 BP(QL-1035)14C1 GB 118 m alt., in silt bed   |
| L. Fryxell drain. ba. | in lac. delta; (Glacial Lake Washburn). STU81           |
| 77038S 163007E RM     | 14,600+700 BP(QL-990)14C1 GB 76 m alt., in silt bed in  |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77038S 163007E RM     | 14,430+170 BP(QL-1148)14C1 GB 76 m alt., in silt bed in |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77038S 163007E RM     | 13,700+180 BP(QL-1252)14C1 GB 98 m alt., in silt bed in |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77038S 163007E RM     | 13,500+320 BP(QL-1254)14C1 GB 118 m alt., in silt bed   |
| L. Fryxell drain. ba. | in lac. delta; (Glacial Lake Washburn). STU81           |
| 77038S 163007E RM     | 13,300+800 BP(QL-989)14C1 GB 68 m alt., in silt bed     |
| L. Fryxell drain. ba. | in lac. delta; (Glacial Lake Washburn). STU81           |
| 77038S 163007E RM     | 12,000+700 BP(QL-1031)14C1 GB 36 m alt., in silt bed    |
| L. Fryxell drain. ba. | in lac. delta; (Glacial Lake Washburn). STU81           |
| 77038S 163007E RM     | 11,900+150 BP(QL-1251)14C1 GB 60 m alt., in silt bed in |
| L. Fryxell drain. ba. | lac. delta; (Glacial Lake Washburn). STU81              |
| 77034S 163008E AR     | 451.4+6.2 MY (GA3505;FP2-4)KA12 BT Quartz monzonite;    |
| Mt Falconer area RM   | Mt Falconer pluton. MCD70                               |
| 77034S 163008E AR     | 461.2+8.0 MY (GA3506;FP2-6)KA12 BT Quartz monzonite;    |
| Mt Falconer area RM   | Mt Falconer pluton. MCD70                               |
| 77034S 163008E AR     | 459.9+8.0 MY (GA3507;FP2-15)KA12 BT Quartz monzonite;   |
| Mt Falconer area RM   | Mt Falconer pluton. MCD70                               |
| 77034S 163008E AR     | 469.1+8.1 MY (GA3508;FS2-1)KA12 BT Schist;              |
| Mt Falconer area RM   | Skelton Group. MCD70                                    |
| 77034S 163008E AR     | 469.0+8.2 MY (GA3509;FD0-4)KA12 BT Microdiorite dike;   |
| Mt Falconer area RM   | intruding Skelton Group. MCD70                          |
| 77034S 163008E AR     | 463.2+8.2 MY;458.9+8.1 MY (both: GA3509; FD0-4)KA12 HB  |
| Mt Flaconer area RM   | Microdiorite dike; intruding Skelton Gp. MCD70          |
| 77034S 163008E AR     | 464.9+8.2 MY (GA3510; FD0-7)KA12 BT Diorite dike;       |
| Mt Falconer area RM   | intruding Skelton Group. MCD70                          |
| 77034S 163008E AR     | 482.1+8.5 MY (GA3510;FD0-7)KA12 BT Diorite dike;        |
| Mt Falconer area RM   | intruding Skelton Group. MCD70                          |

- 77037S 163011E G  
(L. Fryxell)  
77037S 163011E RM  
L. Fryxell drain. ba.  
77037S 163011E G  
(Lake Fryxell)  
77037S 163011E G  
(Lake Fryxell)  
77038S 163012E RM  
L. Fryxell drain. ba.  
77038S 163012E RM  
L. Fryxell drain. ba.  
77038S 163012E RM  
L. Fryxell drain. ba.  
77038S 163012E RM  
L. Fryxell drain. ba.  
77038S 163014E RM  
L. Fryxell drain. ba.  
77038S 163015E RM  
L. Fryxell drain. ba.  
77035S 163016E RM  
Commonwealth Gl.  
77036S 163020E RM  
L. Fryxell drain. ba.  
77035S 163021E RM  
Commonwealth Gl.  
77035S 163021E RM  
Commonwealth Gl.  
77035S 163021E RM  
Commonwealth Gl.  
77035'24.3S  
163024'40.3E R  
DVDP 11  
77035S 163029E RM  
Explorers Cove  
  
77035S 163030E G  
along Wales Stream  
77035S 1630309E RM  
Explorers Cove  
  
77035S 163030E R  
end of Taylor Valley  
  
77035S 163030E M  
mouth, Taylor Valley  
77034'43S  
163030'42E R  
DVDP 8  
77034'43S  
163030'43E R  
DVDP 8 & 9
- 175+20 KY (76-24)U/T CA Fryxell delta;— . UNI78  
(not reliable; not in dating summary of HEN79)  
9200+40 BP (QL-1142)14C1 GB 21 m alt., in silt bed in  
lac. delta; (Glacial Lake Washburn). STU81  
188+35 KY (76-18)U/T CA Clast, in Fryxell delta;  
— . UNI78  
LT 57 KY (76-18)U/T CA Clast, in Fryxell delta;  
— . UNI78  
12,450+350 BP (QL-1043)14C1 GB 88 m alt., in silt bed in  
lac. delta; (Glacial Lake Washburn). STU81  
12,300+700 BP (QL-1044)14C1 GB 69 m alt., in silt bed in  
lac. delta; (Glacial Lake Washburn). STU81  
11,500+300 BP (QL-1045)14C1 GB 69 m alt., in silt bed in  
lac. delta; (Glacial Lake Washburn). STU81  
12,350+120 BP (QL-1149)14C1 GB 69 m alt., in silt bed in  
lac. delta; (Glacial Lake Washburn). STU81  
9800+40 BP (QL-1138)14C1 GB 20 m alt., in silt bed in  
lac. delta; (Glacial Lake Washburn). STU81  
13,700+260 BP (QL-1139)14C1 GB 80 m alt., in silt bed  
in lac. delta; (Glacial Lake Washburn). STU81  
15,660+60 BP (QL-1140)14C1 GB In lac. sed. with drop-  
stones; (Ross Sea ice margin). STU81  
13,330+80 BP (QL-1141)14C1 GB 41 m alt., in silt bed  
lac. delta; (Glacial Lake Washburn). STU81  
14,730+150 BP (QL-1156)14C1 GB In lac. sed. with drop-  
stones; (Ross Sea ice margin). STU81  
13,700+400 BP (QL-1234)14C1 GB In lac. sed. with drop-  
stones; (Ross Sea ice margin). STU81  
13,300+300 BP (QL-1249)14C1 GB In lac. sed. with drop-  
stones; (Ross Sea ice margin). STU81  
GT 26,800 BP (76-18)14C Macrofossil debris, 170.35 m  
depth; Foraminiferal Zone III. WEB82  
(pers. comm., Stuiver; coords. from DVDP Bull. 5)  
5240+40 BP (QL-139)14C1 SH 5.0 m alt. valves of  
Adamussium colbecki in emerged marine deposits;  
postdate Ross Sea drift sheet. STU76 STU81  
8340+120 BP (QL-993)14C1 GB In silt bed in lac. delta;  
(contemp. with grounded Ross Sea ice). STU77 STU81  
5500+70 BP (QL-161)14C1 SH 1.7 m alt., valves of  
Adamussium colbecki, emerged marine deposits;  
postdate Ross Sea drift sheet. STU76 STU81  
4000+200 BP (L-462G)14C1 SH Marine, mostly pecten, on  
sand at high-tide mark on beach. OLS61  
(w/o corr., age=4700+200 BP; loc. may be incorrect)  
4360+110 BP (76-18)14C2 SH Adamussium colbecki, 0.8 m.  
a.s.l.; — . YOS83  
GT 400 KY (76-57)UT1 CA-cemented fine silt, 57.25-57.28m;  
(poss. predates Taylor III Glac.). HEN79  
(in radiometric equilibrium; coords: DVDP Bull.5)  
6670+200 BP (QL-191)14C1 SH Adamussium colbecki,  
combined material from DVDP 8 & 9, -21.1 to -22.1 m  
alt.; postdates Ross Sea drift sheet. STU76 STU81  
(quoted as 5800 BP, using est. correction, in ELS81)

|                                                  |                                                                                                                                                                                                                      |
|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 77033S 163031E RM<br>Explorers Cove              | 5400+60 BP(QL-163)14Cl SH <u>Adamussium colbecki</u> , 8.1 m alt., in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                            |
| 77033S 163031E RM<br>Explorers Cove              | 5970+70 BP(QL-162)14Cl SH <u>Adamussium colbecki</u> , 5.3 m alt., in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                            |
| 77035S 163031E RM<br>Explorers Cove              | 5860+70 BP(QL-158)14Cl SH 4.2 m alt., valves of <u>Adamussium colbecki</u> in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                    |
| 77035S 163031E RM<br>Explorers Cove              | 5350+70 BP(QL-159)14Cl SH 1.9 m alt., valves of <u>Adamussium colbecki</u> in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                    |
| 77035S 163031E RM<br>Explorers Cove              | 5770+50 BP(QL-160)14Cl SH 0.5 m alt., valves of <u>Adamussium colbecki</u> in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                    |
| 77035S 163032E RM<br>Explorers Cove              | 5200+60 BP(QL-153)14Cl SH 1.4 m alt., valves of <u>Adamussium colbecki</u> in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                    |
| 77035S 163032E RM<br>Explorers Cove              | 5630+60 BP(QL-154)14Cl SH 3.3 m alt., valves of <u>Adamussium colbecki</u> in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                    |
| 77035S 163032E RM<br>Explorers Cove              | 6150+80 BP(QL-157)14Cl SH 4.5 m alt., valves of <u>Adamussium colbecki</u> in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                    |
| 77033S 163032E RM<br>Explorers Cove              | 4620+60 BP(QL-165)14Cl SH <u>Adamussium colbecki</u> , 2.9 m alt., in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                            |
| 77035S 163032E RM<br>Explorers Cove              | 6050+70 BP(QL-137)14Cl SH <u>Adamussium colbecki</u> , 5.7 m alt., in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                            |
| 77035S 163032E RM<br>Explorers Cove              | 5800+70 BP(QL-138)14Cl SH <u>Adamussium colbecki</u> , 7.5 m alt., in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                            |
| 77033S 163033E RM<br>Explorers Cove              | 5760+60 BP(QL-164)14Cl SH <u>Adamussium colbecki</u> , 0.5 m alt., in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                            |
| 77035S 163034E RM<br>Explorers Cove              | 5310+60 BP(QL-155)14Cl SH 1.0 m alt., valves of <u>Adamussium colbecki</u> in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                    |
| 77035S 163034E RM<br>Explorers Cove              | 5090+50 BP(QL-156)14Cl SH 2.2 m alt., valves of <u>Adamussium colbecki</u> in emerged marine deposits; postdate Ross Sea drift sheet. STU76 STU81                                                                    |
| 77025S 163043E AR<br>Gneiss Point                | 520 MY (57-12-3d)KA6 BT Paragneiss;<br>East Antarctica shield. GOL58<br>(referred to in PEA63 as #GD-1, 500+? MY, from 77024S 163040E; appears to be first radiometric age determination on a rock from Antarctica.) |
| 77027S 163044E R<br>nr mouth, South<br>Stream RM | 5930+200 BP(QL-70)14Cl AL Terrestrial, 6.6 m alt., from emerged marine deposits; postdates Ross Sea drift sheet. STU77 STU81                                                                                         |
| 77027S 163044E R<br>nr mouth, South<br>Stream RM | 6010+70 BP(QL-71)14Cl AL Terrestrial, 8.1 m alt., from emerged marine deposits; postdates Ross Sea drift sheet. STU77 STU81                                                                                          |

|                    |                                                         |
|--------------------|---------------------------------------------------------|
| 77°27S 163°44E R   | 5280±400 BP (QL-1041) 14C1 AL Terrestrial, 9.3 m alt.,  |
| nr mouth, South    | from emerged marine deposits; postdates Ross Sea        |
| Stream RM          | drift sheet. STU77 STU81                                |
| 77°27S 163°44E R   | 6430±70 BP (QL-72) 14C1 SH Adamussium colbecki, 6.0 m   |
| nr mouth, South    | alt., from emerged marine deposits; postdates Ross      |
| Stream RM          | Sea drift sheet. STU77 STU81                            |
| 77°27S 163°44E R   | 6350±60 BP (QL-96) 14C1 SH Adamussium colbecki, 4.5 m   |
| nr mouth, South    | alt., from emerged marine deposits; postdates           |
| Stream RM          | Ross Sea drift sheet. STU77 STU81                       |
| 77°27S 163°44E R   | 6120±50 BP (QL-1042) 14C1 SH Adamussium colbecki, 4.0 m |
| nr mouth, South    | alt., from emerged marine deposits; postdates           |
| Stream RM          | Sea drift sheet. STU77 STU81                            |
| 77°26S 163°46E R   | 4450±150 BP (L-594) 14C1 Hide, elephant seal, buried    |
| Marble Point       | under 1 ft gravel on beach, 44 ft alt. NIC68 OLS61      |
|                    | (corr. per L-570; w/o corr., age=5650±150 BP)           |
| 77°26S 163°48E R   | 500±20 MY (ATZ-3) KAl3 BT Marble;                       |
| Marble Point       | (Ross System). ANG62 PEA63                              |
| 77°24S 163°50E R   | 496±15 MY (P-1) KAl3 BT Diorite;                        |
| McMurdo Sound area | Surko Creek diorite. PEA63                              |
| 77°25S 163°50E R   | 524±15 MY (P-2) KAl3 BT Basic Dyke;                     |
| McMurdo Sound area | Bill Hill 'trap' (=Loke microdiorite?). PEA63           |



GEOGRAPHIC AREA 7

TRANSANTARCTIC MOUNTAIN AREA, FROM 78°00'S TO BYRD  
GLACIER (samples from north to south by coordinates)

|                                            |                                                                                                                       |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 78°01'S 163°42'E G<br>beside Joyce Gl. RM  | 3960±30 BP (QL-1157) 14C1 AL Freshwater, from upturned<br>lac.seds. in moraine; "Alpine II" or "Alpine I."<br>STU78   |
| 78°01'S 163°42'E G<br>beside Joyce Gl. RM  | 3780±200 BP (QL-1158) 14C1 AL Freshwater, from upturned<br>lac.seds. in moraine; "Alpine II" or "Alpine I."<br>STU78  |
| 78°01'S 163°42'E G<br>beside Joyce Gl. RM  | 5810±160 BP (QL-1159) 14C1 AL Freshwater, from upturned<br>lac. seds. in moraine; "Alpine II" or "Alpine I".<br>STU78 |
| 78°02'S 164°10'E G<br>Garwood Valley RM    | 6580±50 BP (QL-1221) 14C1 GB In lac. seds. in delta;<br>within limits of Ross Sea drift. STY81                        |
| 78°02'S 164°10'E G<br>mouth, Garwood V. RM | 6190±80 BP (QL-80) 14C1 GB 24 m alt., mat;<br>surface of ice-cored Ross Sea drift. STU81                              |
| 78°04'S 164°10'E G<br>lower Marshall V. RM | 1990±40 BP (QL-1038) 14C1 GB 50 m alt., in lac. seds. in<br>delta; within limits of Ross Sea drift. STU81             |
| 78°04'S 164°10'E G<br>lower Marshall V. RM | 4500±40 BP (QL-1039) 14C1 GB 60 m alt., mat;<br>surface of ice-cored Ross Sea drift. STU81                            |
| 78°04'S 164°10'E G<br>Marshall Valley      | 210±15 KY (395) U/T (CA) Section I. UNI78                                                                             |
| 78°04'S 164°10'E G<br>Marshall Valley      | 190-20±30 KY (395) U/T CA section I. UNI78                                                                            |
| 78°04'S 164°10'E G<br>Marshall Valley      | 16±0.46 KY (433) U/T CA —. UNI78                                                                                      |
| 78°05.4'S 165°23.2'E R<br>Rainbow Ridge    | 2.7±0.09 MY (YU-McM-21001) KA9 WR Hornblende trachyte<br>(Trachyte Hill Form.); McMurdo Volc. Gp. ARM78               |
| 78°06'S 164°00'E G<br>mouth, Miers Val. RM | 1300±40 BP (QL-1040) 14C1 GB 133 m alt., mat;<br>surface of ice-cored Ross Sea drift. STU81                           |
| 78°06'S 164°00'E G<br>Miers Valley         | 3.5±0.5 KY (ER28) U/T GY Miers Valley Gypsum. UNI75<br>(sketchy report)                                               |
| 78°06'S 164°00'E G<br>Miers Valley         | 9.0±2.4 KY (ER35) U/T GY Miers Valley Gypsum. UNI75<br>(sketchy report; "Th. Contamination.")                         |
| 78°06'S 164°00'E G<br>Miers Valley         | 7.5±0.7 KY (ER46) U/T GY Miers Valley Gypsum. UNI75<br>(sketchy report).                                              |
| 78°06'S 164°00'E G<br>Miers Valley         | 15±3 TY (76-32) U/T CA Na <sub>2</sub> CO <sub>3</sub> , moraine. UNI78                                               |
| 78°06'S 164°00'E G<br>Miers Valley         | 115±12 TY (76-33) U/T CA Lag. UNI78                                                                                   |
| 78°06'S 164°00'E G<br>(Miers Valley)       | 58±3.3 TY (76-36) U/T CA "Miers till beneath tuff." UNI78<br>(sketchy report).                                        |
| 78°06°164°00'E G<br>(Miers Valley)         | 120±4 KY (76-31) U/T GY —. UNI78<br>(sketchy report)                                                                  |
| 78°06'S 163°51'E G<br>Lake Miers           | 11.9±0.3 KY (76-27) U/T CA Lake Miers High Level. UNI78                                                               |
| 78°06'S 163°51'E G<br>Lake Miers           | 9.5±0.3 KY (76-28) U/T CA Lake Miers High Level. UNI78                                                                |
| 78°06'S 163°51'E G<br>Lake Miers           | 10.0±0.3 KY (76-29) U/T CA Lake Miers High Level. UNI78                                                               |
| 78°06'S 163°51'E G<br>Lake Miers           | 5-15 KY (76-37) U/T GY Lake Miers High Level. UNI78                                                                   |
| 78°06'S 164°00'E G<br>(Miers Valley)       | 185±20 KY (76-35) U/T GY Miers Lake Sed. UNI78<br>(sketchy report)                                                    |

- 78006S 165025E G  
E. Brown Pen. RM  
78007.5S 165016.5E R  
Brown Peninsula  
78008.7S 165028.1E R  
Brown Peninsula  
78008.7S 165025.0E R  
Brown Peninsula  
78011.6S 163026.4E R  
nr Howchin Gl.  
78012S 163055E RM  
edge, Koettlitz Gl.  
tongue  
78012S 163055E RM  
edge, Koettlitz Gl.  
tongue  
78012S 163055E RM  
edge, Koettlitz Gl.  
78014.5S 163024.8E R  
canyon in front of  
Walcott Glacier  
78014.5S 163023.9E R  
canyon in front of  
Walcott Glacier  
78014.5S 163022.5E R  
canyon in front of  
Walcott Glacier  
78014.5S 163022.0E R  
canyon in front of  
Walcott Glacier  
78015.7S 163011.3E R  
nr mouth, Roaring Val.  
78015.7S 163011.2E R  
nr mouth, Roaring V.  
78016.1S 16307.1E R  
Roaring Valley  
78016.1S 16307.1E R  
Roaring Valley  
78016.1S 16308.6E R  
side of Roaring Val.  
78016.1S 16308.9E R  
side of Roaring Valley  
78016.2S 16306.7E R  
Roaring Valley  
78016.5S 163018.8E R  
Dromedary Platform  
78016.8S 163033.2E R  
N summit, The Bulwark  
78016.8S 163033.2E R  
N summit, The Bulwark
- GT 32,900 BP (R1523)14C SH *Zygochlamys*, in sand with  
volcanic fragments; Scallop Hill Fm. VEL69  
2.1+0.4 MY (YU-McM-21068)KA9 WR Hornblende basalt  
(Melania Basalt Fm.); McMurdo Volcanic Gp. ARM78  
2.25+0.05 MY (YU-McM-21047)KA9 WR Hornblende trachyte  
(Aurora Trachyte Fm.); McMurdo Volc. Gp. ARM78  
2.2+0.09 MY (YU-McM-21094)KA9 WR Basalt  
(Nubian Basalt Fm.); McMurdo Volcanic Gp. ARM78  
13.8+0.2 MY (YU-McM-73)KA9 WR Lava;  
McMurdo Volcanic Group. ARM78  
3790+60 BP (QL-81)14C1 GB 65 m alt., mat;  
surface of ice-cored Ross Sea drift. STU81  
2110+60 BP (QL-82)14C1 GB 43 m alt., mat;  
surface of ice-cored Ross Sea drift. STU81  
480+40 BP (QL-95)14C1 GB 34 m alt., mat;  
surface of ice-cored Ross Sea drift. STU81  
5.7+0.5 MY (YU-McM-43)KA9 WR Upper lava unit;  
McMurdo Volcanic Group. ARM78  
("definitely anomalously old")  
0.45+0.07 MY (YU-McM-44)KA9 WR Upper lava unit;  
McMurdo Volcanic Group. ARM78  
0.27+0.10 MY (YU-McM-45)KA9 WR Upper lava unit;  
McMurdo Volcanic Group. ARM78  
1.45+0.15 MY (YU-McM-46)KA9 WR Lower flow;  
McMurdo Volcanic Group. ARM78  
0.90+0.09 MY (YU-McM-50a)KA9 WR Lava flow flooding  
Roaring Val.; McMurdo Volcanic Group. ARM78  
0.84+0.07 MY (YU-McM-50b)KA9 WR Lava flow flooding  
Roaring Val.; McMurdo Volcanic Group. ARM78  
1.12+0.14 MY (YU-McM-47a)KA9 WR Basalt dome;  
McMurdo Volcanic Group. ARM78  
1.35+0.20 MY (YU-McM-47b)KA9 WR Basalt dome;  
McMurdo Volcanic Group. ARM78  
2.10+0.09 MY (YU-McM-49a)KA9 WR Lava cascade, base  
covered by Alpine II mor.; McMurdo Volc. Gp. ARM78  
1.78+0.19 MY (YU-McM-49b)KA9 WR Lava cascade, base  
covered by Alpine II mor.; McMurdo Volc. Gp. ARM78  
1.25+0.10 MY (YU-McM-48a)KA9 WR Second basalt dome;  
McMurdo Volcanic Group. ARM78  
2.44+0.16 MY (YU-McM-63)KA9 WR Lava;  
McMurdo Volcanic Group. ARM78  
30+3 MY (#?)KA9 Excess radiogenic argon in harzburgite  
from eruptive vent, host rock=basalt with  
1.66+0.4 MY K/A date. ARM78  
64+9 MY (#?)KA9 From excess 40-Ar, harzburgite from  
eruptive vent, host rock=basalt with 1.66+0.4 MY  
K/A date. ARM78

|                                                         |                                                                                                                                                                        |
|---------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 78016.8S 163033.2E R<br>N summit, The Bulwark           | 96+6 MY( #?)KA9 From excess 40-Ar, titanaukite xeno-<br>crysts from eruptive vent, host rock=basalt with<br>1.66+0.4 MY K/A date. ARM78                                |
| 78016.8S 163033.2E R<br>N summit, The Bulwark           | 711+20 MY( #?)KA9 From excess 40-Ar, harzburgite from<br>eruptive vent, host rock=basalt with 1.66+0.4 MY<br>K/A date. ARM78                                           |
| 78016.8S 163033.2E R<br>N summit, The Bulwark           | 782+18 MY( #?)KA9 From excess 40-Ar, titanaukite xeno-<br>cryst from eruptive vent, host rock=basalt with<br>1.66+0.4 MY K/A date. ARM78                               |
| 78016.8S 163033.2E R<br>N summit, The Bulwark           | 1.66+0.4 MY (YU-McM-30)KA9 WR Bomb;<br>McMurdo Volcanic Group. ARM78                                                                                                   |
| 78017.4S 163027.7E R<br>floor, Pyramid Valley           | 0.22+.12 MY (YU-McM-31a)KA9 WR Basalt dome, covered<br>with erratics; McMurdo Volcanic Group. ARM78                                                                    |
| 78017.4S 163027.7E R<br>floor, Pyramid Valley           | 0.22+0.06 MY (YU-McM-31b)KA9 WR Basalt dome, covered<br>with erratics; McMurdo Volcanic Group. ARM78                                                                   |
| 78017.8S 163027.8E R<br>floor, Pyramid Valley           | 0.08+0.13 MY (YU-McM-32)KA9 WR Dome, preglacial;<br>McMurdo Volcanic Group. ARM78                                                                                      |
| 78018S 163027E G<br>Pyramid Trough RM                   | 226,000+1100 BP (QAL-21a) KA17 Lava flow;<br>underlies Ross Sea drift. STU81                                                                                           |
| 78018S 163027E G<br>Pyramid Trough RM                   | 236,000+4000 BP (QAL-22) KA17 Lava flow;<br>underlies Ross Sea drift. STU81                                                                                            |
| 78018S 161021E R<br>Stepaside Spur                      | 150 MY (GA 396)KA9 PL Pegmatitic dolerite, dike-like<br>body; Ferrar dolerite, emplaced in basement rocks.<br>MCD63                                                    |
| 78018S 161021E R<br>Stepaside Spur                      | 154 MY (GA 396-R)KA9 PL Pegmatitic dolerite, dike-like<br>body; Ferrar dolerite, emplaced in basement rocks.<br>MCD63                                                  |
| 78018.1S 163034.4E R<br>top, The Bulwark                | 1.65+0.3 MY (YU-McM-40)KA9 WR Flow, appears to overlie<br>a till; McMurdo Volcanic Group. ARM78                                                                        |
| 78018.2S 163027.1E R<br>bottom. Pyramid Val.            | 0.71+0.16 MY (YU-McM-33)KA9 WR Lava on cinder cone;<br>McMurdo Volcanic Group. ARM78                                                                                   |
| 78018.3S 163028.4E R<br>off The Bulwark                 | 1.83+0.09 MY (YU-McM-35)KA9 WR Lava tongue flowing<br>into Pyramid Val.; McMurdo Volcanic Gp. ARM78                                                                    |
| 78018.7S 163030.1E R<br>side, The Bulwark, 9.9          | 2.88+0.15 MY (YU-McM-36)KA9 WR Massive flow;<br>McMurdo Volcanic Group. ARM78                                                                                          |
| 78019.1S 163019.9E R<br>Dromedary Platform              | 1.68+0.08 MY (YU-McM-65)KA9 WR Lava;<br>McMurdo Volcanic Group. ARM78                                                                                                  |
| 78019.4S 164000.0E R<br>3 km NE of L. Morning           | 15.4+0.5 MY (YU-McM-MM 32)KA9 WR Trachyandesite dike;<br>McMurdo Volcanic Group. ARM78                                                                                 |
| 78019.6S 163015.7E R<br>Dromedary Platform              | 1.21+0.09 MY (YU-McM-66)KA9 WR Lava;<br>McMurdo Volcanic Group. ARM78<br>(infer= #?, 1.2 MY, flow underlying drift of Ross<br>Sea Glaciation IV, in DEN70)             |
| 78020S 1590E M<br>Boomerang Ra. and<br>Portal Mountain  | 2700-3400 MY RS2* 3 samples of non-marine carbonate<br>rocks; Aztec Formation. FAU73<br>(=present age of provenance of these rocks based<br>on age of Aztec Fm=150 MY) |
| 78020.4S 163031.2E R<br>nr tongue, Koettlitz<br>Glacier | 13.2+0.4 MY (YU-McM-37)KA9 WR Massive flow or mega-<br>pillow; McMurdo Volcanic Group. ARM78                                                                           |
| 78022S 165001E G<br>Mount Discovery                     | 4.6 MY (K-15)KA6 WR Trachyte;<br>Cenozoic volcanics. POL76                                                                                                             |
| 78022.4S 165000.4E R<br>summit, Mt. Discovery           | 5.3+0.14 MY (YU-McM-15170)KA9 FD Basalt;<br>McMurdo Volcanic Group. ARM78                                                                                              |

|                       |                                                        |
|-----------------------|--------------------------------------------------------|
| 78°29.0S 163°32.6E R  | 1.15±0.02 MY (YU-McM-MM106)KA9 Trachyte;               |
| upper Mt. Morning     | McMurdo Volcanic Group. ARM78                          |
| 78°31S 163°35E G      | 2.2 MY (K-8v)KA6 WR Basalt;                            |
| Mount Morning         | Cenozoic volcanics. POL76                              |
| 78°31S 163°35E G      | 1.2 MY (K-8g)KA6 WR Trachyte;                          |
| Mount Morning         | Cenozoic volcanics. POL76                              |
| 78°31S 163°35E G      | 1.0 MY (K-8p)KA6 WR Trachyte;                          |
| Mount Morning         | Cenozoic volcanics. POL76                              |
| 78°31S 163°35E G      | 1.0 MY (K-9)KA6 WR Trachyte;                           |
| Mount Morning         | Cenozoic volcanics. POL76                              |
| 78°31S 163°35E G      | 2.4 MY (K-10)KA6 WR Basalt;                            |
| Mount Morning         | Cenozoic volcanics. POL76                              |
| 78°31S 163°35E G      | 14.6 MY to 18.7 MY (#?)K/A — Unspecified samples in    |
| Mount Morning area    | trachyandesitic-type rocks; McMurdo Volc. Gp. KYL83    |
|                       | (prob. = "7 analyses" mentioned on map of KYL81)       |
| 78°37S 159°25E AR     | 158 MY (GA 393)KA9 PL Dolerite, lower sheet;           |
| Mt. Escalade          | Ferrar dolerite, intrusive into Beacon Gp. MCD63       |
| 78°37S 159°25E AR     | 153 MY (GA 393)KA9 PY Dolerite, lower sheet;           |
| Mt. Escalade          | Ferrar dolerite, intrusive into Beacon Gp. MCD63       |
| 79°11S 11S 155°51E R  | 174.4±3.4 MY, 175.2 MY (79016)AAF1,AAF1 WR Basaltic    |
| Butcher Ridge         | andesite; Ferrar Supergroup. KYL81B                    |
|                       | (mean inferred age=175.0±2.7 MY with #79028)           |
| 79°12S 155°50E R      | 153 MY (79028)AAF1 WR Intrusive pitchstone;            |
| Butcher Ridge         | Ferrar Supergroup. KYL81B                              |
|                       | (no plateau; mean inferred age=175.0±2.7 MY with       |
|                       | #79016)                                                |
| 79°45S 159°30E RM     | 486±36 MY (G-78-9*)RS512/0.7141±0.0005 FD 4 size frac- |
| coastal moraine,      | tions; Pleistocene till. FAU81                         |
| Brown Hills           | (*isochron is based on this sample and G-78-31,        |
|                       | along Mt. Tuatura, 80°34S 158°20E, Geog. Area 8)       |
| 79°46S 158°33E AR     | 568.2±9.0 MY RS713/0.71222±.00015 WR Carlyon           |
| Brown Hills           | Granodiorite. FEL80                                    |
| 80°S 156°E RM         | GT 500 MY RSR2/0.7132 FD 4 size fractions (G-78-3)     |
| margin, Hatherton Gl. | from till; possible Cenozoic. FAU81                    |
|                       | (samples scatter above ref. line; provenance age       |
|                       | of finest fraction=2034 MY assuming IR=0.7040)         |

|                                            |                                                                                                                                                                                                   |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GEOGRAPHIC AREA 8:                         | TRANSANTARCTIC MOUNTAIN AREA, FROM BYRD GLACIER TO NIMROD GLACIER (samples from north to south by coordinates)                                                                                    |
| 80°34S 158°20E G<br>along Mt. Tuatura RM   | 486+36 MY (G-78-31*)RS5I2/0.7141+0.0005 FD Till from Lateral moraine of Byrd Gl.; Holocene till. FAU81 (*isochron based on this sample and G-78-9 from Brown Hills, 79°45S 159°30E, Geog. Area 7) |
| 80°34S 158°20E G<br>N slope, Mt Tuatura RM | 1100+69 MY (G-78-26, G-78-30)RS6I2/0.7050+0.0021 FD Size fractions, till; possibly Cenozoic. FAU81 (provenance date)                                                                              |
| 80°51S 159°32E R<br>(near Mt. Dick RM)     | 463+3 MY (6291TR; 27536)KA9 WR Siltstone; Dick Formation. Byrd Group. ADA82                                                                                                                       |
| 81°30S 162°32E R<br>(nr Starshot Gl. RM)   | 437+3 MY (6303TR; 27099)KA9 WR Argillite interbedded with sandstone and conglomerate; Starshot Fm. ADA82                                                                                          |
| 81°37S 161°40E R<br>(Nash Range RM)        | 449+3 MY (6297mu; 27065)KA9 MC Pegmatite; Intruding Goldie Formation. ADA82                                                                                                                       |
| 81°42S 162°24E R<br>(Nash Range RM)        | 447+3 MY (6301bi; 27037)KA9 BT Adamellite; Intruding Goldie Formation. ADA82                                                                                                                      |
| 81°53S 159°40E R<br>(by Starshot Gl. RM)   | 384+3 MY (6209TR; J4)KA9 WR Slate, sandstone; Starshot Formation, Byrd Group. ADA82                                                                                                               |
| 82°13S 160°24E R<br>(Holyoake Range RM)    | 475+3 MY (6304TR; 27121)KA9 WR Siltstone interbedded with Cambrian limestone; Shackleton Limestone. ADA82                                                                                         |
| 82°23S 159°43E R<br>(Cobham Range RM)      | 465+3 MY (6208TR; 31600)KA9 WR Slate, greenschist facies; Goldie Formation, Beardmore Group. ADA82                                                                                                |
| 82°38S 155°15E R<br>Quest Cliffs           | 618+6 MY (GA1951)KA9 HB Schist; Miller Formation. GRI69A                                                                                                                                          |
| 82°39S 155°01E R<br>Quest Nunatak          | 655 MY (#?)K/A HB Metamorphics; Miller Formation. GRI69 (pers. comm. McDougall; may be previous date for #GA1951 listed above)                                                                    |

## GEOGRAPHIC AREA 9:

TRANSANTARCTIC MOUNTAIN AREA, NIMROD GLACIER TO  
BEARDMORE GLACIER (samples from north to south by  
coordinates)

|                                                          |                                                                                                                                                               |
|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82°53S 157°24E R<br>Miller Range                         | 481±3 MY(3671hb;26827A)KA9 HB Quartz-diorite;<br>Hope Granite, at granite contact with skarn marbles.<br>ADA82                                                |
| 82°53S 157°24E R<br>Miller Range                         | 476±3 MY(3671bi;26827A)KA9 BT Quartz-diorite;<br>Hope Granite, at granite contact with skarn marbles.<br>ADA82                                                |
| 82°53S 157°24E R<br>Miller Range                         | 470±3 MY;477±4 MY(both are #3663bi;26826)KA9 BT<br>Granodiorite; Hope Granite, sill at contact of<br>northern pluton with marbles. ADA82<br>(mean age=474 MY) |
| 82°57S 157°30E R<br>Rust Bluffs                          | 463 MY(GA 766;NZGS p 26819)KA9 BT Granite;<br>Hope Granite. MCD65 GUN82 GRI69                                                                                 |
| 83°01S 160°00E R<br>(Queen Elizabeth<br>Range Rm)        | 474±3 MY(6295bi;31554)KA9 BT Tonalite;<br>intruding Shackleton Limestone, Byrd Gp. ADA82                                                                      |
| 83°01S 157°15E R<br>Miller Range                         | 486±4 MY(3664mu;26831D)KA9 MC Schist close to<br>granite; Hope Granite. ADA82                                                                                 |
| 83°02S 159°30E R<br>(Queen Elizabeth<br>Range Rm)        | 495±4 MY(6186TR;N4)KA9 WR Slate, greenschist facies,<br>interbedded with limestone and quartzite;<br>Shackleton Limestone, Byrd Group. ADA82                  |
| 83°02S 157°43E R<br>E of Snowshoe Pass                   | 478 MY(GA 767;NZGS p 26835)KA9 MC Pegmatite;<br>assoc. with Hope Granite. MCD65 GRI69                                                                         |
| 83°03S 156°27E R<br>Miller Range                         | 479±4 MY(3669hb;26807A)KA9 HB Hornfels, contact with<br>northern granite pluton; Hope Granite. ADA82                                                          |
| 83°03S 156°27E R<br>Miller Range                         | 474±3 MY(3669bi;26807A)KA9 BT Hornfels, contact with<br>northern granite pluton; Hope Granite. ADA82                                                          |
| 83°04-83°52S<br>164°30-172°40E R<br>Beardmore Gl. region | 538±28 MY RS612/0.713±0.002 WR Composites, mostly<br>arenites and argillites; Goldie Fm. GUN76<br>(from 4 locations, coordinates in GUN76)                    |
| 83°05S 157°53E R<br>Miller Range                         | 494±4 MY;495±4 MY(both are #3665bi;26842A)KA9 BT<br>Granite; Hope Granite, northern pluton close<br>to contact. ADA82<br>(mean age=495 MY)                    |
| 83°06S 156°47E R<br>Aurora Heights                       | 476 MY(GA 762;NZGS p 26779)KA9 BT Lamprophyre dike;<br>intrusive into Nimrod Group. MCD65 GRI69                                                               |
| 83°07S 157°15E R<br>Miller Range                         | 499±4 MY(3670hb;26813A)KA9 HB Schist in pelite and<br>marble sequence; Worsley Fm, Nimrod Gp. ADA82                                                           |
| 83°07S 157°20E R<br>Miller Range                         | 475±3 MY(6310bi;26817)KA9 BT Schist;<br>Worsley formation, Nimrod Group. ADA82                                                                                |
| 83°07S 156°22E R<br>Argosy Glacier                       | 487 MY,491 MY(GA763;NZGS p 26804)KA9 MC Schist;<br>Argosy Formation. MCD65 GRI69<br>(one date of 489 MY listed in GRI69)                                      |
| 83°07S 156°45E R<br>Miller Range                         | 952±7 MY(3667hb;26776A)KA9 HB Schist in pelitic<br>sequence; Argosy Formation, Nimrod Gp. ADA82                                                               |
| 83°08S 156°56E R<br>Aurora Heights                       | 456 MY(GA 764;NZGS p 26810)KA9 BT Schist;<br>Argosy Formation. MCD65 GRI69                                                                                    |
| 83°08S 156°56E R<br>Aurora Heights                       | 486 MY(GA 765;NZGS p 26811)KA9 MC Schist;<br>Argosy Formation. MCD65 GRI69                                                                                    |
| 83°08S 156°19E R<br>N side, Argosy Gl.                   | 528±5 MY(GA1953;NZGS F26805)KA9 BT Amphibolite;<br>Argosy Formation. GRI69A<br>(coords.=83°11S 155°54E in GRI69)                                              |

|                                                   |                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 83°08S 156°19E R<br>N side, Argosy Gl.            | 1011±19 (GA1953;NZGS P26805)KA9 HB Amphibolite;<br>Argosy Formation. GRI69A<br>(coords.=83°11S 155°54E in GRI69)                                                                                                                                                                                                                          |
| 83°08S 156°53E R<br>W. Aurora Heights             | 1043±16 MY (GA1952;NZGS P26808)KA9 HB Amphibolite;<br>Argosy Formation. GRI69A<br>(coords.=83°08S 156°49E in GRI69)                                                                                                                                                                                                                       |
| 83°08S 156°00E R<br>Miller Range                  | 696±5 MY;700±5 MY (3668hb;26800)KA9 HB Schist band<br>(1 m); Argosy Formation, Nimrod Group. ADA82<br>(mean age=698 MY)                                                                                                                                                                                                                   |
| 83°08S 156°00E R<br>Miller Range                  | 525±4 MY (3662hb;26801B)KA9 HB Gneiss; pegmatitic veins<br>in paragneiss sequence; Aurora Formation. ADA82                                                                                                                                                                                                                                |
| 83°08S 156°00E R<br>Miller Range                  | 503±4 MY;504±4 MY;498±4 MY (all are #3662bi;26801B)<br>KA9 BT Gneiss; pegmatitic veins in paragneiss<br>sequence; Aurora Formation. ADA82<br>(mean age=502 MY)                                                                                                                                                                            |
| 83°09S 156°56E R<br>Miller Range                  | 485±3 MY (6309mu;26809)KA9 MC Pelitic schist;<br>Argosy Formation, Nimrod Group. ADA82                                                                                                                                                                                                                                                    |
| 83°10S 156°00E RM<br>W Miller Range               | 456±14 MY (522)RS4I2/0.7511±0.0007 WM Augengneiss;<br>Nimrod Group. GUN72<br>(w/o BT point, isochron age=561±23 MY and IR=<br>0.7478±0.0003)                                                                                                                                                                                              |
| 83°10S 156°00E RM<br>W Miller Range               | 1984±77 MY RS2/c.0.711 WR Selected high-grade meta-<br>sedimentary rocks of Nimrod Group. GUN72<br>(pooled slope of upper isochron=2027±38 MY, RS3I2/<br>0.7276±0.0021 and lower isochron=1828±141 MY,<br>RS3I2/0.7059±0.0042; considered best estimate of<br>age; isochron for all selected samples=1950±153 MY,<br>RS8I2/0.7111±0.0058) |
| 83°10-35S 156°00-<br>158°00E RM<br>S Miller Range | 602±38 MY RS6I2/0.7099±0.0033 WR Selected high-grade<br>metasedimentary rocks of Nimrod Group. GUN72<br>(tentative interpretation: time of isotopic re-<br>equilibration)                                                                                                                                                                 |
| 83°10S 156°00E RM<br>W Miller Range               | 3720 MY (530)RSM2/0.704 WR Granite-gneiss;<br>Nimrod Group. GUN72<br>(maximum estimate of age of Nimrod Group)                                                                                                                                                                                                                            |
| 83°10S 156°00E RM<br>nr head, Argosy Gl.          | 1180 MY,1300 MY,1550 MY (522)UP6 ZR Augen gneiss;<br>Nimrod Group Paragneisses. GUN82 GUN76                                                                                                                                                                                                                                               |
| 83°10S 156°00E RM<br>nr head, Argosy Gl.          | 1640 MY,2230 MY,2800 MY (554)UP6 ZR Gneissic meta-<br>quartzite; Nimrod Group Paragneisses. GUN82 GUN76                                                                                                                                                                                                                                   |
| 83°10S 155°54E R<br>Miller Range                  | 840±6 MY (3666hb;26788)KA9 HB Amphibolite facies<br>schist; metavolcanic horizon in migmatites,<br>Aurora Formation, Nimrod Group. ADA82                                                                                                                                                                                                  |
| 83°10S 155°54E R<br>Miller Range                  | 758±5 MY;751±5 MY (both are #3666hb';26788)KA9 HB<br>Amphibolite facies schist; metavolcanic horizon in<br>migmatites, Aurora Formation. ADA82<br>(mean age=755 MY)                                                                                                                                                                       |
| 83°11S 155°52E R<br>Miller Range                  | 1152±8 MY;1154±8 MY (both are #3676hb;26790)KA9 HB<br>Skarn pegmatite; reaction zone at marble in migma-<br>tites, Aurora Formation. ADA82<br>(mean age=1153 MY)                                                                                                                                                                          |
| 83°12S 155°52E R<br>Miller Range                  | 563±4 MY (3678hb;26797)KA9 HB Schist, metadolomite or<br>marble in pelitic schist; Miller Fm. ADA82                                                                                                                                                                                                                                       |

- 83°12S 155°52E R  
Miller Range  
83°12S 155°52E R  
Miller Range  
83°12S 155°52E R  
Miller Range  
83°14S 156°32E R  
Miller Range  
83°15S 157°00E G  
E. Miller Range RM  
83°15S 157°00E G  
E. Miller Range RM  
83°15S 157°00E G  
Miller Range RM  
83°15S 157°00E G  
S Miller Range  
83°18S 164°23E R  
Robb Glacier  
83°18S 164°23E R  
Robb Glacier  
83°18S 156°28E R  
Miller Range  
83°18S 156°28E R  
Miller Range  
83°20S 161°43E R  
Lowery Glacier  
83°25S 156°40E R  
Miller Range  
83°25S 156°40E R  
Miller Range  
83°30S 171°E RM  
by Beardmore Gl.  
82°-85°S 155°-175°E M  
Cen. Trans. Mts.  
(Nimrod, Beardmore Gl.)  
83°33S 157°18E R  
Miller Range  
83°33S 157°18E R  
Miller Range  
83°34S 157°17E R  
Miller Range  
899±6 MY; 877±6 MY (both are 3677hb; 26794) KA9 HB Skarn  
pegmatite; intruding marble, Miller Fm. ADA82  
(mean age=888 MY)  
551±4 MY (6308hb; 26795) KA9 HB Schist, 30 m above  
Endurance Thrust; Miller Formation. ADA82  
559±4 MY (6308bi; 26795) KA9 BT Schist, 30 m above  
Endurance Thrust; Miller Formation. ADA82  
483±4 MY (3661bi; 26774) KA9 BT Gneiss;  
Aurora Formation, Nimrod Group. ADA82  
476 MY, 477 MY, 484±40 MY (48) UP6 SP Granitic rock;  
Granite Harbor Intrusives. GUN75  
469 MY, 481 MY, 537±5 MY (48) UP6 ZR -200 mesh,  
468 MY, 480 MY, 537±5 MY (48) UP6 ZR +200 mesh,  
granitic rock; Granite Harbour Intrusives. GUN75  
1615±221 MY RS19I2/0.706±0.031 WR High-grade meta-  
sedimentary rocks of Nimrod Group. GUN72  
(points scatter widely; geologically more meaning-  
ful dates are the 3720 MY maximum for one sample  
from W Miller Range, the 602±38 MY minimum from S  
Miller Range, and the 1984±77 MY date for selected  
samples from W Miller Range, all in GUN72)  
488±34 MY RS7I2/0.734±0.002 WR Granitic rocks;  
Granite Harbour Intrusives. GUN75  
147 MY (GA 395) KA9 PL Dolerite;  
Ferrar Dolerite. MCD63 GRI69  
(loc.=western slopes, Mt. Miller in MCD63)  
155 MY (GA 395) KA9 PY Dolerite;  
Ferrar Dolerite. MCD63 GRI69  
(loc.=western slopes, Mt. Miller in MCD63)  
489±4 MY (3674bi; 26769) KA9 BT Diorite;  
xenolith in Hope Granite, Martins Dome Pluton.  
ADA82  
485±4 MY (3675bi; 26771) KA9 BT Granite;  
Hope Granite, Martins Dome pluton. ADA82  
153 MY (GA394) KA9 PL Dolerite, coneter of sheet;  
Ferrar Dolerite. MCD63 GRI69  
(new loc. and coord. from GRI69)  
576±4 MY (3672hb; 26844) KA9 HB Quartz-diorite gneiss;  
pre-tectonic intrusive rock, Argo Gneiss. ADA82  
520±4 MY; 518±4 MY (both are #3672bi; 26844) KA9 BT  
Quartz-diorite gneiss; pre-tectonic intrusive rock,  
Argo Gneiss, Aurora Formation. ADA82  
(mean age=519 MY)  
445 MY, 452 MY, 492±5 MY (577) UP6 ZR Normagnetic,  
483 MY, 484 MY, 490±10 MY (577) UP6 ZR Magnetic,  
granitic rock; Granite Harbour Intrusives. GUN75  
(slightly discordant; lie on chord through origin)  
600-700 MY R/S Beardmore Granites;  
intrude Goldie Fm. TES82  
(unreferenced in review article)  
496±4 MY (6312hb; 26861) KA9 HB Schist, 200 m above  
Endurance Thrust; Miller Formation. ADA82  
497±4 MY (6312bi; 26861) KA9 BT Schist, 200 m above  
Endurance Thrust; Miller Formation. ADA82  
543±4 MY (6311HB; 26859) KA9 HB Schist in marble  
sequence; Miller Formation. ADA82



|                                                           |                                                                                                                                                                     |
|-----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 83°34S 157°13E R<br>Miller Range                          | 504±5 MY(GA1955)KA9 HB Amphibolite;<br>Nimrod Group. GRI69A<br>(infer=#?, from Gerard Cliffs, 83°34S 157°15E,<br>Miller Formation, in GRI69)                        |
| 83°35S 157°13E R<br>Miller Range                          | 517±4 MY(6298bi;26854A)KA9 BT Adamellite;<br>granitic apophyse intruding Aurora gneiss. ADA82                                                                       |
| 83°35S 157°10E R<br>Gerard Cliffs                         | 633 MY(GA 770;NZGS p 26855)KA9 BT Orthogneiss;<br>Aurora Formation, Nimrod Group. MCD65 GRI69<br>(age in MCD65= (1)631 MY, (2)635 MY)                               |
| 83°36S 157°15E R<br>Miller Range                          | 521±4 MY(3673hb;26856)KA9 HB Augen-gneiss;<br>Aurora Formation, Nimrod Group. ADA82                                                                                 |
| 83°36S 157°15E R<br>Miller Range                          | 517±4 MY;513±4 MY(both are #3673 bi;26856)KA9 BT<br>Augen-gneiss; Aurora Formation. ADA82<br>(mean age=515 MY)                                                      |
| 83°36S 157°12E R<br>Miller Range                          | 485±3 MY(6299hb;26855)KA9 HB Schist;<br>Aurora Formation, Nimrod Group. ADA82                                                                                       |
| 83°37S 157°16E R<br>Gerard Cliffs                         | 471 MY(GA 769;NZGS p 26851)KA9 BT Gneiss;<br>Aurora formation, Nimrod Group. MCD65 GRI69                                                                            |
| 83°37S 157°16E R<br>Gerard Cliffs                         | 483 MY(GA 769;NZGS p 26851)KA9 MC Gneiss;<br>Aurora Formation, Nimrod Group. MCD65 GRI69                                                                            |
| 83°00S-84°15S<br>167°00E-174°00E RM<br>Beardmore Gl. area | 463±12 MY RS11I2/0.710±0.002 WR Granitic rocks;<br>Granite Harbour Intrusives. GUN75<br>(ages of Hope and Ida Granite indistinguishable,<br>GUN71)                  |
| 83°38S 156°17E R<br>Miller Range                          | 1006±9 MY(GA1954)KA9 HB Amphibolite lens in garnet<br>gneiss; Nimrod Group. GRI69A<br>(infer=#?, from Gerard Cliffs, 83°37S 157°16E,<br>Aurora Formation, in GRI69) |
| 83°38S 157°09E R<br>Miller Range                          | 528±4 MY(3660hb;21763)KA9 HB Schist; metavolcanic<br>band in pelitic schists & marbles, Miller Fm. ADA82                                                            |
| 83°38S 157°09E R<br>Miller Range                          | 530±4 MY;529±4 MY(both are #3660bi;21763)KA9 BT<br>Schist; metavolcanic band in pelitic schists and<br>marbles, Miller Formation. ADA82<br>(mean age=530 MY)        |
| 83°38S 157°09E R<br>Miller Range                          | 570±4 MY;571±4 MY(both are #3679hb;26850)KA9 HB<br>Schist; metavolcanic band in pelitic schists and<br>marbles, Miller Formation. ADA82<br>(mean age=571 MY)        |
| 83°39S 157°08E R<br>Gerard Cliffs                         | 520 MY(GA 768;NZGS p 26846)KA9 BT Orthogneiss;<br>Aurora Formation, Nimrod Group. MCD65 GRI69                                                                       |
| 83°50S 167°00E R<br>(Queen Alexandra Ra.)                 | 477±3 MY(3996TR;26865)KA9 WR Slate, greenschist<br>facies; Goldie Formation. ADA82                                                                                  |
| 83°51S 166°00E g<br>Tillite Glacier                       | 167±9 MY(14.1)KA13 WR Diabase sill;<br>Ferrar Dolerite. ELL70                                                                                                       |
| 84°17S 169°25E G<br>The Cloudmaker                        | 479 MY(741)K/A BT Hope Granite. GUN76                                                                                                                               |
| 84°22S 164°55E R<br>Mount Falla                           | 173±6 MY RS6I2/0.7128±0.0001 Basalt flows 1 through<br>6; Kirkpatrick Basalt. FAU82                                                                                 |
| 84°22S 164°55E G<br>Mount Falla                           | 197.7±2.7 MY(F218A-19)KA12 WR Trachyte pebble;<br>Prebble Formation. BAR72                                                                                          |
| 84°22S 164°55E G<br>NW Mount Falla                        | 190±9 MY RS5I2/0.7128±0.0096 WR Tuff;<br>Triassic Falla Formation. FAU73A<br>(rev. age for 203±12 MY cited in BAR72)                                                |
| 84°22S 164°55E G<br>Mount Falla                           | 169.3±2.0 MY(71.62)KA12 WR Tholeiite, flow 14;<br>Kirkpatrick Basalt. FLE77                                                                                         |

|                                    |                                                                                                                                                                                     |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 84°22S 164°55E G<br>Mount Falla    | 132.7±3.0 MY(71.42)KA12 WR Tholeiite, flow 11;<br>Kirkpatrick Basalt. FLE77                                                                                                         |
| 84°22S 164°55E G<br>Mount Falla    | 165.9±2.0 MY(71.15)KA12 WR Tholeiite, flow 5;<br>Kirkpatrick Basalt. FLE77                                                                                                          |
| 84°22S 164°55E G<br>Mount Falla    | 130.9±1.5 MY(71.03)KA12 WR Tholeiite, flow 1;<br>Kirkpatrick Basalt. FLE77                                                                                                          |
| 84°34S 163°56E G<br>Peterson Ridge | 135.6±10.9 MY(27.71)KA12 WR Tholeiites, flow 11;<br>Kirkpatrick Basalt. FLE77<br>(wt-avg. age of 126.0±1.8 MY and 141.4±1.4 MY)                                                     |
| 84°34S 163°56E G<br>Peterson Ridge | 176.0±3.9 MY(27.67)KA12 WR Tholeiites, flow 9;<br>Kirkpatrick Basalt. FLE77<br>(wt-avg. age of 179.8±1.2;172.1±1.4;174.7±1.5 MY)                                                    |
| 84°34S 163°56E G<br>Peterson Ridge | 152.1±18.3 MY(27.17)KA12 WR Tholeiites, flow 6;<br>Kirkpatrick Basalt. FLE77<br>(wg-avg. age of 160.5±4.8 MY and 134.6±6.9 MY)                                                      |
| 84°34S 163°56E G<br>Peterson Ridge | 141.7±2.3 MY(27.56)KA12 WR Tholeiites, flow 5;<br>Kirkpatrick Basalt. FLE77<br>(wt-avg. age of 139.8±1.4 MY and 143.1±1.2 MY)                                                       |
| 84°34S 163°56E G<br>Peterson Ridge | 174.4±4.6 MY(27.52)KA12 WR Tholeiites, flow 3;<br>Kirkpatrick Basalt. FLE77<br>(wt-avg. age of 179.4±1.8 MY and 172.9±1.3 MY)                                                       |
| 84°34S 163°56E G<br>Peterson Ridge | 133.5±9.3 MY(27.46)KA12 WR Tholeiites, flow 2;<br>Kirkpatrick Basalt. FLE77<br>(wt-avg. age of 139.5±4.0 MY and 126.3±4.4 MY)                                                       |
| 84°34S 163°56E G<br>Peterson Ridge | 144.9±1.4 MY(27.90)KA12 WR Tholeiite, flow 1;<br>Kirkpatrick Basalt. FLE77                                                                                                          |
| 84°35S 164°00E G<br>Storm Peak     | 179±7 MY(27.42)KA13 WR Basalt;<br>Kirkpatrick Basalt. ELL70                                                                                                                         |
| 84°35S 164°00E G<br>Storm Peak     | 170±7 MY(27.13)KA13 WR Basalt;<br>Kirkpatrick Basalt. ELL70                                                                                                                         |
| 84°35S 164°00E G<br>Storm Peak     | 163±10 MY(27.45)KA13 WR Basalt;<br>Kirkpatrick Basalt. ELL70                                                                                                                        |
| 84°35S 164°00E G<br>Storm Peak     | 156.8 MY;161.8±8.6 MY(27.17)AAF3,AAI3 WR Tholeiite,<br>flow 6; Kirkpatrick Basalt. FLE77<br>(age spectrum discordant; ages given in FLE77;<br>AAI age of questionable significance) |
| 84°35S 164°00E G<br>Storm Peak     | 129.8±4.8 MY;126.1±3.8 MY(27.46)AAP3,AAI3 WR<br>Tholeiite, flow 2; Kirkpatrick Basalt. FLE77<br>(age spectrum and other calc. ages in FLE77)                                        |

| GEOGRAPHIC AREA 10:                                          | QUEEN MAUD MOUNTAIN AREA (samples from west to east by coordinates)                                                                                                                                                                               |
|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 85°28S 171°59E G<br>Mt. Spohn                                | 172±8 MY(50.4)KA13 WR Basalt;<br>Kirkpatrick Basalt. ELL70                                                                                                                                                                                        |
| 85°27S 172°00E G<br>Otway Massif RM                          | 179±10 MY(0003)KA12 WR Basalt boulder, boulder lens<br>in lahar debris; Prebble Formation. BAR72                                                                                                                                                  |
| 82°57S 172°30E R<br>Celebration Pass                         | 465 MY(GA 519)KA9 BT Granodiorite;<br>Hope Granite. MCD65 MCG69 GUN82                                                                                                                                                                             |
| 83°57S 172°30E R<br>Celebration Pass                         | 450 MY(GA 520)KA9 BT Granodiorite;<br>Hope Granite. MCD65 MCG69 GUN82                                                                                                                                                                             |
| 85°39S 174°E R<br>Mt. Bumstead                               | 161 MY(??)K/A WR Basalt; --. MCG69<br>(infer strat.= Kirkpatrick Basalts from ref. map)                                                                                                                                                           |
| 85°39S 174°10E G<br>Mt. Bumstead                             | 173.1±1.9 MY(64.10)KA12 WR Tholeiite, flow 14;<br>Kirkpatrick Basalt. FLE77                                                                                                                                                                       |
| 85°39S 174°10E G<br>Mt. Bumstead                             | 159.1±1.8 MY(64.07)KA12 WR Tholeiite, flow 13;<br>Kirkpatrick Basalt. FLE77                                                                                                                                                                       |
| 85°39S 174°10E G<br>Mt. Bumstead                             | 165.7±1.9 MY(64.04)KA12 WR Tholeiite, flow 3;<br>Kirkpatrick Basalt. FLE77                                                                                                                                                                        |
| 85°39S 174°10E G<br>Mt. Bumstead                             | 167.0±2.2 MY(64.02)KA12 WR Tholeiite, flow 2;<br>Kirkpatrick Basalt. FLE77                                                                                                                                                                        |
| 85°39S 174°10E G<br>Mt. Bumstead                             | 168.2±27.5 MY(64.01)KA12 WR Tholeiites, flow 1;<br>Kirkpatrick Basalt. FLE77                                                                                                                                                                      |
| 85°39S 174°10E G<br>Mt. Bumstead                             | (wt-avg. age of 188.6±2.2 MY and 149.7±2.1 MY)<br>169.8 MY;170.4±1.4 MY;169.4±1.1 MY(64.01)AAF3;AAP3;<br>AAI3 WR Tholeiite, flow 1; Kirkpatrick Basalt. FLE77<br>(age spectrum discordant; AAP3 age is wt-mean;<br>spectrum ages listed in FLE77) |
| 85°39S 174°10E G<br>Mt. Bumstead                             | 175.4 MY;167.5±3.8 MY(64.10)AAF3;AAI3 WR Tholeiite,<br>flow 14; Kirkpatrick Basalt. FLE77<br>(age spectrum discordant; ages listed in FLE77)                                                                                                      |
| 85°52S 174°15E G<br>Mt. Cecily                               | 171±7 MY(59.32)KA13 WR Basalt;<br>Kirkpatrick Basalt. ELL70                                                                                                                                                                                       |
| 84°14S 177°50E<br>Chopper Ridge                              | 418 MY(??)K/A BT Granodiorite;--. MCG69<br>(infer strat.=Granite Harbour Intrusives from RM)                                                                                                                                                      |
| 83°-87°S<br>155°E-153°W RM<br>Beardmore to Scott<br>Glaciers | 1600-2300 MY RS2* WR CA Non-marine;<br>Victoria Group, Beacon Supergroup. FAU73<br>(*age of provenance based on Sr-87/Sr-86 of 12<br>samples=0.7160, assumed IR of provenance=0.7030,<br>and age of the Permian Fms. sampled=250 MY)              |
| 84°58S 177°40W R<br>Cascade Bluff                            | 430 MY(??)R/S FD Monzotonalite;--. MCG69<br>(infer strat.=Granite Harbour Intrusives from RM)                                                                                                                                                     |
| 85°39S 177°W R<br>Roberts Massif                             | 183 MY(??)K/A PY Diabase;--. MCG69<br>(infer strat. prob.=Ferrar Dolerites from ref. map)                                                                                                                                                         |
| 85°39S 177°W R<br>Roberts Massif                             | 171 MY(??)K/A PY Diabase;--. MCG69<br>(infer strat. prob.=Ferrar Dolerites from ref. map)                                                                                                                                                         |
| 83°39S 177°W R<br>Roberts Massif                             | 163 MY(??)K/A PY Diabase;--. MCG69<br>(infer strat. prob.=Ferrar Dolerites from ref. map)                                                                                                                                                         |
| 85°39S 177°W R<br>Roberts Massif                             | 160 MY(??)K/A PY Diabase;--. MCG69<br>(infer strat.=Granite Harbour Intrusives from RM)                                                                                                                                                           |
| 84°57S 176°55W R<br>Thanksgiving Point                       | 315 MY(??)R/S BT Leucogranodiorite;--. MCG69<br>(infer strat.=Granite Harbour Intrusives from RM)                                                                                                                                                 |
| 84°57S 176°55W R<br>Thanksgiving Point                       | 250 MY(??)R/S BT Leucogranodiorite;--. MCG59<br>(infer strat.=Granite Harbour Intrusives from RM)                                                                                                                                                 |

- 84°57S 176°55W R  
Thanksgiving Point  
84°30S 176°30W R  
Mt. Speed  
84°39S 175°55W R  
Longhorn Spurs  
85°14S 175°10W R  
Halfmoon Bluff  
85°00S 175°00W G  
Transantarctic Mts.:  
N. Victoria Land to  
Dufek Massif  
84°34S 174°30W R  
Longhorn Spurs  
85°17S 163°20W R  
NW of mouth, Axel  
Heiberg Gl. RM  
86°22S 160°01W R  
Lonely Ridge  
  
86°22S 160°01W R  
Lonely Ridge  
  
86°00S 160°00W R  
Queen Maud Mt. Area  
  
86°00S 160°00W M  
Upper Amundsen Gl.  
86°20S 158°00W G  
Nilsen Plateau  
86°20S 158°00W G  
Nilsen Plateau  
86°20S 158°00W G  
Nilsen Plateau  
  
86°20S 158°00W G  
Nilsen Plateau  
85°27S 157°15W R  
1 mi SE, O'Brien Pk.  
85°27S 157°15W R  
1 mi SE, O'Brien Pk.  
85°27S 157°15W R  
1 mi SE, O'Brien Pk.  
85°27S 157°15W R  
1 mi SE, O'Brien Pk.  
87°04S 153°46W G  
Mount Early  
  
86°53S 153°30W G\*  
Sheridan Bluff  
  
166 MY(?)K/A BT Leucogranodiorite;--. MCG69  
(infer strat.=Granite Harbour Intrusives from RM)  
405 MY(?)K/A BT Granite gneiss;--. MCG69  
(infer strat.=Granite Harbour Intrusives from RM)  
470 MY(?)R/S BT Adamellite gneiss;--. MCG69  
(infer strat.=Granite Harbour Intrusives from RM)  
165.9±6.3 MY(HB1)AAP1 WR Dolerite;  
Ferrar Supergroup. KYL81B  
470±90 MY RS25I/0.7064±0.0010\* WR Flows and sills of  
Jurassic dolerites. BRO76 FAU82  
(\*pseudoisochron age of mantle rocks)  
  
405 MY(?)K/A BT Adamellite;--. MCG69  
(infer strat.=Granite Harbour Intrusives from RM)  
445±13 MY(GA 771;NZGS p 26950)KA9 MC Pegmatite dike;  
cuts Henson Marble. MCD65 MIR69  
  
846±35 MY(?)R/S BT Granodiorite;  
Lonely Ridge granodiorite. MIR69  
(cited from McLelland, 1967,unpubl.)  
472±10 MY(?)K/A BT Granodiorite;  
Lonely Ridge granodiorite. MIR69  
(cited from McLelland, 1967,unpubl.)  
630-720 MY R/S Silicic ignimbrites and quartz por-  
phyries; unconformably overlain by Cambrian  
strata. TES82  
(dates are part of a review)  
600±13 MY RSI Wisconsin Range batholith. GRI81  
(date is part of a review; higher IR)  
708±41 MY RSI2/0.7122 WR Metasediments;  
LaGorce Formation. FAU79A  
476±9 MY RSI2/0.7157 WR Metavolcanic rocks;  
Wyatt Formation. FAU79A  
620±13 MY RS4I2/0.7115 WR Lonely Ridge Granodiorite.  
FAU79A  
(several cataclastically deformed samples had dates  
of 553-401 MY)  
471±20 MY RSI2/0.7189 WR South Quartz Monzonite.  
FAU79A  
460±20 MY(L62-18)RSM4/0.707 MC Granite;  
--. CRA64A MIR69  
450±20 MY(L62-18)RSM4/0.707 BT Granite;  
--. CRA64A MIR69  
520±30 MY(L62-18)RSM4/0.707 MN Granite;  
--. CRA64A MIR69  
490±20 MY(L62-18)RSM4/0.707 WR Granite;  
--. CRA64A MIR69  
15.45±0.19 MY;16.27±0.23 MY(34)KA17 WR Basalt flow;  
--. STU80  
(duplicate analyses; avg=15.86±0.30 MY)  
18.54±0.37 MY(30)KA17 WR Basalt, lava flow 10;  
--. STU80  
(\*coords. from Antarct. J1. U.S. 17(4),1982,p.11;  
avg. age with #27 and #24=18.32±0.35 MY)

|                                                         |                                                                                                                                                                                                                          |
|---------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 86°53S 153°30W G*<br>Sheridan Bluff                     | 17.98±0.24 MY(27)KA17 WR Basalt, lava flow 7;<br>--. STU80<br>(*see comments for #30 above)                                                                                                                              |
| 86°53S 153°30W G*<br>Sheridan Bluff                     | 18.43±0.23 MY(24)KA17 WR Basalt, lava flow 4;<br>--. STU80<br>(*see comments for #30 above)                                                                                                                              |
| 86°53S 153°30W G*<br>Sheridan Bluff                     | 19.21±0.39 MY(22)KA17 WR Basalt, lava flow 2;<br>--. STU80<br>(*coords. from Antarct. J1.U.S.17(4),1982,p.11)                                                                                                            |
| 86°53S 153°30W G*<br>Sheridan Bluff                     | 19.43±0.65 MY(27)AAP2 WR Basalt, lava flow 7;<br>--.STU80<br>(*coords. from Antarct. J1.U.S.17(4),1982,p.11;<br>age is wt-avg;age spectrum was concordant)                                                               |
| 86°53S 153°30W G*<br>Sheridan Bluff                     | 19.75±1.57 MY(22)AAP2 WR Basalt, lava flow 2;<br>--. STU80<br>(*coords. from Antarct. J1.U.S.17(4),1982,p.11;<br>age is wt-avg;age spectrum was concordant)                                                              |
| 85°45S 153°00W G<br>Scott Gl. Area                      | 27.3±2.7 MY(?)-- Volcanic rocks assoc. with glacial<br>deposits. BUL73<br>(Minshew and Mercer, pers. comm.)                                                                                                              |
| 85°45S 153°00W G<br>Scott Gl. Area                      | LIT 788 MY RSR2 WR Metavolcanic rocks;<br>Wyatt Formation. FAU79A<br>(points scatter;age is upper limit based on 2 samp.)                                                                                                |
| 86°58S 152°37W G<br>Mt. Wilbur                          | 470±14 MY(?)KA13 BT Brown, from grey granite;<br>basement complex. MIN65                                                                                                                                                 |
| 85°29.3S 145°36W R<br>Byrd Mts, nr. Leverett<br>Glacier | 489±30 MY RS4I2 WR Acid volcanic rocks;<br>basement complex. FAU68A<br>(see comment for 472±11 MY, 144°45W, FAU66)                                                                                                       |
| 85°39S 144°45W R<br>Harold Byrd Mts.                    | 472±11 MY(?)RSI2/0.7161 WR Rhyolites;<br>basement complex. FAU66 MIR69<br>(may be based on same samples as these listings:<br>483±13 MY, 144°24W, FAU68; 489±30 MY, 145°36W,<br>FAU68A; and/or 493±9 MY, 144°24W, FAU79) |
| 85°40S 144°24W G<br>Mt. Webster, Byrd Mts.              | 483±13 MY RS4I2/0.7157 WR Acid volcanics;<br>Leverett Fm. FAU68<br>(see comment for 472±11 MY, 144°45W, FAU66)                                                                                                           |
| 85°40S 144°24W G<br>Mt. Webster,Byrd Mts.               | 493±9 MY RSI2/0.7153 WR Acid volcanic rocks;<br>basement complex. FAU79<br>(see comment for 472±11 MY, 144°45W, FAU66)                                                                                                   |

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|---------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GEOGRAPHIC AREA 11:                                                 | HORLICK MOUNTAIN AREA (samples from west to east by coordinates)                                                                                                                                                                                                              |
| 85°55S 131°40W RM<br>nr Quartz Hills, along<br>W side Reedy Glacier | 576±21 MY RS3I2/0.7117±0.0005 FD Grain-size fractions<br>from glaciolacustrine sediment; pre-Reedy III.<br>FAU83<br>(provenance date; finer fractions deviate)                                                                                                                |
| 86°00S 130°00W M<br>Upper Reedy Gl.                                 | 615±22 MY RSI Wisconsin Range Batholith. GRI81<br>(date is part of a review; relatively high IR)                                                                                                                                                                              |
| 86°13S 125°40W R<br>Metavolcanic Mt.                                | 633±13 MY RS4I2/0.7034 WR Metavolcanics;<br>Wyatt Formation. FAU68 FAU68A MIR69<br>(reported as 630±14 MY in FAU68)                                                                                                                                                           |
| 86°02S 125°35W G<br>Mims Spur                                       | 130±13 MY RSI2/0.7430 BT,MC,KF Pegmatite;<br>basement complex. FAU79                                                                                                                                                                                                          |
| 86°02S 125°35W G<br>Mims Spur                                       | 473±5 MY RSI2/0.7189 KF Pegmatite dykes;<br>basement complex. FAU79                                                                                                                                                                                                           |
| 86°02S 125°35W G<br>Mims Spur                                       | 485±17 MY(♯?)K/A MC Pegmatite dyke;<br>basement complex. FAU79                                                                                                                                                                                                                |
| 85°48S 125°24W G<br>Wisconsin Plateau RM                            | 480±21 MY RS4I2/0.7144±0.0030 FD Grain-size fractions<br>in lodgement till; unit 4 (mid. Horlick Glac.).<br>FAU83<br>(provenance date)                                                                                                                                        |
| 86°02S 125°22W R<br>Rdg. E of Olentangy<br>Glacier                  | 479±10 MY RS6I2 Quartz monzonite (aplite,pegmatite);<br>Granite Harbor Intrusives. FAU68A MIR69<br>(listing of 486±9 MY of FAU79 may be rev. age)                                                                                                                             |
| 86°02S 125°22W R<br>Rdg E. of Olentangy<br>Glacier                  | 627±22 MY RS7I2 WR Rapakivi granite and related<br>granitic rocks; Wisc. Ra. batholith. FAU68A MIR69<br>(infer=629±22 MY,RS7I2/0.7090, same descrpt.,<br>Wisc. Range, in FAU68)                                                                                               |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 460±16 MY RSI2/0.7160 WR Metasediments;<br>LaGorce Formation. FAU79<br>(infer=460±16 MY, RS8I2, phyllites and slates,<br>LaGorce Fm., Wisc. Ra., FAU68A; and 462±17 MY,<br>"lower limit", RS8I2/0.7168, metagreywacke, slate,<br>phyllite from LaGorce Fm., Wisc. Ra., FAU68) |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 555±48 MY RSI2/0.7098 WR Metavolcanics;<br>Wyatt Formation. FAU79                                                                                                                                                                                                             |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 507±23 MY RSI2/0.7157 WR Older granitic rocks;<br>(Beardmore Suite). FAU79                                                                                                                                                                                                    |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 513±12 MY RSI2/0.7050 WR Quartz Monzonite plutons;<br>basement complex. FAU79                                                                                                                                                                                                 |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 486±9 MY RSI2/0.7146 WR Aplites;<br>basement complex. FAU79                                                                                                                                                                                                                   |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 490±12 MY RS7I2/0.7062 WR Postkinematic granitic<br>rocks and aplites; Wisconsin Ra. batholith. FAU68<br>(listing: 486±9 MY from FAU79 may be rev. age)                                                                                                                       |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 505 MY(♯?)RSM2 BT Older granites;<br>Wisconsin Range batholith. FAU66<br>(may be rev. by 513 MY, 118°45W, of FAU68)                                                                                                                                                           |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 396 MY(13)RSM2/0.7040 BT Foliated rapakivi granite;<br>basement complex. FAU68                                                                                                                                                                                                |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 1255 MY(13)RSM2/0.7040 MC Foliated rapakivi granite;<br>basement complex. FAU68                                                                                                                                                                                               |
| 85°45S 125°00W G<br>Wisconsin Range                                 | 401 MY(11)RSM2/0.7040 BT Foliated rapakivi granite;<br>basement complex. FAU68                                                                                                                                                                                                |

|                                                         |                                                                                                                                                                             |
|---------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 85°16S 119°19W G<br>Todd Ridge                          | 564±7 MY RSI2/0.7073 WR Acid volcanic rocks;<br>basement complex. FAU79<br>(may relate to same samples as 532±38 MY, FAU68,<br>and 498±45 MY, FAU68A, both from Todd Ridge) |
| 85°16S 119°19W G<br>Todd Ridge                          | 532±38 MY RS6I2/0.7116 WR Acid volcanics;<br>--. FAU68<br>(see comment for 564±7 MY, 119°19W, FAU79)                                                                        |
| 85°16S 119°10W G<br>Todd Ridge                          | 498±45 RS6I2 WR Acid volcanic rocks;<br>basement complex. FAU68A MIR69<br>(see comment for 564±7 MY, 119°19W, FAU79)                                                        |
| 85°18S 118°45W G<br>Long Hills                          | 520-560 MY RS2I2 WR Quartz Monzonite pluton(s);<br>basement complex. FAU79                                                                                                  |
| 85°18S 118°45W G<br>Long Hills                          | 513 MY(227)RSM2/0.7040 BT Porphyritic quartz<br>monzonite;--. FAU68                                                                                                         |
| 84°45S 114°40W R<br>Discovery Ridge and<br>Treves Butte | 472±24 MY(??)K/A BT Quartz monzonite;<br>basement rocks. TRE65 MIR69<br>(infer=470±36 MY, same descrpt., Ohio Ra., TRE64)                                                   |
| 84°45S 114°40W R<br>Discovery Ridge and<br>Treves Butte | 471±49 MY(??)R/S FD Quartz monzonite;<br>basement rocks. TRE65 MIR69                                                                                                        |
| 84°45S 114°40W R<br>Discovery Ridge and<br>Treves Butte | 516±72 MY(??)R/S WR Quartz monzonite;<br>basement rocks. TRE65 MIR69<br>(same sample as FD from this loc.)                                                                  |

## GEOGRAPHIC AREA 12:

THIEL MOUNTAIN AREA (samples from west to east by coordinates)

85°02S 91°45W R  
 (Ford Massif area RM)  
 85°02S 91°45W R  
 (Ford Massif area RM)  
 85°02S 91°37W R  
 (Ford Massif area RM)  
 85°02S 91°37W R  
 (Ford Massif area RM)  
 85°02S 91°37W R  
 (Ford Massif area RM)  
 85°15S 91°00W G  
 Thiel Mountains  
 85°15S 91°00W G  
 Thiel Mountains  
 85°09S 90°40W R  
 Aaron Glacier  
  
 85°04S 90°10W R  
 Green Valley  
  
 85°04S 90°10W R  
 Green Valley  
  
 85°17S 89°30W R  
 (nr Elliot Nun. RM)  
 85°17S 89°30W R  
 (nr Elliot Nun. RM)  
 85°17S 89°20W R  
 (nr Elliot Nun. RM)  
 85°17S 89°20W R  
 (nr Elliot Nun. RM)  
 85°20S 88°05W R  
 (King Peak RM)  
  
 83°41S 87°40W G  
 Pagano Nunatak  
 85°27S 87°00W R  
 (nr Smith Knob RM)  
 85°27S 87°00W R  
 (nr Smith Knob RM)  
 85°27S 87°00W R  
 (nr Smith Knob RM)  
 85°25S 86°44W R  
 SE end, Smith Knob  
 84°12S 86°00W G  
 Stewart Hills

504 MY(##)K/A BT Granodiorite;--. SCH69A  
 (error about ±5% of age value)  
 510±50 MY(##)P/a ZR Granodiorite;--. SCH69A  
 (method may = Pal as in FOR63)  
 648±85 MY(R/S WR Granodiorite;--. SCH69A  
  
 646±85 MY R/S KF Granodiorite;--. SCH69A  
  
 491 MY(##)K/A BT Granodiorite;--. SCH69A  
 (error about ±5% of age value)  
 660±79 MY RSI2/0.7069 WR Metavolcanic rocks;  
 Wyatt Formation. FAU79  
 542±42 MY RSI2/0.7115 WR Granitic rocks;  
 basement complex. FAU79  
 620±70 MY(1)Pal ZR Hypersthene-quartz monzonite  
 porphyry;--. FOR63 SCH69A  
 (coords.=85°10S 90°30W in FOR63)  
 630±70 MY(2)Pal ZR Hypersthene-quartz monzonite  
 porphyry, less magnetic split;--. FOR63 SCH69A  
 (coords.=85°05S 90°15W in FOR63)  
 530±60 MY(2)Pal ZR Hypersthene-quartz monzonite  
 porphyry, more magnetic split;--. FOR63 SCH69A  
 (coords.=85°05S 90°15W in FOR63)  
 560±60 MY(##)Pal ZR Granodiorite;--. FOR64 SCH69A  
 (coords.=85°16S 89°25W in FOR64)  
 511 MY(##)K/A BT Granodiorite;--. SCH69A  
 (error about ±5% of age value)  
 720±90 MY(##)P/a ZR Granodiorite;--. SCH69A  
 (method may = Pal as in FOR63)  
 500 MY(##)K/A BT Granodiorite;--. SCH69A  
 (error about ±5% of age value)  
 670±50 MY(##)Pal ZR Hypersthene-quartz monzonite  
 porphyry;--. FOR64 SCH69A  
 (coords.=85°19S 87°50W in FOR64)  
 175±4 MY(2-65-4)KA13 BT Granite;--. WEB82A  
  
 470±50 MY(##)Pal ZR Granodiorite;--. FOR64 SCH69A  
 (coords.=85°27S 86°50W in FOR64)  
 570±70 MY(##)R/S WR Granodiorite;--. SCH69A  
  
 484 MY(##)K/A BT Granodiorite;--. SCH69A  
 (error about ±5% of age value)  
 510±20 MY(60-H-57)RSM4/0.707 MC Adamellite pegmatite  
 glacial erratic;--. CRA64A SCH69A  
 508 MY(##)K/A MC Metasedimentary rocks;  
 --. CRA70 CRA77



| GEOGRAPHIC AREA 13:                             | PENSACOLA MOUNTAIN AREA (samples from west to east by coordinates)                                                                 |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------|
| 85°37'34"S<br>68°44'26"W R<br>Pecora Escarpment | 217.3±5.4 MY(1Sa)KAl7 WR Basalt;<br>dolerite sill intruding Pecora Fm. FOR80                                                       |
| 85°37'34"S<br>68°44'26"W R<br>Pecora Escarpment | 180.0±4.5 MY(1Se)KAl7 FY Dolerite;<br>dolerite sill intruding Pecora Fm. FOR80<br>(avg of PY and PL ages of 1Se=179±5 MY=sill age) |
| 85°37'34"S<br>68°44'26"W R<br>Pecora Escarpment | 177.7±4.5 MY(1Se)KAl7 PL Dolerite;<br>dolerite sill intruding Pecora Fm. FOR80<br>(avg of PY and PL ages of 1Se=179±5 MY=sill age) |
| 85°37'38"S<br>68°42'21"W R<br>Pecora Escarpment | 208.0±5.2 MY(N57)KAl7 FY Dolerite;<br>dolerite sill intruding Pecora Fm. FOR80                                                     |
| 85°37'38"S<br>68°42'21"W R<br>Pecora Escarpment | 197.0±4.9 MY(N57)KAl7 PL Dolerite;<br>dolerite sill intruding Pecora Fm. FOR80                                                     |
| 85°36'41"S<br>68°37'04"W R<br>Pecora Escarpment | 212.2±5.3 MY(82F6)KAl7 FY Dolerite;<br>dolerite sill intruding Pecora Fm. FOR80                                                    |
| 85°36'41"S<br>68°37'04"W R<br>Pecora Escarpment | 199.7±5.0 MY(82F6)KAl7 PL Dolerite;<br>dolerite sill intruding Pecora Fm. FOR80                                                    |
| 85°36'29"S<br>68°33'32"W R<br>Pecora Escarpment | 223.1±5.6 MY(10Sa)KAl7 WR Basalt;<br>dolerite sill intruding Pecora Fm. FOR80                                                      |
| 84°43S 64°30W G<br>Patuxent Range               | 443±28 MY RSI2/0.7156 WR Metasediments;<br>Patuxent Fm. FAU79A<br>(date may be reset)                                              |
| 84°43S 64°30W G<br>Patuxent Range               | 393±6 MY RSI2/0.7156 WR Metasediments;<br>Patuxent Fm. FAU79A<br>(date may be reset)                                               |
| 84°52S 63°34W R<br>Patuxent Range RM            | 233 MY(??)K/A BT Biotite lamprophyre; dike cutting<br>across strike of Patuxent Fm. SCH69A<br>(error about ±5% of age value)       |
| 84°53S 62°10W R<br>(nr Sullivan Pks RM)         | 244 MY(??)K/A BT Biotite lamprophyre; dike cutting<br>across strike of Patuxent Fm. SCH69A<br>(error about ±5% of age value)       |
| 84°53S 62°10W R<br>(nr Sullivan Pks RM)         | 219 MY(??)K/A BT Biotite lamprophyre; dike cutting<br>across strike of Patuxent Fm. SCH69A<br>(error about ±5% of age value)       |
| 83°14S 57°48W G<br>Schmidt Hills                | 784±58 MY RSI2/0.7064 WR Dolerite sill;<br>intrudes Patuxent Formation. FAU79A                                                     |
| 83°30S 56°00W G<br>(S. Neptune Range)           | 500±10 MY RS8I WR Volcanics; Gambacorta Fm. SCH69<br>(pers. comm. Faure and Eastin; may be same samples<br>as 565±35 MY in FAU79A) |
| 83°30S 56°00W G<br>Neptune Range                | 809±38 MY RSI2/0.7074 WR Gorecki Rhyolite. FAU79A                                                                                  |
| 83°30S 56°00W G<br>Neptune Range                | 565±35 MY RSI2/0.7057 WR Rhyolite;<br>Gambacorta Formation. FAU79A                                                                 |
| 83°30S 56°00W G<br>Neptune Range                | 568±81 RSI2/0.7054 WR Volcaniclastic rocks;<br>Hawkes member, Gambacorta Fm. FAU79A                                                |

- 83°30S 56°00W G  
Neptune Range
- 83°30S 56°00W G  
Neptune Range
- 83°44S 55°55W R  
Nun. NE of Mt. Dover
- 83°44S 55°30W R  
Nun. NW of Mt. Dover
- 83°34S 54°50W G  
Serpan Peak
- 83°35S 54°40W R  
(nr Hannah Rdg RM)
- 83°35S 54°40W R  
(nr Hannah Rdg RM)
- 82°46'05"S
- 53°21'26"W R  
Cordiner Peaks
- 82°46'05"S
- 53°21'26"W R  
Cordiner Peaks
- 82°38'02"S
- 53°17'03"W R  
W of Walker Peak
- 82°36'29"S
- 52°56'40"W R  
N end, Neuburg Pk
- 82°34'11"S
- 52°01'03"W R  
Frost Spur
- 83°22'46"S
- 51°31'46"W R  
W Mt Stephens
- 83°22'46"S
- 51°29'43"W R  
spur of Mt. Stephens
- 83°13'27"S
- 51°02'17"W R  
NW of Mt Lechner
- 83°13'27"S
- 51°02'17"W R  
NW of Mt. Lechner
- 82°29S 50°52W R  
Dufek Massif
- 83°17'20"W R
- 50°40'11"W R  
Base, Sorna Bluff
- 83°0S 50°W M  
Dufek Massif and  
Forrestal Range
- 953±175 MY RS(I) WR Felsic flows;  
Gorecki Rhyolite. EAS69  
(may be same samples as 809±38 MY in FAU79A)
- 563±35 MY RSI WR Hawkes Pyroclastics and rhyolite  
bodies within Patuxent Fm. EAS69  
(may be same samples as 568±81 MY and 565±35 MY in  
FAU79A)
- 261.3±7.5 MY(?)KAl1 WR Rhyodacite;  
--. KAI82
- 237±25 MY(?)KAl1 WR Lamprophyre;  
intrudes Nelson limestone or is between the Nelson  
limestone and the Patuxent Formation. KAI82
- 536±13 MY RSI2/0.7064 WR Serpan Granite and assoc.  
gneiss. FAU79A
- 510±30 MY R/S WR Granite;--. SCH69A  
(infer-postkinematic granite of SCH69)
- 265 MY K/A BT Granite;--. SCH69A  
(error about ±5% of age value)
- 307.9±7.7 MY(13Fa)KAl7 PY Dolerite; interior of dike  
cutting Dover Sandstone and Gale Mudstone. FOR80  
(inferred to contain excess 40-Ar)
- 168.8±4.2 MY(13Fa)KAl7 PL Dolerite; interior of dike  
cutting Dover Sandstone and Gale Mudstone. FOR80
- 171.2±4.3 MY(192Fb)KAl7 PL Plagioclase cumulate;  
Walker Anorthosite, Dufek intrusion. FOR80
- 189.5±31.7 MY(38Fa)AAT2 PY PL-PY-cumulate (leuco-  
gabbro); Dufek intrusion. FOR80  
(J=0.00599)
- 97.5±2.4 MY(198Fa)KAl7 PY (-100±60 μ), pyroxene cumu-  
late; base of Frost Pyroxenite Member, Aughenbaugh  
Gabbro, Dufek intrusion. FOR80
- 169.5±4.2 MY(75Fe)KAl7 PL Plagioclase cumulate;  
Stephens Anorthosite Member, Saratoga Gabbro,  
Dufek intrusion. FOR80
- 148.7±7.3 MY(94Fi)AAT2 PY PL-Fe-titanium oxide cum-  
ulate; in (or above?) Stephens Anorthosite Member,  
Saratoga Gabbro, Dufek intrusion. FOR80
- 111.9±2.8 MY(297Fa)KAl7 WR Gabbro;  
Dufek intrusion. FOR80
- 106.3±2.7 MY(297FaR)KAl7 WR Gabbro;  
Dufek intrusion. FOR80
- 126±27 MY(?)KAl1 WR Gabbro;  
Dufek intrusion. KAI82
- 174.1±4.4 MY(101Fa)KAl7 PL Plagioclase cumulate;  
Dufek intrusion. FOR80  
(avg. age of 101Fa, 192Fb, 75Fe=172±4 MY=best est.)
- 168±5 MY(?)K/A PL Gabbros; Dufek intrusion. FOR72  
(avg. age; may be same samples as in FOR80)

|                                            |                                                                                                                                                            |
|--------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GEOGRAPHIC AREA 14:                        | SHACKLETON RANGE AREA (samples from west to east by coordinates)                                                                                           |
| 80°24S 30°05W G<br>(Nostoc Lake area RM)   | 531±13 MY(Z.1060.9)K/A HB Migmatitic gneiss;<br>metasediments, Nostoc Lake Fm. PAN83A                                                                      |
| 80°24S 30°05W G<br>(Nostoc Lake area RM)   | 537±36 MY RS6I3/0.7086±0.0003 WR Gneisses;<br>metasediments, Nostoc Lake Fm. PAN83A<br>(4 data points fall on 583 MY isochron of GRE79)                    |
| 80°24S 30°05W G<br>(Nostoc Lake area RM)   | 500±5 MY RS5I3/0.7085±0.0001 BT,AM,KF,PL,WR Gneiss;<br>metasediments, Nostoc Lake Fm. PAN83A                                                               |
| 80°23S 29°55W G<br>Mt Provender area RM    | 583±48 MY("1017-1")RS5I3/0.7084±0.0024 WR Feldspathic<br>augen gneiss; Shackleton Range Metamorphic Complex.<br>GRE79                                      |
| 80°23S 29°55W G<br>Mt Provender area RM    | 656±66 MY(#1017-6)RS3I3/0.7078±0.0064 WR Granitic<br>gneiss; Shackleton Range Metamorphic Complex. GRE79                                                   |
| 80°23S 29°55W G<br>Mt Provender area RM    | 519±15 MY(1017-3)RSM3/0.708 BT Feldspathic augen<br>gneiss; Shackleton Range Metamorphic Complex. GRE79                                                    |
| 80°23S 29°55W G<br>Mt Provender area RM    | c.600 MY("1006-1")RS5R3/0.707 WR Gneissic granite;<br>Shackleton Range Metamorphic Complex. GRE79                                                          |
| 80°23S 29°55W G<br>Mt Provender area RM    | 515 MY,512 MY,497 MY(1006-2)U/P ZR Gneissic granite;<br>Shackleton Range Metamorphic Complex. GRE80 GRE70<br>(concordant at 500 MY)                        |
| 80°23S 29°55W G<br>Mt Provender area RM    | 431 MY,451 MY,556 MY(1017-4)U/P ZR Feldspathic augen<br>gneiss; Shackleton Range Metamorphic Complex.<br>GRE80 GRE79<br>(data lie close to chord 0-550 MY) |
| 80°23S 29°55W G<br>Mt Provender area RM    | 466 MY,470 MY,490 MY(1029-7)U/P ZR Migmatite;<br>Shackleton Range Metamorphic Complex. GRE80 GRE79<br>(data lie close to chord 0-500 MY)                   |
| 80°23S 29°55W G<br>Mt Provender area RM    | 477 MY,484 MY,518 MY(1045-4)U/P ZR Migmatite;<br>Shackleton Range Metamorphic Complex. GRE80 GRE79<br>(data lie close to chord 0-500 MY)                   |
| 80°23S 29°55W G<br>(Mt. Provender area RM) | 475±40 MY("Z.1039.9")RS4I3/0.716±0.004 WR Red shale;<br>Mt. Provender Fm., Blaiklock Glacier Gp. PAN83A<br>(using 3 data points, date=482±11 MY)           |
| 80°27S 29°30W G<br>(Mt. Gass area RM)      | c.900-1500 MY RSM3/0.703 WR Schist;<br>metasediments, Mount Gass Fm. PAN83A<br>(10 samples; secondary lines of c. 700-900 MY with<br>IR=0.715)             |
| 80°24S 29°21W G<br>Pratts Peak RM          | 510±5 MY RSI3/0.7082±0.0001 MS Pegmatite clinopyroxene-<br>biotite-apatite body; metasediments, Nostoc Lake<br>Formation. PAN83A                           |
| 80°30S 29°20W G<br>Williams Ridge RM       | 600 MY(Z.1095*)RS2I3/0.742 WR Schist, gneiss;<br>supposed basement rock in Williams Ridge Fm. PAN83A<br>(*locality number)                                 |
| 80°30S 29°20W G<br>Williams Ridge RM       | 520±24 MY(Z.1090,Z.1097*)RS4I3/0.7134±0.0006 WR<br>Unaltered schist; Williams Ridge FM. PAN83A<br>(*locality numbers; "errorchron" date)                   |
| 80°38S 29°12W G<br>around Wedge Ridge RM   | 2700±100 MY RS6I3/0.700±0.004 WR Pegmatites(2) and<br>gneisses(4); crystalline basement. PAN83A<br>(*errorchron" date)                                     |
| 80°38S 29°12W G<br>around Wedge Ridge RM   | 1700±50 MY RSM3/LIT 1. MC Pegmatite;<br>crystalline basement. PAN83A                                                                                       |
| 80°38S 29°12W G<br>around Wedge Ridge RM   | 504±6 MY RS3I3/0.8820±0.0003 BT,KF,WR Gneiss;<br>crystalline basement. PAN83A                                                                              |

- 80°28S 29°10W G  
nr Mt. Weston RM  
80°24S 28°31W G  
Dragons Back  
81°33S 28°30W G  
Eastern Nunatak of  
Whichaway Nunataks  
81°33S 28°30W G  
Whichaway Nunataks  
80°18S 27°50W G  
"Myashiro Ridge,"  
Lagrange Nunataks  
80°18S 27°50W G  
Lagrange Nunataks RM
- 80°18S 27°50W G  
Lagrange Nunataks RM  
80°23S 26°50W G  
Lewis Chain RM
- 80°46S 25°43W R  
S. side, Hatch Plain
- 80°20S 25°30W G  
"Sumgin Buttress N."  
Herbert Mts.
- 80°20S 25°30W G  
"Charpentier Pyramid  
S.E.", Herbert Mts.  
80°20S 25°30W G  
"Sumgin Buttress N.,"  
Herbert Mts.  
80°20S 25°30W G  
"Unnamed Nun., S. Sum-  
gin Buttress,"  
Herbert Mts.  
80°20S 25°30W G  
"Sumgin Buttress N.,"  
Herbert Mts.  
80°20S 25°30W G  
"Unnamed Nun., S. Sum-  
gin Buttress, E."  
Herbert Mts.  
80°20S 25°30W G  
Herbert Mountains  
80°20S 25°30W G  
Herbert Mountains  
80°42S 24°45W G  
"Beche Blade, N.,"  
Read Mountains
- 1550 MY RS11R3/0.707 WR Paragneisses;  
crystalline basement. PAN83A  
297±12 MY(Z.736.4)KA9 WR Dolerite dike;  
intruding Otter Highlands Fm. CIA72 REX72  
163±13 MY(9)KAl1 WR Dolerite;  
crosscuts sandstone of Whichaway Fm. HOF80
- 171±14 MY(10)KAl1 WR Dolerite;  
crosscuts sandstone of Whichaway Fm. HOF80  
195±20 MY(8)KAl1 Dolerite;  
--. HOF80
- 2310±130 MY RS6I3/0.722±0.004 WR Gneisses;  
crystalline basement. PAN83A  
("errorchron" date)  
c.1600 MY RSM3/0.722±0.004 WR Gneiss;  
crystalline basement. PAN83A  
505±18 MY("Z.720.1")RS5I3/0.7141±0.0001 WR Micaschists;  
Williams Ridge Formation. PAN83A  
(if combined with the 520±24 MY samples from  
Williams Ridge, age=512±3 MY, RS9I3/0.713±0.0002)  
1446±60 MY(Z.602.2)KA9 WR Granodiorite dike;  
intrudes Shackleton Range Metamorphic Complex.  
CIA72 REX72  
391±31 MY(1)KAl1 WR Dolerite;--. HOF80  
(isochron for samples (1) through (4) of HOF80=  
402 MY; isochron for (1) through (4), and (6)=  
357 MY)  
417±33 MY(2)KAl1 WR Dolerite;  
--. HOF80  
(see comment for sample (1) of HOF80  
434±35 MY(3)KAl1 WR Amphibolite;  
Herbert metamorphics. HOF80  
(see comment for sample (1) of HOF80)  
399±32 MY(4)KAl1 WR Amphibolite;  
Herbert metamorphics HOF80  
(see comment for sample (1) of HOF80)
- 268±21 MY(5)KAl1 FU Mica-quartz schist;  
Herbert metamorphics. HOF80  
(suggests argon loss likely)  
351±28 MY(6)KAl1 WR Granitoid;  
Herbert metamorphics. HOF80  
(see comment for sample (1) of HOF80)
- 470±36 MY RS 3I2/0.7277±0.0007 WR Mica schists;  
Shackleton metamorphic complex. HOF81A  
1414±185 MY RS2I2/0.7090±0.0044 WR Mica schists;  
Shackleton metamorphic complex. HOF81A  
1401±70 MY(7)KAl1 WR Granitoid, prophyroblastic;  
--. HOF80

|                      |                                                        |
|----------------------|--------------------------------------------------------|
| 80°42S 24°45W G      | 1763±32 MY RS5I3/0.704±0.001 WR Gneissose granites;    |
| Hatch Plain area,    | crystalline basement. PAN83A                           |
| Read Mtns. RM        | (SE part of outcrop)                                   |
| 80°42S 24°45W G      | 1599±38 MY RS3I3/0.714±0.001 WR Gneissose granites;    |
| Hatch Plain area,    | crystalline basement. PAN83A                           |
| Read Mtns. RM        | (west of 1763 MY samples)                              |
| 80°42S 24°45W G      | 1820±160 MY RS3I3/0.705±0.003 WR Granites;             |
| Read Mtns.           | crystalline basement. PAN83A                           |
|                      | (none of 10 samples lies significantly below an        |
|                      | 1850 MY reference line)                                |
| 80°42S 24°45W G      | c.1900 MY, 1300 MY RS10R3 WR Granodiorite dikes;       |
| Read Mtns.           | intrude the basement rocks. PAN83A                     |
|                      | (the samples scatter btwn these two isochrons)         |
| 80°45S 24°W RM       | 720 MY(Z.884.3)RSM3/0.715 WR Purple shale;             |
| S. Shackleton Ra.    | Watts Needle Fm., Turnpike Bluff Gp. PAN83A            |
| 80°44S 23°31W*       | 526±6 MY("Z.1236.1")RS13I3/0.7152±0.0005 WR Slaty mud- |
| (Mt.Wegener area RM) | stones and siltstones; Mount Wegener Fm. PAN83A        |
|                      | (*coords. from Antarct. Jl. U.S. 17(4), 1982, p.12)    |
| 80°30S 20°15W R      | 457±18 MY(Z.628.1)KA9 WR Dolerite dike;                |
| Lundstrom Knoll      | intrudes schists of Shackleton Range Metamorphic       |
|                      | Complex. CIA72 REX72                                   |

## GEOGRAPHIC AREA 15:

THERON MOUNTAIN AREA (samples from west to east by coordinates)

|                  |                                                  |
|------------------|--------------------------------------------------|
| 79°09S 28°50W R  | 164±6 MY(Z.500.1)KA9 WR Dolerite sill;           |
| Theron Mountains | intrudes Theron Formation. REX72                 |
| 79°02S 28°35W R  | 162±6 MY(Z.481.1)KA9 WR Dolerite sill;           |
| Theron Mountains | intrudes Theron Formation. REX72                 |
| 78°59S 28°15W R  | 158±6 MY(Z.471.13)KA9 WR Dolerite dike;          |
| Theron Mountains | intrudes Theron Formation. REX72                 |
| 78°59S 28°10W R  | 161±6 MY, 169±6 MY(Z.498.8)KA9 WR Dolerite sill; |
| Theron Mountains | intrudes Theron Formation. REX72                 |
| 78°55S 27°45W R  | 154±6 MY(Z.489.4)KA9 WR Dolerite sill;           |
| Theron Mountains | intrudes Theron Formation. REX72                 |
| 78°52S 27°30W R  | 161±6 MY(Z.487.1)KA9 WR Dolerite sill;           |
| Theron Mountains | intrudes Theron Formation. REX72                 |

|                                         |                                                                                                                           |
|-----------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| GEOGRAPHIC AREA 16:                     | COATS LAND EXCLUDING THERON MOUNTAIN AREA (samples from west to east by coordinates)                                      |
| 77°55S 34°32W G                         | 998±19 MY("405")RS5I2/0.7042±0.0014 WR Acid volcanic or hypabyssal rocks; Littlewood Volcs. EAS71                         |
| Bertrab Nunatak                         | 1001±16 MY RS7I2/0.7042±0.0011 WR Acid volcanic or hypabyssal rocks; Littlewood Volcanics. EAS71                          |
| 77°54S 34°21W M                         | (pooled isochron for samples 234,367, and "405")                                                                          |
| Littlewood Nunataks and Bertrab Nunatak | 840±30 MY(235)K/A WR Rhyolite porphyry; Littlewood Volcanics. AUG65 EAS71                                                 |
| 77°53.5S 34°10W R                       | (age is a minimum)                                                                                                        |
| Littlewood Nunataks                     | 1044 MY(235)RSM2/0.7040 WR Rhyolite; Littlewood Volcanics. FAU68 AUG65 EAS71                                              |
| 77°53S 34°10W R                         | (prelim. result superseded by data in EAS71)                                                                              |
| Littlewood Nunataks                     | 1036±28 MY(?)R/S WR Acid volcanic rocks; Littlewood Volcanics. EAS69                                                      |
| 77°53S 34°10W G                         | (prelim. result superseded by data in EAS71; combined isochron with Gorecki Rhyolites of the Pensacola Mts. = 1016±18 MY) |
| Littlewood Nunataks                     | 966-1035 MY(235,367)RSM2/0.7050 WR Acid volcanic or hypabyssal rocks; Littlewood Volcanics. EAS71                         |

## GEOGRAPHIC AREA 17:

QUEEN MAUD LAND, FROM STANCOMB-WILLS GLACIER THROUGH  
NEW SCHWABENLAND (samples from west to east by  
coordinates)

|                                                      |                                                                                                                  |
|------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|
| 73°50S 15°W AR<br>nuns. in Vestfjella                | 168±6 MY(Specimen A)KA9 WR Dolerite;<br>--. REX67                                                                |
| 73°50S 15°W AR<br>nuns. in Vestfjella                | 172±6 MY(Specimen B)KA9 WR Dolerite;<br>--. REX67                                                                |
| 74°36S 14°25W R<br>Mannefallknausane                 | 259±10 MY;256±10 MY(Z.388.1)KA9 WR Dolerite,<br>slightly altered; intrudes basement. REX72                       |
| 74°36S 14°20W R<br>Mannefallknausane                 | 547±100 MY;580±100 MY(Z.391.1)KA9 WR Dolerite;<br>intrudes basement complex. REX72                               |
| 73°30S 14°10W G<br>"Skansen" (RM)<br>Vestfjella      | 231±10 MY(VF 89)KA9 WR Subaerial compound basalt<br>lava flow;--. FUR78                                          |
| 73°30S 14°10W G<br>"Muren" (RM)<br>Vestfjella        | 200±6 MY(VF 95)KA9 WR Subaerial compound basalt<br>lava flow;--. FUR78                                           |
| 73°30S 14°10W G<br>"Steinkjeften" (RM)<br>Vestfjella | 219± MY(VF 119)KA9 WR Subaerial compound basalt<br>lava flow;--. FUR78                                           |
| 73°30S 14°10W G<br>"Steinkjeften" (RM)<br>Vestfjella | 201± MY(VF 140)KA9 WR Subaerial compound basalt<br>lava flow;--. FUR78                                           |
| 73°30S 14°10W G<br>"Pagodromen" (RM)<br>Vestfjella   | 156±4 MY(VF 44)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                  |
| 73°30S 14°10W G<br>"Pagodromen" (RM)<br>Vestfjella   | 158±3 MY(VF 41)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                  |
| 73°30S 14°10W G<br>"Pagodromen" (RM)<br>Vestfjella   | 158±2 MY(VF 45)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                  |
| 73°30S 14°10W G<br>"Kjakebeinet" (RM)<br>Vestfjella  | 162±2 MY(VF 110)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                 |
| 73°30S 14°10W G<br>"Nimbusryggen"?(RM)<br>Vestfjella | 164±2 MY(VF 34)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                  |
| 73°30S 14°10W G<br>"Muren" (RM)<br>Vestfjella        | 164±3 MY(VF 82)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                  |
| 73°30S 14°10W G<br>"Steinkjeften" (RM)<br>Vestfjella | 164±2 MY(VF 120)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                 |
| 73°30S 14°10W G<br>"Muren" (RM)<br>Vestfjella        | 166±2 MY(VF 83)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                  |
| 73°30S 14°10W G<br>"Nunatak A" (RM)<br>Vestfjella    | 169±5 MY(VF 30)KA9 WR Fresh basalt dike margin;<br>cuts the dated lava sequence. FUR78                           |
| 73°30S 14°10W G<br>"Nunatak A" (RM)<br>Vestfjella    | 165±2 MY(VF 32)KA9 WR Fresh basalt dike, center<br>of same dike as VF 30; cuts the dated lava<br>sequence. FUR78 |



|                                                      |                                                                                                                                                             |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 73°30S 14°10W G<br>"Steinkjeften" (RM)<br>Vestfjella | 168±2 MY(VF 116)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                                                            |
| 73°30S 14°10W G<br>"Pagodromen" (RM)<br>Vestfjella   | 171±3 MY(VF 40)KA9 WR Fresh basalt dike;<br>cuts the dated lava sequence. FUR78                                                                             |
| 73°30S 14°10W G<br>"Nunatak A"<br>Vestfjella         | 170±2 MY(VF 128)KA9 WR Fresh basalt dike, margin;<br>cuts the dated lava sequence. FUR78                                                                    |
| 73°30S 14°10W G<br>"Nunatak A"<br>Vestfjella         | 172±2 MY(VF 129)KA9 WR Fresh basalt dike, center<br>of same dike as VF 128; cuts the dated lava<br>sequence. FUR78                                          |
| 73°19'17"S<br>14°09'12"W R<br>Vestfjella             | c.400 MY(68/69 Hj6B)K/A WR Basalt lava;<br>--. HJE72<br>(prelim. analysis by A. Ya. Krylov)                                                                 |
| 73°23'47"S<br>13°02'43"W R<br>Vestfjella             | c.220 MY(68/69 Hj3G)K/A WR Dolerite sill;<br>--. HJE72<br>(prelim. analysis by A. Ya. Krylov)                                                               |
| 74°36S 10°05W R<br>Milorgfjella                      | 173±7 MY(Z.371.7)KA9 WR Basalt lava;<br>overlie(?) Permian sediments. REX72                                                                                 |
| 74°37S 10°02W R<br>Milorgfjella                      | 173±5 MY(Z.372.1)KA9 WR Lava;<br>overlie(?) Permian sediments. REX72                                                                                        |
| 74°36S 10°00W R<br>Milorgfjella                      | 172±7 MY(Z.308.4)KA9 WR Basalt lava;<br>overlie(?) Permian sediments. REX72                                                                                 |
| 74°19S 9°49W R<br>Milorgfjella                       | 179±7 MY(Z.353.7)KA9 WR Dolerite;<br>cuts Permian sediments. REX72                                                                                          |
| 74°17S 9°45W R<br>Milorgfjella                       | 452±15 MY(Z.313.4)KA9 WR Dolerite;<br>cuts Precambrian basement. REX72                                                                                      |
| 74°17S 9°45W R<br>Milorgfjella                       | 485±15 MY(Z.313.4)KA9 WR Dolerite;<br>cuts Precambrian basement. REX72                                                                                      |
| 74°28S 8°15W R<br>Milorgfjella                       | 162±6 MY(Z.349.1)KA9 WR Basalt lava;<br>overlie(?) Permian sediments. REX72                                                                                 |
| 72°32S 6°18W G<br>Annandagstoppane                   | 1802±100 MY RS8I3/0.7034±0.0009 WR Gabbro (suite 1);<br>--. BAR83                                                                                           |
| 72°32S 6°18W G<br>Annandagstoppane                   | 2518±406 MY RS4I3/0.6990±0.0033 WR Gabbro (suite 2);<br>--. BAR83                                                                                           |
| 72°23S 5°33W R<br>nuns. in Jule Peaks                | 3060±80 MY(5(A) and 5(B))RSM4/0.7040 WR Biotite<br>granite;--. HAL70 SOL75                                                                                  |
| 72°23S 5°33W R<br>nuns. in Jule Peaks                | 2840±10 MY(4(A) and 4(B))RSM4/0.7040 WR Pegmatite;<br>--. SOL75                                                                                             |
| 73°54S 5°15W AR*<br>Kirwanveggen                     | 172±10 MY(??)K/A WR Basaltic lava;<br>Kirwan Volcanics. AUC72<br>(*sample location not given but from Kirwan<br>Volcanics; date from G. Faure, pers. comm.) |
| 71°18S 3°57W G<br>Boreas Nunatak                     | 827 MY,824 MY(GA2092;B0)KA8 PL Dolerite;<br>Borg metamafics. NEE69 ALL70 NEE72                                                                              |
| 71°18S 3°57W G<br>Boreas Nunatak                     | 1007 MY,1012 MY(GA2092;B0)KA8 PY Dolerite;<br>Borg metamafics. NEE69 ALL70 NEE72                                                                            |
| 72°33S 2°59W G<br>Fasettfjellet                      | 1109-1280 MY(??)R/S WR Lava;<br>correlated with Krylen Intrusion. BRE82<br>(quoting MS thesis of Bowman, 1971)                                              |
| 72°30S 2°50W R<br>Ytstenut Nunatak                   | 924±4 MY,761±11 MY(??)A/A WR Altered sample from<br>mafic sill; Ytstenut Intrusions. BRE73 BRE82<br>(second age component is less well-defined)             |

|                                       |                                                                                                                                                                                                                |
|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 72°03S 2°47W G<br>Grunehogna (Peaks)  | 832±2 MY, 716±4 MY(?) A/A WR Dioritic sill;<br>Ytstenut Intrusions. BRE73 BRE82<br>(second age component is less well-defined)                                                                                 |
| 72°03S 2°47W G<br>(Grunehogna Peaks)* | 1426±87 MY("GD1/81") RS11I3/0.7051±0.0013 WR Diorite;<br>---. BAR83<br>(*loc. given as "Grunehogna Nunatak")                                                                                                   |
| 72°03S 2°47W G<br>(Grunehogna Peaks)* | 1008±11 MY("GG1/81") RS10I3/0.7097±0.0003 WR Grano-<br>diorite; ---. BAR83<br>(*loc. given as "Grunehogna Nunatak")                                                                                            |
| 73°00S 2°45W G<br>Penck Trough        | 860 MY(99a) KA6 WR Schistose siltstone, slightly<br>metamorphosed; ---. RAV64 RAV65                                                                                                                            |
| 73°00S 2°45W G<br>Penck Trough        | 420 MY(114t) KA6 WR Pyroxene syenite (cutting lava<br>sequence); ---. RAV64 RAV65                                                                                                                              |
| 73°00S 2°45W G<br>Penck Trough        | 590 MY(81) KA6 WR Epidote-chlorite-biotite schist<br>(diaphthorite); ---. RAV64 RAV65                                                                                                                          |
| 73°00S 2°45W G<br>Penck Trough        | 590 MY(81d) KA6 WR Epidote-chlorite-biotite schist<br>(diaphthorite); ---. RAV64 RAV65<br>(infer=#81g in RAV64)                                                                                                |
| 73°00S 2°45W G<br>Penck Trough        | 515 MY(82) KA6 WR Metamorphosed argillaceous schist<br>(phyllite); ---. RAV64 RAV65                                                                                                                            |
| 73°00S 2°45W G<br>Penck Trough        | 340 MY(107l) KA6 WR Nepheline-syenite (cutting<br>gneiss); ---. RAV64 RAV65                                                                                                                                    |
| 73°00S 2°45W G<br>Penck Trough        | 330 MY(107) KA6 WR Hornfels formed from plagioclase-<br>gneiss; ---. RAV64 RAV65                                                                                                                               |
| 73°00S 2°45W G<br>Penck Trough        | 260 MY(89b) KA6 WR Biotite schist (contact with<br>nepheline-syenite); ---. RAV64 RAV65                                                                                                                        |
| 73°00S 2°45W G<br>Penck Trough        | 225 MY(107c) KA6 MC Alkaline pegmatite;<br>---. RAV64 RAV65                                                                                                                                                    |
| 72°03S 2°40W R<br>Grunehogna (Peaks)  | 1030±70 MY(?) RS6I/0.7101±0.0015 WR Syenodiorite;<br>Jorgen Intrusions. ALL70 NEE72                                                                                                                            |
| 72°00S 2°40W<br>Jekselen              | 1700±130 MY(?) RS4I/0.7007±0.0026 WR Dolerite and<br>granophyre; Borg Metamafics. ALL70 NEE72                                                                                                                  |
| 72°00S 2°33W G<br>Jekselen            | 1339±55 MY, 1140±56 MY, 806±28 MY(?) A/A WR Altered<br>sample from volcanic subzone of Krylen Intrusions.<br>BRE73 BRE82<br>(min. age=1339 MY; rocks in this subzone can<br>be classified as quartz andesites) |
| 72°00S 2°33W G<br>(Jekselen Peak)*    | 1079±87 MY RS4I3/0.7091±0.0012 WR Diorite (suite 1);<br>---. BAR83<br>(*loc. given as "Jekselen Nunatak")                                                                                                      |
| 72°00S 2°33W G<br>(Jekselen Peak)*    | 984±120 MY RS6I3/0.7122±0.0015 WR Diorite (suite 2);<br>---. BAR83<br>(*loc. given as "Jekselen Nunatak")                                                                                                      |
| 72°00S 2°32W R<br>Jekselen            | c.1000 MY(N30A) U/P WR Quartz-carbonate vein in<br>dolerite in Borg Metamafics. ALL70 NEE72                                                                                                                    |
| 71°50S 2°25W G<br>Ahlmann Ridge       | 1672±79 MY RSI WR Undeformed mafic sill; ---. BAR83<br>(date from T. Elworthy)                                                                                                                                 |
| 71°50S 2°25W G<br>Ahlmann Ridge       | 1000 MY R/S MC, WR Rock units; ---. BAR83.<br>(date from Barton and Copperthwaite, unpubl. data).                                                                                                              |
| 72°06S 2°23W G<br>Istend (Peak)       | c.600 MY(?) A/A WR Altered lava flow;<br>Istend Member, Viddalen Formation. BRE82<br>(age of three major age components)                                                                                       |
| 71°30S 2°10W R<br>Krylen Nunatak      | 1701 MY, 1600 MY(GA2093;XX) KA8 HB Altered dolerite;<br>Borg metamafics. NEE69 ALL70 NEE72                                                                                                                     |

|                                      |                                                                                                                                                                                                  |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 71°33S 2°10W G<br>(Krylen Hill)*     | 767±49 MY RS5I3/0.7128±0.0006 WR Diorite (suite 1);<br>--. BAR83<br>(*loc. given as "Krylen Nunatak")                                                                                            |
| 71°33S 2°10W G<br>(Krylen Hill)*     | 806±122 MY RS6I3/0.7122±0.0016 WR Diorite (suite 2);<br>--. BAR83<br>(*loc. given as "Krylen Nunatak")                                                                                           |
| 71°33S 2°10W G<br>(Krylen Hill)*     | 124±61 MY RS3I3/0.7077±0.0008 WR Diorite (suite 3);<br>--. BAR83<br>(*loc. given as "Krylen Nunatak")                                                                                            |
| 71°35S 1°10W R<br>Straumsnutane      | 856±30 MY RS8I2/0.7097±0.0009 WR Andesitic lava;<br>Trollkjellrygg Group. EAS70A NEE72<br>(also reported as 848±28 MY in NEE72, EAS70A)                                                          |
| 71°31S 1°W R<br>Utkikken             | 1720 MY(484)RSM2/0.710 WR Andesite (metamorphosed);<br>Trollkjellrygg Volcanics. EAS70A<br>(also reported as 1760 MY in NEE72)                                                                   |
| 72°11S 0°15W G<br>(Gburek Peaks)     | 145±10 MY(107k)KA16 BT Nepheline-syenite;<br>--. DEU64A PIC64<br>(loc. given as "Gburek Mountains"; age=140 MY<br>in PIC64)                                                                      |
| 72°11S 0°15W G<br>(Gburek Peaks)     | 165±10 MY(107k)RSM2 BT Nepheline-syenite;--. DEU64A<br>(loc. given as "Gburek Mountains"; revised to<br>155 MY, RSM4, in PIC64)                                                                  |
| 72°33S 0°30E G<br>Herrmann Mountains | 475 MY(103)KA6 WR Migmatite derived from pyroxene<br>schist;--. RAV65                                                                                                                            |
| 72°22S 1°00E G<br>Barkley Mountains  | 450 MY(729c)KA6 KF Migmatite vein material;<br>--. RAV64 RAV65<br>(reported as "Barclay Mountains" in RAV65)                                                                                     |
| 72°05S 1°25E G<br>(Mount Hedden)     | 450 MY(552e)KA6 WR Veined granite;--. RAV64 RAV65<br>(reported as "Mount Khadden" in RAV65 and as<br>"Mount Hadden" in RAV64; infer=Mt. Hedden)                                                  |
| 72°05S 1°25E G<br>(Mount Hedden)     | 425 MY(554)KA6 WR Alkaline granite;--. RAV64 RAV65<br>(rpted as "Mount Khadden" in RAV65 and as<br>"Mount Hadden" in RAV64; infer=Mt. Hedden)                                                    |
| 72°05S 1°25E G<br>(Mount Hedden)     | 400 MY(69n)KA6 WR Granosyenite;--. RAV64 RAV65<br>(rpted as "Mount Khadden" in RAV65 and as<br>"Mount Hadden" in RAV64; infer=Mt. Hedden)                                                        |
| 72°11S 2°22E G<br>(Mayr Range)       | 475 MY(68a)KA6 WR Migmatite derived from pyroxene<br>schist;--. RAV64 RAV65<br>(rpted as "Maier Mountains" in RAV65 and as<br>"Mayer Mountains" in RAV64; infer=Mayr Range)                      |
| 72°11S 2°22E G<br>(Mayr Range)       | 420 MY(706)KA6 WR Migmatite derived from biotite<br>plagioclase-gneiss;--. RAV65 RAV65<br>(rpted as "Maier Mountains" in RAV65<br>and as "Mayer Mountains" in RAV64; infer=Mayr Range)           |
| 72°11S 2°22E G<br>(Mayr Range)       | 420 MY(706b)KA6 WR Granite(migmatite vein material);<br>--. RAV64 RAV65<br>(rpted as "Maier Mountains" in RAV65 and as<br>"Mayer Mountains" in RAV64; infer=Mayr Range)                          |
| 72°11S 2°22E G<br>(Mayr Range)       | 460 MY(704a)KA6 WR Biotite gneiss from xenolith in<br>granosyenite (charnockite);--. RAV64 RAV65<br>(rpted as "Maier Mountains" in RAV65 and as<br>"Mayer Mountains" in RAV64; infer=Mayr Range) |
| 72°01S 2°42E G<br>(Bundermann Range) | 510 MY(705e)KA6 WR Migmatized schist;--. RAV64 RAV65<br>(loc. given as "Buderman Mountains"; sample #<br>given as 705d in RAV64)                                                                 |

- 72°11S 3°24E\* R  
unspecified mts
- 72°06S 4°24E G  
Kaye Crest
- 72°06S 4°24E G  
Kaye Crest
- 72°06S 4°24E G  
Kaye Crest
- 72°06S 4°24E G  
Kaye Crest
- 72°06S 4°24E G  
Kaye Crest
- 72°00S 4°45E G  
Thälmann Mountains
- 72°00S 4°45E G  
Thälmann Mountains
- 72°03S 4°49E G  
Luz Range
- 72°03S 4°49E G  
Luz Range
- 72°03S 4°49E G  
Luz Range
- 71°0S 5°0E RM  
Queen Maud Land
- 71°0S 5°0E RM  
Queen Maud Land
- 71°0S 5°0E RM  
Queen Maud Land
- 71°0S 5°0E RM  
Queen Maud Land
- 71°52S 5°24E G  
Buddenbrock Range
- 71°20S 7°35E\*  
Marble Nunatak
- 71°20S 7°35E\*  
Marble Nunatak
- 71°53S 8°55E G  
Kurze Mountains
- 71°57S 9°23E G  
(Gagarin Mountains)
- 1050 MY(112d)KA6 WR Argillite with thin interlayers  
of siltstone;--. RAV64 RAV65  
(\*coords. in RAV64= 72°11S 3°24W, and #=112g)
- 480 MY(714d)KA6 WR Migmatite derived from pyroxene  
schist;--. RAV64 RAV65  
(infer=#714g from "Cayaux Range" in RAV64)
- 455 MY(714)KA6 WR Granosyenite(chaonockite);  
--. RAV64 RAV65
- 445 MY(33)KA6 WR Granosyenite (chaonockite);  
--. RAV64 RAV65
- 420 MY(751)KA6 WR Granosyenite;  
--. RAV64 RAV65
- 445 MY(751b)KA6 WR Biotite gneiss from xenolith in  
granosyenite (chaonockite);--. RAV64 RAV65
- 315 MY(33a)KA6 WR Veined syenite-porphry (cutting  
granosyenite);--. RAV64 RAV65
- 410 MY(762a)KA6 WR Veined granite (cutting grano-  
syenite);--. RAV64 RAV65
- 400 MY(725c)KA6 KF Granosyenite;  
--. RAV64 RAV65
- 425 MY(140)KA6 WR Granosyenite (chaonockite);  
--. RAV64 RAV65
- 405+15 MY(140)KA2 BT Granosyenite;--. DEU64A  
(rpted as WR in PIC64; same sample # as WR sam-  
ple in RAV65)
- 450+15 MY(140)RSM2 BT Granosyenite;--. DEU64A  
(revised to 423 MY by PIC64 using RSM4)
- 470 MY(#?)K/A WR Morainic loam, 1-3 mm size frac-  
tion;--. KRY62  
(coords. approx. from CRA70)
- 550 MY(#?)K/A WR Morainic loam, 1-0.1 mm size frac-  
tion;--. KRY62  
(coords. approx. from CRA70)
- 420 MY(#?)K/A WR Morainic loam, less than 0.1 size  
fraction;--. KRY62  
(coords. approx. from CRA70)
- 520 MY(#?)K/A WR Morainic loam, 1-3 mm size frac-  
tion;--. KRY62  
(coords. approx. from CRA70)
- 455 MY(34a)KA6 WR Subalkaline skialithic migmatite;  
--. RAV64 RAV65
- 515 MY(152g)KA16 MC Greisenized pegmatite vein;  
--. DEU64A PIC64 RAV65  
(\*coords. taken from listing in Atlas Antarktiki I;  
rpted as 540 MY,KA6, in RAV65)
- 485+15 MY(152g)RSM2 MC Greisenized pegmatite vein;  
--. DEU64A PIC64  
(\*coords. taken from listing in Atlas Antarktiki I;  
revised to 455 MY, RSM4, in PIC64)
- 445 MY(155a)KA6 WR Veined pegmatite (cutting  
granosyenite);--. RAV64 RAV65
- 415 MY(153)KA6 WR Granosyenite;--. RAV64 RAV65  
(loc. given as "Gagarin Ridge" in RAV65 and  
"Gagarin Range" in RAV64)

|                                       |                                                                                                                                       |
|---------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| 71°50S 9°40E G<br>Conrad Mountains    | 463 MY(31)KA16 WR Migmatite derived from pyroxene schist;--. STA60 PIC63 RAV65<br>(rpted as 480 MY using KA6 in RAV65 and STA60)      |
| 71°50S 9°40E G<br>Conrad Mountains    | 386 MY(31b)KA16 WR Veined pegmatite (cutting granosyenite;--. STA60 PIC63 RAV65<br>(rpted as 400 MY using KA6 in RAV65 and STA60)     |
| 71°50S 9°40E G<br>Conrad Mountains    | 434 MY(31e)KA16 WR Veined biotite granite;<br>--. STA60 PIC63 RAV65<br>(rpted as 450 MY using KA6 in RAV65 and STA60)                 |
| 71°50S 9°40E G<br>Conrad Mountains    | 405 MY(31g)KA16 WR Veined biotite granite;<br>--. STA60 PIC63 RAV65<br>(rpted as 420 MY using KA6 in RAV65 and STA60)                 |
| 71°50S 9°40E G<br>Conrad Mountains    | 443 MY(512)KA16 WR Porphyroblastic granite;<br>--. STA60 PIC63<br>(rpted as 460 MY using KA6 in STA60)                                |
| 71°50S 9°40E G<br>Conrad Mountains    | 395 MY(559c)KA16 WR Biotite granite;--. STA60 PIC63<br>(rpted as 410 MY using KA6 in STA60)                                           |
| 71°50S 9°40E G<br>Conrad Mountains    | 400 MY(263c)KA16 WR Syenite porphyry;--. STA60 PIC63<br>(rpted as 415 MY using KA6 in STA60)                                          |
| 71°45S 10°18E G<br>Mount Dallmann     | 470 MY(755h)KA6 WR Migmatized schist;--. RAV64 RAV65<br>(infer=#755z from "Dallmann Mountains" in RAV64)                              |
| 71°51S 10°32E G<br>Shcherbakov Range  | 435 MY(184)KA6 WR Migmatite derived from garnet-biotite gneiss;--. RAV64 RAV65<br>(loc.="Shcherbakov Ridge" in RAV65)                 |
| 71°51S 10°32E G<br>Shcherbakov Range  | 490 MY(180)KA6 WR Granosyenite (charnockite);<br>--. RAV65 RAV65<br>(loc.="Shcherbakov Ridge" in RAV65)                               |
| 71°45S 11°30E G<br>Humboldt Mountains | 650 MY(831d)KA6 WR Diopside-phlogopite rock;<br>--. RAV65 RAV65                                                                       |
| 71°45S 11°30E G<br>Humboldt Mountains | 485 MY(811n)KA6 WR Veined pegmatite;--. RAV64 RAV65<br>(infer=#811i in RAV72)                                                         |
| 71°45S 11°30E G<br>Humboldt Mountains | 475 MY(54c)KA6 BT Pegmatite vein;--. RAV64 RAV65<br>(infer=#54v in RAV64 and RAV72)                                                   |
| 71°45S 11°30E G<br>Humboldt Mountains | 465 MY(821c)KA6 WR Quartz-diorite;--. RAV64 RAV65<br>(rpted as #821v in RAV64)                                                        |
| 71°45S 11°30E G<br>Humboldt Mountains | 460 MY(826)KA6 WR Quartz diorite-syenite;<br>--. RAV65 RAV65                                                                          |
| 71°45S 11°30E G<br>Humboldt Mountains | 450 MY(836a)KA6 WR Quartz diorite-syenite;<br>--. RAV64 RAV65<br>(infer=#836 in RAV72)                                                |
| 70°45S 11°35E R<br>Schirmacher Hills  | 2225±130 BP(Mo-255)14C1 SE Skin of seal mummy, partly buried in sand, on moraine. VIN66<br>(loc.=8 km W-NW of sta. Novo-Lazarevskaya) |
| 70°45S 11°40E G<br>Schirmacher Hills  | 386 MY(28)KA16 WR Pegmatite (quartz-feldspar);<br>--. STA60 PIC63 RAV65<br>(rpted as 400 MY using KA6 in RAV65 and STA60)             |
| 70°45S 11°40E G<br>Schirmacher Hills  | 845 MY(866c)KA6 WR Slightly migmatized pyroxene-amphibole schist;--. RAV65                                                            |
| 70°45S 11°40E G<br>Schirmacher Hills  | 830 MY(867a)KA6 WR Slightly migmatized pyroxene-amphibole schist;--. RAV65                                                            |
| 70°45S 11°40E G<br>Schirmacher Hills  | 690 MY(866)KA6 WR Migmatized biotite-amphibole schist;--. RAV65                                                                       |

- 70°45S 11°40E G  
Schirmacher Hills  
70°45S 11°40E G  
Schirmacher Hills  
70°45S 11°40E G  
Schirmacher Hills
- 70°45S 11°50E R  
Schirmacher Hills
- 70°45S 11°50E R  
Schirmacher Hills
- 72°30S 12°00E G  
"Leningrad Mountains"  
Queen Maud Land  
72°30S 12°00E G  
"Leningrad Mountains"  
Queen Maud Land  
72°30S 12°00E G  
"Leningrad Mountains"  
Queen Maud Land  
72°30S 12°00E G  
"Leningrad Mountains"  
Queen Maud Land  
72°30S 12°00E G  
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stitute Mountains"  
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72°30S 12°00E G  
"Leningrad Mining In-  
stitute Mountains"  
Queen Maud Land  
72°30S 12°00E G  
"Belolikh Rocks"  
Queen Maud Land  
71°43S 12°00E M  
Humboldt Mts/  
Petermann Ranges  
71°43S 12°00E M  
Humboldt Mts/  
Petermann Ranges  
71°43S 12°00E M  
Humboldt Mts/  
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71°43S 12°00E M  
Humboldt Mts/  
Petermann Ranges  
71°43S 12°00E M  
Humboldt Mts/  
Petermann Ranges
- 490 MY(863)KA6 WR Migmatized biotite-amphibole  
schist;--. RAV65
- 460 MY(885)KA6 WR Augen migmatite derived from  
plagioclase gneiss;--. RAV65
- 376 MY(34)KA16 WR Cataclastic migmatized  
garnet-biotite gneiss;--. RAV60 PIC63  
(rpted as 390 MY using KA6 in RAV60)
- 640 MY, 623 MY, 651 MY, --(378X)UTP AT Pegmatite;  
Precambrian crystalline basement. GRE83  
(concordant near 630 MY)
- c.1500 MY(395B)UTP2C ZR Quartzo-feldspathic gneiss;  
Precambrian crystalline basement. GRE83  
("rough" date is UI if LI=630 MY)
- 415 MY(38)KA6 WR Migmatite derived from garnet-  
biotite gneiss;--. RAV64 RAV65
- 435 MY(141)KA6 WR Granosyenite (charnockite);  
--. RAV64 RAV65
- 450 MY(134)KA6 WR Subalkaline skialithic migmatite;  
--. RAV64 RAV65
- 365 MY(141e)KA6 KF Granosyenite;  
--. RAV64 RAV65
- 435 MY(196)KA6 WR Granosyenite (charnockite);  
--. RAV64 RAV65
- 500 MY(196p)KA6 WR Biotite gneiss from xenolith in  
granosyenite (charnockite);--. RAV64 RAV65
- 445 MY(199k)KA6 WR Biotite schist from xenolith  
in microcline granite;--. RAV64 RAV65
- 465 MY(93)K/A WR Weakly feldspathized gabbroid;  
--. RAV72  
(constants probably = KA6 as in RAV65)
- 400 MY(44)K/A WR Biotitized gabbroid;--. RAV72  
(constants probably = KA6 as in RAV65)
- 390 MY(36)K/A WR Feldspathized gabbro-diorite;  
--. RAV72  
(constants probably = KA6 as in RAV65)
- 460 MY(34)K/A WR Feldspathized gabbro-diorite;  
--. RAV72  
(constants probably = KA6 as in RAV65)
- 360 MY(38a)K/A WR Porphyroblastic granosyenite;  
--. RAV72  
(constants probably = KA6 as in RAV65)
- 400 MY(38)K/A WR Porphyroblastic granosyenite;  
--. RAV72  
(constants probably = KA6 as in RAV65)

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| 71°43S 12°00E M<br>Humboldt Mts/<br>Petermann Ranges<br>71°35S 12°20E G<br>Wohlthat Mountains | 390 MY(41)K/A WR 'Giant-grained' porphyroblastic<br>granosyenite;--. RAV72<br>(constants probably = KA6 as in RAV65)<br>530 MY(809m)KA6 PG Diopside-phlogopite rock;<br>--. RAV64 RAV65<br>(loc. given as "Wohlthat Massif")   |
| 71°40S 12°20E G<br>(Petermann Ranges)                                                         | 505±20 MY(809)KA16 PG Granosyenite;--. DEU64A PIC64<br>(#=809m, dscrpt="altered calciphyre" in PIC64;<br>may be same as #809m from Wohlthal Mountains;<br>loc. given as "Petermann Mountains")                                 |
| 71°40S 12°20E G<br>(Petermann Ranges)                                                         | 505±15 MY(809)RSM2 PG Granosyenite;--. DEU64A<br>(#=809m, dscrpt="altered calciphyre" in PIC64;<br>may be same as #809m from Wohlthat Mts; loc.=<br>"Petermann Mountains"; rev. to 470 MY,RSM4,PIC64)                          |
| 72°00S 13°30E G<br>Weyprecht Mountains<br>71°25S 15°31E G<br>Vorposten Peak "1"               | 490 MY(796a)KA6 WR Skialithic granite derived from<br>pyroxene plagioclase-gneiss;--. RAV64 RAV65<br>443 MY(16d)KA16 WR Veined plagioclase granite;<br>--. STA60 PIC63 RAV65<br>(rpted as 460 MY using KA6 in RAV65 and STA60) |
| 71°25S 15°31E G<br>Vorposten Peak "1"                                                         | 405 MY(254a)KA16 WR Veined granite;<br>--. STA60 PIC63 RAV65<br>(rpted as 420 MY using KA6 in RAV65 and STA60)                                                                                                                 |
| 71°25S 15°31E G<br>Vorposten Peak "1"                                                         | 463 MY(253c)KA16 WR Diopside-phlogopite rock;<br>--. STA60 PIC63 RAV65<br>(rpted as 480 MY using KA6 in RAV65 and STA60)                                                                                                       |
| 71°25S 15°31E G<br>Vorposten Peak "2"                                                         | 458 MY(17c*)KA16 WR Migmatite derived from pyroxene<br>schist;--. STA60 PIC63 RAV65<br>(rpted as 475 MY using KA6 in RAV65 and STA60;<br>*infer sample # "19b" in RAV65 is typo. error)                                        |

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| GEOGRAPHIC AREA 18:                     | QUEEN MAUD LAND, VICINITY OF SØR RONDANE AND BELGICA MOUNTAINS (samples from west to east by coordinates)                                                                                      |
| 72°05S 18°37E*<br>Zhelannya Mountain    | 448 MY(19b)KA16 WR Amphibole-plagioclase gneiss;<br>--. STA60 PIC63<br>(*coords. taken from listing in Atlas Antarktiki I:<br>(rpted as 265 MY using KA6 in STA60)                             |
| 72°04S 23°24E G<br>Viking Heights       | 790±15 MY, 814±25 MY, 875±45 MY (ANT5)UP2 ZR Embrech-<br>itic gneiss; Teltet-Vengen group. PAS68 VAN72                                                                                         |
| 72°06S 23°39E R<br>Gunnestad Glacier    | 512±20 MY, 524±20 MY, 575±10 MY (GB)UP3 ZR Granite of<br>intrusive type;--. PIC64A VAN69<br>(infer= #3 in DEU64A)                                                                              |
| 72°06S 23°39E R<br>Gunnestad Glacier    | 474±15 MY (GB)RSM2 BT Granite of intrusive type<br>(erratic boulder);--. PIC64A VAN69<br>(rev. to 445 MY, RSM4, in PIC64; appears to be<br>same as 435 MY sample in PIC63 and #3 in DEU64A)    |
| 72°06S 23°39E R<br>Gunnestad Glacier    | 472±14 MY (GB)RSM2 BH Granite of intrusive type<br>(erratic boulder);--. PIC64A VAN69<br>(rev. to 443 MY, RSM4, in PIC64)                                                                      |
| 72°06S 23°39E R<br>Gunnestad Glacier    | 480±160 MY (GB)RSM2 FD Granite of intrusive type<br>(erratic boulder);--. PIC64A VAN69<br>(rev. to 451 MY, RSM4, in PIC64; infer SM= zircon<br>in DEU64A is typo. error)                       |
| 72°06S 23°39E R<br>Gunnestad Glacier    | 350 MY (GB)KA16 WR Granite of intrusive type<br>(erratic boulder);--. PIC64A VAN69                                                                                                             |
| 71°42S 23°40E G<br>Vesthaugen Nunatak   | 526±10 MY, 523±16 MY, 505±40 MY (ANT 3)UP2 ZR Monzonite;<br>--. PAS68                                                                                                                          |
| 71°31S 24°00E<br>Mount Romnaes          | 514±20 MY, 518±20 MY, 540±10 MY (R1a)UP3 ZR Porphyro-<br>blastic granite, intrusive type;--. PIC64A VAN69<br>(sample # given as "R-1" in DEU64A)                                               |
| 71°31S 24°00E R<br>Mount Romnaes        | 476±15 MY (R1)RSM2 BT Porphyroblastic granite of in-<br>trusive type;--. PIC64A VAN69<br>(age=478 MY, revised to 454 MY, RSM4, in PIC63;<br>age=480 MY in DEU64A, rev. to 451 MY, RSM4, PIC64) |
| 71°31S 24°00E R<br>Moutn Romnaes        | 485±15 MY (R1a)RSM2 BT Porphyroblastic granite of<br>intrusive type;--. PIC64A VAN69<br>(age=473 MY, revised to 449 MY, RSM4, in PIC63)                                                        |
| 71°31S 24°00E R<br>Mount Romnaes        | 465±15 MY (91R)RSM2 BT Pegmatite vein in granite;<br>--. PIC64A VAN69<br>(age revised to 442 MY, RSM4, in PIC63)                                                                               |
| 71°31S 24°00E R<br>Mount Romnaes        | 350 MY (R1a)KA16 WR Porphyroblastic granite of in-<br>trusive type;--. PIC64A VAN69                                                                                                            |
| 72°00S 24°39E R<br>Luncke Range         | 488±15 MY (21c)RSM2 BT Syenite;--.. PIC64A VAN69<br>(rev. to 460 MY, RSM4, in PIC64; loc. between<br>peak 2380 and peak 2750)                                                                  |
| 72°02S 24°42E G<br>Luncke Range         | 607±12 MY, 608±25 MY, 610±100 MY (ANT 1 A)UP2 ZR<br>Intrusive microcline granite;--. PAS68                                                                                                     |
| 72°02S 24°42E G<br>Luncke Range         | 494±10 MY, 510±18 MY, 580±60 MY (ANT 1 B)UP2 ZR<br>Intrusive microcline granite;--. PAS68                                                                                                      |
| 72°02S 24°42E G<br>Luncke Range         | 960±20 MY, 953±25 MY, 935±50 MY (ANT 4)UP2 ZR Tonalite<br>gneiss; Nils Larsen fjellet Gp. PAS68 VAN72                                                                                          |
| 71°29S 25°14E R<br>Nordtoppen Nun. 1100 | 476±15 MY (S9a)RSM2 BT Gneiss xenolith;<br>in Smahausane gabbro-diorite. PIC64A VAN69<br>(rev. to 452 MY, RSM4, in PIC63)                                                                      |



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| 71°29S 25°14E R<br>Nordtoppen Nun. 1100                       | 481±15 MY(S9b)RSM2 BT Gneiss xenolith;<br>in Smahausane gabbro-diorite. PIC64A VAN69<br>(rev. to 457 MY, RSM4, in PIC63)                                                                                                   |
| 71°29S 25°14E R<br>Nordtoppen Nun. 1100                       | 495±15 MY(S96)RSM2 BT Biotitic segregation in<br>gneiss xenolith; in Smahausane gabbro-diorite.<br>PIC64A VAN69<br>(rev. from 493 MY to 468 MY, RSM4, in PIC63)                                                            |
| 71°29S 25°14E R<br>Nordtoppen Nun. 1100                       | 555±20 MY, 555±55 MY, 550±150 MY(S9)UP2 ZR Gneiss<br>xenolith; in Smahausane gabbro-diorite.<br>PIC64A PIC64 VAN69                                                                                                         |
| 71°47S 25°15E R<br>Austkampane Hills                          | 492±15 MY(K16)RSM2 BT Banded muscovite-biotite-<br>corundum gneiss;--. PIC64A VAN69<br>(age rev. to 463 MY, RSM4, in PIC64; infer=<br>486 MY sample rev. to 462MY in PIC63)                                                |
| 71°47S 25°15E R<br>Austkampane Hills                          | 499±15 MY(K16)RSM2 MC Banded muscovite-biotite-<br>corundum gneiss;--. PIC64A VAN69<br>(age rev. to 469 MY, RSM4, in PIC64)                                                                                                |
| 71°47S 25°15E R<br>Austkampane Hills                          | 519±15 MY(K16)RSM2 MC Banded muscovite-biotite-<br>corundum gneiss;--. PIC64A VAN69<br>(age rev. to 488 MY, RSM4, in PIC64)                                                                                                |
| 71°47S 25°15E R<br>Austkampane Hills                          | 452 MY(K16)RSM4 MC Muscovite-biotite-corundum<br>gneiss;--. PIC63 VAN69<br>(appears to be prelim. result for one of other<br>K16 samples from this loc.)                                                                   |
| 71°29S 25°17E R<br>Nordtoppen Nun. 950                        | 463±15 MY(S20a)RSM2 BT Granite dike;<br>in Smahausane gabbro-diorite. PIC64A VAN69<br>(infer=unlabelled 462 MY sample rev. to 439 MY,<br>RSM4, in PIC3; infer="#950", 465±15 MY in DEU64A<br>and #"S96", 439 MY, in PIC64) |
| 71°29S 25°17E R<br>Nordtoppen Nun. 950                        | 510±20 MY, 508±20 MY, 500±30 MY(s20a)UP3 ZR Granite<br>dike; in Smahausane gabbro-diorite. PIC64A VAN69<br>(infer= #"S96" in PIC64 and #"950" in DEU64A)                                                                   |
| 71°29S 25°17E R<br>Nordtoppen Nun. 950                        | 495 MY(??)P/P ZR Granite vein;--. PIC63 VAN69<br>(appears to be prelim. result for S20a from this<br>loc. later rpted in PIC64A)                                                                                           |
| 71°29S 25°17E R<br>Nordtoppen Nun. 950                        | 380±15 MY(S20a)KA16 WR Granite dike;<br>in Smahausane gabbro-diorite. DEU64A PIC64A VAN69<br>(infer="#950" in DEU64A and #"S96" in PIC64)                                                                                  |
| 71°35S 25°21E R<br>"Nunatak 1180"<br>Smahausane Nunataks      | 460±15 MY(S12)RSM2 BT Quartz diorite;<br>Smahausane gabbro-diorite. PIC64A VAN69<br>(age=458 MY revised to 435 MY, RSM4, in PIC63)                                                                                         |
| 71°35S 25°21E R<br>"Nunatak 'Solweig'"<br>Smahausane Nunataks | 460±15 MY(S18)RSM2 BT Diorite;<br>Smahausane gabbro-diorite. PIC64A VAN69<br>(infer=S18b, 457 MY rev. to 434 MY, RSM4, in PIC63)                                                                                           |
| 71°35S 25°21E R<br>"Nunatak 1180"<br>Smahausane Nunataks      | 475 MY(S12)KA16 WR Quartz diorite;<br>Smahausane gabbro-diorite. PIC64A VAN69<br>(age=470±20 MY in DEU64A and 500 MY in PIC66)                                                                                             |
| 71°35S 25°21E R<br>"Nunatak 1180"<br>Smahausane Nunataks      | 501±15 MY(S17)RSM2 BT Granite dike;<br>in Smahausane gabbro-diorite. PIC64A VAN69<br>(rev. to 476 MY, RSM4, in PIC64)                                                                                                      |
| 71°35S 25°21E R<br>"Nunatak 1180"<br>Smahausane Nunataks      | 488±15 MY(S17)RSM2 BT Granite dike;<br>in Smahausane gabbro-diorite. PIC64A VAN69<br>(rev. to 459 MY, RSM4, in PIC64)                                                                                                      |

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| 71°52S 25°36E R<br>E spur, Strandrud Mt. | 457±15 MY(T7)RSM2 BT Migmatitic gneiss;--. PIC64A VAN69<br>(age=455 MY revised to 432 MY, RSM4, in PIC63)                                                                                                                                                              |
| 71°52S 25°36E R<br>E spur, Strandrud Mt. | 483±15 MY(T4)RSM2 BT Fine-grained pink granite;<br>intrusive into gneiss series. PIC64A VAN69<br>(rev. to 459 MY, RSM4, in PIC63)                                                                                                                                      |
| 71°52S 25°36E R<br>E spur, Strandrud Mt. | 460±90 MY(T4)RSM2 FD Fine-grained pink granite;<br>intrusive into gneiss series. PIC64A VAN69<br>(rev. to 433 MY, RSM4, in PIC64)                                                                                                                                      |
| 71°52S 25°36E R<br>E spur, Strandrud Mt. | 488 MY, 548 MY, 464 MY, 503 MY(T4)RSM2 WR Fine-grained<br>pink granite; intrusive into gneiss. PIC64A VAN69<br>(avg. age=500±50 MY in PIC64A; ages rev. to 459 MY<br>515 MY, 436 MY, 473 MY using RSM4 in PIC64;<br>avg.(?) age=510 MY rev. to 482 MY, RSM4, in PIC63) |
| 71°52S 25°36E G<br>Strandrud Mountain    | 552±10 MY, 564±17 MY, 610±45 MY(ANT 6 A)UP2 ZR<br>Anatectic microcline granite; Teltet-Vengen Gp.<br>PAS68 VAN72                                                                                                                                                       |
| 71°52S 25°36E G<br>Strandrud Mountain    | 521±10 MY, 534±20 MY, 590±65 MY(ANT 6 B)UP2 ZR<br>Anatectic microcline granite; Teltet-Vengen Gp.<br>PAS68 VAN72                                                                                                                                                       |
| 71°52S 25°36E G<br>Strandrud Mountain    | 979±20 MY, 972±35 MY, 950±70 MY(ANT 7 A)UP2 ZR<br>Granitic gneiss; Teltet-Vengen Gp. PAS68 VAN72                                                                                                                                                                       |
| 71°52S 25°36E G<br>Strandrud Mountain    | 609±12 MY, 639±18 MY, 745±35 MY(ANT 7 B)UP2 ZR<br>Granitic gneiss; Teltet-Vengen Gp. PAS68 VAN72                                                                                                                                                                       |
| 71°52S 25°36E G<br>Strandrud Mountain    | 777±15 MY, 1026±35 MY, 1610±55 MY(ANT 8 A)UP2 ZR<br>Granodioritic gneiss; Teltet-Vengen Gp. PAS68 VAN72                                                                                                                                                                |
| 71°47S 25°36E R<br>Strandrud Mountain    | 715±15 MY, 896±20 MY, 1378±20 MY(ANT 8 B)UP2 ZR<br>Granodioritic gneiss; Teltet-Vengen Gp. PAS68 VAN72                                                                                                                                                                 |
| 71°52S 25°36E G<br>Strandrud Mountain    | 570-2700 MY(ANT 8)UP2C2 ZR Granodioritic gneiss;<br>Teltet-Vengen Group. PAS68 VAN72                                                                                                                                                                                   |
| 71°52S 25°36E G<br>Strandrud Mountain    | 540±75 MY(ANT 6)RS3I2 WR, KF, AP Anatectic microcline<br>granite; Teltet-Vengen Group. PAS68 VAN72                                                                                                                                                                     |
| 71°58S 25°57E R<br>Bautaen Peak          | 497±15 MY(A3)RSM2 BT Fine-grained pink granite<br>(fallen block);--. PIC64A VAN69<br>(age rev. to 472 MY, RSM4, in PIC63 and to 467 MY,<br>RSM4, in PIC64)                                                                                                             |
| 71°58S 25°57E R<br>Bautaen Peak          | 506±15 MY(A3)RSM2 BT Fine-grained pink granite<br>(fallen block);--. PIC64A VAN69<br>(age rev. to 481 MY, RSM4, in PIC63 and to 476 MY,<br>RSM4, in PIC64)                                                                                                             |
| 71°58S 25°57E R<br>Bautaen Peak          | 475±60 MY(A3)RSM2 FD Fine-grained pink granite<br>(fallen block);--. PIC64A VAN69<br>(age rev. to 446 MY, RSM4, in PIC64)                                                                                                                                              |
| 71°58S 25°57E R<br>Bautaen Peak          | 478±60 MY (A3)RSM2 FD Fine-grained pink granite<br>(fallen block);--. PIC64A VAN69<br>(age rev. to 450 MY, RSM4, in PIC64)                                                                                                                                             |
| 71°58S 25°57E R<br>Bautaen Peak          | 553 MY, 650 MY, 585 MY(A3)RSM2 WR Fine-grained pink<br>granite (fallen block);--. PIC64A VAN69<br>(avg. age given as 593±60 MY in PIC64A; ages rev.<br>to 520 MY, 611 MY, and 550 MY, RSM4, in PIC64)                                                                  |
| 71°58S 25°57E R<br>Bautaen Peak          | 475 MY(A3)RSM4 WR Fine-grained microcline granite;<br>--. PIC63 VAN69<br>(appears to be a prelim. result superseded by<br>other A3 results from this loc.)                                                                                                             |

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| 72°11S 26°18E R<br>Isachsen Mountain                          | 493±15 MY(G13)RSM2 BT Coarse pegmatite (fallen block);--. PIC64A VAN69<br>(age rev. to 468 MY, RSM4, in PIC64)                        |
| 72°11S 26°18E R<br>Isachsen Mountain                          | 517±15 MY(G6)RSM2 BT Migmatitic gneiss;<br>--. PIC64A VAN69<br>(age rev. to 491 MY, RSM4, in PIC64)                                   |
| 72°11S 26°18E R<br>Isachsen Mountain                          | 440±15 MY(G6)RSM2 WR Migmatitic gneiss;<br>--. DEU64A PIC64A VAN69                                                                    |
| 71°40S 27°26E R<br>Trillingane Nun. 2240                      | 473±15 MY(Tr7)RSM2 BT Dioritic gneiss-migmatite;<br>--. PIC64A VAN69<br>(age rev. from 471 MY to 447 MY, RSM4, in PIC63)              |
| 71°40S 27°26E R<br>Trillingane Nun. 1240                      | 476±15 MY(Tr12)RSM2 BT Concordant pegmatite in migmatitic gneiss;--. PIC64A VAN69<br>(age rev. from 474 MY to 450 MY, RSM4, in PIC63) |
| 72°35S 31°15E G<br>cen. NW massif,<br>Belgica Mountains       | 442±22 MY(A79121411)KA17 WR Pyroxenite dike;<br>Belgica Group. KOJ82                                                                  |
| 72°35S 31°15E G<br>N. end, NW massif,<br>Belgica Mountains    | 401±20 MY(A79121504)KA17 WR Hornblende-biotite gneiss; Belgica Group. KOJ82                                                           |
| 72°35S 31°15E G<br>cen. SE Massif,<br>Belgica Mountains       | 386±19 MY(K79121914)KA17 WR Pink granite dike;<br>Belgica Group. KOJ82                                                                |
| 72°35S 31°15E G<br>NW part, SW massif,<br>Belgica Mountains   | 382±19 MY(K79122014)KA17 WR Granitic gneiss;<br>Belgica Group. KOJ82                                                                  |
| 72°35S 31°15E G<br>cen. part, NW massif,<br>Belgica Mountains | 472±24 MY(A79122401)KA17 WR Hornblende-biotite gneiss;<br>Belgica Group. KOJ82                                                        |
| 72°32S 31°15E G<br>N. Mt. Bastin                              | 411±21 MY(K79122607)KA17 WR Syenite dike;<br>Belgica Group. KOJ82                                                                     |

## GEOGRAPHIC AREA 19:

- QUEEN MAUD LAND, EAST OF THE BELGICA MOUNTAINS  
(samples from west to east by coordinates)
- 71°22'S 35°29'E R  
Queen Fabiola Mts.  
486±15 MY(YD218)RSM2 BT Granitic gneiss;  
--. PIC64 PIC66 TAT69  
(age rev. to 457 MY, RSM4, in PIC64)
- 71°30'S 35°40'E G  
Yamato Mountains  
71°30'S 35°40'E G  
"Massif C"  
383 MY(A-08)RSM2/0.7115 FD Gneissic rock;  
--. MAE68
- Yamato Mountains  
71°30'S 35°40'E G  
"Massif C"  
363±18 MY(74121709)KA17 WR Augen gneiss;  
Precambrian basement. YAN82
- Yamato Mountains  
71°30'S 35°40'E G  
"Massif C"  
400±20 MY(K79112910)KA17 WR Syenite;  
Precambrian basement. YAN82
- Yamato Mountains  
71°30'S 35°40'E G  
"Massif C"  
359±18 MY(A79120102)KA17 WR Syenite;  
Precambrian basement. YAN82
- Yamato Mountains  
71°30'S 35°40'E G  
"Massif C"  
363±18 MY(N79120112)KA17 WR Syenite;  
Precambrian basement. YAN82
- Yamato Mountains  
69°05' 39°05' RM  
E. Lutzow Holm Bay  
69°38'S 39°23'E R  
Skallen Hills  
69°38'S 39°23'E R  
Skallen Hills  
526 MY(A-10)RSM2/0.7115 BT Gneissic rock; --.MAE68  
(exact sample site not shown on RM)
- 69°01.5'S 39°28'E R  
Kurumi Island  
69°01.5'S 39°28'E R  
Kurumi Island  
530±16 MY(JARE 57102622)RSM1 BT Granitic pegmatite  
in pyroxene gneiss; --. NIC61 TAT69
- 69°00'S 39°30'F R  
East Ongul Island  
69°01'S 39°30'E R  
West Ongul Island  
69°01'S 39°32'E R  
Ongul Island  
485±5 MY, 468±16 MY, 375±29 MY, 458±26 MY(?)UTP4 EX  
Granitic pegmatite in pyroxene gneiss; --.  
SAI61 NIC61 TAT69  
(sample from same pegmatite as JARE 57102622)
- 69°01'S 39°32'E G  
West Ongul Island  
539 MY(A-4 68090706)KA11 BT Garnet-biotite plagioclase  
rock; --. YAN74
- 69°01'S 39°32'E G  
West Ongul Island  
515 MY(A-4 68090706)KA11 BT Garnet-biotite plagioclase  
rock; --. YAN74
- 69°01'S 39°32'E G  
West Ongul Island RM  
69°01'S 39°32'E G  
West Ongul Island RM  
467 MY(A-7 68091201-1)KA11 PG Eclogite:  
basement rocks. YAN74 YAN74A
- 69°01'S 39°32'E G  
West Ongul Island RM  
69°01'S 39°32'E G  
West Ongul Island RM  
560 MY(A-8 68022002)KA11 BT Biotite gneiss;  
basement rocks. YAN74 YAN74B
- 69°01'S 39°32'E G  
West Ongul Island RM  
69°01'S 39°32'E G  
West Ongul Island RM  
500±30 MY(JARE 57122307)RSM1 BT Small BT-rich mass  
in charnockite lens in gneiss; --. NIC61 TAT69  
(rev. to 570 MY, RSM4, in PIC63)
- 69°01'S 39°32'E G  
N part, West Ongul I.  
25,840±2450 BP(?)14C SH Adamussium colbecki, step  
landform or raised beach, 3.5 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- GT 31,510 BP(?)14C SH Laternula elliptica, step  
landform or raised beach, 2.5 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 508 MY(A-02)RSM2/0.7115 BT Gneissic rock;  
basement rocks. MAE68 YAN74B
- 465 MY(A-05)RSM2/0.7115 BT Gneissic rock;  
basement rocks. MAE68 YAN74B
- 726 MY(A-02)RSM2/0.7115 KF Gneissic rock;  
basement rocks. MAE68 YAN74B
- 930±90 BP(GaK-5832)14C2 SH Adamussium colbecki, below  
8 m a.s.l.; --. YOS83

- 69°01S 30°32.5E R  
West Ongul Island  
69°29S 39°33E AR  
Skarvsnes
- 69°26'36.5"S  
39°33'15"E R  
Lake Funazoko  
69°26'36.5"S  
39°33'15"E R  
W, Funazoko-ike (Pond)  
69°01.5S 39°33.5E R  
West Ongul Island  
69°26S 39°34E R  
Skarvsnes Foreland
- 69°27S 39°34E M  
Lake Hunazoko
- 69°27S 39°34E M  
Lake Hunazoko
- 69°27S 39°34E M  
Lake Hunazoko
- 69°27S 39°34E M  
Lake Hunazoko
- 69°27S 39°34E M  
Lake Hunazoko
- 69°27S 39°34E M  
Lake Hunazoko
- 69°01S 39°34E G  
Kaino-hama Beach,  
East Ongul Island RM  
69°01S 39°34E G  
Kitami Beach,  
East Ongul Island RM  
69°01S 39°34E G  
Kitami Beach,  
East Ongul Island RM  
69°01S 39°34E G  
Kitami Beach,  
East Ongul Island RM  
69°01S 39°34E G  
Kitami Beach,  
East Ongul Island RM
- 399 MY(A-9 68022014)KAl1 BT Microcline-biotite granite;  
basement rocks. YAN74 YAN74B  
363 MY(AS)KAl2 WR Garnet-biotite gneiss;  
--. KAN68  
(infer  $\lambda\beta=4.72\times10^{-10}$  yr<sup>-1</sup>)  
3200±130 BP(Th-051)14C2 Shell fragments, shore  
terrace deposits. OMO76
- 4830±150 BP(Th-054)14C2 SH *Laternula elliptica*,  
1.7 m. below surface of shore terrace (or tidal delta  
terrace). OMO76  
485 MY(A-11 68022609)KAl1 BT Hornblende gneiss;  
basement rocks. YAN74 YAN74B  
510±30 MY(JARE 57110704)RSM1 BT Granitic pegmatite  
in pyroxene gneiss; --. NIC61 TAT69  
(age rev. to 479 MY, RSM4, in PIC63)  
3530±130 BP(#?)14C SH *Laternula elliptica*, step  
landform or raised beach, -1.4 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)  
3120±110 BP(#?)14C SH *Laternula elliptica*, step  
landform or raised beach, -3.8 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)  
2510±110 BP(#?)14C SH *Laternula elliptica*, step  
landform or raised beach, -6.0 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)  
2000±120 BP(#?)14C SH *Laternula elliptica*, step  
landform or raised beach, -10.4 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)  
4540±210 BP(#?)14C SH *Laternula elliptica*, step  
landform or raised beach, -19.6 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)  
3200±130 BP(#?)14C SH *Laternula elliptica*, step  
landform or raised beach, -22.8 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)  
3840±110 BP(#?)14C SH *Adamussium colbecki*, gravelly  
sand, surface of raised beach, 3-4 m a.s.l.; --.  
MEG64 YAN74A  
GT 30,000 BP(#?)14C SH Fragments of mollusca, raised  
beach, 5-6 m a.s.l.; --. MEG64 YAN74A
- 25,400±1200 BP(GaK-285)14C2 SH Fragments of mollusca,  
raised beach, 7-8 m a.s.l.; --. MEG64 KIG64 YAN74A
- 34,000±3000-2000 BP(GaK-286)14C2 SH Fragments of  
mollusca, raised beach, 12 m a.s.l.; --.  
MEG64 KIG64 YAN74A  
22,800±1000 BP(GaK-287)14C SH Fragments of mollusca,  
raised beach, 9-10 m a.s.l.; --. MEG64 KIG64 YAN74A
- 29,500±2400-1800 BP(GaK-288)14C2 SH Fragments of  
mollusca, raised beach 3-4 m a.s.l.; --.  
MEG64 KIG64 YAN74A  
31,200±2500-1900 BP(GaK-289)14C2 Tests of benthonic  
foraminifera mixed with echinoid spines,  
raised beach, 7-8 m a.s.l.; --. MEG64 KIG64 YAN74A

- 69°27'S 39°34'E M  
Lake Hunazoko  
69°27'S 39°34'E M  
Lake Hunazoko
- 69°27'S 39°34'E M  
SW coast, Lake Hunazoko  
69°00'29"S  
39°34'30"E R  
Kitamihama  
69°00'29"S  
39°34'30"E R  
Kitamihama  
69°01'S 39°35'E AR  
East Ongul Island
- 69°01'S 39°35'E AR  
East Ongul Island
- 69°00'S 39°35'E R  
East Ongul Island  
69°00'S 39°35'E R  
East Ongul Island  
69°01'S 39°35'E G  
East Ongul Island
- 69°01'S 39°35'E G  
East Ongul Island
- 69°00'S 39°35'E M  
N part, East Ongul I.  
69°00'S 39°35'E G  
Mizukumi Stream,  
East Ongul Island  
69°30'S 39°35'E M  
SW part, Skarvsnes  
69°28'S 39°35'E M  
Kizahashi Beach  
69°28'S 39°35'E G  
Kizahashi Beach  
69°01'S 39°35'E G  
East Ongul Island  
69°28'S 39°35'E G  
Kizahashi Beach  
69°01'S 39°35'E AR  
East Ongul Island
- 69°28'S 39°36'E RM  
Skarvsnes  
69°26'S 39°37'E RM  
E. Lutzow-Holm Bay
- 4190±100 BP(GaK-2037)14C2 SH Laternula elliptica, raised  
shore line, -23 m a.s.l.; --. YOS70 YOS83  
31,600±2800-2100 BP(GaK-2036)14C2 SH Fragments of  
mollusca, raised shoreline, 8 m a.s.l.;  
--. YOS70 YOS83  
2540±160 BP(GaK-5834)14C2 SH Laternula elliptica,  
4 m a.s.l.; --. YOS83  
1450±110 BP(TH-021)14C2 SH Adamussium colbecki,  
about 2 m a.s.l.; --. OMO74  
2510±110 BP(N-925)14C2 SH Adamussium colbecki,  
about 2 m a.s.l.; --. OMO74  
(same sample as TH-021)  
387 MY(AO2)KAL2 WR Biotite-hornblende gneiss;  
--. KAN68  
(infer  $\lambda\beta = 4.72 \times 10^{-10} \text{yr}^{-1}$ )  
350 MY(AO2)KAL2 FD, QZ Biotite-hornblende gneiss;  
--. KAN68  
(infer  $\lambda\beta = 4.72 \times 10^{-10} \text{yr}^{-1}$ )  
517 MY(A-2 68032704)KAL1 PG Pyroxenite;  
basement rocks. YAN74 YAN74A  
533 MY(A-3 68091201-2)KAL1 PG Hornblendite;  
basement rocks. YAN74 YAN74A  
3340±90 BP(GaK-3664)14C2 Calcareous algae, high tide  
level; --. OMO74 YOS83  
(date from Dr. T. Hoshiai, pers. comm.)  
3540±90 BP(GaK-3665)14C2 Calcareous algae, 1 m. above  
GAK-3664; --. OMO74 YOS83  
(date from Dr. T. Hoshiai, pers. comm.)  
5850±100 BP(GaK-2032)14C2 SH Fragments of mollusca,  
raised shoreline, 16 m a.s.l.; --. YOS70 YOS83  
30,700±2000 BP(GaK-2033)14C2 SH Fragments of mollusca,  
raised shoreline, 12 m a.s.l.; --. YOS70 YOS83  
3180±250 BP(GaK-2039)14C2 SH Laternula elliptica, shore  
or inlet, 0.5 m a.s.l.; --. YOS70 YOS83  
3600±100 BP(GaK-2035)14C2 SH Adamussium colbecki, raised  
shoreline, 1.8 m a.s.l.; --. YOS70 YOS83  
4700±100 BP(GaK-2034)14C2 SH Adamussium colbecki, raised  
shoreline, 8 m a.s.l.; --. YOS70 YOS83  
2400±90 BP(?)14C2 SH Adamussium colbecki, -9 m.  
a.s.l.; --. YOS83  
5580±180 BP(GaK-5835)14C2 SH Laternula elliptica,  
11 m a.s.l.; --. YOS83  
421 MY(AO2)KAL2 BH Biotite-hornblende gneiss;  
--. KAN68  
(infer  $\lambda\beta = 4.72 \times 10^{-10} \text{yr}^{-1}$ )  
1800 MY(3020204)RSM3/0.7037 WR Pyroxene gneiss;  
crystalline basement. SHI83  
745 MY(A-04)RSM2/0.7115 KF Gneissic rock;  
--. MAE68

|                                                        |                                                                                                                                                                                      |
|--------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 69°29S 39°37.5E R<br>near Suribachi-ike                | 6020±175 BP(TH-020)14C2 SH <u>Laternula elliptica</u> ,<br>about 14 m a.s.l.; --. OMO74                                                                                              |
| 69°29S 39°37.5E R<br>near Suribachi-ike                | 7450±135 BP(N-926)14C2 SH <u>Laternula elliptica</u> ,<br>about 14 m a.s.l.; --. OMO74<br>(same sample as TH-020)                                                                    |
| 69°13S 39°38E R<br>Langhovde Hills                     | 525±40 MY(JARE 57112001)RSM1 BT Granitic pegmatite<br>in granitic gneiss; --. NIC61 TAT69<br>(age rev. to 494 MY, RSM4, in PIC63)                                                    |
| 69°27S 39°38E RM<br>Skarvsnes                          | 1080 MY(3020105)RSM3/0.710 WR Garnet-biotite gneiss;<br>crystalline basement. SHI83                                                                                                  |
| 69°27S 39°38E RM<br>Skarvsnes                          | 1060 MY(3020113)RSM3/0.710 WR Garnet-biotite gneiss;<br>crystalline basement. SHI83                                                                                                  |
| 69°27S 39°38E RM<br>Skarvsnes                          | 1180 MY(3020113,3020105)RS2I3/0.709 WR Garnet-biotite<br>gneisses; crystalline basement. SHI83 YOS83A                                                                                |
| 69°11S 39°39E M<br>Lake Zakuro                         | GT 31,700 BP(#!)14C SH <u>Laternula elliptica</u> , raised<br>beach, -3.4 m a.s.l.; --. OMO77<br>(date from Dr. Nogami, pers. comm.)                                                 |
| 69°11S 39°39E M<br>Lake Zakuro                         | GT 33,200 BP(#!)14C SH <u>Adamussium colbecki</u> , raised<br>beach, -4.6 m a.s.l.; --. OMO77<br>(date from Dr. Nogami, pers. comm.)                                                 |
| 69°28S 39°39E G<br>Skarvsnes RM                        | 1900 MY PP5I5 WR Pyroxene gneisses;<br>crystalline basement. SHI83 YOS83A<br>(max. age based on a two-stage model)                                                                   |
| 69°28S 39°39E G<br>Skarvsnes RM                        | 1700 MY PPI5 WR Pyroxene gneisses, garnet-biotite<br>gneisses; crystalline basement. SHI83<br>(age based on two-stage model; age is speculative)                                     |
| 69°05S 39°40E RM<br>E. Lutzow-Holm Bay                 | 1013 MY(A-23)RSM2/0.7115 KF Gneissic rock;<br>--. MAE68<br>(date from Dr. Nogami, pers. comm.)                                                                                       |
| 69°11S 39°40E M<br>Ko-minato Inlet                     | 23,830±910 BP(GaK-4148)14C2 SH <u>Laternula elliptica</u> ,<br>raised beach, 5-6 m a.s.l.; --. MOR74 ISH76 YOS83<br>(locality number = Langhovde 03)                                 |
| 69°11S 39°40E M<br>Ko-minato Inlet                     | 4290±90 BP(GaK-4151)14C2 SH <u>Adamussium colbecki</u> , raised<br>beach, 1.5 m a.s.l.; --. MOR74 ISH76 YOS07<br>(locality number = Langhovde 04; same sample as<br>TH-044 of OMO76) |
| 69°11S 39°40E M<br>Ko-minato Inlet                     | 10,250±210 BP(GaK-4150)14C2 SH <u>Adamussium colbecki</u> ,<br>raised beach, 6 m a.s.l.; --. MOR74 ISH76 YOS83<br>(locality number = Langhovde 07)                                   |
| 69°11S 39°40E M<br>Ko-minato Inlet                     | GT 33,400 BP(GaK-4149)14C2 SH <u>Laternula elliptica</u> ,<br>raised beach, 6 m a.s.l.; --. MOR74 ISH76 YOS83<br>(locality number = Langhovde 08)                                    |
| 69°10S 39°40E RM*<br>E. Lutzow-Holm Bay                | 458 MY RS8I2/0.793 BT Gneissic rocks; --. MAE68<br>(*avg. coords. of sample sites)                                                                                                   |
| 69°10S 39°40E RM*<br>E. Lutzow-Holm Bay                | 1100±100 MY RS6I2/0.704 KF Gneissic rocks; --. MAE68<br>(*avg. coords. of sample sites)                                                                                              |
| 69°27S 39°40E G<br>S coast, Osen (Cove)                | 8370±270 BP(GaK-5833)14C2 Worm tubes, 8 m a.s.l.;<br>--. YOS83                                                                                                                       |
| 69°27S 39°40E G<br>S coast, Osen (Cove)                | 4430±90 BP(GaK-5841)14C2 SH <u>Laternula elliptica</u> , 6 m<br>a.s.l.; --. YOS83                                                                                                    |
| 69°28'57.7"S<br>39°40'21.2"E R<br>Suribachi-ike (Pond) | 5230±155 BP(TH-053)14C2 BN Seal mummy on shore,<br>-32 m a.s.l.; --. OMO76                                                                                                           |

- 69°29S 39°41E M  
Lake Suribachi 5860+170 BP(?) 14C SH Laternula elliptica, step  
landform or raised beach, 15.5 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°29S 39°41E M  
Lake Suribachi 6630+230 BP(?) 14C Serpuloid tubes, step  
landform or raised beach 12.0 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°29S 39°41E M  
Lake Suribachi 6700+180 BP(?) 14C SH Laternula elliptica, step  
landform or raised beach 12.0 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°29S 39°41E M  
Lake Suribachi 5370+160 BP(?) 14C SH Laternula elliptica, step  
landform or raised beach 11.7 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°29S 39°41E M  
Lake Suribachi 7680+250 BP(?) 14C Serpuloid tubes, step  
landform or raised beach, 8.0 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°29S 39°41E M  
Lake Suribachi 8130+200 BP(?) 14C SH Laternula elliptica, step  
landform or raised beach, 4.7 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°29S 39°41E M  
Lake Suribachi 6180+260 BP(?) 14C Serpuloid tubes, step  
landform or raised beach, 4.5 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°29S 39°41E M  
shore, Lake Suribati 5640+130 BP(GaK-2038) 14C2 Tubes of Polychaeta, raised  
shoreline -30 m a.s.l.; --. YOS70 YOS83
- 69°29S 39°41E M  
Lake Suribachi 5870+210 BP(?) 14C Serpuloid tubes, step landform  
or raised beach, 2.0 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°29S 39°41E M  
Lake Suribachi 5640+130 BP(?) 14C Serpuloid tubes, step landform  
or raised beach, -30 m a.s.l.; --. OMO77
- 69°29S 39°41E M  
S coast, L. Suribati 6090+90 BP(GaK-5840) 14C2 Worm tubes, below 6 m  
a.s.l.; --. YOS83
- 69°29S 39°41E M  
S coast, L. Suribati 7830+280 BP(GaK-5837) 14C2 Worm tubes, 15+5 m a.s.l.;  
--. YOS83
- 69°10'51.9"S  
39°41'20"E R 3120+110 BP(TH-186) 14C2 SH Laternula elliptica,  
terrace deposits, 3 m a.s.l.; --. OMO78
- Kominato Inlet  
69°10'51.9"S 3305+130 BP(TH-044) 14C2 SH Adamussium colbecki,  
raised beach. OMO76  
(same as sample of MOR74 listed as 4290+90 BP)
- 39°41'20"E R 526 MY(A-09) RSM2/0.7115 BT Gneissic rock;  
--. MAE68
- Kominato (Bay) 3730+220 BP(?) 14C SH Laternula elliptica, raised  
beach, 5.5 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°11S 39°42E RM 4570+120 BP(?) 14C SH Laternula elliptica, raised  
beach, 5.1 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- E. Iutzow-Holm Bay 1030+100 BP(?) 14C SH Laternula elliptica, raised  
beach, 1.4 m a.s.l.; --. OMO77  
(date from Dr. Nogami, pers. comm.)
- 69°14S 39°44E G 2000+220 BP(?) 14C2 SH Fragments of mollusca, 2 m  
a.s.l.; --. YOS83  
(infer = 2000+220 BP undescribed sample from  
Oyayubi Island in MOR74 and OMO77)
- Langhovde
- 69°14S 39°44E G
- Langhovde
- 69°14S 39°44E G
- Langhovde
- 69°14S 39°44E G
- Langhovde



|                        |                                                                 |
|------------------------|-----------------------------------------------------------------|
| 69°31S 39°44E M        | 3370±120 BP(GaK-5836)14C2 SH <u>Laternula elliptica</u> ,       |
| southernmost Skarvsnes | 3 m a.s.l.; --. YOS83                                           |
| 69°16S 39°45E M        | 3840±90 BP(GaK-4850)14C2 SH <u>Laternula elliptica</u> , raised |
| Simo-kama Cove,        | beach deposit, 1.5 m a.s.l.;--. ISH74 ISH76 YOS83               |
| Langhovde              |                                                                 |
| 69°13S 39°45E R        | 463 MY(A-1 68013113)KA11 BT Pyroxenite;                         |
| Langhovde              | --. YAN74                                                       |
| 69°22S 39°48E RM       | 508 MY(A-01)RSM2/0.7115 BT Gneissic rock;                       |
| E. Lutzow-Holm Bay     | --. MAE68                                                       |
| 69°22S 39°48E RM       | 471 MY(A-03)RSM2/0.7115 BT Gneissic rock;                       |
| E. Lutzow-Holm Bay     | --. MAE68                                                       |
| 69°22S 39°48E RM       | 442 MY(A-24)RSM2/0.7115 BT Gneissic rock;                       |
| E. Lutzow-Holm Bay     | --. MAE68                                                       |
| 69°22S 39°48E RM       | 971 MY(A-01)RSM2/0.7115 KF Gneissic rock;                       |
| E. Lutzow-Holm Bay     | --. MAE68                                                       |
| 69°22S 39°48E RM       | 1116 MY(A-24)RSM2/0.7115 KF Gneissic rock;                      |
| E. Lutzow-Holm Bay     | --. MAE68                                                       |
| 68°45S 40°30E RM       | 448 MY(A-22)RSM2/0.7115 BT Gneissic rock;                       |
| E. Lutzow-Holm Bay     | --. MAE68                                                       |
| 68°45S 40°30E RM       | 816 MY(A-22)RSM2/0.7115 KF Gneissic rock;                       |
| E. Lutzow-Holm Bay     | --. MAE68                                                       |
| 68°29S 41°23E G        | 7730±110 BP(GaK-5839)14C2 SH Fragments, 10 m a.s.l.;            |
| (Cape Akarui)          | --. YOS83                                                       |
|                        | (loc. given as "Akarui Point")                                  |

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| GEOGRAPHIC AREA 20:                            | ENDERBY LAND (samples from west to east by coordinates)                                                                                                                                    |
| 67°43S 45°30E RM<br>Freeth Bay                 | 460±250 MY(287B)RSM4/0.715±0.010 WR Quartzo-feldspathic gneiss; Precambrian basement. GRE78                                                                                                |
| 67°45S 45°45E RM<br>Konovalov Mts.             | 680±320 MY(354C)RSM4/0.715±0.010 WR Quartzo-feldspathic gneiss; Precambrian basement. GRE78                                                                                                |
| 67°40S 45°50E AR<br>nr Molodezhnaya station RM | 1500±500 BP(??)14C3 GO Penguin rookery (Abendberg), deepest layers (c. 30-40 cm). HER80                                                                                                    |
| 67°40S 45°50E AR<br>nr Molodezhnaya sta.       | 373 MY, 393 MY, 382 MY, 501 MY(4338)UTP6 PO Pegmatite; intrudes Precambrian basement. GRE79<br>(ages recalcd. from ATR67; appears to be same sample as 530 MY PO listing from Thala Hills) |
| 67°40S 45°51E RM<br>nr Molodezhnaya sta.       | 512±155 MY RS7I4/0.7134±0.0161 WR Granite dike cores; intrude Precambrian basement. GRE78                                                                                                  |
| 67°40S 45°51E RM<br>nr Molodezhnaya sta.       | 423±2 MY, 444±5 MY, 528±3 MY, 554±20 MY(92X)UTP6 MZ Pegmatite dike; intrudes Precambrian basement. GRE78                                                                                   |
| 67°40S 45°51E RM<br>nr Molodezhnaya sta.       | 460±20 MY(RM26A)RSM4/0.709 BT Clinopyroxene-hornblende gneiss; Precambrian basement. GRE78                                                                                                 |
| 67°40S 45°51E R<br>Molodezhnaya sta.           | 1220±80 BP(LE-780)14C2 Peaty moss;-- SEM72                                                                                                                                                 |
| 67°40S 45°52E RM<br>nr Molodezhnaya sta.       | 467±20 MY(RM28)RSM4/0.708 BT Hornblende gneiss; Precambrian basement. GRE78                                                                                                                |
| 67°40S 45°52E RM<br>nr Molodezhnaya sta.       | 755±390 MY(179X)RSM4/0.715±0.010 WR Quartzo-feldspathic gneiss; Precambrian basement. GRE78                                                                                                |
| 67°40S 45°53E RM<br>Thala Hills                | 445 MY, --, 503 MY, --(129B)UTP6 AT Pegmatite dike; intrudes Precambrian basement. GRE78<br>(common lead correction assuming 450 MY model age)                                             |
| 67°40S 45°54E RM<br>Thala Hills                | 708±200 MY(340)RSM4/0.7109±0.0015 WR Granodioritic gneiss; Precambrian basement. GRE78                                                                                                     |
| 67°40S 45°56E RM<br>Molodezhnaya sta. area     | 2120±130 MY(263)RSM4/0.715±0.010 WR Quartzo-feldspathic gneiss; Precambrian basement. GRE78                                                                                                |
| 67°40S 45°56E RM<br>Molodezhnaya sta. area     | 1410±350 MY(265E)RSM4/0.715±0.010 WR Quartzo-feldspathic gneiss; Precambrian basement. GRE78                                                                                               |
| 67°39S 45°58E G<br>Thala Hills                 | 460 MY(??)K/A WR Biotitized two feldspar-charnockite; Nye Series. KAM72<br>(data taken from ATR67)                                                                                         |
| 67°39S 45°58E G<br>Thala Hills                 | 490 MY(??)K/A BT Two feldspar-charnockite; Nye Series. KAM72<br>(data taken from ATR67)                                                                                                    |
| 67°39S 45°58E G<br>Thala Hills                 | 465 MY(3?)K/A MN Pegmatite formed from aplite vein; cuts Nye Series. KAM72<br>(data taken from ATR67)                                                                                      |
| 67°39S 45°58E G<br>Thala Hills                 | 530 MY(??)K/A BT Pegmatite formed from aplite vein; cuts Nye Series. KAM72<br>(data taken from ATR67)                                                                                      |
| 67°39S 45°58E G<br>Thala Hills                 | 540 MY(??)K/A MC Pegmatite formed from aplite vein; cuts Nye Series. KAM72<br>(data taken from ATR67)                                                                                      |
| 67°39S 45°58E G<br>Thala Hills                 | 530 MY(??)P/P PO Pegmatite formed from aplite vein; cuts Nye Series. KAM72<br>(data taken from ATR67)                                                                                      |
| 67°39S 45°58E G<br>Thala Hills RM              | 987±60 MY RS8I4/0.7109±0.0015 WR Charnockitic gneiss; Precambrian basement. GRE78                                                                                                          |

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| 67°40S 45°59E<br>and 67°40S 46°09E RM<br>Alasheev Bight area<br>67°40S 46°06E RM<br>("Mt. Vechernyaya")                                                                                                                                                                                                                                                                                             | 512 MY-984 MY(323,109C)UP2C ZR Charnockitic gneiss;<br>Precambrian basement. GRE78 GRE81                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 67°40S 46°08E RM<br>Thala Hills area<br>67°40S 46°09E RM<br>Thala Hills area<br>67°40S 46°09E RM<br>Thala Hills area                                                                                                                                                                                                                                                                                | 514 MY, 547 MY, 549 MY, 703 MY(96C)UTP6 SP Pegmatite<br>dike; intrudes Precambrian basement. GRE78<br>(common lead correction assuming 450 MY model age)<br>1740±75 MY(322B)RSM4/0.715±0.010 WR Quartzo-feldspathic<br>gneiss; Precambrian basement. GRE78<br>2120±155 MY(106Z)RSM4/0.715±0.010 WR Quartzo-<br>feldspathic gneiss; Precambrian basement. GRE78<br>1800 MY(106Z)UP1C ZR Quartzo-feldspathic gneiss;<br>Precambrian basement. GRE78 GRE81<br>(UI of chord on concordia plot assuming LI=550 MY)<br>2405±140 MY R/S WR Paragneiss; Napier complex. BLA83<br>(unpubl. data; age reflects D <sub>3</sub> event)<br>2440±115 MY R/S WR Paragneiss; Napier complex. BLA83<br>(unpubl. data; age reflects D <sub>3</sub> event)<br>520 MY(2109A, 2105C)UPOC AL, SP Pegmatite veins;<br>cut the Napier complex. GRE79A<br>2500 MY(R25730a,b,c)UPOC ZR Pegmatite in gneiss;<br>Napier complex. GRE82A<br>(three samples)<br>1000 MY-2500 MY(2233a,b)UP2C ZR Pegmatite in gneiss;<br>Napier complex. GRE82A                                                                                                                                                                                                                                                                                                                                                                |
| 67°30S 48°00E G<br>Casey Bay area<br>67°30S 48°00E G<br>Casey Bay area<br>67°37S 48°04E G<br>Forefinger Point<br>67°22S 49°05E G<br>McIntyre Island,<br>Casey Bay<br>67°22S 49°05E G<br>"Zircon Point,"<br>S of McIntyre I.<br>67°22S 49°12E G<br>"Mt. Novogodnyaya,"<br>Fyfe Hills<br>67°22S 49°12E G<br>"Mt. Novogodnyaya,"<br>Fyfe Hills<br>67°22S 49°12E G<br>"Mt. Novogodnyaya,"<br>Fyfe Hills | 3800±300 MY, 3900±300 MY, 3000±700 MY, 4000±100 MY(28a,c)<br>UTP2I WR Enderbites; Raggatt series, Napier complex.<br>SOB76<br>--, --, 3600±1000 MY, 3700±200 MY("28")UTP4I WR Basic<br>schists; Raggatt series, Napier complex. SOB76<br>("adjusted" age=4100±500-200 MY)<br>4200±500-200 MY(28c)UTP6I WR* Enderbite;<br>Raggatt series, Napier complex. SOB76<br>(*fractional sublimates of lead determined the<br>listed date which is from an "inner isochron")<br>2800±100 MY, --, 1250±150 MY, 3100±200 MY(28a, 28c*)PPM*<br>WR Enderbites; Raggatt series, Napier complex. SOB76<br>(*samples used and methodology uncertain; last date<br>is reported as a Pb-206/Pb-207 age)<br>--, --, 1300±400 MY, 2800±200 MY("28")PPM* WR Basic<br>schists; Raggatt series, Napier complex. SOB76<br>(*samples used and methodology uncertain; last date<br>is reported as a Pb-206/Pb-207 age; 1300 MY date<br>reported as 1600±1000 MY in RAV74)<br>4100±100 MY UTP, PPM* WR Enderbites and schists;<br>Raggatt series, Napier complex. SOB76<br>(*"composite isochron" for all data listed for<br>SOB76 from "Mt. Novogodnyaya")<br>3500 MY("28")PP6I WR Enderbite and granulite;<br>Napier complex. GRE79A DEP82<br>(recalc. of SOB76 data using three-stage rather<br>than two-stage development of U-Pb system; listed<br>date is min. age for parental premetamorphic rocks) |
| 67°22S 49°12E G<br>"Mt. Novogodnyaya,"<br>Fyfe Hills                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 67°22S 49°12E G<br>"Mt. Novogodnyaya,"<br>Fyfe Hills                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 67°22S 49°12E G<br>"Mt. Novogodnyaya,"<br>Fyfe Hills                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

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| 67°22S 49°12E G<br>Fyfe Hills        | 2500 MY(28-VIII)UPOC ZR 100-200 mesh size fraction from granulite; Napier complex. DEP82                                                                                                                                   |
| 67°22S 49°12E G<br>Fyfe Hills        | 2550 MY(28-VIII)UP1C ZR Greater than 100 mesh size fraction from granulite; Napier complex. DEP82 (UI of chord assuming LI=500 MY)                                                                                         |
| 67°22S 49°12E G<br>Fyfe Hills        | 3870 MY(28-IV;28e)SNMD WR Garnet-two pyroxene granulite; Napier complex. DEP82 (crust formation age)                                                                                                                       |
| 67°22S 49°12E G<br>Fyfe Hills        | 3310 MY(28-II;28g)SNMD WR Mg-pyroxene granulite; Napier complex. DEP82 (crust formation age)                                                                                                                               |
| 67°22S 49°12E G<br>Fyfe Hills        | 3450 MY(28-III;28d)SNMD WR Mg-pyroxene granulite; Napier complex. DEP82 (crust formation age)                                                                                                                              |
| 67°22S 49°12E G<br>Fyfe Hills        | 3280 MY(28-VIII)SNMD WR Quartzofeldspathic granulite; Napier complex. DEP82 (crust formation age)                                                                                                                          |
| 67°22S 49°12E G<br>Fyfe Hills        | 3200 MY(28-IV;28a)SNMD WR Quartzofeldspathic granulite; Napier complex. DEP82 (crust formation age)                                                                                                                        |
| 67°22S 49°12E G<br>Fyfe Hills        | 3490 MY(28-VII;28v)SNMD WR Quartzofeldspathic granulite; Napier complex. DEP82 (crust formation age)                                                                                                                       |
| 67°22S 49°12E G<br>Fyfe Hills        | 3090 MY(28-V)SNMD WR Ironstone; Napier complex. DEP82 (crust formation age)                                                                                                                                                |
| 67°22S 49°12E G<br>Fyfe Hills        | c.4000 MY(??)P/P ZR Charnockite;                                                                                                                                                                                           |
| 67°22S 49°12E G<br>Fyfe Hills        | --. LOV79A GRE82B                                                                                                                                                                                                          |
| 67°22S 49°12E G<br>Fyfe Hills        | 3050±210 MY SNI/0.50776±14 WR Charnockite to leuconorite samples and gabbros; Napier complex. MCC83                                                                                                                        |
| 67°12S 50°23E G<br>Priestley Peak    | 482±3 MY RSI -- K-rich alkali melasyenite dike; in Napier complex. SHE81 BLA82 SHE83                                                                                                                                       |
| 67°13S 50°39E G<br>Mt. Tod           | 2934±146-127 MY(7828 5003)RSI/0.7105±0.0016 WR Enderbite; Napier Complex. BLA83                                                                                                                                            |
| 67°13S 50°39E G<br>Mt. Tod           | 2255±360 MY(7828 5003)RSI/0.7081±0.0006 WR Enderbite; Napier complex. BLA83                                                                                                                                                |
| 66°47S 50°40E G<br>Mt. Riiser-Larsen | c.2900 MY(??)UPOC ZR Paragneiss; Napier complex. BLA83 (Black, unpubl. data)                                                                                                                                               |
| 66°49S 50°43E G<br>Mt. Hardy         | 2500 MY(78285017)UPOC ZR Seven fractions from leuconorite; Tula series, Napier complex. JAM81 (alternative models based on deletion of certain fractions, assumed inaccurate, result in ages= 2474±6-3 MY and 2488±7-5 MY) |
| 67°02S 51°30E G<br>Mt. Sones         | c.3100 MY(78285008)UP6C ZR Fractions from paragneiss; Raggatt series, Napier complex. JAM81 (date=UI; adjustment for probable Pb-loss at 2500 MY yields equilibration age=3000-3050 MY, brown ZR)                          |
| 67°02S 51°30E G<br>Mt. Sones         | 2869 MY(78285008-250 NM+MO (brown))P/P ZR Fraction from paragneiss; Raggatt series, Napier complex. JAM81 (minimum age of event)                                                                                           |
| 67°02S 51°30E G<br>Mt. Sones         | 3100±500 MY RSI/0.717±0.21 WR Paragneiss; Raggatt series, Napier complex. BLA79 JAM81                                                                                                                                      |
| 67°02S 51°30E G<br>Mt. Sones         | c.2500 MY, c.3700 MY(78285007)UP6C ZR Enderbite; Napier complex. BLA83                                                                                                                                                     |

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| 67°00S 52°50E*<br>"Mt. King"                                       | 2120 MY(##?)P/P CV Along fissures in mesoperthite-<br>charnockite of Raggatt Series. KAM72<br>(*coords. from listing in Atlas Antarktiki I)                                                                              |
| 67°30S 53°00E G<br>Enderby Land*                                   | 2350±48 MY RS8I3/0.7020±0.0008 WR High-Mg tholeiite<br>dikes; in Napier complex. SHE81<br>(*the 8 sample locations are given in SHE81)                                                                                   |
| 67°30S 53°00E G<br>Enderby Land*                                   | 2400±250 MY RS9I3/0.702±0.001 WR Metatholeiite dikes;<br>in Napier complex. SHE81<br>(*the 9 sample locations are given in SHE81)                                                                                        |
| 67°30S 53°00E G<br>Enderby Land*                                   | 1190±200 MY RS8I3/0.7041±0.0005 WR Tholeiite dikes;<br>Group I Amundsen dikes in Napier complex. SHE81<br>(*the 8 sample locations are given in SHE81)                                                                   |
| 67°30S 53°00E G<br>Enderby Land                                    | 580±12 MY(##?)K/A -- Biotite pegmatite;--. PIE76<br>(dated by AMDL)                                                                                                                                                      |
| 67°30S 53°00E G<br>Enderby Land                                    | 511±10 MY(##?)K/A -- Biotite pegmatite;--. PIE76<br>(dated by AMDL)                                                                                                                                                      |
| 67°30S 53°00E G<br>Enderby Land                                    | 2485 MY, 2485 MY, 2485 MY(28-77)U/P ZR Enderbite;<br>--. SOB83<br>(more info. in Russian in SOB83)                                                                                                                       |
| 67°30S 53°00E G<br>Enderby Land                                    | 2500 MY(28-77)P/P ZR Dark fraction, from enderbite;<br>--. SOB83<br>(more info. in Russian in SOB83)                                                                                                                     |
| 67°30S 53°00E G<br>Enderby Land                                    | 2420 MY(28-77)P/P ZR Light fraction, from enderbite;<br>--. SOB83<br>(more info. in Russian in SOB83)                                                                                                                    |
| 67°30S 53°00E G<br>Enderby Land                                    | 2720 MY, 2600 MY, 2480 MY(21-77)U/P ZR Charnockite;<br>--. SOB83<br>(more info. in Russian in SOB83)                                                                                                                     |
| 67°30S 53°00E G<br>Enderby Land                                    | 2440 MY(21-77)P/P ZR -0.25±0.2 fraction, from char-<br>nockite;--. SOB83<br>(more info. in Russian in SOB83)                                                                                                             |
| 67°S 54°E M*<br>Rippon Gl.,<br>Mt. Charles,<br>and nr Mt. Torckler | 2500 MY UP5C PR,ZR Discordant charnockitic pegmatites;<br>cut Napier complex. GRE79A<br>(*approx. avg. coords; date listed is UI, LI=600 MY;<br>#4343, CV from fissure in charnockite, ATR67<br>also lies on this chord) |
| 66°58S 57°25E G<br>Øygarden Group                                  | 620 MY(1218i)KA6 WR Migmatized biotite-garnet<br>gneiss;--. RAV64 RAV65 TRA69<br>(infer="Eiger Islands" 620 MY samples "from Oates<br>Coast" in STA61, rev. to 598 MY, KA16, in PIC63)                                   |
| 66°58S 57°25E G<br>Øygarden Group                                  | 615 MY(1210)KA6 WR Migmatite from pyroxene plagio-<br>clase-gneiss;--. RAV64 RAV65 TRA69<br>(infer="Eiger Islands" 615 MY sample "from Oates<br>Coast" in STA61, rev. to 593 MY, KA16, in PIC63)                         |
| 66°58S 57°25E G<br>Øygarden Group                                  | 535 MY(1217i)KA6 WR Vein pegmatite;<br>--. RAV64 RAV65 TRA69<br>(infer="Eiger Islands" 535 MY sample "from Oates<br>Coast" in STA61, rev. to 516 MY, KA16, in PIC63)                                                     |
| 66°58S 57°25E G<br>Øygarden Group                                  | 560 MY(397)KA6 BT6 --;--. STA60. PIC63<br>(rev. to 540 MY, KA16, in PIC63)                                                                                                                                               |
| 68°S 58°E M<br>Enderby Land to<br>N. Prince Charles Mts.           | 160 MY(##?)FTK AP --;<br>--. KEL79C                                                                                                                                                                                      |

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| GEOGRAPHIC AREA 21:                  | MACROBERTSON LAND - LAMBERT GLACIER - AMERICAN HIGHLAND AREA (samples from north to south by coordinates)                                            |
| 67°36S 62°53E R<br>Mawson Station    | 627 MY(10d)KA16 WR Biotitized pyroxene plagiogneiss (xenolith in charnockite);--. STA60 PIC63 RAV65 (rptd as 650 MY, KA6, in STA60 and RAV65)        |
| 67°36S 62°53E R<br>Mawson Station    | 535 MY(13)KA16 WR Biotitized pyroxene plagiogneiss (xenolith in charnockite);--. STA60 PIC63 RAV65 (rptd. as 555 MY, KA6, in STA60 and RAV65)        |
| 67°36S 62°53E R<br>Mawson Station    | 476 MY(10g)KA16 WR Garnet-biotite schist (xenolith in charnockite);--. STA60 PIC63 RAV65 (rptd as 490 MY, KA6, in STA60 and RAV65)                   |
| 67°36S 62°53E R<br>Mawson Station    | 516 MY(11)KA16 WR Porphyroblastic charnockite; --. STA60 PIC63 RAV65 (rptd as 535 MY, KA6, in STA60 and RAV65)                                       |
| 67°36S 62°53E R<br>Mawson Station    | 1084+37 MY RSI/0.729 -- Charnockite; Mawson charnockite. GRE79B SHE82 (P.A. Arriens, pers. comm.)                                                    |
| 67°36S 62°53E R<br>Mawson Station    | 850 MY(?)UP2C ZR,PR Pegmatite; in Mawson charnockite. GRE79B (date is UI; ZR data nearly concordant at 850 MY)                                       |
| 67°40S 63°30E G<br>Mawson Coast RM   | 930+18 MY(?)RS/0.736 -- Late Proterozoic metamorphics. TIN82 (data inferred from RM, not discussed in text)                                          |
| 67°40S 63°30E G<br>Mawson Coast RM   | 1098+48 MY(?)RS/0.736 -- Late Proterozoic metamorphics. TIN82 (data inferred from RM, not discussed in text)                                         |
| 70°00S 65°00E G<br>MacRobertson Land | 500-700 MY(?)R/S MS,BT,KF Pegmatites;--. ARR75 (similar ages are given by WR RSI for massive granites in various localities)                         |
| 70°00S 65°00E G<br>MacRobertson Land | c.500 MY(?)R/S BT "Older rocks";--. ARR75 (ages are reset)                                                                                           |
| 70°42S 67°50E G<br>Manning Massif    | 51.8+2 MY,49.1+2 MY(73281594)KA9 WR Leucite tris-tanite lava flow; in late Proterozoic metamorphics. TIN76 SHE83                                     |
| 70°47S 67°53E G<br>Fox Ridge         | 504+20 MY(69280225)KA9 PY Alkali basalt dike; in late Proterozoic metamorphics. TIN76 SHE83                                                          |
| 70°52S 68°00E G<br>Radok Lake        | c.960 MY(221/4)RSM4/0.705 WR Pegmatitic granite boulder; Permian basal conglomerate. HAL75                                                           |
| 70°52S 68°00E G<br>Radok Lake        | 110+3 MY(69280153)KA9 PG Alnöite; in late Proterozoic metamorphics. SHE83 (may be sill in TIN76)                                                     |
| 70°52S 68°00E G<br>Radok Lake        | 110+3 MY(69280152)KA9 PG Alnöite; in late Proterozoic metamorphics. SHE83 (may be sill in TIN76)                                                     |
| 70°52S 68°00E G<br>Radok Lake        | 108+3 MY(69280334)KA9 PG Alnöite; in late Proterozoic metamorphics. SHE83 (may be sill in TIN76)                                                     |
| 71°01S 67°09E G<br>Taylor Platform   | 246+6 MY(71280126)KA9 PL Calc-alkali basalt dike; in late Proterozoic metamorphics. TIN76 SHE83                                                      |
| 71°24S 70°47E G<br>Pickering Nunatak | 765 MY("552")RS3I4/0.707 WR Plagiogneiss, leucogranite, and pegmatite granite; Precambrian basement. HAL75 (date is for a "reference isochron line") |

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| 72°S 70°E M            | c.240-360 MY(?)FTK AP --;                            |
| E. Lambert Gl. and     | --. KEL79C                                           |
| Amery Ice Shelf        |                                                      |
| 72°00S 67°00E G        | 923±179 MY RSI/0.743 WR Late Proterozoic             |
| Prince Charles Mts. RM | metamorphics. TIN82                                  |
| 72°00S 67°00E G        | 945±36 MY RSI/0.712 WR Late Proterozoic              |
| Prince Charles Mts. RM | metamorphics. TIN82                                  |
| 72°00S 67°00E G        | 1005±87 MY RSI/0.708 WR Late Proterozoic             |
| Prince Charles Mts.    | metamorphics. TIN82                                  |
| 72°00S 67°00E G        | 1068±354 MY RSI/0.707 WR Late Proterozoic            |
| Prince Charles Mts.    | metamorphics. TIN82                                  |
| 72°00S 67°00E G        | 834±304 MY RSI/0.710 WR Late Proterozoic             |
| Prince Charles Mts. RM | metamorphics. TIN82                                  |
| 72°00S 67°00E G        | 961±96 MY RSI/0.704 WR Late Proterozoic              |
| Prince Charles Mts. RM | metamorphics. TIN82                                  |
| 72°00S 67°00E G        | 891±70 MY RSI/0.706 WR Late Proterozoic              |
| Prince Charles Mts. RM | metamorphics. TIN82                                  |
| 72°00S 67°00E G        | 1197±238 MY RSI/1.113 WR "Archean" basement          |
| Prince Charles Mts. RM | rocks. TIN82                                         |
| 72°00S 67°00E G        | 2766±92 MY RSI/0.721 WR (Archean) basement           |
| Prince Charles Mts. RM | rocks. TIN82                                         |
| 72°00S 67°00E G        | 2809±411 MY RSI/0.708 WR (Archean) basement          |
| Prince Charles Mts.    | rocks. TIN82                                         |
| 72°00S 67°00E G        | 2822±227 MY RSI/0.705 WR (Archean) basement          |
| Prince Charles Mts.    | rocks. TIN82                                         |
| 72°00S 67°00E G        | 873 MY(?)P/P MS Pegmatite in gneiss;                 |
| Prince Charles Mts.    | Precambrian rocks. GRE76A                            |
| 72°00S 67°00E G        | 2600-2800 MY RSI WR Gneisses;                        |
| Prince Charles Mts.    | --. ARR75                                            |
| 72°00S 67°00E G        | 1000-1200 MY RSI WR Gneisses and granites;           |
| Prince Charles Mts.    | --. ARR75                                            |
| 72°00S 67°00E G        | 500-700 MY RSI WR Gneisses and granites;             |
| Prince Charles Mts.    | --. ARR75                                            |
| 73°00S 66°00E RM       | c.1100 MY RSI/1.1 WR Granite;--. ARR75               |
| Mt. Rymill*            | (*sample described as "the Mt. Rymill granite")      |
| 73°04S 66°24E G        | 1035±2 MY(544)P/P YX Nodule from pegmatite;          |
| Mt. Stinear RM         | basement complex. GRE76 GRE82                        |
|                        | (date from W.I. Manton, unpublished date)            |
| 73°05S 66°20E G        | 2580 MY(?)R/S MC Pegmatite;                          |
| nr Edwards Pillar RM   | cuts Archean quartzite. ARR75 GRE82 TIN82            |
|                        | (Archean age of metasedimentary rocks is based on    |
|                        | this single date)                                    |
| 78°07'30"S 66°15E R    | 442 MY,509 MY,589 MY, -- (544)UTP WR Nodule in       |
| Mt. Stinear            | pegmatite; basement complex. GRE83                   |
|                        | (discordant; UI=850 MY if LI=0)                      |
| 73°12S 63°15E G        | 980 MY(?)K/A WR Amphibolite;--. GRE82B               |
| Mt. McCauley           | (quoted from IOP77)                                  |
| 73°13S 62°55E G        | 495 MY(222)RSM4/0.705 WR Muscovite pegmatite;        |
| Mt. Scherger RM        | intrudes schist sample 222a. HAL75                   |
|                        | (if IR=0.750, age=490 MY)                            |
| 73°13S 62°55E G        | 493 MY(222 muscovite) RSM4/0.705 MC Muscovite        |
| Mt. Scherger RM        | pegmatite; intrudes schist sample 222a. HAL75        |
| 73°13S 62°55E G        | 465-865 MY(222a)RSM4/0.710-0.750 WR Fibrolite-       |
| Mt. Scherger RM        | biotite-quartz schist;--. HAL75                      |
| 73°25S 65°40E G        | 495 MY(216d,216g,216z)RS3I4/0.738 WR Phyllite;       |
| cen. Mt. Rubin RM      | Late Precamb./lower Paleozoic greenschist fac. HAL75 |

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| 73°25S 65°40E G<br>NW Mt. Rubin RM<br>73°25S 65°40E G<br>cen. Mt. Rubin RM                                                                                                                       | 520 MY(209a)RSM4/0.740 WR Phyllite;<br>Late Precamb/lower Paleozoic greenschist fac. HAL75<br>800 MY RS4I4/0.730 WR Plagiogranite(2), granitoid rock<br>(1), granitic gneiss (1); boulder clasts from meta-<br>conglomerate overlying phyllite. HAL75                                                                                                                                                                                                                                                |
| 73°26S 62°50E R<br>Mt. Bayliss                                                                                                                                                                   | 414+10 MY, 413+10 MY(73281545)KA9 MG Alkali melasyenite<br>dike; in late Proterozoic metamorphics.<br>TIN76 SHE80 SHE83<br>(sample material=K-richierite in SHE80 and SHE83)                                                                                                                                                                                                                                                                                                                         |
| 73°26S 62°50E R<br>Mt. Bayliss                                                                                                                                                                   | 430+12 MY(73281545)KA9 RI Alkali melasyenite dike;<br>in late Proterozoic metamorphics. TIN76 SHE80 SHE83<br>(sample material=K-arfvedsonite in SHE80 and SHE83)                                                                                                                                                                                                                                                                                                                                     |
| 73°32S 62°44E G<br>Mt. Bayliss<br>73°40S 64°30E G<br>Mt. Ruker                                                                                                                                   | 2630 MY(??)R/S -- Metamorphic basement. SHE76<br>(from studies by P.A. Arriens)<br>2500 MY, 3200 MY(206*)RSR4/0.702 WR Granite(3), plagi-<br>granite(1); underlie (?) greenschist facies. HAL75<br>(*site number; the 4 samples lie between two<br>reference isochrons with ages as listed)                                                                                                                                                                                                          |
| 73°40S 64°30E G*<br>east N slope,<br>Mt. Ruker<br>73°40S 64°30E G*<br>mid. N slope,<br>Mt. Ruker<br>73°40S 64°30E G<br>Mt. Ruker<br>73°40S 64°30E G<br>Mt. Ruker<br>73°40S 64°30E G<br>Mt. Ruker | 796+80 MY(1)KA17 -- Metabasite;--. HOF80A<br>(*coordinates given in text="74°25S, 64°30E")<br>992+99 MY(2)KA17 -- Metabasite;--. HOF80A<br>(*coords. given in text="74°25S, 64°30E")<br>1040 MY(??)K/A WR Metabasite (tholeiitic);--. GRE82B<br>(quoted from FED77)<br>830 MY(??)K/A WR DiKE;--. GRE82B<br>(quoted from FED77)<br>1442+152 MY RSI/0.8902 -- Archean granitic<br>basement rocks. TIN82<br>(P.A. Arriens, pers. comm. and J.W. Sheraton, pers.<br>comm.; considered a metamorphic age) |



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| GEOGRAPHIC AREA 22:                                                  | INGRID CHRISTENSEN COAST TO CAPE FILCHNER, WILHELM II COAST (samples from west to east by coordinates)                                                            |
| 70°28S 72°27E R<br>Reinbolt Hills                                    | 94-896 MY("556-1")UTP6C ZR Pegmatite lens in gneiss; bedrock. GRE81 GRE79B (thorium ages of 1300-1800 MY are discordant)                                          |
| 70°30S 72°30E AR<br>Reinbolt Hills                                   | 94-896 MY(557 and 565A)UPC* ZR Reinbolt Hills charnockite. GRE81 (*samples lie on the chord defined by "556-1")                                                   |
| 70°10S 72°33E G<br>Jennings Promontory                               | 405 MY(1202)KA16 WR Intermediate charnockite; --. STA61 PIC63 RAV65 (reported as 420 MY using KA6 in RAV65; infer= 420 MY sample from "Larsemann Hills" in STA61) |
| 70°S 73°E M<br>"Landing Bluff"                                       | 500 MY R/S -- Granite; --. ARR75 (may be same as 504 MY Landing Bluff Adamellite)                                                                                 |
| nr Amery Ice Shelf<br>69°40S 74°25E G<br>(Sande fjord Ice Bay area*) | 504+17 MY RSI/0.7184 -- Landing Bluff Adamellite. SHE83A (*prob. loc. inferred; dated by P.A. Arriens)                                                            |
| 69°24S 76°13E G<br>Larsemann Hills                                   | 405 MY(1199)KA16 WR Migmatized gneiss; --. STA61 PIC63 RAV65 (reported as 420 MY using KA6 in RAV65 and STA61)                                                    |
| 69°24S 76°13E G<br>Larsemann Hills                                   | 540 MY(1194k)KA6 MC Pegmatitic vein; --. RAV65 (may be same as sample 560(Ch) from STA60)                                                                         |
| 69°24S 76°13E G<br>Larsemann Hills                                   | 458 MY(560(Ch))KA16 MC Unspecified; --. STA60 PIC63 (*recalc. from 475 MY in STA60; may be same as sample 1194k in RAV65)                                         |
| 68°51S 77°50E G<br>Rauer Islands                                     | c.1100 MY R/S -- Gneisses; --. ARR75                                                                                                                              |
| 68°49S 77°50E G<br>Filla Island                                      | 1073+111 MY RS/0.7086+0.0013 -- In felsic gneisses; --. SHE83A (dated by P.A. Arriens)                                                                            |
| 68°39S 77°57E RM<br>"Mud Lake"                                       | 3500+86 BP(ZDL69)14C SH <u>Laternula</u> , from terrace; postglacial deposits. ZHA83                                                                              |
| 68°39S 77°57E RM<br>nr "Mud Lake"                                    | 2410+90 BP(SUA 1411)14C SH Marine <u>Laternula</u> , on terrace. ADA83 (infer revised from 2800+85 BP in ZHA83)                                                   |
| 68°39S 77°57E RM<br>"Mud Lake"                                       | 3325+103 BP(ZDL66)14C SH <u>Laternula</u> from terrace; postglacial deposits. ZHA83                                                                               |
| 68°39S 77°58E G<br>Mule Peninsula RM                                 | 3062+212 MY(81-260)RS11I3/0.7012+0.0002 WR Granulite facies, Mossel gneisses; Vestfold Block. COL83A                                                              |
| 68°39S 77°58E G<br>Mule Peninsula RM                                 | 2456+163 MY RS10I3/0.7015+0.0001 WR Granulite facies, Mossel gneisses; Vestfold Block. COL83A                                                                     |
| 68°39S 77°59E RM<br>W end, "Clear Lake"                              | 8355+250 BP(Beta 4760)14C MO Freshwater aquatic. ADA83                                                                                                            |
| 68°39S 77°59E RM<br>W end, "Clear Lake"                              | 7310+150 BP(Beta 4759A)14C MO Freshwater aquatic. ADA83 (cold HCl treatment)                                                                                      |
| 68°39S 77°59E RM<br>W end, "Clear Lake"                              | 7745+285 BP(Beta 4759B)14C MO Freshwater aquatic. ADA83 (full pretreatment of alkali and acid)                                                                    |
| 68°39S 78°00E RM<br>E end, "Laternula Lake"                          | 3470+80 BP(ANU 1010)14C SH Marine <u>Laternula</u> , in lower-most of five layers. ADA83                                                                          |
| 68°39S 78°00E RM<br>E end, "Laternula Lake"                          | 3270+90 BP(ANU 1009)14C SH Marine <u>Laternula</u> , in upper-most layer. ADA83                                                                                   |
| 68°34S 78°04E G<br>Lake Dingle                                       | 5600+77 BP(ZDL79)14C SH <u>Laternula</u> , from terrace which is 6 m a.s.l. ZHA83                                                                                 |

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| 68°36S 78°05E G<br>S side, Ellis Fjord<br>68°34S 78°08E G<br>SW end, L. Stinear                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | 6225±85 BP(Beta 4761)14C Marine organic sediment. ADA83                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| 68°34S 78°08E G<br>SW end, Lake Stinear<br>68°38S 78°08E RM<br>"Marine Plain"<br>68°31S 78°10E G<br>Partizan Island RM<br>68°35S 78°10E RM<br>Vestfold Hills area<br>68°33S 78°10E RM<br>Vestfold Hills area<br>68°33S 78°10E RM<br>Vestfold Hills area<br>68°33S 78°10E RM<br>Vestfold Hills area<br>68°38S 78°10E RM<br>"Marine Plain"<br>68°38S 78°10E RM<br>"Marine Plain"<br>68°34S 78°11E RM<br>Deep Lake"<br>68°33S 78°14E G<br>btwn. Club Lake and<br>"Deep Lake"<br>68°36S 78°14E RM<br>"Lake Watts"<br>68°32S 78°14E RM<br>"Triple Lake"<br>68°36S 78°14E RM<br>"Lake Watts"<br>68°28S 78°15E G<br>Langnes Peninsula | 5440±110 BP(SUA 1239)14C SH Marine <u>Laternula</u> , from<br>flank of terrace. PIC82 ADA83<br>(infer revised from 5740±105 BP given in ZHA83;<br>est. reservoir correction would be 1100 yrs)<br>4710±70 BP(ANU1011)14C SH Marine <u>Laternula</u> . ADA83<br>31,000±474 BP(ZDL68)14C SH --;<br>near top of marine section. ZHA83<br>7370±95 BP(Beta 4767)14C SH Marine, fragments. ADA83<br>2400 MY(81-390)SNMC1 WR Granulite facies gneiss;<br>Tyne Metavolcanics. COL83A<br>2661 MY(72-630)SNMC1 WR Granulite facies gneiss;<br>Mossel gneisses. COL83A<br>2690 MY(72-619)SNMC1 WR Granulite facies gneiss;<br>Mossel gneisses. COL83A<br>2599 MY(81-331)SNMC1 WR Granulite facies gneiss;<br>Mossel gneisses. COL83A<br>GT 28,000 BP(SUA 1832)14C Marine organic sediment, top<br>of sediment. ADA83<br>GT 24,000 BP(SUA 1413)14C Marine organic sediment, 8 m<br>below top of sediment. ADA83<br>6632±118 BP(ZDL80)14C SH <u>Laternula</u> , from terrace which<br>is 4 m a.s.l. ZHA83<br>5340±90 BP(SUA 1237)14C Serpulid worm tubes, from<br>flank of marine terrace. PIC82 ADA83<br>(est. reservoir correction would be 1100 yrs)<br>6100±108 BP(ZDL70)14C SH From terrace;<br>postglacial deposits. ZHA83<br>6141±90 BP(ZDL78)14C SH <u>Laternula</u> , from terrace which<br>is 3 m a.s.l. ZHA83<br>7616±104 BP(ZDL85)14C Calcareous tufa from terrace.<br>ZHA83<br>1782 MY(9)KA16 WR Eluvial loam, 1-0.25 mm size<br>fraction, rocky edge of beach;--. VOR61 KRY62 PIC63<br>(dscrpt.=arkosic sand in VOR61; recal. from<br>1830 MY)<br>1792 MY(9)KA16 WR Eluvial loam, less than 0.25 mm<br>size fraction;--. VOR61 KRY62 PIC63<br>(dscrpt.=arkosic sand in VOR61; recal. from<br>1840 MY)<br>1220 MY(??)K/A WR Morainic loam with eluvial-glacial<br>material, 1-3 mm size fraction;--. KRY62<br>1000 MY(??)K/A WR Morainic loam with eluvial-glacial<br>material, 0.1-1 mm size fraction;--. KRY62<br>460 MY(??)K/A WR Morainic loam with eluvial-glacial<br>material, less than 0.05 mm size fraction. KRY62<br>1418 MY(6;1242)KA16 WR Migmatite leucogranite vein<br>material;--. VOR61 PIC63 RAV65<br>(rptd as 1460 MY using KA6 in RAV65)<br>1433 MY(14;1243)KA16 WR Gneissic hypersthene-<br>plagioclase granite;--. VOR61 PIC63 RAV65<br>(rptd as 1475 MY using KA6 in RAV65) |
| 68°28S 78°15E G<br>Langnes Peninsula                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 68°28S 78°15E G<br>Langnes Peninsula<br>68°28S 78°15E G<br>Langnes Peninsula<br>68°28S 78°15E G<br>Langnes Peninsula<br>68°28S 78°15E G<br>Langnes Peninsula                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 68°28S 78°15E G<br>Langnes Peninsula                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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| 68°28S 78°15E G<br>Langnes Peninsula      | 1312 MY(85A)KA16 WR Vein leucogranite (pegmatoidal);<br>--. VOR61 PIC63 RAV65<br>(rptd as 1350 MY using KA6 in RAV65 and STA61,<br>and as 1270 MY in STA59) |
| 68°28S 78°15E G<br>Langnes Peninsula      | 1482 MY(20a)KA16 WR Migmatite leucogranite vein<br>material from gneiss;--. VOR61 PIC63 RAV65<br>(rptd as 1525 MY in RAV65)                                 |
| 68°28S 78°15E G<br>Langnes Peninsula      | 1147 MY(72)KA16 WR Vein alaskitic granite;<br>--. VOR61 PIC63 RAV65<br>(rptd as 1185 MY in RAV65 and 1070 MY in STA59)                                      |
| 68°28S 78°15E G<br>(Langnes Peninsula)    | 1104 MY(71;1244)KA16 WR Granite rock;--. STA60 PIC63<br>(rptd as 1140 MY, KA6, from "Langenset oasis"<br>in STA60)                                          |
| 68°33S 78°15E G<br>Vestfold Hills         | GT 1300 MY(?)KA6 WR Dolerite dikes;--. VOR61 PIC63<br>(preliminary result reported as "Archaean")                                                           |
| 68°33S 78°15E G<br>Vestfold Hills         | 1030±220 MY("GA5429")RS6I2 WR 6 dolerite dikes<br>intruding gneiss;--. HAR67<br>(one dike near Davis station; 5 along S. side of<br>Heidemann Bay)          |
| 68°33S 78°15E G<br>(Vestfold Hills RM)    | 2559±68 MY RS(I) (WR) Archaean (metamorphic)<br>basement rocks. TIN82                                                                                       |
| 68°33S 78°15E G<br>Vestfold Hills         | 2692±162 MY R/S -- Mafic granulites; high-grade<br>gneiss complex. COL79                                                                                    |
| 68°33S 78°15E G<br>Vestfold Hills         | 2275±102 MY R/S -- Weakly foliated ganitic gneisses;<br>high-grade gneiss complex. COL79                                                                    |
| 68°33S 78°15E G<br>Vestfold Hills         | 2477±44 MY RS1/0.7018±0.0003 -- Layered grey gneisses;<br>component of gneiss complex. COL79                                                                |
| 68°33S 78°15E G<br>Vestfold Hills         | c.1400 MY R/S WR Dolerite dikes;--. ARR75<br>(from a suite of analyses)                                                                                     |
| 68°33S 78°15E G<br>Vestfold Hills         | GT 2500 MY R/S -- Gneisses;<br>--. ARR75                                                                                                                    |
| 68°33S 78°15E G<br>Vestfold Hills region  | GT 2000 MY R/S KF Pegmatite dikes;--. ARR75<br>(from more than one sample)                                                                                  |
| 68°33S 78°15E G<br>Vestfold Hills region  | 500 MY R/S BT Pegmatite dikes;--. ARR75<br>(from more than one sample; ages are reset)                                                                      |
| 68°33S 78°15E G<br>near Vestfold          | 1480±75 BP(LE-658)14C2 SE Mummified; found on<br>surface, partly covered with sand. DOL70                                                                   |
| 68°33S 78°15E G<br>Vestfold Hills area RM | 2454±117 MY RS11I3/0.7021±0.0005 WR Crooked Lake<br>gneisses; Vestfold Block. COL83A                                                                        |
| 68°33S 78°15E G<br>Vestfold Hills area RM | 2488±600 MY SN6I1/0.50856±0.00038 WR Orthogneisses;<br>Mossel gneisses. COL83A<br>(calc. using "McIntyre et al. method")                                    |
| 68°33S 78°15E G<br>Vestfold Hills area RM | 2599±1160-473 MY SN6I1/0.50849±0.00031-0.00075 WR<br>Orthogneisses; Mossel gneisses. COL83A<br>(calc. using "Cameron et al. method")                        |
| 68°33S 78°15E G<br>Vestfold Hills area RM | 2923±570 MY SN 6I1/0.50827±0.00049 WR Orthogneisses;<br>Tyne metavolcanics. COL83A<br>(calc. using "McIntyre et al. method")                                |
| 68°33S 78°15E G<br>Vestfold Hills area RM | 2999±830-451 MY SN6I1/0.50820±0.00072 WR<br>Orthogneisses; Tyne metavolcanics. COL83A<br>(calc. using "Cameron et al. method")                              |
| 68°33S 78°15E G<br>Vestfold Hills area RM | 2810±271 MY SN12I1/0.50836±0.00021 WR Orthogneisses;<br>Mossel gneisses and Tyne metavolcanics. COL83A<br>(calc. using "McIntyre et al. method")            |

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| 68°33S 78°15E G<br>Vestfold Hills area RM | 2859+355-256 MY SN12I1/0.50832+0.00019-0.00025 WR<br>Mossel gneisses and Tyrne metavolcanics. COL83A<br>(calc. using "Cameron et al. method") |
| 68°33S 78°15E G<br>Vestfold Hills area RM | 2411+212 MY SN6I1/0.50866+0.00014 WR Orthogneisses;<br>Crooked Lake gneisses. COL83A                                                          |
| 68°37S 78°15E RM<br>E end, "Watts Lake"   | 8260+110 BP(SUA 1410)14C Marine algal sediment, from<br>slope below terrace. ADA83<br>(infer revised from 8700+100 BP in ZHA83)               |
| 68°37S 78°15E RM<br>E end, "Watts Lake"   | 7680+120 BP(SUA 1828A)14C CaCO <sub>3</sub> , Marine worm tubes,<br>from slope below terrace. ADA83                                           |
| 68°37S 78°15E RM<br>E end, "Watts Lake"   | 7380+250 BP(SUA 1828B)14C AL Sieved from SUA 1828A,<br>from slope below terrace. ADA83                                                        |
| 68°37S 78°15E RM<br>E end, "Watts Lake"   | 7305+130 BP(Beta 4768)14C SH Marine scallops, from<br>slope below terrace. ADA83                                                              |
| 68°37S 78°15E RM<br>E end, "Watts Lake"   | 6500+105 BP(Beta 4765)14C SH Marine, from slope below<br>terrace. ADA83                                                                       |
| 68°37S 78°15E RM<br>"Lake Lebed"          | 6452+160 BP(Beta 4763)14C Algal mud. ADA83                                                                                                    |
| 68°37S 78°15E RM<br>E end, "Watts Lake"   | 6150+95 BP(Beta 4764)14C Marine serpulid worm tube<br>( <i>Merceriella enigmatica</i> ), from slope below terrace.<br>ADA83                   |
| 68°37S 78°15E RM<br>E end, "Watts Lake"   | 5795+85 BP(Beta 4766)14C SH Marine <i>Laternula</i> , from<br>slope below terrace. ADA83                                                      |
| 68°37S 78°15E RM<br>E end, "Watts Lake"   | 4670+190 BP(SUA 1824)14C AL Marine, from slope below<br>terrace. ADA83                                                                        |
| 63°37S 78°15E RM<br>E end, "Watts Lake"   | 2800+80 BP(SUA 1409)14C Non-marine stromatolites, from<br>slope below terrace above SUA 1410. ADA83                                           |
| 68°33S 78°15E G<br>Vestfold Hills vic.    | c.1300 MY, c.1850 MY R/S -- Suites of dolerite<br>dikes; cut Archaean gneisses. SHE83A<br>(preliminary and unpubl. data)                      |
| 68°30S 78°18E G<br>Tyrne Crossing area RM | 2349+50 MY RS9I3/0.7027+0.0001 WR Mossel gneiss retro-<br>gressed to amphibolite facies; Vestfold Block.<br>COL83A                            |
| 68°30S 78°18E G<br>nr Tyrne Crossing RM   | 2416+21 MY RS7I3/0.7022+0.0003 WR Crooked Lake<br>gneisses; cut Tyrne metavolcanics. COL83A                                                   |
| 68°26S 78°20E RM<br>Vestfold Hills area   | 2659 MY(81-358)SNMCl WR Granulite facies gneiss;<br>Tyrne metavolcanics. COL83A                                                               |
| 68°29S 78°20E RM<br>Vestfold Hills area   | 2283 MY(81-309)SNMCl WR Granulite facies gneiss;<br>Tyrne metavolcanics. COL83A                                                               |
| 68°29S 78°20E RM<br>Vestfold Hills area   | 2287 MY(81-326)SNMCl WR Granulite facies gneiss;<br>Tyrne metavolcanics. COL83A                                                               |
| 68°29S 78°20E RM<br>Vestfold Hills area   | 2165 MY(81-306)SNMCl WR Granulite facies gneiss;<br>Tyrne metavolcanics. COL83A                                                               |
| 68°29S 78°20E RM<br>Vestfold Hills area   | 2540 MY(81-397)SNMCl WR Granulite facies gneiss;<br>Mossel gneisses. COL83A                                                                   |
| 68°38S 78°20E RM<br>Vestfold Hills area   | 2397 MY(81-253)SNMCl WR Granulite facies gneiss;<br>Mossel gneisses. COL83A                                                                   |
| 68°29S 78°20E RM<br>Vestfold Hills area   | 2462 MY(81-283)SNMCl WR Granulite facies gneiss;<br>Crooked Lake gneisses. COL83A                                                             |
| 68°29S 78°20E RM<br>Vestfold Hills area   | 2462 MY(81-287)SNMCl WR Granulite facies gneiss;<br>Crooked Lake gneisses. COL83A                                                             |
| 68°38S 78°20E RM<br>Vestfold Hills area   | 2492 MY(81-267)SNMCl WR Granulite facies gneiss;<br>Crooked Lake gneisses. COL83A                                                             |

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| 68°31S 78°25E RM<br>"Calendar Lake"        | 1200±170 BP(Beta 1831)14C AL --. ADA83                                                                                                      |
| 68°34S 78°25E RM<br>"Thalantine Lake"      | 1340±140 BP(SUA 1412)14C AL Freshwater. ADA83                                                                                               |
| 68°31S 78°28E RM<br>nr "Platcha Hut"       | 5677±94 BP(ZDL81)14C AL From dry basin. ZHA83                                                                                               |
| 68°28S 78°30E R<br>Vestfold Hills          | 2169±217 MY(3)KA9 WR Basite;--. HOF80A                                                                                                      |
| 68°35S 78°30E RM<br>"Graticule Lake"       | 405±95 BP(Beta 4762)14C MO Freshwater, aquatic. ADA83                                                                                       |
| 68°35S 78°30E RM<br>Vestfold Hills area    | 2498 MY(81-247)SNMC1 WR Granulite facies gneiss;<br>Crooked Lake gneisses. COL83A                                                           |
| 68°22S 78°32E G<br>(Wyatt Earp Is. RM)     | 2511 MY(81-344)SNMC1 WR Granulite facies gneiss;<br>Crooked Lake gneisses. COL83A                                                           |
| 68°22S 78°32E G<br>(nr Walkabout Rocks RM) | 2506 MY(81-346)SNMC1 WR Granulite facies gneiss;<br>Crooked Lake gneisses. COL83A                                                           |
| 65°45S 81°50E G<br>Pingvin Island          | 458 MY(7;1185)KA16 WR Alaskitic porphyroblastic<br>granite;--. STA60 PIC63<br>(reported as 475 MY using KA6 in STA60)                       |
| 65°45S 81°50E G<br>Pingvin Island          | 477 MY(9;1086)KA16 WR Pegmatite in charnockite;<br>--. STA60 PIC63<br>(reported as 495 MY using KA6 in STA60)                               |
| 68°18S 86°25E G<br>Mount Brown             | 675 MY(1165g)KA16 WR Amphibolized and biotitized<br>plagioclase-gneiss;--. STA61 PIC63 RAV65<br>(reported as 700 MY using KA6 in RAV65)     |
| 66°48S 89°11E G<br>Gaussberg               | 9 MY(1152c)KA6 WR Leucite basalt;--. RAV65                                                                                                  |
| 66°48S 89°11E G<br>Gaussberg               | 20 MY(K.1152s)KA6 WR Leucite basalt;--. RAV64<br>(appears to be rev. to 9 MY -- see 1152c above;<br>infer=20 MY samples of RAV59 and STA61) |
| 66°48S 89°11E G<br>Gaussberg               | 9.0 MY(??)K/A WR Leucite basalt flow;<br>intrusive in metamorphic basement. TIN76<br>(may refer to sample 1152s of RAV65 listed above)      |
| 66°48S 89°11E G<br>(Gaussberg*)            | 0.052±0.003 MY(??)K/A LE Leucitite;--. COL83<br>(*prob. loc. inferred; Tingey et al., in press)                                             |
| 66°48S 89°11E G<br>(Gaussberg*)            | 0.059±0.002 MY(??)K/A LE Leucitite;--. COL83<br>(*prob. loc. inferred; Tingey et al., in press)                                             |
| 66°48S 89°11E G<br>Gaussberg               | 1973-2152 MY(??)SNMC Samples of granitic inclusions;<br>in Gaussberg lavas. COL83<br>(700-1093 MY T <sub>UP</sub> Sr model ages also calc.) |
| 66°48S 89°11E G<br>Gaussberg               | 1220-1280 MY(??)SNMD -- Gaussberg lavas. COL83<br>(dates time of enrichment event)                                                          |

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| GEOGRAPHIC AREA 23:                   | QUEEN MARY COAST AND WILKES LAND WEST OF 120°00E<br>(samples from west to east by coordinates)                                                                                                                |
| 66°33S 93°00E R<br>"Haswell Islet"    | 463 MY(?)KA16 WR Charnockite-mangerite series;<br>--. STA59 PIC63<br>(recalc. from 455 MY in STA59 and 480 MY in<br>STA61; loc.="Mirny" in STA61)                                                             |
| 66°31S 93°00E G<br>Haswell Island     | 415 MY(?)KA16 WR Pegmatite;--. STA61 PIC63<br>(recalc. from 430 MY in STA61; infer=#1014a,<br>vein pegmatite in RAV65; infer=430 MY, FD from<br>pegmatite, in KRY61; infer=#K.1014a in RAV64)                 |
| 66°31S 93°00E G<br>Haswell Island     | 550 MY(1058d)KA6 BT Pyroxene plagioclase-gneiss<br>xenolith in charnockite;--. RAV64 RAV65<br>(infer=#?, 509 MY in RAV58 and PIC63)                                                                           |
| 66°31S 93°00E G<br>Haswell Island     | 520 MY(1062)KA6 BT Pegmatitic cross-cutting vein;<br>--. RAV64 RAV65<br>(infer=#?, 468 MY in RAV58 and PIC63)                                                                                                 |
| 66°31S 93°00E G<br>Haswell Island     | 600 MY, 550 MY, 440 MY(?)U/P Accessory allanite;<br>650 MY(?)Pb/(U+Th) " "<br>650 MY(?)208-Pb/232-Th " "                                                                                                      |
| 66°33S 93°00E AR<br>Stroyteley Island | --. KRY61<br>458 MY(1106c)KA16 WR Pegmatoidal vein granite;<br>--. STA59 PIC63 RAV65<br>(reported as 475 MY, KA6, in RAV65 and others)                                                                        |
| 66°34S 93°00E G<br>Morennaya Hill     | 400 MY(1145e)KA16 WR Charnockite-mangerite series;<br>--. STA61 PIC63 RAV65<br>(recalc. from 415 MY, KA6; loc.=Moraine Cliff<br>in STA61; loc.=Morennaya Rock in RAV65)                                       |
| 66°34S 93°00E G<br>Morennaya Hill     | 453 MY(1145a)KA16 WR Pyroxene-plagioclase schist;<br>--. STA61 PIC63 RAV65<br>(recalc. from 440 MY in STA59 and 470 MY in STA61<br>and others; loc.=Moraine Cliff in STA61; loc.=<br>Morennaya Rock in RAV65) |
| 66°34S 93°00E G<br>Morennaya Hill     | 443 MY(1145b)KA16 WR Pyroxene-plagioclase schist;<br>--. STA61 PIC63 RAV65<br>(recalc. from 430 MY in STA59 and 460 MY in STA61<br>and others; loc.=Moraine Cliff in STA61; loc.=<br>Morennaya Rock in RAV65) |
| 66°34S 93°00E G<br>Morennaya Hill     | 439 MY(1145c)KA16 WR Plagioclase granite from<br>migmatite vein material;--. STA61 PIC63 RAV65<br>(recalc. from 455 MY in STA61 and others; loc.=<br>Moraine Cliff in STA61; loc.=Morennaya Rock in<br>RAV65) |
| 66°33S 93°01E R<br>Mirnyy, Haswell I. | 443 MY(?)KA16 BT Pegmatite;--. STA60 PIC63<br>(recalc. from 460 MY in STA60)                                                                                                                                  |
| 66°33S 93°01E R<br>Mirnyy, Haswell I. | 424 MY(82)KA16 WR Pegmatite (Quartz-feldspar);<br>--. STA60 PIC63<br>(recalc. from 440 MY in STA60)                                                                                                           |
| 66°33S 93°01E AR<br>Mirnyy Station    | 515 MY(?)K/A WR Morainic loam, 1-3 mm size fraction;<br>--. KRY62<br>(coords. for Mirnyy from PIC63)                                                                                                          |
| 66°33S 93°01E AR<br>Mirnyy Station    | 425 MY(?)K/A WR Morainic loam, 0.1-1.0 mm size<br>fraction;--. KRY62<br>(coords. for Mirnyy from PIC63)                                                                                                       |

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| 66°33S 93°01E AR<br>Mirnyy Station                       | 520 MY(??)K/A WR Morainic loam, 0.1-3 mm size<br>fraction;--. KRY62<br>(coords. for Mirnyy from PIC63)                                                                                                                         |
| 66°33S 93°01E AR<br>Mirnyy Station                       | 502+24 MY("RUL2")RS514/0.7194+0.0007 WR Charnokitic<br>rocks;--. MCQ72                                                                                                                                                         |
| 66°33S 93°01E AR<br>"Hoadley Island"<br>Mirnyy Sta. Area | 480 MY(12a)KA6 WR Acid charnockite;--. RAV65<br>(reported as "Godley Island" in RAV64; coords. for<br>Mirnyy from PIC63)                                                                                                       |
| 66°25S 98°46E G<br>David Island                          | 318 MY(866a)KA16 WR Granite-porphyry;<br>--. STA61 PIC63 RAV65<br>(recalc. from 330 MY in STA61 and others;<br>dscrpt.=syenite-porphyry in RAV65)                                                                              |
| 66°25S 98°46E G<br>David Island                          | 453 MY(866)KA16 WR Pegmatoid granite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 470 MY in STA61 and others; dscrpt.=<br>acid charnockite in RAV65)                                                                             |
| 66°25S 98°46E G<br>David Island                          | 443 MY(858 MY)KA16 WR Granite;--. STA61 PIC63 RAV65<br>(recalc. from 460 MY in STA61 and 430 MY in STA59;<br>dscrpt.=acid charnockite in RAV65)                                                                                |
| 66°25S 98°46E G<br>David Island                          | 540 MY(865)KA16 WR Granite;--. STA61 PIC63 RAV65<br>(recalc. from 560 MY in STA61 and 525 MY in STA59;<br>dscrpt.=acid charnockite in RAV65)                                                                                   |
| 66°25S 98°46E G<br>David Island                          | 670 MY(??)KA16 WR Shadow migmatite;--. STA61 PIC63<br>(recalc. from 695 MY in STA61; not included in<br>later reports such as RAV65)                                                                                           |
| 66°22S 99°11E G<br>Mount Strathcona                      | 684 MY(1173)KA16 WR Porphyroblastic plagioclase<br>granite;--. STA61 PIC63 RAV65<br>(recalc. from 710 MY in STA61 and RAV65)                                                                                                   |
| 66°22S 99°11E G<br>Mount Strathcona                      | 583 MY(1175e)KA16 WR Vein pegmatite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 605 MY in STA61 and RAV65)                                                                                                                      |
| 69°22S 99°11E G<br>Mount Strathcona                      | 949 MY(1p)KA16 WR Biotite-schist xenolith in plagio-<br>clase granite;--. STA61 PIC63 RAV65<br>(recalc. from 925 MY in STA59 and 980 MY in STA61<br>and RAV65)                                                                 |
| 66°35S 99°46E G<br>center, Obruchev Hills                | 1099 MY(21b)KA16 WR Leucogranite from migmatite vein<br>material;--. STA61 PIC63 RAV65<br>(recalc. from 1070 MY in STA59, and 1135 MY in<br>STA61 and RAV65; loc.="Obruchev Oasis" in STA59<br>and "Obruchev Island" in STA61) |
| 66°35S 99°46E G<br>center, Obruchev Hills                | 523 MY(26)KA16 WR Cross-cutting leucogranitic vein;<br>--. STA61 PIC63 RAV65<br>(recalc. from 515 MY in STA59, and 545 MY in STA61<br>and RAV65; loc.="Obruchev Oasis" in STA59 and<br>"Obruchev Island" in STA61)             |
| 67°22S 100°24E G<br>Mount Sandow                         | 610 MY(1178i)KA6 WR Sericitic quartzite;<br>--. RAV65                                                                                                                                                                          |
| 67°22S 100°24E G<br>(Mount Sandow)                       | 530 MY(??)K/A WR Sandstone;--. KRY62<br>(loc. given as "Sandau")                                                                                                                                                               |
| 66°25S 100°33E G<br>Grace Rocks                          | 675 MY(46)KA16 WR Charnockite;--. STA61 PIC63 RAV65<br>(recalc. from 700 MY in STA61; loc.="Harris Cliffs"<br>in STA61 and PIC63 but infer=sample from Grace<br>Rocks in RAV65; loc.="Grace Crag" in RAV64)                    |
| 67°14S 100°45E G<br>(Mount Amundsen)                     | 595 MY(??)K/A WR Red siltstone;--. KRY62<br>(loc. given as "Amundsen")                                                                                                                                                         |

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| 67°14S 100°45E G<br>(Mount Amundsen)                           | 565 MY(?)K/A WR Red sandstone;--. KRY62<br>(loc. given as "Amundsen")                                                                                                                                 |
| 67°14S 100°45E G<br>Mount Amundsen                             | 560 MY(?)K/A WR Sericitized sandstone;--. PIC63<br>(PIC63 quote this date from RAV58)                                                                                                                 |
| 66°17S 100°47E G<br>"Passeshen Cliffs,"<br>Bunger Hills locale | 516 MY(?)KA16 WR Migmatite;--. STA61 PIC63<br>(recalc. from 530 MY, KA6, in STA61)                                                                                                                    |
| 66°17S 100°47E G<br>"Smelykh Island,"<br>Bunger Hills locale   | 549 MY(752c)KA16 WR Vein leucogranite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 570 MY in STA61 and RAV65)                                                                                           |
| 66°17S 100°47E G<br>"Smelykh Island,"<br>Bunger Hills locale   | 675 MY(753)KA16 WR Charnockitized gabbroic;<br>--. STA61 PIC63 RAV65<br>(recalc. from 700 MY in STA61; reported as 685 MY<br>in RAV65)                                                                |
| 66°17S 100°47E G<br>Bunger Hills                               | 1190 MY, (800 MY), ? MY(?)U/P AT Pegmatite;<br>1350 MY(?)208-Pb/232-Th " "<br>--. TUG59<br>(loc. corrected as in KRY61)                                                                               |
| 66°17S 100°47E G<br>Bunger Hills                               | 1262 MY(?)KA16 BT Pegmatite vein;--. TUG59 PIC63<br>(recalc. from 1330 MY, KA5, in TUG59)                                                                                                             |
| 66°17S 100°47E G<br>Bunger Hills                               | 1215 MY(?)KA16 MC Pegmatite vein;--. TUG59 PIC63<br>(recalc. from 1280 MY, KA5, in TUG59)                                                                                                             |
| 66°17S 100°47E G<br>Bunger Hills                               | 1310 MY(?)Pb/(U+Th) AT Pegmatite vein;--. STA60<br>1520 MY(same) 206-Pb/238-U " "<br>1300 MY(same) 208-Pb/232-Th " "<br>(most probable age=1300 MY; loc. given as "Banger<br>Oasis")                  |
| 66°17S 100°47E G<br>Bunger Hills                               | 968-1137 MY(?)KA16 WR Pegmatite vein;--. STA60 PIC63<br>(recalc. from 1000-1175 in STA60)                                                                                                             |
| 66°17S 100°47E G<br>SW side, Bunger Hills                      | 713 MY(615a)KA16 WR Intermediate charnockite;<br>----. STA61 PIC63 RAV65<br>(recalc. from 740 MY in STA61 and RAV65, and 700 MY<br>in STA59)                                                          |
| 66°17S 100°47E G<br>Bunger Hills                               | 747 MY(117a)KA16 WR Migmatite;--. STA61 PIC63 RAV65<br>(recalc. from 775 MY in STA61 and 730 MY in STA59;<br>dscrpt.="pyroxene schist," loc.="Oasis Station<br>Area" in RAV65)                        |
| 66°17S 100°47E G<br>Bunger Hills                               | 747 MY(104)KA16 WR Migmatite;--. STA61 PIC63 RAV65<br>(recalc. from 775 MY in STA61 and 730 MY in STA59;<br>loc.="Oasis Station Area" in RAV65)                                                       |
| 66°17S 100°47E G<br>Bunger Hills                               | 708 MY(187a)KA16 WR Migmatite;--. STA61 PIC63 RAV65<br>(recalc. from 735 MY in STA61 and RAV65, and<br>700 MY in STA59; loc.="SW coast of Rybii Khvost<br>Bay" in RAV65)                              |
| 66°17S 100°47E G<br>Bunger Hills                               | 723 MY(328b)KA16 WR Vein leucogranite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 750 MY in STA59 and RAV65, and<br>705 MY in STA59; dscrpt.="pegmatite" in STA61;<br>loc.="Geologov Island" in RAV65) |
| 66°17S 100°47E G<br>Bunger Hills                               | 777 MY(?)KA16 WR Rapakivi boulders;<br>--. STA59 PIC63<br>(recalc. from 760 MY in STA59)                                                                                                              |
| 66°17S 100°47E G<br>Bunger Hills                               | 602 MY(?)KA16 WR Shadow migmatite;--. STA61 PIC63<br>(recalc. from 625 MY in STA61)                                                                                                                   |



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| 66°17S 100°47E G<br>Bunger Hills                             | 627 MY(720c)KAl6 WR Vein leucogranite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 650 MY in STA61 and RAV65; descrpt.=<br>"pegmatite" in STA61; loc.="Soglasia Lake area"<br>in RAV65)                   |
| 66°17S 100°47E G<br>Bunger Hills                             | 617 MY(173)KAl6 WR Pyroxene schist;<br>--. STA61 PIC63 RAV65<br>(recalc. from 640 MY in STA61 and RAV65; loc.=<br>"Oasis Station Area" in RAV65)                                                        |
| 66°17S 100°47E G<br>Bunger Hills                             | 704 MY(247)KAl6 WR Feldspathized pyroxene schist;<br>--. STA61 PIC63 RAV65<br>(recalc. from 730 MY in STA61 and RAV65; loc.=<br>"Center of Main Fault valley" in RAV65)                                 |
| 66°17S 100°47E G<br>SW Bunger Hills                          | 1041 MY(622b)KAl6 WR Skialithic granite from pyro-<br>xene schist;--. STA61 PIC63 RAV65<br>(recalc. from 1075 MY in STA61 and RAV65)                                                                    |
| 66°17S 100°47E G<br>Bunger Hills                             | 1137 MY(847a)KAl6 WR Migmatite from pyroxene schist;<br>--. STA61 PIC63 RAV65<br>(recalc. from 1175 MY in STA61 and RAV65; loc.=<br>"S. coast of Kinzhai Bay" in RAV65)                                 |
| 66°17S 100°47E G<br>Bunger Hills                             | 1094 MY(62e)KAl6 WR Migmatite from quartzite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 1130 MY in STA61 and RAV65; descrpt.=<br>"biotite gneiss in STA61, loc.="Oasis Station<br>Area" in RAV65)       |
| 66°17S 100°47E G<br>Bunger Hills                             | 968 MY(88)KAl6 WR Migmatized quartzite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 1000 MY in STA61 and RAV65; and<br>950 MY in STA59; descrpt.=gneiss in STA61; loc.=<br>"Oasis Station Area" in RAV65) |
| 66°17S 100°47E G<br>Bunger Hills                             | 973 MY(184a)KAl6 WR Biotite schist -- skialithic<br>migmatite substrate;--. STA61 PIC63 RAV65<br>(recalc. from 1005 MY in STA61 and RAV65, and<br>940 MY in STA59; loc.="Oasis Station Area" in RAV65)  |
| 66°17S 100°47E G<br>Bunger Hills                             | 944 MY(403(Ch))KAl6 WR Biotite gneiss;<br>--. STA60 PIC63<br>(recalc. from 975 MY in STA60)                                                                                                             |
| 66°17S 100°47E G<br>"Druzhba Island,"<br>Bunger Hills locale | 689 MY(561)KAl6 WR Intermediate charnockite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 715 MY in STA61; loc.="Obryvistyi<br>Island" in RAV65)                                                           |
| 66°17S 100°47E G<br>"Druzhba Island,"<br>Bunger Hills locale | 963 MY(560)KAl6 Migmatite from gneiss;<br>--. STA61 PIC63 RAV65<br>(recalc. from 995 MY in STA61; loc.="Obryvistyi<br>Island" in RAV65)                                                                 |
| 66°17S 100°47E G<br>"Druzhba Island,"<br>Bunger Hills locale | 1225 MY(560a)KAl6 WR Skialithic granite from gneiss;<br>--. STA61 PIC63 RAV65<br>(recalc. from 1265 MY in STA61; loc.="Obryvistyi<br>Island" in RAV65; descrpt.="pink polymigmatite"<br>in STA61)       |
| 66°17S 100°47E G<br>Bunger Hills                             | 750 MY(7?)K/A WR Morainic loam, 3-0.1 mm size<br>fraction;--. KRY62<br>(loc. given as "Banger Oasis")                                                                                                   |

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| 66°17S 100°47E G<br>Bunger Hills         | 560 MY(??)K/A WR Morainic loam, less than 0.005 mm size fraction;--. KRY62<br>(loc. given as "Banger Oasis")                                                                                                 |
| 66°17S 100°47E G<br>Bunger Hills         | 860 MY(??)K/A WR Eolian sand, 1-3 mm size fraction;--. KRY62<br>(loc. given as "Banger Oasis")                                                                                                               |
| 66°17S 100°47E G<br>Bunger Hills         | 830 MY(??)K/A WR Eolian sand, less than 1 mm size fraction;--. KRY62<br>(loc. given as "Banger Oasis")                                                                                                       |
| 66°17S 100°47E G<br>Bunger Hills         | 835 MY(??)K/A WR Eolian sand, 1-3 mm size fraction;--. KRY62<br>(loc. given as "Banger Oasis")                                                                                                               |
| 66°17S 100°47E G<br>Bunger Hills         | 850 MY(??)K/A WR Eolian sand, less than 1 mm size fraction;--. KRY62<br>(loc. given as "Banger Oasis")                                                                                                       |
| 66°17S 100°47E G<br>Bunger Hills         | 920-970 MY(??)K/A WR? 3 specimens of crystalline schists;--. RAV58<br>(data appears superseded by later reports)                                                                                             |
| 66°17S 100°47E G<br>Bunger Hills         | 910 MY(??)K/A BT Pegmatite vein in migmatite;--. RAV58                                                                                                                                                       |
| 66°17S 100°47E G<br>Bunger Hills         | 920 MY(??)K/A BT Pegmatite vein in migmatite;--. RAV58                                                                                                                                                       |
| 66°18S 100°48E G<br>(Algae Lake)         | 1016 MY(925)KA16 WR Skialithic granite from pyroxene schist;--. STA61 PIC63 RAV65<br>(recalc. from 1050 MY in STA61 and RAV65; loc.="SE end of Figurnoe Lake" in RAV65)                                      |
| 66°07S 100°57E G<br>Thomas Island        | 516 MY(??)KA16 WR Feldspathized biotite-garnet gneiss;--. STA61 PIC63<br>(recalc. from 535 MY in STA61; not included in later reports such as RAV65)                                                         |
| 66°07S 100°57E G<br>Thomas Island        | 774 MY(152)KA16 WR Pyroxene-schist;--. STA61 PIC63 RAV65<br>(recalc. from 800 MY in STA61 and RAV65; descrpt.= garnet gneiss in STA61)                                                                       |
| 66°12S 101°00E G<br>(Fuller Island)      | 612 MY(565a)KA16 WR Shadow polymigmatite;--. STA61 PIC63 RAV65<br>(recalc. from 635 MY in STA61 and RAV65; loc. given as "Kashalot Island")                                                                  |
| 66°12S 101°00E G<br>(Fuller Island)      | 718 MY(??)KA16 WR Charnockite-mangerite series;--. STA61 PIC63<br>(recalc. from 745 MY in STA61; loc. given as "Kashalot Island"; may be same sample as #681, 745 MY charnockite from Booth Pen. in RAV65)   |
| 66°05S 101°00E G<br>Highjump Archipelago | 472 MY(??)KA16 WR Feldspathized granite-gneiss;--. STA61 PIC63<br>(recalc. from 490 MY in STA61)                                                                                                             |
| 66°05S 101°00E G<br>Highjump Archipelago | 472 MY(??)KA16 WR Pegmatite;--. STA61 PIC63<br>(recalc. from 490 MY in STA61)                                                                                                                                |
| 66°05S 101°00E G<br>Highjump Archipelago | 472 MY(??)KA16 WR Pegmatite;--. STA61 PIC63<br>(recalc. from 490 MY in STA61)                                                                                                                                |
| 66°06S 101°13E G<br>(Booth Peninsula)    | 745 MY(681)KA6 WR Intermediate charnockite;--. RAV65<br>(may be same sample as 745 MY charnockite from Fuller Island; loc. given as "Charnokitovy Island" in RAV65 and as "Charnokitovy Peninsula" in RAV64) |

|                                                                 |                                                                                                                                                                                                                                                          |
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| 66°06S 101°13E G<br>(Booth Peninsula)                           | 564 MY (674)KA16 WR Vein leucogranite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 585 MY in STA61 and RAV65; loc.<br>given as "Charnockite Island")                                                                                                       |
| 66°39S 108°26E R<br>Davis Islands                               | 1070 MY(GA 383)KA10 BT Adamellite;<br>--. WEB64                                                                                                                                                                                                          |
| 66°S 110°E M<br>Windmill Islands and<br>Casey Sta. areas        | 1600-3100 MY(??)P/P ZR Ion microprobe determina-<br>tions on "a wide variety of rocks." LOV79                                                                                                                                                            |
| 66°S 110°E M<br>Areas of Windmill I.'s,<br>Casey, Wilkes Sta.'s | 1100-1400 MY RSI WR Gneisses of upper amphibolite<br>to granulite facies;--. ARR75                                                                                                                                                                       |
| 66°S 110°E M<br>Areas of Windmill I.'s,<br>Casey, Wilkes Sta.'s | c.1100 MY(??)RSM MC,BT Pegmatites;<br>--. ARR75                                                                                                                                                                                                          |
| 66°14S 110°09E R<br>Charlton Island                             | 1050 MY(GA 738)KA10 Granulite;<br>--. WEB64                                                                                                                                                                                                              |
| 66°14S 110°11E R<br>Nelly Island                                | 1130 MY(GA 737)KA10 BT Schist;<br>--. WEB64                                                                                                                                                                                                              |
| 66°12S 110°23E R<br>Lilienthal Island                           | 1140 MY(GA 736)KA10 BT Schist;<br>--. WEB64                                                                                                                                                                                                              |
| 66°11S 110°25E R<br>Chappel Island                              | 1050 MY(GA737)KA10 BT Schist;<br>--. WEB64                                                                                                                                                                                                               |
| 66°11S 110°25E G<br>Chappel Island                              | 1450+70-90 MY,2990+230-190 MY(7810/28;234A)UP3C5 ZR<br>Paragneiss; Windmill Metamorphics. WIL83<br>(from rim and core of same grain; max. age of rim=<br>1817+27 MY, min. age of core=2726+30 MY; the 3<br>apparent ages for each fraction are in WIL83) |
| 66°11S 110°25E G<br>Chappel Island                              | 1763+103 MY(7810/28;234)UP0C5 ZR Paragneiss;<br>Windmill Metamorphics. WIL83<br>(UP ages: 1763 MY, 1751 MY, 1737 MY)                                                                                                                                     |
| 66°11S 110°25E G<br>Chappel Island                              | 1270 MY,1289 MY,1322 MY(7810/28;227A)UP5 ZR<br>Paragneiss; Windmill Metamorphics. WIL83                                                                                                                                                                  |
| 66°11S 110°25E G<br>Chappel Island                              | 1192 MY,1230 MY,1297 MY(7810/28;231-4)UP5 ZR<br>Paragneiss; Windmill Metamorphics. WIL83                                                                                                                                                                 |
| 66°11S 110°25E G<br>Chappel Island                              | 1128 MY,1200 MY,1334 MY(7810/28;231-3)UP5 ZR<br>Paragneiss; Windmill Metamorphics. WIL83                                                                                                                                                                 |
| 66°11S 110°25E G<br>Chappel Island                              | 1366 MY,1404 MY,1463 MY(7810/28;246)UP5 ZR<br>Paragneiss; Windmill Metamorphics. WIL83                                                                                                                                                                   |
| 66°22S 110°27E G<br>Ardery Island                               | 1050 MY,1100 MY(3)KA15* BT Quartz diorite;--. CAM60<br>(*constants corrected for inferred misprint)                                                                                                                                                      |
| 66°19S 110°27E G<br>Pidgion Island                              | 1477+73 MY RS9I3/0.7032+0.0004 WR Layered tonalitic<br>orthogneisses; Windmill Metamorphics. WIL83<br>("model two isochron age")                                                                                                                         |
| 66°19S 110°27E G<br>Pidgion Island                              | 1465+34 MY(??)SNMCl WR Tonalitic gneiss;<br>oldest orthogneiss sequence, Windmill metamorphics.<br>WIL83                                                                                                                                                 |
| 66°20S 110°28E G<br>5 mi. N, Wilkes Sta.,<br>Windmill Islands   | 1120 MY(2)KA15* BT Contorted migmatite;--. CAM60<br>(*constants corrected for inferred misprint)                                                                                                                                                         |
| 66°20S 110°28E G<br>5 mi. N, Wilkes Sta.,<br>Windmill Islands   | 1120 MY,1110 MY(2)RSM4 BT Contorted migmatite;<br>--. CAM60                                                                                                                                                                                              |

|                                                          |                                                                                                                                                                               |
|----------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 66°20S 110°28E G<br>"Grisson Oasis,"<br>Windmill Islands | 1045 MY(141)KA16 WR Leucogranitic vein material from<br>migmatite;--. STA61 PIC63 RAV65<br>(recalc. from 1080 MY in STA61 and RAV65, and<br>1020 MY in STA59)                 |
| 66°20S 110°28E G<br>"Grisson Oasis,"<br>Windmill Islands | 741 MY(146(V))KA16 WR Granite gneiss;<br>--. STA60 PIC63<br>(recalc. from 765 MY in STA60 and RAV65; descrpt.=<br>granite in STA60)                                           |
| 66°20S 110°28E G<br>"Grisson Oasis,"<br>Windmill Islands | 731 MY(146(V))KA16 WR Granite gneiss;<br>--. STA60 PIC63<br>(recalc. from 765 MY in STA60 and RAV65; descrpt.=<br>granite in STA60)                                           |
| 66°20S 110°28E G<br>"Grisson Oasis,"<br>Windmill Islands | 818 MY(192(Ch))KA16 WR Porphyritic granite;<br>--. STA60 PIC63<br>(recalc. from 845 MY in STA60)                                                                              |
| 66°20S 110°28E G<br>"Grisson Oasis,"<br>Windmill Islands | 905 MY(210(Ch))KA16 WR Biotite gneiss;<br>--. STA60 PIC63<br>(recalc. from 935 MY in STA60)                                                                                   |
| 66°20S 110°28E G<br>"Grisson Oasis,"<br>Windmill Islands | 741 MY(146(V))KA16 WR Granite gneiss;<br>--. STA60 PIC63<br>(recalc. from 765 MY in STA60)                                                                                    |
| 66°20S 110°28E G<br>"Grisson Oasis,"<br>Windmill Islands | 852 MY(187)KA16 WR Acid charnockite;<br>--. STA60 PIC63 RAV65<br>(recalc. from 880 MY in STA60 and RAV65; descrpt.=<br>granite in STA60)                                      |
| 66°20S 110°28E G<br>"Grisson Oasis,"<br>Windmill Islands | 866 MY(222)KA16 WR Acid charnockite;<br>--. STA60 PIC63 RAV65<br>(recalc. from 895 MY in STA60 and RAV65; descrpt.=<br>granite in STA60)                                      |
| 66°20S 110°28E G<br>"Grisson Oasis,"<br>Windmill Islands | 915 MY(251)KA16 WR Acid charnockite;<br>--. STA60 PIC63 RAV65<br>(recalc. from 945 MY in STA60 and RAV65; descrpt.=<br>granite in STA60)                                      |
| 66°20S 110°28E G<br>S. Windmill Islands                  | 1200 MY(146(V))KA16 WR Granite gneiss;<br>--. STA60 PIC63 RAV65<br>(recalc. from 880 MY in STA60 and RAV65; descrpt.=<br>granite in STA60)                                    |
| 66°28S 110°30E G<br>E. shore, Peterson I.                | 1800+130 BP(14C) SE Cranium muscles, mummified sea<br>elephant, 30 m. high coastal bench. VOR62 KOR71                                                                         |
| 66°24S 110°31E R<br>Ford Island                          | 1110 MY(GA 733)KA10 BT Adamellite;<br>--. WEB64                                                                                                                               |
| 66°24S 110°31E G<br>Ford and/or Cloyd I.                 | 1100-1140 MY(146(V))KA16 WR Granite gneiss;<br>--. STA60 PIC63 RAV65<br>(recalc. from 880 MY in STA60 and RAV65; descrpt.=<br>granite in STA60)                               |
| 66°15.5S 110°31.2E R<br>Clark Peninsula                  | 6040+250 MY(M-1052)14C AL Archaeolithothamnion,<br>coralline, 65 ft. a.s.l.;--. CRA61                                                                                         |
| 66°17S 110°32E G<br>Casey Sta. area<br>(nr Bailey Pen.)  | 230-270 MY(146(V))KA16 WR Granite gneiss;<br>--. STA60 PIC63 RAV65<br>(recalc. from 880 MY in STA60 and RAV65; descrpt.=<br>granite in STA60)                                 |
| 66°13S 110°38E R<br>Berkeley Island                      | 1080 MY(GA 734)KA10 BT Gneiss;<br>--. WEB64                                                                                                                                   |
| 66°24S 110°38E G<br>Herring Island                       | 1275+21 MY, 2529+108 MY(786-T38)UP5C5 ZR Garnet<br>hypersthene gneiss;--. OLI83<br>(the 3 discordant ages for each of six zircon<br>fractions are listed in a table in OLI83) |
| 66°35S 110°41E G<br>Haupt Nunatak                        | 950 MY(1)KA15* BT Garnet-biotite-gneiss;--. CAM60<br>(*constants corrected for inferred misprint)                                                                             |

66°35S 110°41E G  
Haupt Nunatak

66°00S 111°07E R  
Balaena Islands  
66°00S 111°13E R  
Balaena Islands  
66°02S 111°13E R  
Balaena Islands

720+300-650 MY, 1540+780-220 MY(7810/21)UP7C5 ZR  
Granitic orthogneiss; Windmill Metamorphics. WIL83  
(the 3 apparent ages for each fraction are in ref)  
1110 MY(GA 741)KA10 BT Adamellite;  
---. WEB64  
1060 MY(GA740)KA10 BT Adamellite;  
---. WEB64  
510 MY(GA739)KA10 PL Gabbro;  
---. WEB64

GEOGRAPHIC AREA 24: WILKES LAND EAST OF 120°00E (samples from west to east by coordinates)

66°53S 120°38E G 731 MY(1230)KA16 WR Granite (altered charnockite);  
 Henry Islands --. STA61 PIC63 RAV65  
 (recalc. from 755 MY in STA61 and RAV65, and  
 720 MY in STA59; loc.=Henry Bay in STA61)

66°47S 121°00E G 675 MY(1229)KA16 WR Intermediate charnockite;  
 Chick Island --. STA61 PIC63 RAV65  
 (recalc. from 700 MY in STA61 and RAV65, and  
 660 MY in STA59; loc.=Henry Bay in STA61)

66°28S 126°45E G 1055 MY(1232)KA16 WR Leucogranitic migmatite vein  
 Al'bov Rocks material from gneiss;--. STA61 PIC63 RAV65  
 (recalc. from 1090 MY in STA61; "1070 MY" in  
 RAV65 appears to be misprint; may be the same  
 as the 1044 MY sample from STA59 and PIC63)

66°28S 126°45E G 1044 MY(??)KA16 WR Pegmatoid granite;  
 Al'bov Rocks --. STA59 PIC63  
 (recalc. from 1020 MY in STA59; appears to be  
 the same sample as #1232 above)

66°37S 139°44E G 1530 MY(DS 395)RSM4 BT Pegmatite vein;  
 Helene Island --. BEL62

66°40S 140°01E G 1543 MY(DS 394)RSM4 BT Granite vein in gneiss;  
 Petrel Island --. BEL62

66°40S 140°01E\* 280 MY(??)FTK AP Unspecified;--. KEL79C  
 Dumont d'Urville (\*coords. from "Polar Regions Atlas")

66°40S 140°01E\* 466 MY(??)FTK AP Erratic boulder;--. KEL79C  
 Dumont d'Urville (\*coords. from "Polar Regions Atlas")

|                                                      |                                                                                                                                                                                                 |
|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| GEOGRAPHIC AREA 25:                                  | GEORGE V COAST (samples from west to east by coordinates)                                                                                                                                       |
| 67°00S 142°40E G<br>Cape Denison*                    | 428±103 MY, 2366±30 MY (786-T60) UP4C5 ZR Biotite gneiss; --. OLI83<br>(*loc. given as w/in a few meters of Mawson's Hut; the 3 discordant ages for each fraction are in ref)                   |
| 66°54S 142°40E G<br>Commonwealth Bay area            | 1540 MY(?) R/S MC, BT Pegmatites; --. JAM83<br>(avg. age from Arriens, unpubl. data; prob. part of the 1500-1700 MY samples from Cape Denison)                                                  |
| 67°00S 142°40E G<br>Cape Denison                     | 1500-1700 MY(?) R/S MC, BT Unspecified. ARR75<br>(infer=1600-1700 MY R/S MC ages and 1550 MY BT ages from pegmatites cutting gneiss in Commonwealth Bay area -- Arriens, pers. comm., in OLI83) |
| 67°00S 142°40E G<br>Cape Denison                     | 1300-1700 MY(?) RSM WR? Erratic boulders from moraine; --. ARR75<br>(unspecified number of samples)                                                                                             |
| 66°54S 142°40E G<br>Commonwealth Bay                 | 320 MY(?) FTK AP Unspecified. KEL79C                                                                                                                                                            |
| 67°43S 146°34E G<br>Cape Bage                        | 487 MY(1235) KA16 WR Granite; --. STA60 PIC63 RAV65<br>(recalc. from 505 MY in STA60; infer "#1135" in STA61 is misprint)                                                                       |
| 67°48S 146°37E G<br>Ainsworth Bay                    | 463 MY(1234) KA16 WR Rose granite; --. STA60 PIC63 RAV65<br>(recalc. from 480 MY in STA60; loc.="Cape Ploskii" in RAV65)                                                                        |
| 67°48S 146°37E G<br>Ainsworth Bay                    | 337 MY(?) KA16 WR Gray granite; --. STA61 PIC63<br>(recalc. from 350 MY in STA61)                                                                                                               |
| 67°48S 146°37E G<br>Ainsworth Bay                    | 755 MY(?) KA16 WR Pink granite; --. STA61 PIC63<br>(recalc. from 780 MY in STA61)                                                                                                               |
| 67°48S 146°37E G<br>Ainsworth Bay                    | 461 MY(?) KA16 WR Porphyroblastic granite;<br>--. STA59 PIC63<br>(recalc. from 450 MY in STA59)                                                                                                 |
| 67°51S 146°55E G<br>Cape Webb,<br>Ainsworth Bay area | 458 MY(1239p) KA16 WR Xenolith in porphyroblastic granite; --. STA61 PIC63 RAV65<br>(recalc. from 475 MY in STA61 and RAV65, and 450 MY in STA59)                                               |
| 67°51S 146°55E G<br>Cape Webb,<br>Ainsworth Bay area | 458 MY(1240b) KA16 WR Porphyroblastic granite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 475 MY in STA61 and RAV65, and 450 MY in STA59; infer "745 MY" in STA61 is error)                      |
| 67°51S 146°55E G<br>Cape Webb,<br>Ainsworth Bay area | 458 MY(1239) KA16 WR Porphyroblastic granite;<br>--. STA61 PIC63 RAV65<br>(recalc. from 475 MY in STA61 and RAV64, and 485 MY in STA59)                                                         |
| 67°51S 146°55E G<br>Cape Webb,<br>Ainsworth Bay area | 453 MY(1239e) KA16 WR Biotite-schist xenolith in granite; --. STA61 PIC63 RAV65<br>(recalc. from 470 MY in STA61 and RAV65, and 445 MY in STA59)                                                |
| 68°21S 149°45E G<br>Horn Bluff                       | 191 MY(5r) KA16 WR Dolerite;<br>Beacon Group Sill. STA61 PIC63 RAV65<br>(recalc. from 195 MY in STA61 and RAV64; infer "165 MY" in RAV65 is misprint)                                           |

68°54S 154°10E G  
Mt. Obruchev

175 MY(15)KA16 WR Dolerite;  
Beacon Group sill. STA59 PIC63 RAV65  
(recalc. from 170 MY in STA59; infer=same sample  
as 175 MY, "Anyuta Cape" sample in STA61)



|                        |                                                                                                                         |
|------------------------|-------------------------------------------------------------------------------------------------------------------------|
| GEOGRAPHIC AREA 26:    | OCEAN SITES WITHIN C. 250 KM OF THE EAST ANTARCTIC COAST, EXCLUDING ROSS SEA (samples from west to east by coordinates) |
| 69°S 15°E RM           | 340 MY(235*)K/A WR Iceberg silt;--. KRY62 CRA70                                                                         |
| nr Queen Maud Land     | (*station number)                                                                                                       |
| c. 68°S 20°E M         | 295±35 MY(226*)K/A Terrigenous minerals in iceberg                                                                      |
| Queen Maud Land Sector | silt;--. KRY61A                                                                                                         |
|                        | (*station number; more info. in Russian in ref.)                                                                        |
| 67°S 46°E RM           | 380 MY(206*)K/A WR Iceberg silt;--. KRY62 CRA70                                                                         |
| nr Enderby Land        | (*station number)                                                                                                       |
| 67°S 70°E RM           | 640 MY(198*)K/A WR Iceberg silt;--. KRY62 CRA70                                                                         |
| nr Mac. Robertson Land | (*station number)                                                                                                       |
| c. 68°S 75°E M         | 475±40 MY(193*)K/A Terrigenous minerals in iceberg                                                                      |
| Mac. Robertson Land    | silt;--. KRY61A                                                                                                         |
| Sector                 | (*station number; more info. in Russian in ref.)                                                                        |
| 66°S 79°E RM           | 460 MY(185*)K/A WR Iceberg silt;--. KRY62 CRA70                                                                         |
| nr Christensen Coast   | (*station number)                                                                                                       |
| 65°30S 93°30E RM       | 460 MY(158*)K/A WR Iceberg silt;--. KRY62 CRA70                                                                         |
| Davis Sea              | (*station number)                                                                                                       |
| 65°S 104°E RM          | 610 MY(23*)K/A WR Iceberg silt;--. KRY62 CRA70                                                                          |
| nr Knox Coast          | (*station number)                                                                                                       |
| 65°30S 115°30E RM      | 650 MY(330*)K/A WR Iceberg silt;--. KRY62 CRA70                                                                         |
| nr Sabrina Coast       | (*station number)                                                                                                       |
| 65°S 132°E RM          | 690 MY(43*)K/A WR Iceberg silt;--. KRY62 CRA70                                                                          |
| nr Clarie Coast        | (*station number)                                                                                                       |
| c. 65°S 145°E M        | 350±50 MY(51*)K/A Terrigenous minerals in iceberg                                                                       |
| George V Coast Sector  | silt;--. KRY61A                                                                                                         |
|                        | (*station number; more info. in Russian in ref.)                                                                        |
| 68°S 155°E RM          | 500 MY(57*)K/A WR Iceberg silt;--. KRY62 CRA70                                                                          |
| nr George V Coast      | (*station number; age also given as 505 MY in Table 2 of KRY62)                                                         |
| c. 68°S 165°E M        | 290±120 MY(373*)K/A Terrigenous minerals in iceberg                                                                     |
| Oates Coast Sector     | silt;--. KRY61A                                                                                                         |
|                        | (*station number; more info. in Russian in ref.)                                                                        |
| c. 69°S 175°E M        | 40±20 MY(377*)K/A Terrigenous minerals in iceberg                                                                       |
| "Skotta Island"        | silt;--. KRY61A                                                                                                         |
|                        | (*station number; more info. in Russian in ref.)                                                                        |

## GEOGRAPHIC AREA 27:

- ROSS ICE SHELF, MCMURDO SOUND, AND ROSS SEA;  
BLACK, WHITE, ROSS, AND FRANKLIN ISLANDS  
(samples from south to north by coordinates)
- 82°22S 168°38E R  
Ross Ice Shelf  
Site J9  
78°31S 166°25E G  
near east end,  
Minna Bluff  
78°13.9S 166°26.1E R  
Black I.  
78°13.7S 166°27.4E R  
Black I.  
78°12S 166°44E RM  
nr E. Black I.  
78°12S 166°44E RM  
nr E. Black I.  
78°10S 166°30E RM  
btwn Black Island  
and Brown Pen.  
78°10S 166°30E RM  
nr N Black I.  
78°10S 166°30E RM  
btwn Black Island  
and Brown Pen.  
78°10S 166°30E RM  
nr Black I.  
78°10S 166°30E RM\*  
nr NE shore, Black I.
- 78°09.3S 166°19.8E R  
Black I.  
77°53S 165°15E RM  
nr Dailey Islands  
77°53S 165°15E RM  
nr Dailey Islands  
77°53S 165°15E RM  
nr Dailey Islands  
77°51S 166°41E G  
Observation Hill RM
- 77°51S 166°41E G  
Observation Hill RM
- 77°51S 166°41E G  
Observation Hill RM
- 77°51S 166°40E G  
Observation Hill RM  
77°51S 166°40E G  
Observation Hill RM  
77°51S 166°40E G  
Observation Hill RM
- 174±75 MY(PNW-23A,PNW-23B)RS2I3/0.7155±0.0023 FD  
Glacial-marine sediments. FAU79 FAU83  
("provenance date")  
GT 51,000 BP(K76-58;QL-1129)14C1 Macrofossils in Ross  
Ice Shelf, assoc. with Globocassidulina biora.  
KEL79A  
3.8±0.09 MY(VUW21205;YU-McM-21205)KA9 WR Pyroxene  
trachyte; Aurora Trachyte Fm. WEB72 ARM78  
3.35±0.14 MY(VUW 21208;YU-McM-21208)KA9 WR Alkali  
olivine basalt; Nubian Basalt Fm. WEB72 ARM78  
3590±80 BP(QL-1222)14C1 SH Mixture of shells from  
debris band on surface of McMurdo Ice Shelf. STU81  
3610±40 BP(QL-1132)14C1 SH Mixture of shells from  
debris band on surface of McMurdo Ice Shelf. STU81  
3770±40 BP(QL-1130)14C1 SH Mixture of shells from  
debris band on surface of McMurdo Ice Shelf. STU81  
1260±30 BP(QL-1128)14C1 SH Mixture of shells from  
debris band on surface of McMurdo Ice Shelf. STU81  
3130±40 BP(QL-167)14C1 SH Mixture of shells from debris  
band on surface of McMurdo Ice Shelf. STU81  
1290±50 BP(QL-79)14C1 SH Mixture of shells from debris  
band on surface of McMurdo Ice Shelf. KEL77 STU81  
3630±90 BP(QL-1123)14C1 SH Mixture of shells from  
debris band of McMurdo Ice Shelf. STU78  
(\*coords. are from STU81)  
10.9±0.4 MY(YU-McM-21230)KA9 WR Alkali olivine basalt;  
Melania Basalt Fm. ARM78  
1370±50 BP(QL-77)14C1 SH Mixture of shells from debris  
band of McMurdo Ice Shelf. STU81  
1340±30 BP(QL-1225)14C1 SH Mixture of shells from  
debris band on surface of McMurdo Ice Shelf. STU81  
3370±80 BP(QL-97)14C1 AL Mat, nonmarine, stranded on  
ice-cored moraine, McMurdo Ice Shelf. STU81  
1.17±0.03 MY(OH1-12-63;73028)KA12 WR Trachyte;  
--. FOR74  
(mean age of 3 trachytes in FOR74=1.18±0.03 MY)  
1.16±0.03 MY(OH1-8-63;73030)KA12 WR Trachyte;  
--. FOR74  
(mean age of 3 trachytes in FOR74=1.18±0.03 MY)  
1.22±0.04 MY(OH51-1-63;73029)KA12 WR Trachyte;  
--. FOR74  
(mean age of 3 trachytes in FOR74=1.18±0.03 MY)  
1.8 MY(K-57g)KA6 WR Trachyte;--. POL76  
(more info. in Russian in POL76)  
1.3 MY(K-57v)KA6 WR Trachyte;--. POL76  
(more info. in Russian in POL76)  
10.0 MY(K-57)KA6 WR Trachyte;--. POL76  
(more info. in Russian in POL76)

|                                                                                                       |                                                                                                                                                                                                                            |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 77°51S 166°38E G<br>Hut Pt. Promontory RM<br>77°50'59.68"S<br>166°40'28.77"E*<br>DVDP hole 2, Ross I. | 0.8 MY(K-66)KA6 WR Plagiobasalt;--. POL76<br>(more info. in Russian in POL76)<br>1.32±0.16 MY(#!)KA17 WR Basanite clast;<br>nr top of hyaloclastite unit 16, 173.93 m deep.<br>KYL78<br>(*coords. taken from DVDP Bull. 3) |
| 77°50'59.68"S<br>166°40'28.77"E*<br>DVDP hole 2, Ross I.                                              | 1.16±0.03 MY(#!)KA17 WR Ne-bermoreite;<br>flow unit 7, 62.38 m deep. KYL78<br>(*coords. taken from DVDP Bull. 3)                                                                                                           |
| 77°50.4S 166°39.5E R<br>Hut Point Peninsula<br>77°50.3S 166°40.3E R<br>Black Knob,<br>Hut Pt. Pen.    | 0.57±0.03 MY(YU-McM-HP26;22900)KA9 WR Olivine basalt;<br>Nubian Basalt Fm. ARM78                                                                                                                                           |
| 77°50S 166°40E*<br>DVDP hole 1, Ross I.                                                               | 0.43±0.07 MY(YU-McM-HP18;22892)KA9 WR Olivine basalt;<br>Nubian Basalt Fm. ARM78                                                                                                                                           |
| 77°50S 166°40E*<br>DVDP hole 1, Ross I.                                                               | 1.34±0.23 MY(#!)KA17 WR Basanite clast;<br>nr top of hyaloclastite unit 40, 148.81 m deep.<br>KYL78<br>(coords. taken from DVDP Bull. 3)                                                                                   |
| 77°50S 165°50E RM<br>btwn Ross I-Brown Pen.                                                           | 1.21±0.11 MY(#!)KA17 WR Ne-hawaiite;<br>flow unit 10, 25.52 m deep. KYL78<br>(*coords. taken from DVDP Bull. 3)                                                                                                            |
| 77°50S 165°50E RM<br>btwn Ross I-Brown Pen.                                                           | 4630±80 BP(QL-1127)14C1 SH Mixture of shells from<br>debris band on surface of McMurdo Ice Shelf. STU81                                                                                                                    |
| 77°50S 165°50E RM<br>btwn Ross I-Brown Pen.                                                           | 6510±50 BP(QL-1126)14C1 SH Mixture of shells from<br>debris band on surface of McMurdo Ice Shelf. STU81                                                                                                                    |
| 77°50S 165°50E RM<br>btwn Ross I-Brown Pen.                                                           | 6600±60 BP(QL-166)14C1 SH Mixture of shells from debris<br>band on surface of McMurdo Ice Shelf.<br>KEL77 STU76A STU81                                                                                                     |
| 77°50S 165°50E RM<br>btwn Ross I-Brown Pen.                                                           | 4140±60 BP(QL-85)14C1 AL Mat, nonmarine, stranded<br>on ice-cored debris band, McMurdo Ice Shelf. STU81                                                                                                                    |
| 77°50S 165°50E RM<br>btwn Ross I-Brown Pen.                                                           | 5670±100 BP(QL-84)14C1 SH Mixture of shells from debris<br>band on surface of McMurdo Ice Shelf. KEL77 STU81                                                                                                               |
| 77°49S 166°39E G<br>Arrival Heights RM                                                                | 0.4 MY(K-46a)KA6 WR Gray olivine basalt;--. POL76<br>(more info. in Russian in POL76)                                                                                                                                      |
| 77°49S 166°39E G<br>Arrival Heights RM                                                                | 3.4 MY(K-45v)KA6 WR Speckled olivine basalt;--. POL76<br>(more info. in Russian in POL76)                                                                                                                                  |
| 77°48.5S 166°44.6E R<br>Half Moon Crater                                                              | 1.0±0.15 MY(YU-McM-HP4;22878)KA9 WR Hornblende basalt<br>(or trachybasalt); Melania Basalt Fm. ARM78                                                                                                                       |
| 77°48S 166°46E G<br>"Sulphur Cone"<br>(nr Castle Rock) RM                                             | 4.7 MY(K-53)KA6 WR Hornblende basalt;<br>--. POL76<br>(more info in Russian in POL76)                                                                                                                                      |
| 77°48S 166°46E G<br>Castle Rk, Ross I. RM                                                             | 2.2 MY(K-42)KA6 WR Amphibole basalt;--. POL76<br>(more info in Russian in POL76)                                                                                                                                           |
| 77°48S 166°46E G<br>Castle Rock RM                                                                    | 0.5 MY(K-76)KA6 WR Amphibole basalt;--. POL76<br>(more info in Russian in POL76)                                                                                                                                           |
| 77°48S 166°46E G<br>Castle Rock RM                                                                    | 1.21±0.05 MY(22879)KA17 WR Basanite dike;<br>--. KYL74 KYL81A                                                                                                                                                              |
| 77°46S 166°51E G<br>N part, Hut Pt Pen. RM                                                            | 5.0 MY(K-2)KA6 WR Kenyte;--. POL76<br>(more info in Russian in POL76)                                                                                                                                                      |
| 77°38S 166°24E G<br>Cape Evans                                                                        | 1570±90 BP(#!)14C AL Remains. YAM67 DOR81                                                                                                                                                                                  |
| 77°35S 166°14E M<br>nr Cape Barne,<br>Ross Island                                                     | 2760±100 BP(Y-2643)14C1 GB Mat, alt. 70 m on surface<br>of ice-cored Ross Sea Drift. DEN70 STU81<br>("Y-2623" in DEN70 should read Y-2643)                                                                                 |

|                                                    |                                                                                                                                                                                                       |
|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 77°35S 166°14E RM<br>nr Cape Barne,<br>Ross Island | GT 49,000 BP(Y-2642)14C1 SH Mixture, in sponge mat<br>resting on ice core, overlain by kenyte-rich<br>Ross Sea ablation drift, 59 m a.s.l. DEN70 STU81                                                |
| 77°35S 166°14E RM<br>Cape Barne,<br>Ross Island    | GT 47,000 BP(Y-2641)14C1 SH Mixture, in sponge mat<br>resting on ice core, overlain by kenyte-rich<br>Ross Sea ablation drift, 28.0-32.0 m a.s.l.<br>DEN70 STU81                                      |
| 77°35S 166°14E RM<br>nr Cape Royds,<br>Ross Island | 36,300+1200-1000 BP; 39,000+2100-1700 BP(QL-83)14C1 SH<br>Marine (largely <i>Serpulae</i> ), mixed into Ross Sea<br>ablation drift on ice core. STU81                                                 |
| 77°34S 166°12E G<br>Backdoor Bay, Ross I.          | 120,000+6000 BP(?)U/T SH Mollusk in uplifted marine<br>sediments with <i>Globocassidulina biora</i> . KEL79A STU81                                                                                    |
| 77°34S 166°13E G<br>N of Deep Lake,<br>Cape Barne  | 36,000+2300 BP(?)14C1 CA Mollusca and Bryozoa from<br>marine sediment above the permafrost table. HEN69                                                                                               |
| 77°33.5S 166°16.2E R<br>Cape Barne*                | 0.8±0.2 MY(YU-McM-PKA6;22909)KA9 WR Basalt;-- ARM78<br>(*"Middle Cone")                                                                                                                               |
| 77°33.4S 166°16.9E R<br>Cape Barne*                | 0.94±0.05 MY(YU-McM-PKA7;22910)KA9 FD Kenyte;-- ARM78<br>(*btwn. "Middle and East cones")                                                                                                             |
| 77°33S 166°09E G<br>Cape Royds                     | 0.68±0.14 MY(?)K/A AN Trachyte (Antarctic kenyte)<br>flow; youngest flow exposed. TRE67 TRE68                                                                                                         |
| 77°32.0S 167°07.6E R<br>2nd Crater, Mt. Erebus     | 0.20±0.07 MY(YU-McM-E15)KA9 WR Glassy kenyte;<br>McMurdo Volcanic Group. ARM78                                                                                                                        |
| 77°32.0S 167°07.6E R<br>2nd Crater, Mt. Erebus     | 0.15±0.05 MY(YU-McM-E15)KA9 WR Glassy kenyte;<br>McMurdo Volcanic Group. ARM78                                                                                                                        |
| 77°31.9S 167°08.8E R<br>summit, Mt. Erebus         | 0.44±0.09 MY(YU-McM-ES)KA9 AN Decomposed glass froth;<br>McMurdo Volcanic Group. ARM78                                                                                                                |
| 77°31.9S 167°08.8E R<br>summit, Mt. Erebus         | 0.45±0.2 MY(YU-McM-13170)KA9 GS Trachyte;<br>McMurdo Volcanic Group. ARM78                                                                                                                            |
| 77°31.9S 167°08.8E R<br>summit, Mt. Erebus         | 0.55±0.15 MY(YU-McM-13710)KA9 AN Trachyte;<br>McMurdo Volcanic Group. ARM78                                                                                                                           |
| 77°31.9S 167°57.1E R<br>summit, Mt. Terra Nova     | 0.8±0.5 MY(YU-McM-14970)KA9 AN Pyroxene trachyte;<br>McMurdo Volcanic Group. ARM78                                                                                                                    |
| 77°31.0S 169°19.4E R<br>Cape Crozier               | 1.29±0.05 MY(YU-McM-PKA52;22955)KA9 WR Pyroxene<br>trachyte; Aurora Trachyte Fm. ARM78                                                                                                                |
| 77°31S 169°24E G<br>Cape Crozier area RM           | 1.71 MY(?)K/A -- Volcanic rock sample(s);<br>McMurdo Volcanic Group. KYL81<br>(sample taken from RM, source not determined)                                                                           |
| 77°30S 168°00E G<br>Ross Island<br>and vicinity*   | c.1500 MY PPM WR 18 phonolites, trachybasalts, and<br>basanitoids; Cenozoic volc. province. SUN75<br>(*one sample is from Taylor Valley, Mt. Discovery,<br>and Mt. Morning; two-stage model lead age) |
| 77°29.3S 167°11.5E R<br>Fang Ridge,<br>Mt. Erebus  | 0.81±0.02 MY(YU-McM-E10)KA9 WR Fine grained plagio-<br>clase basalt; McMurdo Volc. Gp. (oldest rk. on<br>ridge). ARM78                                                                                |
| 77°28.7S 167°11.2E R<br>Fang Ridge,<br>Mt. Erebus  | 0.73±0.07 MY(YU-McM-3AA)KA9 WR Porphyritic plagioclase<br>basalt; McMurdo Volc. Gp. (youngest flows on<br>ridge). ARM78                                                                               |
| 77°28.2S 169°13.9E R<br>Cape Crozier               | 1.31±0.04 MY(YU-McM-PKA40;22934)KA9 WR Hornblende<br>trachyte; Aurora Trachyte Fm. ARM78                                                                                                              |
| 77°27.8S 169°18.6E R<br>Cape Crozier               | 0.8±0.14 MY(YU-McM-PKA73;22976)KA9 WR Olivine<br>basalt; Melania Basalt Fm. ARM78                                                                                                                     |

|                                                                                |                                                                                                                                                                                                          |
|--------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 77°26.48S<br>178°30.19W R<br>Site 270, SE Ross Sea                             | 26.1±0.4 MY, 25.9±0.4 MY (73-1184) KA12 GU Calcareous greensand; unit 3. MCD76 (DSDP Leg 28, Sample 270-43-6, 125-135 cm (364 m subbottom depth), c. 2% impurities)                                      |
| 77°26.48S<br>178°30.19W R<br>Site 270, SE Ross Sea                             | 27.9±0.4 MY, 28.1±0.4 MY (73-1184) KA12 GU Calcareous greensand; unit 3. MCD76 (DSDP Leg 28, Sample 270-43-6, 125-135 cm (364 m subbottom depth), c. 8% impurities)                                      |
| 77°21.7S 173°04.0E,<br>77°25.5S 173°46.5E,<br>77°26.1S 174°47.7E R<br>Ross Sea | 7360±3700-2500 BP (QL-1125) 14C1 OC Diatom-rich sediment; basal portion of unit A. KEL79 (composite sample from Ross Sea trigger cores GL76-1TW, 10-15 cm; GL76-12TW, 15-20 cm; and GL76-13TW, 12-23 cm) |
| 77°17.1S 166°43.2E<br>summit, Mt. Bird                                         | 4.5±0.6 MY (YU-McM-15970) KA9 WR Trachyte; --. ARM78                                                                                                                                                     |
| 77°17.0S 166°21.9E R<br>Cape Bird                                              | 3.15±0.09 MY (YU-McM-PKA32; 22935) KA9 WR Pyroxene-hornblende trachyte; Aurora Trachyte Fm. ARM78                                                                                                        |
| 77°16.7S 166°20.6E R<br>Cape Bird                                              | 3.0±0.15 MY (YU-McM-PKA31; 22934) KA9 WR Hornblende trachyte; Trachyte Hill Fm. ARM78                                                                                                                    |
| 77°15.1S 166°22.2E R<br>Cape Bird                                              | 3.7±0.2 MY (YU-McM-PKA29; 22932) KA9 WR Olivine-augite-plagioclase basalt; Melania Basalt Fm. ARM78                                                                                                      |
| 77°10.3S 168°06E R<br>Ross Sea                                                 | 5600±120 BP (QL-1288) 14C1 OC Diatom-rich sediment, bulk sample; Unit A. KEL79B (from core GL78-11, 240-270 cm depth)                                                                                    |
| 77°10S 166°41E G<br>Cape Bird RM                                               | 43,000±6700 BP (588) 14C SH Fragments (dominated by lamellibranch <i>Zygoclamys</i> ) in volcanic cgl.; Scallop Hill Fm. SPE62 (min. age since partial recrystallization)                                |
| 77°10S 168°05E R<br>Ross Sea                                                   | 7490±120 BP (QL-1287) 14C1 OC Diatom-rich sediment, bulk sample; Unit A. KEL79B (from core GL78-10, 310-340 cm depth)                                                                                    |
| 77°10S 168°05E R<br>Ross Sea                                                   | 3480±80 BP (QL-1286) 14C1 OC Diatom-rich sediment, bulk sample; Unit A. KEL79B (from core GL78-7, 10-40 cm depth)                                                                                        |
| 76°23S 166°53E R<br>Ross Sea                                                   | 6490±100 BP (QL-1285) 14C1 OC Diatom-rich sediment, bulk sample; Unit A. KEL79B (from core GL78-7, 10-40 cm depth)                                                                                       |
| 76°05S 168°19E RM<br>W side, Franklin I.                                       | 1750±70 BP (QL-170) 14C1 PQ Adelie, in seacliff exposure; top of upper unit of bedded brown sand and gravel. STU81                                                                                       |
| 76°05S 168°19E RM<br>W side, Franklin I.                                       | 3150±80 BP (QL-169) 14C1 PQ Adelie, in seacliff exposure; middle of upper unit of bedded brown sand and gravel. STU81                                                                                    |
| 76°05S 168°19E RM<br>W side, Franklin I.                                       | 5340±50 BP (QL-141) 14C1 PQ Adelie, lowermost remains in seacliff exposure; base of upper unit of bedded brown sand and gravel. DEN75 STU81                                                              |
| 76°00.7S 168°21E R<br>Franklin I.                                              | 4.8±2.0 MY (YU-McM-R2C) KA9 WR Olivine basalt; McMurdo Volcanic Group. ARM78                                                                                                                             |

## GEOGRAPHIC AREA 28:

MARIE BYRD LAND (samples from west to east  
by coordinates)

|                       |                                                   |
|-----------------------|---------------------------------------------------|
| 78°09S 155°18W R      | 92±5 MY(?)K/A BT Granite;--. WAD69 WAD72A         |
| Tennant Peak          | (from C. Craddock, pers. comm.)                   |
| 78°04S 155°07W R      | 102±3 MY(?)K/A BT Schist;--. WAD69 WAD72A         |
| Breckenridge Peak     | (from C. Craddock, pers. comm.)                   |
| 77°52S 154°58W R      | 104±4 MY(?)K/A BT Granite;--. WAD69 WAD72A        |
| Mt. Jackling          | (from C. Craddock, pers. comm.)                   |
| 78°05'30"S 154°48W R  | 95.9±3.5 MY(?)K/A BT Granitoid rock;              |
| Mt. Franklin          | --. WAD72                                         |
| 78°02S 154°36W R      | 102±4 MY(?)K/A BT Granite (basis segregation);    |
| Mt. Paterson          | --. WAD69 WAD72A                                  |
|                       | (from C. Craddock, pers. comm.)                   |
| 77°02S 148°36W R      | 107±4 MY(?)K/A BT Granitoid rock;                 |
| Prezbecheski I.       | --. WAD72                                         |
| 77°52S 148°10W R      | 101±4 MY(?)K/A BT Granitoid rock;                 |
| McKinley Peak         | --. WAD72                                         |
| 76°25S 147°22W G      | 95±5 MY(66-D-172)RSM4/0.707* BT Biotite-quartz-   |
| Mitchell Peak         | feldspar schist;--. HAL72                         |
|                       | (*calculated from total-rock-mineral data)        |
| 76°25S 147°22W G      | 102±5 MY(66-D-166)RSM4/0.706* BT Quartz-biotite-  |
| Mitchell Peak         | schist;--. HAL72                                  |
|                       | (*calculated from total-rock-mineral data)        |
| 76°54S 146°45W R      | 355±12 MY(?)K/A BT Granodioritic pluton;          |
| Radford I.            | --. WAD72                                         |
| 76°29S 146°20W G      | 98±5 MY(66-D-164)RSM4/0.710 BT Gneiss;--. HAL72   |
| Birchall Peaks*       | (*south nuns.)                                    |
| 76°29S 146°20W G      | 100±5 MY(66-D-159)RSM4/0.715 BT Gneiss;--. HAL72  |
| Birchall Peaks*       | (*cen. nuns.)                                     |
| 76°33S 145°50W R      | 130 MY(K-182)K/A WR Amphibolite;                  |
| Fosdick Mountains     | Proterozoic gneiss-migmatite complex. LOP76       |
| 76°51S 145°48W R      | 348±12 MY(?)K/A BT Granodioritic pluton;          |
| Saunders Mtn.         | --. WAD72                                         |
| 76°15S 145°42W R      | 134±5 MY(?)K/A BT Granitoid rock;                 |
| West Nunatak          | --. WAD72                                         |
| 77°04S 145°38W R      | 101±4 MY(?)K/A BT Granitoid rock;                 |
| The Billboard         | --. WAD72                                         |
| 76°15S 145°36W R      | 120 MY(K-186v)KA6 WR Porphyraceous granite;       |
| Phillips Mountains RM | intrusive "Chalky complex." KRY70 LOP76           |
| 76°40S 145°30W R      | 98.4±3.6 MY(?)K/A BT Granitoid rock;              |
| Chester Mtns.         | --. WAD72                                         |
| 76°06'30"S 145°08W R  | 88±3.4 MY(?)K/A WR Granitoid rock;                |
| Webster Bluff         | --. WAD72                                         |
| 76°16S 145°07W G      | 352±21 MY RS8I4/0.7066±0.0168 WM Quartz diorite;  |
| Mt. June area         | --. HAL68                                         |
| and Phillips Mtns.*   | (*northmost nun. in W. Phillips Mtns.)            |
| 76°16S 145°07W G      | 320±40 MY RS3I4 WR Quartz diorite;                |
| Mt. June area         | --. HAL68                                         |
| and Phillips Mtns.*   | (*northmost nun. in W. Phillips Mtns.)            |
| 76°16S 145°02W R      | 328±5 MY(?)K/A BT Granodioritic pluton;           |
| Mt. June              | --. WAD72                                         |
| 77°33S 145°00W R      | 475 MY(K-144)KA6 WR Phyllite-like schist;         |
| Mt. West              | metasedimentary/metavolcanic complex. KRY70 LOP76 |

|                                                                |                                                                                                                   |
|----------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 77°33S 145°00W R<br>Mt. West                                   | 470 MY(K-144-A)KA6 WR Phyllite-like schist;<br>metasedimentary/metavolcanic complex. KRY70 LOP76                  |
| 77°26S 145°00W R<br>Mt. West                                   | 445 MY(K-159)KA6 WR Phyllite-like schist;<br>metasedimentary/metavolcanic complex. KRY70 LOP76                    |
| 76°30S 144°50W RM<br>midway btwn Mt.'s<br>Colombo and Lockhart | 92±5 MY(66-D-98)RSM4/0.724* BT Biotite-feldspar<br>gneiss;-- HAL72<br>(*calculated from total-rock-mineral data)  |
| 76°28S 144°50W R<br>N Flank, Fosdick Mtns.                     | 39±4 MY(66-D-91)KA7 FD Scoriaceous olivine-basalt;<br>intraglacial volcanic deposits. LEM82                       |
| 76°30S 144°50W R<br>Fosdick Mountains                          | 120 MY(K-167)K/A WR Amphibolite;<br>Proterozoic gneiss-migmatite complex. LOP76                                   |
| 76°30S 144°50W R<br>Fosdick Mountains                          | 100 MY(K-167 <sup>3</sup> )KA6 WR Biotite-cordierite schist;<br>Proterozoic gneiss-migmatite complex. KRY70 LOP76 |
| 77°10S 144°48W G<br>Asman Ridge RM                             | 115 MY(K-177)KA6 WR Porphyreous granite;<br>-- KRY70                                                              |
| 77°10S 144°48W G<br>Asman Ridge RM                             | 155 MY(K-181-A)KA6 WR Quartzite;<br>-- KRY70                                                                      |
| 77°10S 144°48W G<br>Asman Ridge RM                             | 110 MY(K-176)KA6 WR Mica schist in contact with<br>granites;-- KRY70                                              |
| 76°34S 144°41W R<br>Fosdick Mtns.                              | 92±5 MY(??)K/A BT Biotite-gneiss;-- WAD69 WAD72A<br>(from C. Craddock, pers. comm.)                               |
| 76°34S 144°39W G<br>W of Mt. Richardson                        | 96±5 MY(66-D-88A)RSM4/0.716* MC Muscovite granite<br>-- HAL72<br>(*calculated from total-rock-mineral data)       |
| 76°36S 144°30W R<br>Fosdick Mountains                          | 100 MY(K-172)KA6 WR Biotite-granite-gneiss;<br>Proterozoic gneiss-migmatite complex. KRY70 LOP76                  |
| 76°49S 144°26W R<br>Wiener Peaks                               | 299±11 MY(??)K/A BT Granitoid rock;<br>-- WAD72                                                                   |
| 76°31S 144°21W R<br>Fosdick Mountains                          | 190 MY(K-202-L)KA6 WR Magmatized-biotite-gneiss;<br>Proterozoic gneiss-migmatite complex. KRY70 LOP76             |
| 76°50S 144°12W R<br>Weiner Peaks                               | 290 MY(K-134)KA6 WR Biotite granite;<br>Mid. Paleozoic intrusive. KRY70 LOP76                                     |
| 76°32S 144°08W G<br>W of Mt. Perkins                           | 96±5 MY(66-D-63)RSM4/0.725* BT Granodiorite-gneiss;<br>-- HAL72<br>(*calculated from total-rock-mineral data)     |
| 76°32S 144°08W G<br>W of Mt. Perkins                           | 93±5 MY(66-D-64)RSM4/0.714* BT Quartz-monzonite-gneiss;<br>-- HAL72<br>(*calculated from total-rock-mineral data) |
| 76°32S 144°08W R<br>Mt. Perkins                                | 110.0 MY(K-151v)KA6 WR Basalt from a fragment in tuff;<br>Cenozoic volcanics. POL76 LOP76                         |
| 76°30S 144°00W R<br>Mt. Perkins                                | 4.5±0.5 MY(66-D-30)KA7 WR Basalt in hyaloclastite;<br>upper part, 40m thick hyaloclastite section. LEM82          |
| 76°30S 144°00W R<br>Mt. Perkins                                | 3.4±0.3 MY(66-D-28)KA7 WR Basalt in hyaloclastite;<br>stratigraphically below sample 66-D-30. LEM82               |
| 76°30S 144°00W R<br>Mt. Perkins                                | 19±2 MY(66-D-27)KA7 FD Basalt nodule in hyaloclastite;<br>stratigraphically below 66-D-28. LEM82                  |
| 76°58S 143°48W R<br>Mt. Swan                                   | 334±12 MY(??)K/A BT Granodioritic pluton;<br>-- WAD72                                                             |
| 76°57S 143°45W R<br>Mt. Swan                                   | 325 MY(K-125)K/A WR Granite;<br>Mid. Paleozoic intrusive. LOP76<br>(Klimov, pers. comm.)                          |
| 77°16'12"S<br>142°18'54"W R<br>Mt. Atwood, Clark Mtns.         | 137±9 MY(BTB-30;523F)RSM4 KF Adamellite within pluton;<br>intrudes metasediments. BOU66 WAD69                     |

- 77°16'12"S  
142°18'54"W R  
Mt. Atwood, Clark Mtns.  
77°16'12"S  
142°18'54W R  
Mt. Atwood, Clark Mtns.  
77°17S 142°15W R  
Clark Mountains  
75°37S 142°00W R  
Mt. Shirley  
75°37S 142°00W R  
Mt. Shirley
- 75°37S 142°00W R  
Mt. Shirley
- 75°52S 141°10W G  
Mt. McCoy  
76°00S 141°00W R  
Mt. Hartkopf
- 75°54S 140°58W R  
Mt. Pearson RM  
75°54S 140°57W G  
Mt. Pearson  
(=Pearson Peak)  
76°01S 140°41W G  
Milan Rock  
74°45S 140°40W R  
Cruzen Island  
75°53S 140°36W G  
Lewis Bluff  
73°52S 140°30W R  
Lewis Bluff RM  
75°39S 140°05W R  
Bailey Nun. RM  
75°32S 140°02W G  
Billey Bluff  
75°32S 140°02W G  
Billey Bluff  
75°32S 140°02W G  
Billey Bluff
- 75°40S 140°02W G  
Bailey Nunatak
- 75°32S 140°02W G  
Landry Peak  
(=Billey Bluff)
- 116+10 MY(BTB-30;523R;F5\*)RSM4 WR Adamellite within  
pluton; intrudes metasediments. BOU66 WAD69  
(\*site number in SCH72)  
143+4 MY(BTB-30;523B)KA13 BT Adamellite within pluton;  
intrudes metasediments. BOU66 WAD69
- 140 MY(K-143)KA6 WR Leucocratic granite;  
intrusive "Chalky complex." KRY70 LOP76  
156 MY R/S WR Diabasitic metaporphryrite;  
metasedimentary/metavolcanic complex. CRA70 LOP76  
100 MY(??)K/A WR Diabasitic metaporphryrite;  
metasedimentary/metavolcanic complex. CRA70 LOP76  
(only one 100 MY sample is listed in CRA70 while  
LOP76 also lists a 100 MY syenite; infer one  
or both of these=100+2 metavolcanic in SP081)  
100 MY(??)K/A WR Quartzose syenite;  
intrusive "Chalky complex." CRA70 LOP76  
(only one 100 MY sample is listed in CRA70 while  
LOP76 also lists a 100 MY metaporphryrite; infer one  
or both of these=100+2 MY metavolcanic in SP081)  
103+4 MY(??)K/A WR Metavolcanic rocks;--. SP081  
(may=Mt. Hartkopf syenite in CRA70, LOP76)  
103 MY(??)K/A WR Quartzose syenite;  
intrusive "Chalky complex." CRA70 LOP76  
(may=Mt. McCoy metavolcanic in SP081)  
109+9 MY,112+9 MY(7677Tr;RC1A)KA9 WR Andesite dike;  
Cretaceous Volcanic Rocks. GRI83  
121 MY(??)RSM3/0.705 BT Plutonic igneous rock;  
--. HAL79  
101 MY(??)RSM3/0.705 BT Plutonic igneous rock;  
--. HAL79  
268+0.13 MY(51C)KA7 WR Subaerial basalt nr top of 150 m  
section; overlies 100+ m hyaloclastite. LEM83  
128 MY(??)RSM3/0.705 BT Plutonic igneous rock;  
--. HAL79  
104+3 MY(7682Tr;RC23B)KA9 WR Dolerite dike;  
Cretaceous Volcanic Rocks. GRI83  
91+2 MY(7668Tr;RC7A)KA9 WR Camptonite dike;  
Cretaceous Volcanic Rocks. GRI83  
102 MY(??)RSM3/0.705 BT Plutonic igneous rock  
--. HAL79  
94+12 MY RS5I3/0.7054+0.0013 WR Plutonic igneous  
rocks;--. HAL79  
113+1 MY(??)K/A WR Porphyritic basalt; --. SP081  
(infer=113 MY syenite of intrusive "Chalky  
complex" cited from CRA70 by LOP76)  
98+1 MY(??)K/A WR Rhyolite porphyry;--. SP081  
(infer=98 MY syenite of intrusive "Chalky  
complex" cited from CRA70 by LOP76)  
92 MY(??)R/S --\* Granite;--. MET78  
(\*infer=92 MY BT from syenite of the intrusive  
"Chalky complex" cited from CRA70 by LOP76)



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| 77°00S 140°00W G<br>nunataks,*<br>Ford Ranges                      | 98±3 MY RS6I4/0.7060±0.0015 WR Monzonite, quartz diorite, granodiorite, and adamellite; (Andean orogenic belt). HAL68<br>(*Mt. Corey, Mt. Peddie, O'Connor Nun., Hutcheson Nun.) |
| 75°29S 139°45W G<br>Ickes Mtns.                                    | 96 MY(??)K/A AM Alkali granite;-- MET78<br>(infer=96 MY syenite from intrusive "Chalky complex" cited from CRA70 by LOP76)                                                       |
| 75°20S 138°25W R<br>Mt. Shirley                                    | 140 MY R/S WR Diabasitic metaporphyrity;<br>metasedimentary/metavolcanic complex. CRA70 LOP76                                                                                    |
| 75°38S 138°10W R<br>Ruppert Coast                                  | 115 MY(K-240)KA6 WR Trachytic metaporphyrity;<br>metasedimentary/metavolcanic complex. KRY70 LOP76                                                                               |
| 75°24S 137°54W R<br>Lambert nun. RM                                | 94±3 MY(7670Tr; RC42A)KA9 WR Quartz dolerite dike;<br>Cretaceous Volcanic Rocks. GRI83                                                                                           |
| 75°05S 137°45W R<br>Mt. Giles                                      | 473 MY(??)R/S WR Gabbro;<br>Early Paleozoic intrusive. CRA70 CRA72 LOP76                                                                                                         |
| 75°05S 137°45W R<br>Mt. Giles                                      | 423 MY(??)R/S WR Diorite;<br>Early Paleozoic intrusive. CRA70 CRA72 LOP76                                                                                                        |
| 75°09S 137°37W G<br>Mt. Giles,<br>and 75°01S 136°42W G<br>Mt. Gray | 154±35 MY RS3I WR Gabbro(1), quartz monzonite(1)<br>and quartz diorite (1);-- MET78<br>(first 2 rocks from Mt. Giles, third rock from Mt. Gray)                                  |
| 75°09S 137°37W G<br>Mt. Giles                                      | 103 MY(??)RSM3/0.705 BT Plutonic igneous rock;<br>-- HAL79                                                                                                                       |
| 75°09S 137°37W G<br>Mt. Giles                                      | 133 MY(??)RSM3/0.705 BT Plutonic igneous rock;<br>-- HAL79                                                                                                                       |
| 74°45S 136°50W R<br>Cape Burks RM                                  | 99±3 MY,95±3 MY(7672Tr;CB7A)KA9 WR Andesite dike;<br>Cretaceous Volcanic Rocks. GRI83                                                                                            |
| 75°05S 136°20W R<br>Mt. Gray                                       | 317 MY(??)R/S WR Diorite;<br>Early Paleozoic intrusive. CRA70 CRA72 LOP76                                                                                                        |
| 76°01S 136°16W G<br>Mefford Knoll                                  | 0.63±0.03 MY(14B)KA7 WR Subaerial lava, 125 m above ice level;-- LEM83                                                                                                           |
| 76°04S 136°11W G<br>Kraut Rocks                                    | 0.62±0.05 MY(7E)KA7 WR Subaerial lava, 200 m above ice level;-- LEM83                                                                                                            |
| 76°03S 136°03W G<br>Merrem Peak                                    | LIT 0.1 MY(31A)KA7 WR Subaerial lava, 1000 m above ice level;-- LEM83                                                                                                            |
| 75°57S 136°00W R<br>Brandenberger Bluff                            | 2.58±0.10 MY(3C)KA7 WR Basalt lens of nodule in hyaloclastite; base of section, at ice level. LEM83                                                                              |
| 75°57S 136°00W R<br>Brandenberger Bluff                            | 2.23±0.26 MY(3D)KA7 WR Basalt lens or nodule in hyaloclastite; base of section, at ice level. LEM83                                                                              |
| 75°57S 136°00W R<br>Brandenberger Bluff                            | 2.70±0.10 MY(4C)KA7 WR Basalt lens or nodule in hyaloclastite; top of section. LEM83                                                                                             |
| 76°06S 135°56W G<br>Wedemeyer Rocks                                | 2.5±0.2 MY(67A-35)KA7 WR Subaerial lava, 200 m above ice level;-- LEM83                                                                                                          |
| 76°03S 135°52W G<br>Berlin Crater                                  | LIT 0.1 MY(23C)KA7 WR Subaerial lava, 1300 m above ice level;-- LEM83                                                                                                            |
| 75°00S 135°40W R<br>Bowyer Butte                                   | 9.56±0.90 MY(57D)KA7 WR Basalt, 5 m. tk, on hyaloclastite; overlain by 10-20 m of flow rock. LEM83<br>(13±2 MY date from LEM82 from same section)                                |
| 75°59S 135°18W G<br>Edwards Spur                                   | 4.6±0.3 MY(67-1A)KA7 WR Subaerial lava, 200 m above ice level;-- LEM83                                                                                                           |
| 76°03S 135°08W G<br>Mt. Moulton                                    | 4.68±0.61 MY(2A)FTK GS Volcanic rock;<br>-- SEW80                                                                                                                                |
| 76°03S 135°08W G<br>Mt. Moulton                                    | 4.8±0.4 MY(2A)K/A GS Volcanic rock;-- SEW80<br>(same or closely adjacent to sample 2A, FTK date)                                                                                 |

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| 75°00S 135°00W R<br>Bowyer Butte RM                 | 13+2 MY(5)KA7 WR Basalt in hyaloclastite;<br>"single subaerial(?) flow on basement." LEM72 LEM82<br>(previously reported as 23.2+2.1 MY in LEM72)                                             |
| 76°04S 134°43W G<br>Prah! Crags                     | 4.8+0.4 MY(67-2A)KA7 WR Subaerial lava, 450 m above ice<br>level;--. LEM83                                                                                                                    |
| 75°10S 134°30W G<br>Bennett Bluff                   | 101 MY(?)RSM3/0.705 BT Plutonic igneous rock;<br>--. HAL79                                                                                                                                    |
| 74°58S 134°11W G<br>Mt. Prince                      | 75 MY(?)RSM3/0.705 BT Plutonic igneous rock;<br>--. HAL79                                                                                                                                     |
| 74°58S 134°10W R<br>Mt. Prince RM                   | 91+3 MY(7673Tr;HC17)KA9 WR Microdiorite dike;<br>Cretaceous Volcanic Rocks. GRI83                                                                                                             |
| 74°55S 133°50W R<br>Holmes Bluff                    | 6.0 MY(K-268d)KA6 WR Basalt;<br>Cenozoic volcanics. POL76 LOP76                                                                                                                               |
| 75°07S 133°45W R<br>S end, Kouperov Pk              | 8.21+0.33 MY(47B)KA7 WR Subaerial lava, 180 m above ice<br>level;--. LEM83                                                                                                                    |
| 75°00S 133°45W R<br>Holmes Bluff                    | 8.17+0.33 MY(48B)KA7 WR Subaerial basalt flow;<br>rest on peneplain remnant at 600 m. elev. LEM83                                                                                             |
| 75°00S 133°45W R<br>N side, Holmes Bluff            | 6.27+0.25 MY(50A)KA7 WR Basalt flow, 20 m. tk, with<br>1 m. of basal hyaloclastite. LEM83                                                                                                     |
| 74°59S 133°43W G<br>Holmes Bluff                    | 99 MY(?)RSM3/0.705 BT Plutonic igneous rock;<br>intrudes metasedimentary and metaigneous rks. HAL79                                                                                           |
| 74°59S 133°43W G<br>Holmes Bluff                    | 100 MY(?)RSM3/0.705 BT Plutonic igneous rock;<br>intrudes metasedimentary and metaigneous rks. HAL79                                                                                          |
| 74°59S 133°43W G<br>Holmes Bluff                    | 101 MY(?)RSM3/0.705 BT Plutonic igneous rock;<br>intrudes metasedimentary and metaigneous rks. HAL79                                                                                          |
| 75°14S 133°42W R<br>Patton Bluff RM                 | 99+4 MY(7669Bi;HC8)KA9 BT Microdiorite dike;<br>Cretaceous Volcanic Rocks. GRI83                                                                                                              |
| 75°13S 133°40W R<br>Patton Bluff                    | 9.97+0.40 MY(37A)KA7 WR Basalt flow, 5 m. tk, with 1 m<br>of basal hyaloclastite; rests on peneplain. LEM83                                                                                   |
| 75°20S 133°40W R<br>Coleman Nunatak                 | 2.63+0.11 MY(35K)KA7 WR Basalt lens or nodule in hyalo-<br>clastite; top of section. LEM83                                                                                                    |
| 75°20S 133°40W R<br>Coleman Nunatak                 | 3.19+0.33 MY(35E)KA7 WR Basalt lens or nodule in hyalo-<br>clastite; middle portion of section. LEM83                                                                                         |
| 75°20S 133°40W R<br>Coleman Nunatak                 | 2.34+0.11 MY(35m)KA7 WR Basalt lens or nodule in hyalo-<br>clastite; middle portion of section. LEM83                                                                                         |
| 75°10S 133°35W R<br>Shibuya Peak                    | 4.66+0.50 MY(38A)KA7 WR Basalt lens or nodule in hyalo-<br>clastite; middle of section, at top of tillite.<br>LEM83                                                                           |
| 75°10S 133°35W R<br>Shibuya Peak                    | 4.75+0.20 MY(38C)KA7 WR Basalt lens or nodule in hyalo-<br>clastite; middle of section at top of tillite. LEM83                                                                               |
| 75°40S 133°30W R<br>Shibuya Peak,<br>Hobbs Coast RM | 4.4+0.2 MY(6C)KA7 WR Basalt in hyaloclastite;<br>upper part of the 100-200 m subaquatic basal succes-<br>sion. LEM73 LEM82<br>(previously reported as 6.6+0.7 MY, 75°10S 133°45W<br>in LEM72) |
| 76°01S 133°11W G<br>Starbuck Crater                 | 8.54+0.34 MY(25A)KA7 WR Subaerial lava, 100 m above ice<br>level;--. LEM83                                                                                                                    |
| 76°01S 133°11W G<br>Starbuck Crater                 | 9.0+1.0 MY(67A-7)KA7 WR Subaerial lava, 100 m above ice<br>level;--. LEM83                                                                                                                    |
| 76°00S 133°04W G<br>Koerner Bluff                   | 9.42+0.40 MY(67A-21)KA7 WR Subaerial lava, 450 m above<br>ice level;--. LEM83                                                                                                                 |
| 76°00S 133°04W G<br>E of Koerner Bluff              | 9.31+0.37 MY(29A)KA7 WR Cinder cone, 400 m above ice<br>level;--. LEM83                                                                                                                       |
| 75°58S 133°02W G<br>Syrstad Rock                    | 10.4+0.4 MY(24A)KA7 WR Subaerial lava, 30 m above ice<br>level;--. LEM83                                                                                                                      |

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| 76°00S 132°46W G<br>Heaps Rock                        | 6.04±0.24 MY(27A)KA7 WR Subaerial lava, 400 m above ice level;--. LEM83                                                             |
| 74°25S 132°43W G<br>Mt. Petinos                       | 0.6 MY(10*)K/A -- Basaltic hyaloclastite;<br>--. LEM80<br>(0.6±0.1 MY date given for Hawaiite in MCI81 may be based on this sample) |
| 76°01S 132°39W G<br>Hutt Peak                         | 0.43±0.06 MY(28A)KA7 WR Cinder cone, 650 m above ice level;--. LEM83                                                                |
| 74°23S 132°33W G<br>Mathewson Pt.                     | 0.6 MY(10*)K/A -- Thin basalt flow or cinder cones; overlies hyaloclastites. LEM80                                                  |
| 74°23S 132°33W G<br>Mathewson Pt.                     | 1.5 MY(10*)K/A -- Basaltic hyaloclastite;<br>--. LEM80                                                                              |
| 74°25S 132°30W R<br>Shepard Island                    | 0.6±0.1 MY(8E)KA7 WR Basalt lens or nodule in hyaloclastite; from +100 m level of the section. LEM83                                |
| 74°25S 132°30W R<br>Shepard Island                    | 0.42±0.06 MY(9F)KA7 WR Basalt lens or nodule in hyaloclastite; from +300 m level of the section. LEM83                              |
| 74°25S 132°30W R<br>Shepard Island                    | 0.6±0.1 MY(10D)KA7 WR Late subaerial trachyte flow, at sea level. LEM83                                                             |
| 75°35S 132°20W R<br>W Mt. Kauffman                    | 5.5±0.5 MY(67B-8)KA7 WR Subaerial lava, 350 m above ice level;--. LEM83                                                             |
| 75°50S 132°20W R<br>W end, Lind Ridge,<br>Mt. Andrus  | 11.1±0.5 MY(61C)KA7 FD Subaerial lava, 300 m above ice level;--. LEM83                                                              |
| 75°50S 132°20W R<br>WSW spur, Mt. Andrus              | 14.3±2.2 MY(67B-2)KA7 WR Subaerial lava, 200 m above level;--. LEM83                                                                |
| 75°50S 132°20W R<br>South Caldera wall,<br>Mt. Andrus | 10.5±0.4 MY(58D)KA7 WR Subaerial lava, 1100 m above ice level;--. LEM83                                                             |
| 75°50S 132°20W R<br>ctr., Lind Ridge,<br>Mt. Andrus   | 10.0±0.4 MY(59B)KA7 WR Subaerial lava, 900 m above ice level;--. LEM83                                                              |
| 75°50S 132°20W R<br>E end, Lind Ridge<br>Mt. Andrus   | LT 0.1 MY(60A)KA7 WR Cinder cone, 900 m above ice level;--. LEM83                                                                   |
| 75°50S 132°20W R<br>NW Mt. Andrus                     | 11.3±0.4 MY(44F)KA7 WR Subaerial lava, 800 m above ice level;--. LEM83                                                              |
| 75°43S 132°15W R<br>W Mt. Kosciusko                   | 10.0±0.4 MY(40A)KA7 WR Subaerial lava, 200 m above ice level;--. LEM83                                                              |
| 75°43S 132°15W R<br>W Mt. Kosciusko                   | 8.66±0.35 MY(40C)KA7 WR Cinder cone, 200 m above ice level;--. LEM83                                                                |
| 75°43S 132°15W R<br>W Mt. Kosciusko                   | 8.5±0.5 MY(67B-6)KA7 WR Subaerial lava, 200 m above ice level;--. LEM83                                                             |
| 75°43S 132°15W R<br>SW Mt. Kosciusko                  | 10.3±0.4 MY(43A)KA7 WR Cinder cone, 800 m above ice level;--. LEM83                                                                 |
| 75°48S 132°14W G<br>Mt. Andrus                        | 10.8±0.5 MY RS3I4/0.7035 WR Trachyte and obsidian; supraglacial stratovolcano. HAL70A LEM72A                                        |
| 76°00S 132°00W G<br>Mt. Bursey                        | 3.8 MY(0G-21.67)K/A WR Olivine-basalt; supraglacial stratovolcano. GON72 LEM72A                                                     |
| 75°35S 132°00W R<br>N end, Ames Range                 | 5.5±0.5 MY(67-B-8)K/A WR Trachyte; stratovolcano succession. LEM76                                                                  |
| 75°45S 132°00W R<br>cen. Ames Range                   | 8.5±0.5 MY(67-B-6)K/A WR Trachyte; stratovolcano succession. LEM76                                                                  |

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| 74°25S 131°50W R<br>Grant Island                      | 0.7±0.1 MY(11E)KA7 WR Basalt lens or nodule in hyaloclastite; from phreatomagmatic tuff cone. LEM83<br>(infer=from Mt. Obiglio, mentioned in LEM82A)                                    |
| 75°55S 128°46W R<br>Navarette Pk. RM                  | 104±3 MY(7671Hb;MP7A)KA9 HB Microdiorite dike;<br>Cretaceous Volcanic Rocks. GRI83                                                                                                      |
| 75°52S 128°39W G<br>1 km S of<br>Mt. Petras summit RM | 25.3±1.0 MY(PT67E)K/A WR Palagonite-tuff-breccia<br>(hyaloclastite); c.150-200m thick section overlying<br>erosion surface of rhyodacite. LEM81                                         |
| 75°52S 128°39W G<br>1 km S of<br>Mt. Petras summit    | 23.0±1.0 MY(PT67M)K/A WR Palagonite-tuff-breccia<br>(hyaloclastite); c.150-200m thick section overlying<br>erosion surface of rhyodacite. LEM81                                         |
| 75°52S 128°39W G<br>nr top, Mt. Petras RM             | 84.7±4.7(?) MY(13d)K/A WR Coarsely crystalline<br>basalt flow; topographically above 13b. LEM72                                                                                         |
| 75°45S 128°30W R<br>Mt. Petras                        | 80.8±5.7 MY(12C)K/A PL Rhyodacite ash flow;<br>Mesozoic Suite. LEM76                                                                                                                    |
| 75°50S 128°30W R<br>Mt. Petras RM                     | 22±1 MY(13b)KA7 WR Basalt in hyaloclastite;<br>from thin blanket of subaquatic basal succession<br>that overlies basement. LEM72 LEM82<br>(previously reported as 22.2±1.6 MY in LEM72) |
| 77°10S 127°00W R<br>S peak, Mt. Waesche               | 1.0±0.1 MY(33c)K/A WR Basalt (Hawaiiite);<br>--. LEM72B LEM76                                                                                                                           |
| 11°10S 127°00W R<br>S peak, Mt. Waesche               | 0.2±0.2 MY(39A')K/A WR Basalt (Benmoreite);<br>Stratovolcano succession. LEM72B LEM76                                                                                                   |
| 77°10S 127°00W R<br>Mt. Waesche                       | 0.93±0.18 MY, 1.48±0.33 MY(32A)FTK GS Volcanic rock;<br>--. LEM72B SEW80<br>(natural age and corrected age, respectively, for<br>annealed sample)                                       |
| 77°10S 127°00W R<br>N caldera, Mt. Waesche            | 1.6±0.2 MY(32A)KA7 SN Rhyolite;--. LEM72B LEM76 SEW80<br>(same or closely adjacent to sample 32A, FTK date)                                                                             |
| 77°02S 126°06W G<br>vicinity of Mt. Sidley            | 6.2 MY(?)KA8 WR Anorthoclase-trachyte boulder;<br>stratovolcano. DOU64 GON72                                                                                                            |
| 76°40S 126°00W R<br>Mt. Cumming                       | 9.7±0.5 MY(27A)K/A WR Trachyte;<br>stratovolcano succession. LEM76                                                                                                                      |
| 76°30S 126°00W R<br>Whitney Pk.,<br>Mt. Hampton       | 13.4±0.5 MY(24A)K/A AN Volcanic rock;<br>stratovolcano succession, NW caldera. LEM76                                                                                                    |
| 76°30S 126°00W R<br>SE caldera,<br>Mt. Hampton        | 8.3±0.5 MY(20D)K/A AN Volcanic rock;<br>stratovolcano. LEM76                                                                                                                            |
| 76°54S 126°00W R<br>Mt. Hartigan                      | 7.6±0.5 MY(46B)K/A WR Mugearite;<br>stratovolcano succession. LEM76                                                                                                                     |
| 75°55S 125°45W R<br>Mt. Galla                         | 87.6±4 MY(37)K/A FD Vitrophyric rhyolite;<br>Mesozoic Suite. LEM76                                                                                                                      |
| 75°50S 125°30W R<br>USAS Escarpment                   | 27±1 MY(58b)KA7 WR Basalt in hyaloclastite;<br>from poorly exposed, subaquatic basal succession.<br>LEM72 LEM76 LEM82<br>(previously reported as 31.3±2.0 MY in LEM72 LEM76)            |
| 76°03S 124°30W R<br>Mt. Aldaz RM                      | 19.4±1.5 MY(56b)KA7 WR Holocrystalline basalt;<br>100 m thick subaquatic basal succession over base-<br>ment. LEM72 LEM76 LEM82<br>(76°00S 124°30W in LEM76)                            |
| 76°30S 118°00W R<br>Mt. Steere RM                     | 8.3±0.3 MY(73)KA7 WR Holocrystalline basalt;<br>base of 1,200m thick subaquatic basal succession.<br>LEM72 LEM82<br>(previously rpt. as 7.0±1.1 MY in LEM72)                            |

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| 76°48S 117°42W R<br>Mt. Frakes                         | 6.0 MY(39)KA6 WR Basalt;<br>Cenozoic volcanics. POL76 LOP76                                                                                             |
| 76°57S 116°57W R<br>Boyd Ridge                         | 11.0 MY(36)KA6 WR Hyaloclastite tuff;<br>Cenozoic volcanics. POL76 LOP76                                                                                |
| 75°30S 116°00W R<br>Toney Mtn. RM                      | 0.500±0.2 MY(76B)K/A WR Felsite;<br>subaerial stratovolcano succession. LEM72 LEM72A                                                                    |
| 75°30S 116°00W R<br>Toney Mtn.                         | 0.5±0.1 MY(75)K/A WR Bernmoreite;<br>stratovolcano succession. LEM76                                                                                    |
| 75°50S 115°51W R<br>S slope, Toney Mt.                 | 11.5 MY(47a)KA6 WR Alkali trachyte;<br>Cenozoic volcanics. POL76 LOP76<br>(age=12.0 MY in LOP76)                                                        |
| 75°48S 115°48W G<br>Toney Mtn, alt. 1515               | 13.0 MY(42a)KA6 WR Alkali trachyte;<br>Cenozoic volcanics. POL76 LOP76<br>(age=2.3 MY in LOP76)                                                         |
| 75°48S 115°48W G<br>Toney Mtn.                         | 0.24±0.05, 0.29±0.10 MY(76D)FTK GS Volcanic rock;<br>--. SEW80<br>(natural age and corrected age, respectively, for<br>annealed sample)                 |
| 75°48S 115°48W G<br>Toney Mtn.                         | 0.5±0.2 MY(76D)K/A GS Volcanic rock;--. SEW80<br>(same or closely adjacent to sample 76D, FTK date)                                                     |
| 75°30S 115°00W R<br>Cox Bluff,<br>Toney Mtn. RM        | 9.0±1.0 MY(80A)K/A WR Holocrystalline basalt;<br>lower part, 200m thick subaerial basal succession.<br>LEM72 LEM76<br>(reported as 9.1±1.0 MY in LEM72) |
| 75°49S 115°00W R<br>"Schist Ridge,"<br>Jones Mountains | 12.0 MY(43v)KA6 WR Basalt;<br>Cenozoic volcanics. POL76 LOP76                                                                                           |
| 74°07S 114°55W R<br>Martin Peninsula                   | 370 MY(21v)K/A WR Metaporphyrity;<br>metasedimentary/metavolcanic complex. LOP76                                                                        |
| 75°06S 114°23W R<br>Kohler Range                       | 13.0 MY(22)KA6 WR Olivine basalt;<br>Cenozoic volcanics POL76 LOP76                                                                                     |
| 74°25S 114°10W G<br>Martin Pen. RM                     | 118±6 MY(W10*)RS2I4/0.706 BT,WR Quartz-diorite;<br>pluton. SCH72<br>(* = site number)                                                                   |
| 75°00S 114°00W R<br>Leister Peak RM                    | 9.8±1.7 MY(84)K/A WR Holocrystalline basalt;<br>basal succession. LEM72 LEM76                                                                           |
| 75°11S 113°50W R<br>Kohler Range                       | 90 MY(3)K/A WR Adamellite;<br>intrusive "Chalky complex." LOP76                                                                                         |
| 75°11S 113°50W R<br>Kohler Range                       | 150 MY(3v)K/A WR Principal dike;<br>intrusive "Chalky complex." LOP76                                                                                   |
| 75°11'20"S 113°49W R<br>Early Bluff                    | 101±4 MY(?)K/A BT Granitoid rock;<br>--. WAD72                                                                                                          |
| 75°04S 113°44W R<br>Kohler Range                       | 295 MY(4)K/A WR Metaporphyrity;<br>metasedimentary/metavolcanic complex. LOP76                                                                          |
| 74°59S 113°43W G<br>Mt. Isherwood                      | 174 MY(?)RSM3/0.705 BT Plutonic igneous rock;<br>--. HAL79                                                                                              |
| 74°59S 113°36W R<br>Mt. Isherwood                      | 283±10 MY(?)K/A BT Granitoid rock;<br>--. WAD72                                                                                                         |
| 74°58S 113°21W R<br>Mt. Strange                        | 265±20 MY(246)RS3I4/0.705 WR,BT,MC Quartz-diorite;<br>--. HAL72                                                                                         |
| 74°10S 113°20W R<br>Kohler Range                       | 95 MY(8)K/A WR Adamellite;<br>intrusive "Chalky complex." LOP76                                                                                         |
| 74°10S 113°20W R<br>Kohler Range                       | 90 MY(8)K/A BT Adamellite;<br>intrusive "Chalky complex." LOP76                                                                                         |

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|-----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 74°40S 113°20W R<br>Kohler Range        | 90 MY(7)K/A WR Diorite;<br>intrusive complex. IOP76                                                                                                                                             |
| 74°42S 113°02W R<br>Wunneburger Rk.     | 101±4 MY(7)K/A BT Granitoid rock;<br>--. WAD72                                                                                                                                                  |
| 76°00S 112°00W R<br>Mt. Takahe          | 0.2±0.2 MY(65B)KA7 WR Basalt in hyaloclastite;<br>intraglacial volcanic deposits. LEM72B LEM82                                                                                                  |
| 76°00S 112°00W R<br>Mt. Takahe RM       | LT 0.240 MY(65C)KA7 WR Aegerine syenite cognate<br>inclusion; subaquatic stratovolcano succession.<br>LEM72 LEM72A LEM82                                                                        |
| 76°00S 112°00W R<br>Mt. Takahe          | 0.3±0.3 MY(67A)KA7 WR Basalt in hyaloclastite;<br>intraglacial volcanic deposits. LEM72B LEM82                                                                                                  |
| 74°33'45"S 111°45W R<br>Jeffrey Head    | 143±11 MY(7)K/A BT Granitoid rock;<br>--. WAD72                                                                                                                                                 |
| 74°34S 111°44W R<br>Bear Peninsula      | 130 MY(14)K/A WR Adamellite;<br>intrusive "Chalky complex." IOP76                                                                                                                               |
| 74°38S 111°44W R<br>Bear Peninsula      | 295 MY(12)K/A WR Diorite;<br>Late Paleozoic intrusive. IOP76                                                                                                                                    |
| 74°38S 111°44W R<br>Bear Peninsula      | 290 MY(12)K/A AM Diorite;<br>Late Paleozoic intrusive. IOP76                                                                                                                                    |
| 74°40S 111°30W RM<br>NE Marie Byrd Land | 244±44 MY(10e)RSM4/0.706±0.002 WR Aplite;<br>basement rocks. HAL73 HAL74<br>(sample #="10f" in HAL74; ref. isochron age for<br>#s 10e, 26, and 26d = 240 MY)                                    |
| 75°15S 111°30W R<br>Turtle Peak         | 13±3 MY(61A)KA7 WR Basalt in hyaloclastite;<br>base of 800-1000m thick section. LEM82                                                                                                           |
| 75°15S 111°30W R<br>Turtle Peak RM      | 15±5 MY(61B)KA7 WR Basalt in hyaloclastite;<br>base of 800-1000m thick section. LEM72 LEM82<br>(previously reported as 42±9 MY, from base of<br>300-400m subaquatic basal succession, in LEM72) |
| 74°40S 111°30W R<br>Bear Peninsula      | 475 MY(10b)K/A WR Amphibolite;<br>Proterozoic gneiss-migmatite complex. IOP76                                                                                                                   |
| 75°27S 111°20W R<br>Dorrel Rock         | 44±2 MY, 42±2 MY(60A)KA7 WR Coarse-grained alkaline<br>gabbro; subvolcanic pluton. LEM72 LEM82<br>(previously reported as 53.1±4.2 MY in LEM72)                                                 |
| 75°27S 111°20W R<br>Dorrel Rock         | 28±2 MY(60D)KA7 WR Aegerine syenite dike;<br>in the gabbro described for sample 60A. LEM82                                                                                                      |
| 75°25S 111°20W R<br>Dorrel Rock         | 45.0 MY(25)K/A WR Gabbro-dolerite;<br>Cenozoic volcanics. IOP76<br>(more info. in Russian in IOP76)                                                                                             |
| 75°22S 111°18W R<br>Turtle Peak         | 9.0 MY(27)KA6 WR Hyaloclastite tuff;<br>Cenozoic volcanics. POL76 IOP76                                                                                                                         |
| 74°30S 111°16W R<br>Bear Peninsula      | 145 MY(16a)K/A WR Andesitic porphyrite;<br>metasedimentary/metavolcanic complex. IOP76                                                                                                          |
| 75°15S 111°00W R<br>Mt. Murphy RM       | 0.90±0.14 MY(62A)KA7 WR Holocrystalline basalt;<br>middle of 2,000m thick subaquatic basal succession.<br>LEM72 LEM82<br>(previously rpt. as 0.82±0.14 MY in LEM72)                             |
| 75°20S 110°53W R<br>Mt. Murphy          | 5.0 MY(30)KA6 WR Olivine basalt;<br>Cenozoic volcanics. POL76 IOP76                                                                                                                             |
| 74°40S 110°30W R<br>Bear Peninsula      | 225 MY(26v)K/A WR Porphyroblastic granodiorite;<br>Proterozoic gneiss-migmatite complex. IOP76                                                                                                  |
| 74°40S 110°30W R<br>Bear Peninsula      | 250 MY(26v)K/A BT Porphyroblastic granodiorite;<br>Proterozoic gneiss-migmatite complex. IOP76                                                                                                  |

74°40S 110°20W RM  
NE Marie Byrd Land

74°40S 110°20W RM  
NE Marie Byrd Land

240±20 MY(26)RSM4/0.706±0.002 BT Biotite-quartz-feld-  
spar gneiss; basement rocks. HAL73 HAL74  
(ref. isochron age for #'s 10e, 26, and 26d=240 MY)  
238±17 MY(26d)RSM4/0.706±0.002 KF Pegmatitic quartz and  
K-feldspar; basement rocks. HAL73 HAL74  
(sample #="26e" in HAL74; ref. isochron age for #'s  
10e, 26, and 26d = 240 MY)

ELLSWORTH LAND, NORTH OF 77°00S (samples from  
west to east by coordinates)

112±5 MY(M-197,M-204,M-211)RS3I2/0.705 WR One granite,  
two leucogranites; (Andean intrusive belt). MUN72

60 MY(151)K/A WR Biotite granite;  
intrusive "Chalky complex." LOP76

125 MY(151a)K/A WR Lamprophyre dike;  
intrusive "Chalky complex." LOP76

146 MY(151 v)K/A WR Porphyry dike;  
intrusive "Chalky complex." LOP76

105 MY(165b)K/A WR Biotite granite;  
intrusive "Chalky complex." LOP76

5.0 MY(155a)KA6 WR Basalt (pillow lava);  
Cenozoic volcanics. POL76 LOP76

347 MY(#!)R/S AM Paleozoic(?) intrusives and/or  
metamorphics.\* CRA70 CRA72  
(\*"unpubl. data" shown on generalized RM)

190 MY(68-50-1)K/A AM Amphibole-biotite granite;  
early Mesozoic intrusive complex. CRA70 LOP76

220 MY(181)K/A WR Amphibole-biotite granite;  
early Mesozoic intrusive complex. LOP76

9.0 MY(159)KA6 WR Hyaloclastite tuff;  
Cenozoic volcanics. POL76 LOP76

12.0 MY(159a)KA6 WR Basalt from a fragment in  
hyaloclastite tuff; Cenozoic volcs. POL76 LOP76

18.0 MY(159b)K/A WR Olivine basalt;  
Cenozoic volcanics. LOP76

184 MY(68-51-1)K/A BT Biotite granite;  
early Mesozoic intrusive complex. CRA70 LOP76

166 MY(68-51-1)R/S BT Biotite granite;  
early Mesozoic intrusive complex. CRA70 LOP76

20+4 MY(#!)K/A WR Basalt; sub-glacial section. LEM72A  
(from T.S. Landon, unpubl. ms.; infer=#H-1,  
20+4 MY, olivine basalt from Laudon in RUT68)

9.0 MY(208v)KA6 WR Basalt from crust;  
Cenozoic volcanics. POL76 LOP76

64.0 MY(207a)K/A WR Basalt from a fragment in tuff;  
Cenozoic volcanics. LOP76

4.8+0.3 MY(42-6A)KA7 WR Basalt in hyaloclastite;  
top of 200m hyaloclastite section. LEM82

4.5+0.2 MY(42-5A)KA7 WR Basalt in hyaloclastite;  
below sample 42-6A. LEM82

4.9+0.3 MY(42-4A)KA7 WR Basalt in hyaloclastite;  
below sample 42-5A. LEM82

5.5+1.9 MY(H6)KA13 WR Basalt, subaerial flow-rocks;  
overlies hyaloclastite sequence. IAU82

8.3+1.0 MY(H4)KA13 WR Basalt, nodule within  
hyaloclastite; c. 50m from top of 200 m section.  
IAU82

4.8+1.6 MY(H2)KA13 WR Basalt, flow rock within  
hyaloclastite sequence; c. middle of 200m section.  
IAU82

9.0 MY(208v)KA6 WR Basalt from crust;  
Cenozoic volcanics. POL76 LOP76

64.0 MY(207a)K/A WR Basalt from a fragment in tuff;  
Cenozoic volcanics. LOP76

4.8+0.3 MY(42-6A)KA7 WR Basalt in hyaloclastite;  
top of 200m hyaloclastite section. LEM82

4.5+0.2 MY(42-5A)KA7 WR Basalt in hyaloclastite;  
below sample 42-6A. LEM82

4.9+0.3 MY(42-4A)KA7 WR Basalt in hyaloclastite;  
below sample 42-5A. LEM82

5.5+1.9 MY(H6)KA13 WR Basalt, subaerial flow-rocks;  
overlies hyaloclastite sequence. IAU82

8.3+1.0 MY(H4)KA13 WR Basalt, nodule within  
hyaloclastite; c. 50m from top of 200 m section.  
IAU82

4.8+1.6 MY(H2)KA13 WR Basalt, flow rock within  
hyaloclastite sequence; c. middle of 200m section.  
IAU82

4.8 $\pm$ 1.6 MY(H2)KA13 WR Basalt, flow rock within  
hyaloclastite sequence; c. middle of 200m section.  
IAU82



|                         |                                                        |
|-------------------------|--------------------------------------------------------|
| 74°22S 99°00W R         | 3.6±0.2 MY(28-3A)KA7 WR Basalt in hyaloclastite;       |
| Velie Nunatak           | intraglacial volcanic deposits. LEM82                  |
| 72°04S 99°00W R         | 266 MY(68-54-1)K/A AM Quartzose diorite;               |
| Guy Peak, Thurston I.   | late Paleozoic intrusive complex. CRA70 LOP76          |
| 72°26S 98°42W R         | 145 MY(195)K/A WR Gabbro;                              |
| Boker Rock, Thurston I. | intrusive complex. LOP76                               |
| 71°44S 98°27W R         | 140 MY(198a)K/A WR Gabbro;                             |
| "Mt. Fury," Thurston I. | intrusive complex. LOP76                               |
| 72°09S 98°23W R         | 230 MY(6a)K/A WR Granodiorite;                         |
| Kohler Range            | early Mesozoic intrusive complex. LOP76                |
| 72°27S 98°12W R         | 200 MY(179)K/A WR Andesitic porphyry;                  |
| Mt. Dowling,            | metasedimentary/metavolcanic complex. LOP76            |
| Thurston Island         |                                                        |
| 72°12S 97°50W R         | 348 MY(??)K/A AM Gabbro;                               |
| "Mt. Babbier,"          | late Paleozoic intrusive complex. CRA70 LOP76          |
| Thurston Island         |                                                        |
| 72°28S 97°40W R         | 160 MY(68-63-1)K/A PY Gabbro;                          |
| Belknap Nunatak         | intrusive complex. CRA70 LOP76                         |
| 72°27S 97°24W R         | 140 MY(191)K/A WR Adamellite;                          |
| Shelton Head            | intrusive "Chalky complex." LOP76                      |
| 72°27S 97°24W R         | 60 MY(191 g)K/A WR Principal dike;                     |
| Shelton Head            | intrusive "Chalky complex." LOP76                      |
| 72°30S 96°47W G         | 13.2 MY(M-228)RSM2/0.706 BT Granodiorite;              |
| Long Glacier,           | --. MUN72                                              |
| Thurston Island         |                                                        |
| 72°15S 96°20W R         | 233 MY(60-11-7)K/A BT Gneiss;                          |
| Thurston Island         | Proterozoic gneiss-migmatite complex. CRA70 LOP76      |
| 72°12S 96°00W G         | 280±10 MY(60-10-8)RSM4/0.707 BT Quartz diorite gneiss; |
| SE wall, Morgan Inlet,  | --. CRA64A                                             |
| Thurston Island RM      |                                                        |
| 72°15S 96°00W R         | 502 MY(68-57-1)R/S CL Gneiss;                          |
| Thurston Island         | Proterozoic gneiss-migmatite complex. CRA70 LOP76      |
| 72°15S 96°00W R         | 200 MY(60-12-8)K/A CL Gneiss;                          |
| Thurston Island         | Proterozoic gneiss-migmatite complex. CRA70 LOP76      |
| 72°00S 95°45W R         | 314 MY(68-31-1)K/A AM Amphibolite;                     |
| Thurston Island         | Proterozoic gneiss-migmatite complex. CRA70 LOP76      |
| 72°00S 95°45W R         | 430 MY(60-9-1)K/A AM Gneiss;                           |
| Thurston Island         | Proterozoic gneiss-migmatite complex. CRA70 LOP76      |
| 72°20S 95°00W RM        | 138 MY(??)K/A WR Paleozoic(?) intrusives and/or        |
| E. Thurston Island      | metamorphics.* CRA70 CRA72                             |
|                         | (*"unpubl. data" shown on generalized RM)              |
| 73°32S 94°27W G         | 9.6±0.5 MY, 8.4±0.9 MY(69-C-18)K/A WR Basaltic flow;   |
| below Snowplume Pk.     | Jones Mts. volc. sequence. RUT72                       |
| 73°32S 94°27W G         | 24±12 MY(61-1-1)K/A WR Olivine basalt;                 |
| Snowplume Peak          | Jones Mts. volc. sequence. RUT68 RUT72                 |
| 73°32S 94°27W G         | 10.0±1.2 MY, 8.5±2.8 MY(69-C-17)K/A WR Basaltic flow;  |
| Snowplume Peak          | Jones Mts. volcanic sequence. RUT72                    |
| 73°30S 94°26W R         | 210 MY(201)K/A WR Biotite granite;                     |
| "Mt. Jones"             | early Mesozoic intrusive complex. LOP76                |
| 73°30S 94°24W G         | 225±50 MY(64-Jones-TB)K/A WR Olivine basalt;           |
| Granite Spur            | Jones Mts. volcanic sequence. RUT68 RUT72              |
| 73°30S 94°24W G         | 252±30 MY(64-Jones-TB)K/A WR Olivine basalt;           |
| Granite Spur            | Jones Mts. volcanic sequence. RUT68 RUT72              |
| 73°30S 94°24W G         | 210±8 MY(??)R/S WR Granite;                            |
| Granite Spur            | Basement Complex. RUT72                                |

|                                                   |                                                                                                                                                                                      |
|---------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 73°30S 94°22W G<br>Avalanche Ridge                | 199±6 MY(61-159)K/A MC Porphyritic granite;<br>Basement Complex. CRA64 RUT68                                                                                                         |
| 73°30S 94°22W G<br>Avalanche Ridge                | 269±10 MY,332±15 MY(69-C-10)K/A WR Basaltic flow;<br>Jones Mts. volc. sequence. RUT72                                                                                                |
| 73°31S 94°20W G<br>Pillsbury Tower                | 10.5±0.3 MY,9.6±0.3 MY(69-C-19)K/A WR Basaltic flow;<br>Jones Mts. volcanic sequence. RUT72                                                                                          |
| 73°31S 94°20W G<br>Pillsbury Tower                | 6.8±0.3 MY,9.6±0.2 MY(69-C-20)K/A WR Basaltic flow;<br>Jones Mts. volcanic sequence. RUT72                                                                                           |
| 73°32S 94°17W RM<br>"Plant Spur"                  | 52.2±5 MY,42.9±6 MY(69-C-12)K/A WR Basaltic flow;<br>Jones Mts. volc. sequence. RUT72                                                                                                |
| Jones Mountains                                   |                                                                                                                                                                                      |
| 73°32S 94°17W RM<br>"Plant Spur"                  | 141±10 MY,148±15 MY(69-C-13)K/A WR Basaltic flow;<br>Jones Mts. volc. sequence. RUT72                                                                                                |
| Jones Mountains                                   |                                                                                                                                                                                      |
| 73°36S 94°12W G<br>Forbidden Rocks                | 9.5±0.3 MY,10.8±0.6 MY(16)K/A WR Basaltic flow;<br>Jones Mts. volcanic sequence. RUT72                                                                                               |
| 73°36S 94°12W G<br>"K Peak",                      | 6.9±0.3 MY,6.1±0.15 MY,7.5±0.4 MY(69-C-9)K/A WR<br>Basaltic flow; Jones Mts. volcanic sequence. RUT72                                                                                |
| W. of Forbidden Rocks                             | (unnamed peak about 30 km west at Forbidden Rocks)                                                                                                                                   |
| 73°26S 94°05W G<br>Inspiration Rocks              | 14.8±1.3 MY,14.7±3 MY(69-C-15)K/A WR Basaltic flow;<br>Jones Mts. volc. sequence. RUT72                                                                                              |
| 73°30S 94°00W RM<br>Jones Mountains Area          | 210 MY(?)R/S WR Mesozoic intrusive rocks.* CRA70 CRA72<br>(*"unpubl. data" shown on generalized RM)                                                                                  |
| 73°32S 94°00W G<br>Jones Mountain Area            | 22±12 MY(61-225-4)K/A WR Olivine basalt;<br>Jones Mts. volc. sequence. CRA64 RUT68 RUT72                                                                                             |
| 73°32S 94°00W G<br>Jones Mountains                | 12.1±1.7 MY(?)FTK GS Basaltic;<br>--. RUT73                                                                                                                                          |
| 73°27S 93°50W G<br>Rice Ridge                     | 104±4 MY(61-214-1)K/A WR Quartz-latitude dike;<br>intrudes extrusives of Basement Complex. CRA64 RUT68                                                                               |
| 72°34'56"S<br>93°23'00"W R<br>"Peeler's Pinnacle" | 150±20 MY(361Z)Pal ZR Quartz diorite;<br>composite batholith. DRA64                                                                                                                  |
| 72°34'56"S<br>93°23'00"W R<br>"Peeler's Pinnacle" | 97±5 MY(361B)KAl3 BT Quartz diorite;<br>composite batholith. DRA64<br>(from same sample as 361Z)                                                                                     |
| 68°46S 90°42W R<br>Cape Ingrid,<br>Peter I Island | 12.5±1.5 MY(PI-5)KAl1 WR Olivine basalt;<br>--. BAS76 BAS76A<br>(infer=#?, 13 MY, in CRA70 and CRA72 with<br>strat.=Miocene volcanic rocks)                                          |
| 75°27S 73°17W G<br>N. of Mt. Glowa RM             | 102±6 MY RS2I2/0.706 WR,BT Quartz diorite;<br>intrudes folded Jurassic sed. rocks. HAL67 IAU69                                                                                       |
| 75°14S 73°15W R<br>W. of Behrendt Mts.            | 108.9±1.6 MY(Kel93d)KAl7 HB Granodiorite;<br>west Behrendt batholith. FAR80                                                                                                          |
| 75°14S 73°15W R<br>W. of Behrendt Mts.            | 104.5±1.5 MY(Kel93d)KAl7 BT Granodiorite;<br>west Behrendt batholith. FAR80                                                                                                          |
| 75°22S 72°37W G<br>Mount Brice RM                 | 103±6 MY(H-66-9)RS2I2 WR,BT Quartz monzonite;<br>intrudes folded Jurassic sed. rocks. HAL67 IAU69<br>(combined with samples H-66-15 and H-66-9, age=<br>102±2 MY,RS6I2/0.7060±.0010) |
| 75°19S 72°32W G<br>Luck Nunatak RM                | 103±5 MY(H-66-15)RS2I2 WR,BT Granodiorite;<br>intrudes folded Jurassic sed. rocks. HAL67 IAU69<br>(combined with samples H-66-15 and H-66-9, age=<br>102±2 MY, RS6I2/0.7060±.0010)   |

|                                       |                                                                                                                                                                                    |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 75°18S 72°25W G<br>Mount Caywood RM   | 102±2 MY(H-66-20)RS2I2 WR,BT Granodiorite;<br>intrudes folded Jurassic sed. rocks. HAL67 IAU69<br>(combined with samples H-66-15 and H-66-9, age=<br>102±2 MY, RS6I2/0.7060±.0010) |
| 75°07S 72°04W G<br>E. of Mt. Boyer    | 6 MY(#?)KA13 WR Basalt;--. HAL71                                                                                                                                                   |
| 75°04S 71°57W G<br>Mount Berger RM    | 109±10 MY(H-66-65)RS2I2/0.706 WR,BT Diorite;<br>intrudes folded Jurassic sed. rocks. HAL67 IAU69                                                                                   |
| 75°55S 71°19W R<br>SE Ski-Hi Nunataks | 120.5±1.7 MY,123.1±1.8 MY(Ro498j)KA17 HB Granodiorite;<br>Ski-Hi stock. FAR80                                                                                                      |
| 75°16S 70°14W R<br>Mount Smart        | 103.4±1.5 MY,110.8±1.5 MY(C2)KA17 BT Quartz monzonite;<br>Smart stock. FAR80                                                                                                       |
| 75°28S 69°21W R<br>Witte Nunataks     | 110.0±1.6 MY,112.3±1.6 MY(Ro441d)KA17 HB Granodiorite;<br>interior of Witte stock. FAR80                                                                                           |
| 75°28S 69°21W R<br>Witte Nunataks     | 108.8±1.6 MY(Ro441d)KA17 BT Granodiorite;<br>interior of Witte stock. FAR80                                                                                                        |
| 75°18S 68°11W R<br>Hagerty Peak       | 112.6±1.6 MY,104.7±1.5 MY(V148a)KA17 HB Quartz<br>monzonite; interior of Hagerty stock. FAR80                                                                                      |
| 75°18S 68°11W R<br>Hagerty Peak       | 116.0±1.6 MY(V148a)KA17 BT Quartz monzonite;<br>interior of Hagerty stock. FAR80                                                                                                   |
| 75°09S 65°02W R<br>Scaife Mountains   | 99.4±2.1 MY(S47e)KA9 BT Granodiorite;<br>Terwileger pluton. MEH75                                                                                                                  |
| 75°09S 65°02W R<br>Scaife Mountains   | 102.8±2.2 MY(S47e)KA9 HB Granodiorite;<br>Terwileger pluton. MEH75                                                                                                                 |

## GEOGRAPHIC AREA 30:

ELLSWORTH LAND, SOUTH OF 77°00S, INCLUDING WHITMORE MOUNTAIN AREA (samples from north to south by coordinates)

77°02S 78°20W R  
Haag Nunataks  
77°02S 78°20W R  
Haag Nunataks  
77°02S 78°20W R  
Haag Nunataks  
77°02S 78°20W R  
Haag Nunataks  
77°02S 78°20W R  
Haag Nunataks  
77°02S 78°20W R  
Haag Nunataks  
77°02S 78°20W R  
Haag Nunataks  
77°02S 78°20W R  
Haag Nunataks  
79°09S 86°25W G  
(Frazier Ridge\*)  
  
79°50S 83°39W G  
Edson Hills  
79°50S 83°39W G  
Edson Hills  
79°50S 83°39W G  
Edson Hills  
79°50S 83°39W G  
Edson Hills  
79°50S 84°00W RM  
Ellsworth Mts. area  
80°01S 80°38W G  
Wilson Nunataks  
80°01S 80°38W G  
Wilson Nunataks  
  
81°17S 85°21W G  
Pirrit Hills area RM  
81°17S 85°21W G  
Pirrit Hills area RM  
81°17S 85°21W G  
Pirrit Hills area RM  
81°17S 85°21W G  
Pirrit Hills area RM  
81°53S 89°23W G  
Nash Hills area RM  
81°53S 89°23W G  
Nash Hills area RM  
81°53S 89°23W G  
Nash Hills area RM  
81°53S 89°23W R  
Mount Byerly

1018+28 MY(E.4690.1)KA9 HB Gneiss;  
may be metamorphic basement of Ellsworth Mts. CIA77  
991+22 MY(E.4690.1)KA9 BT Gneiss;  
may be metamorphic basement of Ellsworth Mts. CIA77  
745+18 MY(E.4690.1)KA9 BT Gneiss;  
may be metamorphic basement of Ellsworth Mts. CIA77  
628+18 MY(3.4690.1)KA9 BT Gneiss;  
may be metamorphic basement of Ellsworth Mts. CIA77  
1031+14 MY(3.4690.2)KA9 BT Gneiss;  
may be metamorphic basement of Ellsworth Mts. CIA77  
1002+24 MY(E.4690.2)KA9 BT Gneiss;  
may be metamorphic basement of Ellsworth Mts. CIA77  
731+18 MY(E.4690.2)KA9 BT Gneiss;  
may be metamorphic basement of Ellsworth Mts. CIA77  
595+16 MY(3.4690.2)KA9 PL Gneiss;  
may be metamorphic basement of Ellsworth Mts. CIA77  
308+15 MY(MY79120701)KA17 WR Muscovite-chlorite  
phyllite;--. YOS82  
(\*location given in text="Fraser Ridge")  
396+20 MY(MY80010602)KA17 WR Weakly altered dolerite;  
intrudes Heritage Group. YOS82  
278+14 MY(MY80010707)KA17 WR Chlorite-muscovite  
phyllite;--. YOS82  
237+12 MY(MY80010801A)KA17 WR Strongly cleaved and  
altered andesite dike; intrudes Heritage Gp. YOS82  
254+13 MY(MY80010801)KA17 WR Cleaved and altered  
basaltic dike; intrudes Heritage Gp. YOS82  
298 MY(??)K/A WR Paleozoic strata.\* CRA70 CRA72  
(\*\*unpubl. data" shown on generalized RM)  
381+19 MY(MY69123033)KA17 WR Altered massive dolerite;  
intrudes Heritage Group. YOS82  
935+47 MY(MY79122909)KA17 WR Fine-grained chlorite-  
muscovite-quartz feldspar rock (meta-pelite);  
assumed basement metasediments drawn upward. YOS82  
176 MY(??)K/A BT Mesozoic intrusive rocks.\* CRA70 CRA72  
(\*\*unpubl. data" shown on generalized RM)  
167 MY(??)K/A MC Mesozoic intrusive rocks.\* CRA70 CRA72  
(\*\*unpubl. data" shown on generalized RM)  
166 MY(??)K/A BT Mesozoic intrusive rocks.\* CRA70 CRA72  
(\*\*unpubl. data" shown on generalized RM)  
163 MY(??)K/A MC Mesozoic intrusive rocks.\* CRA70 CRA72  
(\*\*unpubl. data" shown on generalized RM)  
175 MY(??)K/A BT Mesozoic intrusive rocks.\* CRA70 CRA72  
(\*\*unpubl. data" shown on generalized RM)  
174 MY(??)K/A FD Mesozoic intrusive rocks.\* CRA70 CRA72  
(\*\*unpubl. data" shown on generalized RM)  
172 MY(??)K/A BT Mesozoic intrusive rocks.\* CRA70 CRA72  
(\*\*unpubl. data" shown on generalized RM)  
177+5 MY(??)RS2I1/0.7070 BT,WR Granite;  
thought to intrude metasediments. HAL66

82°28S 103°54W G  
Mount Seelig  
82°35S 105°55W R  
Mount Chapman  
Whitmore Mts.

82°41S 104°12W G  
Linck Nunataks

190±8 MY(W-65-45)KAl3 BT Granite, coarsely crystalline  
prophyritic; Mount Seelig Granite. WEB82A

173 MY(120A,120B)RS4I3/0.7148 WR,BT,FD Fine and  
coarse-grained phases of granite; the two phases  
may correlate with the Linck Nunataks granite and  
Mt. Seelig granite. KOV78

176±5 MY(W-65-76)KAl3 BT Granite, finely crystalline  
equigranular; Linck Nunataks Granite. WEB82A

## GEOGRAPHIC AREA 31:

74°28S 64°28W R  
 N. Latady Mountains  
 74°28S 64°28W R  
 N. Latady Mountains  
 74°23S 65°02W AR  
 Copper Nunataks  
 74°23S 64°53W AR  
 Copper Nunataks  
 74°23S 64°50W AR  
 Copper Nunataks  
 74°22S 64°28W R  
 N. RARE Range  
 74°22S 64°28W R  
 N. RARE Range  
 74°21S 64°16W R  
 cen. RARE Range  
 74°21S 64°16W R  
 cen. RARE Range  
 74°19S 62°41W AR  
 S. Hutton Mountains  
 73°57S 63°04W AR  
 Playfair Mountains  
 73°57S 63°04W AR  
 Playfair Mountains  
 73°33S 64°33W R  
 N. Latady Mountains  
 73°33S 64°33W R  
 N. Latady Mountains  
 73°32S 62°29W AR  
 Werner Mountains  
 73°24S 63°19W AR  
 SW Dana Mountains  
 73°23S 63°15W AR  
 SW Dana Mountains  
 73°23S 63°15W AR  
 SW Dana Mountains  
 73°15S 62°10W AR  
 E. Dana Mountains  
 73°11S 62°19W AR  
 E. Dana Mountains  
 72°50S 63°12W AR  
 Unnamed mountains  
 71°54S 68°13W G  
 Two Step Cliffs RM  
  
 71°54S 68°13W G  
 Two Step Cliffs RM  
  
 71°54S 68°13W G  
 Two Step Cliffs RM

PALMER LAND (samples from south to north by coordinates)

108.6±2.3 MY(S10a)KA9 BT Mafic granodiorite;  
 North Latady pluton. MEH75  
 117.0±2.4 MY(S10a)KA9 HB Mafic granodiorite;  
 North Latady pluton. MEH75  
 95.2±3.0 MY(M430a)KA12 BT Quartz monzonite;  
 Copper Nunataks pluton. ROW75 FAR82  
 95.6±3.0 MY(311a)KA12 BT Granodiorite porphyry dike;  
 in Copper Nunataks pluton. ROW75 FAR82  
 104.9±3.2 MY(M308a)KA12 BT Granodiorite;  
 West RARE batholith. ROW75 FAR82  
 113.4±2.3 MY(S54a)KA9 BT Mafic granodiorite;  
 North RARE pluton. MEH75  
 119.4±2.5 MY(S54a)KA9 HB Mafic granodiorite;  
 North RARE pluton. MEH75  
 98.7±2.1 MY(W56)KA9 HB Quartz monzonite;  
 Crowell pluton. MEH75  
 100.0±2.1 MY(W56)KA9 BT Quartz monzonite;  
 Crowell pluton. MEH75  
 108.6±6.8 MY(Rol60a)KA12 BT Mafic granodiorite;  
 Rath pluton. FAR82  
 98.2±3.0 MY(Ro207a)KA12 BT Quartz monzonite;  
 southern Werner batholith. FAR82  
 100.9±3.0 MY(Ro207a)KA12 HB Quartz monzonite;  
 southern Werner batholith. FAR82  
 105.9±2.2 MY(S16x)KA9 BT Granodiorite;  
 McLaughlin pluton. MEH75  
 107.1±2.3 MY(S16x)KA9 BT Granodiorite;  
 McLaughlin pluton. MEH75  
 107.9±5.1 MY(Ro241a)KA12 BT Diorite, older mafic phase;  
 near E. intrusive contact, Werner batholith. FAR82  
 104.9±4.6 MY(Ke33h)KA12 BT Granodiorite, silicic phase;  
 near roof of central Werner batholith. FAR82  
 101.3±3.6 MY(V39f)KA12 BT Diorite, older mafic phase;  
 near roof of central Werner batholith. FAR82  
 114.4±6.8 MY(V39f)KA12 HB Diorite, older mafic phase;  
 near roof of central Werner batholith. FAR82  
 108.1±2.7 MY(Ro304a)KA12 BT Diorite;  
 Grimmering pluton. FAR82  
 104.3±3.8 MY(Ke61f)KA12 BT Granodiorite;  
 Galan batholith. FAR82  
 100.6±4.3 MY(Bo68a)KA12 BT Granodiorite;  
 northern Werner batholith. FAR82  
 6930±60 BP(SRR-1500)14C SH Barnacles (outer fraction)  
 in moraine; oldest of two ice shelf moraines  
 (Unit 6). CIA82  
 7200±50 BP(SRR-1500)14C SH Barnacles (inner fraction)  
 in moraine; oldest of two ice shelf moraines  
 (Unit 6). CIA82  
 30,600±600 BP(SRR-1499)14C SH *Hiatella solida* (inner  
 fraction) in basal till, 94 to 114 m. alt.;-. CIA82

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| 71°54S 68°13W G        | 32,160±360 BP(SRR-1499)14C SH <i>Hiatella solida</i> (outer |
| Two Step Cliffs RM     | (fraction) in basal till, 94 to 114m. alt.;--. CIA82        |
| 71°31S 67°15W R        | 124±7 MY(KG.200A)RS2I4/0.7037 BT Tonalite;--. REX76         |
| SSW of Mt. Bagshawe    | (appears to be Andean Intrusive Suite)                      |
| 71°31S 67°15W R        | 131±5 MY(KG.200A;IDB1160)KA9 BT Tonalite;--. REX76          |
| SSW of Mt. Bagshawe    | (appears to be Andean Intrusive Suite)                      |
| 71°31S 67°15W R        | 134±5 MY(KG.200A;IDB1174)KA9 BT Tonalite;--. REX76          |
| SSW of Mt. Bagshawe    | (appears to be Andean Intrusive Suite)                      |
| 71°31S 68°14W G        | 15±1 MY(KG.103.22;AR17)KA9 WR Olivine-campstonite dike;     |
| N. end,                | intrudes Aptian sediments. HOR67 REX70 REX76                |
| Waitabit Cliffs RM     |                                                             |
| 71°31S 68°14W G        | 15±1 MY(KG.103.22;AR30)KA9 WR Olivine-campstonite dike;     |
| N. end,                | intrudes Aptian sediments. HOR67 REX70 REX76                |
| Waitabit Cliffs RM     |                                                             |
| 71°24S 63°00W G        | 115±4 MY(E.4178.1)KA9 BT Foliated granodiorite;             |
| nr Davis Ridge RM      | main granodiorite unit. SIN80                               |
| 71°24S 63°00W G        | 118±5 MY(E.4178.1)KA9 HB Foliated granodiorite;             |
| nr Davis Ridge RM      | main granodiorite unit. SIN80                               |
| 71°23S 63°22W G        | 108±4 MY(E.4193.1)KA9 BT Foliated granodiorite;             |
| nr Mount Jackson RM    | main granodiorite unit. SIN80                               |
| 71°23S 63°22W G        | 113±4 MY(E.4193.1)KA9 HB Foliated granodiorite;             |
| nr Mount Jackson RM    | main granodiorite unit. SIN80                               |
| 71°00S 62°50W G        | 104±4 MY(E.4065.1)KA9 BT Undeformed granodiorite;           |
| nr Giannini Peak RM    | main granodiorite unit. SIN80                               |
| 70°57S 63°30W G        | 121±4 MY(E.4012.1)KA9 BT Undeformed granodiorite;           |
| Welch Mountains RM     | main granodiorite unit. SIN80                               |
| 70°57S 63°30W G        | 119±4 MY(E.4021.1)KA9 BT Underformed granodiorite;          |
| Welch Mountains RM     | main granodiorite unit. SIN80                               |
| 70°57S 63°30W G        | 123±4 MY(E.4021.1)KA9 HB Undeformed granodiorite;           |
| Welch Mountains RM     | main granodiorite unit. SIN80                               |
| 70°57S 63°30W G        | 124±4 MY(E.4012.1)KA9 HB Undeformed granodiorite;           |
| Welch Mountains RM     | main granodiorite unit. SIN80                               |
| 70°56S 66°48W R        | 152±7 MY(KG.509.2;AR173)KA9 WR Basic dike;                  |
| Palmer Land            | --. REX72 REX76                                             |
| 70°55S 69°20W G        | 165 MY(18)KA6 WR Arkosic sandstone;                         |
| Le May Range           | upper horizon of the Trinity series. GRI67                  |
| 70°55S 69°20W G        | 165 MY(19)KA6 WR Foliated arkosic sandstone;                |
| Le May Range           | upper horizon of the Trinity series. GRI67                  |
| 70°53S 66°23W R        | 88±3 MY(KG.211)RS2I4/0.740 MC,KF Granite;                   |
| W of St. Valentines    | --. REX76                                                   |
| 70°48S 66°13W R        | 112±5 MY(KG.226.1;IDB1166)KA9 BT,WR Granite;--. REX76       |
| SE of St. Valentines   | (appears to be Andean Intrusive Suite)                      |
| 70°48S 66°13W R        | 119±33 MY(KG.226.1)RS2I4/0.7096 BT,KF Granite;--. REX76     |
| SE of St. Valentines   | (appears to be Andean Intrusive Suite)                      |
| 70°46S 65°55W R        | 86±4 MY(KG.214;IDB1028)KA9 WR Andesite;                     |
| SE of St. Valentines   | --. REX72 REX76                                             |
| 70°42S 69°49W G        | 105 MY(16)KA6 WR Polymict sandstone;                        |
| Mt. Corelli Horn       | lower horizon of the Trinity series. GRI67                  |
| 70°42S 69°49W G        | 110 MY(17)KA6 WR Polymict sandstone;                        |
| Mt. Corelli Horn       | lower horizon of the Trinity series. GRI67                  |
| 70°35S 69°35W G        | 69 MY(15)KA17 BT Lithocrystalloclastic tuff;                |
| N.E. Colbert Mountains | Vivaldi Formation. GRI67 BUR81                              |
|                        | (earlier reported as 70 MY, KA6, GRI67)                     |
| 70°35S 70°35W G        | 62±1 MY RS6I3/0.7057±0.0001 WR Rhyolite tuffs and           |
| Colbert Mtns.          | sills; Antarctic Pen. Volc. Gp. THO83                       |

|                       |                                                |
|-----------------------|------------------------------------------------|
| 70°28S 66°33W R       | 91±4 MY(KG.554.3;AR201)KA9 WR Basic dike;      |
| Palmer Land           | --. REX72 REX76                                |
| 70°28S 66°33W R       | 92±4 MY(KG.554.3;AR175)KA9 WR Basic dike;      |
| Palmer Land           | --. REX72 REX76                                |
| 70°S 70°W RM          | 40-60 MY(#!)KA17 WR Two lavas from Colbert Fm. |
| N. Alexander Island   | and 4 lavas from Elgar Fm. BUR81               |
| 70°S 65°W M           | 175 MY RSR3/0.706 WR Altered volcanic and      |
| N. Palmer Land        | metavolcanics;--. THO83                        |
| 69°39S 63°49W G       | 177±2 MY RS9I3/0.7075±0.0003 WR Augen-gneisses |
| W end, Mt. Sullivan   | and acid gneisses; crystalline basement. PAN83 |
| 69°13S 70°50W G       | 46.3±2.8 MY RS6I3/0.7030±0.0016 WR Adamellite; |
| NW Rouen Mountains RM | Rouen Mountains batholith. BUR81 PAN82         |



## GEOGRAPHIC AREA 32:

GRAHAM LAND, EXCLUDING TRINITY PENINSULA  
(samples from south to north by coordinates)

|                       |                                                       |
|-----------------------|-------------------------------------------------------|
| 68°30S 68°30W G       | 87±3 MY(E2725.2)KA9 BT --;                            |
| Marguerite Bay area   | --. GLE82                                             |
| 68°23S 67°00W G       | 100 MY(21)KA6 WR Porphyroblastic granite from         |
| Tiber Rocks Island RM | massif of coarse-grained granites;--. GRI66           |
| 68°21S 67°04W G       | 110 MY(18)KA6 WR Mesocratic gneissoid granodiorite;   |
| Garnet Rocks Mtn. RM  | metamorphic complex in crystalline basement. GRI66    |
| 68°20S 66°57W G       | 90 MY(24)KA6 WR Biotite granite;                      |
| Safety Col RM         | Andean intrusive complex. GRI66                       |
| 68°20S 66°57W G       | 85 MY(25)KA6 WR Granite porphyry from dike;           |
| Safety Col RM         | in Andean intrusive complex. GRI66                    |
| 68°20S 66°57W G       | 100 MY(20)KA6 WR Porphyroblastic granite from         |
| Safety Col RM         | massif of coarse-grained granites;--. GRI66           |
| 68°20S 66°57W G       | 100 MY(22)KA6 WR Potassic keratophyre;                |
| Safety Col RM         | --. GRI66                                             |
| 68°20S 66°57W G       | 113±2 MY RS10I3/0.7063±0.0001 WR Adamellite/aplite;   |
| Safety Col RM         | --. PAN82                                             |
| 68°18S 67°08W G       | 92±2 MY RS7I3/0.7050±0.0001 WR Pink granite;          |
| Red Rock Ridge        | --. PAN82                                             |
| 68°16S 66°50W G       | 190 MY RSR3/0.705 WR Granite-gneisses to diorite-     |
| Neny Fjord area*      | gneisses; "Marguerite Bay Gneisses." PAI83            |
|                       | (*locs.=Roman Four Promontory, Neny Island, and       |
|                       | Randall Rocks; IR is calc., not assumed)              |
| 68°13S 66°56W G       | 117±10 MY(76b)RSM4/0.706 WR Adamellite dike;          |
| Roman Four Promontory | post-'basement'. HAL72                                |
| 68°13S 66°56W G       | 200±10 MY(69-36,69-33)RS2I4/0.705 WR Biotite-granite- |
| Roman Four Promontory | gneiss and a diorite-gneiss; 'Basement Complex'       |
|                       | orthogneiss. HAL72                                    |
| 68°13S 66°56W G       | 95 MY(17)KA6 WR Gneissoid granite;                    |
| Roman Four Prom. RM   | intersects metamorphic complex. GRI66                 |
| 68°13S 66°56W G       | 110 MY(16)KA6 AM Amphibolite;                         |
| Roman Four Prom. RM   | metamorphic complex in crystalline basement. GRI66    |
| 68°12S 67°03W G       | 120 MY(15)KA6 WR Biotitic amphibolite;                |
| Neny Island RM        | metamorphic complex in crystalline basement. GRI66    |
| 68°12S 67°03W G       | 115 MY(14)KA6 BT Biotitic amphibolite;                |
| Neny Island RM        | metamorphic complex in crystalline basement. GRI66    |
| 68°12S 66°54W G       | 140 MY(13)KA6 AM Biotitic amphibolite;                |
| Mt. Nemesis RM        | metamorphic complex in crystalline basement. GRI66    |
| 68°12S 66°54W G       | 95 MY(12)KA6 WR Gneissoid cataclastic granite;        |
| Mt. Nemesis RM        | intersects metamorphic complex. GRI66                 |
| 68°12S 66°41W R       | 86±3 MY(π.102.2;IDB650)KA9 BT Granite;--. REX76       |
| Pyrox Island          | (appears to be Andean Intrusive Suite)                |
| 68°11S 67°00E G       | 119±1 MY RS5I2/0.7063 WR Gray granitic dike;          |
| Anemometer Hill       | --. GLE82                                             |
| 68°11S 67°00W G       | 111±4 MY(BS101.19)KA9 BT Leucocratic gneiss;          |
| nr Mast Hill          | gneissic metamorphic complex. GLE82                   |
| 68°11S 67°00W G       | 110 MY(7)KA6 WR Melanocratic gneissoid diorite;       |
| Stonington I. sta. RM | metamorphic complex in crystalline basement. GRI66    |
| 68°11S 67°00W G       | 115 MY(8)KA6 BT Xenoliths of quartz-plagioclase-      |
| Stonington I. sta. RM | biotitic rock in granite veins; metamorphic complex   |
|                       | in crystalline basement GRI66                         |
| 68°11S 67°00W G       | 95 MY(9)KA6 WR Granite vein in gneissoid diorites;    |
| Stonington I. sta. RM | intersects metamorphic complex. GRI66                 |

|                                                            |                                                                                                                                                                           |
|------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 68°11S 67°00W G<br>Stonington I. sta. RM                   | 115 MY(10)KA6 BT Biotite-amphibolic gneissoid rocks of diorite composition; metamorphic complex in crystalline basement. GRI66                                            |
| 68°11S 67°00W G<br>Stonington I. sta. RM                   | 125 MY(11)KA6 BT Amphibole-biotitic gneissoid rocks of dioritic composition; metamorphic complex in crystalline basement. GRI66                                           |
| 68°11S 67°00W G<br>Stonington Island                       | 115±10 MY(69-37)RSM4/0.706 WR Granodiorite dike; post-"basement". HAL72                                                                                                   |
| 68°11S 67°00W G<br>Stonington Island                       | 108±5 MY(69-33)RSM4/0.705 BT Diorite-gneiss; "Basement Complex" orthogneiss. HAL72                                                                                        |
| 68°11S 67°00W G<br>Stonington Island                       | 105±15 MY(CT-IV-5)RSM4/0.706 WR Quartz-diorite dike; post-"basement". HAL72                                                                                               |
| 68°11S 65°42W R<br>S of Daspit Glacier                     | 181±7 MY(TL.103.1;IDB1038)KA9 BT Gneiss;--. REX76 (appears to be Andean Intrusive Suite)                                                                                  |
| 68°11S 65°28W R<br>N side of Joerg Pen                     | 171±7 MY(TL.1161.1;IDB1173)KA9 MC Potash-granite-gneiss contact;--. REX76 (appears to be Andean Intrusive Suite)                                                          |
| 68°10S 65°00W G<br>Bowman Coast                            | 600 MY(R.1206.2)RSM3 -- Migmatitic gneiss; Antarctic Peninsula Volcanic Group.* HAM82 (R.J. Pankhurst, pers. comm.; *widely referred to as Upper Jurassic Volcanic Group) |
| 68°09S 67°13W G<br>Millerand Island RM                     | 82±8 MY RS6I3/0.7045±0.0003 WR Pink granite; --. PAN82                                                                                                                    |
| 68°08S 67°06W G<br>Barbara Island                          | 109±1 MY RS5I2/0.7060 WR Granite(3) and aplite(2); pluton of coarse pink granite suite. GLE82                                                                             |
| 68°08S 67°06W G<br>Barbara Island                          | 120±25 MY RS3I2/0.7054 WR Granite; pluton of coarse pink granite suite. GLE82 (same granite samples as 109±1 MY sample of GLE82)                                          |
| 68°08S 67°06W G<br>Barbara Island                          | 115±10 MY(69-35)RSM4/0.706 WR Coarse pink granite; post-"basement." HAL72                                                                                                 |
| 68°08S 67°06W G<br>Barbara Island                          | 98±15 MY(54a,55a)RS2I4/0.706 WR Coarse pink granite; post-"basement." HAL72                                                                                               |
| 68°08S 67°07W G<br>Barry Island                            | 175±7 MY RS6I2/0.7076 WR Pink granitic gneiss; gneissic metamorphic complex. GLE82                                                                                        |
| 68°08S 66°50W G<br>Mt. Rhamnus RM                          | 100 MY(23)KA6 WR Biotite granite; Andean intrusive complex. GRI66                                                                                                         |
| 68°08S 67°07W G<br>Debenham Island RM                      | 85 MY(19)KA6 WR Granite prophyry from massif of coarse-grained granites;--. GRI66                                                                                         |
| 67°51S 67°12W R<br>Horseshoe Island                        | 72±3 MY(7.93.8;IDB582,IDB596)KA9 HB,PY Gabbro; --. REX76 (appears to be Andean Intrusive Suite)                                                                           |
| 67°51S 67°12W G<br>Horseshoe Island RM                     | 90 MY(26)KA6 WR Quartz albitophyre from dike; in Andean intrusive complex. GRI66                                                                                          |
| 67°49S 67°21W G<br>Beacon Head RM                          | 67±8 MY RS8I3/0.7050±0.0001 WR Pale feldspathic granite;--. PAN82                                                                                                         |
| 67°49S 67°11W G<br>NW of Gaul Cove,<br>Horseshoe Island RM | 102±1 MY RS5I3/0.7055±0.0007 WR Pink granite/diorite; --. PAN82 (four granites alone gave an age of 101±6 MY)                                                             |
| 67°36S 68°13W G<br>Anchorage Island RM                     | 62±2 MY RS10I3/0.7039±0.0001 WR Granodiorite/granite; --. PAN82                                                                                                           |
| 67°30S 68°10W RM<br>Square Peninsula                       | 60±3 MY RS11I3/0.7038±0.0001 WR Intrusion of leucogranodiorite-adamellite;--. PAN82                                                                                       |
| 67°27S 67°56W G<br>Webb Island                             | 67±24 MY RS3I3/0.7038±0.0002 WR Dacite; Antarctic Pen. Volc. Gp. THO83                                                                                                    |

|                                                     |                                                                                                                                                      |
|-----------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 66°52S 63°43W G<br>Cape Robinson RM                 | 209±3 MY RS8I3/0.7065±0.0001 WR 'Older' granite;<br>--. PAN82                                                                                        |
| 66°50S 64°00W G<br>Cape Robinson RM                 | 174±5 MY RS5I3/0.7063±0.0001 WR Porphyritic dikes;<br>--. PAN82                                                                                      |
| 66°50S 64°00W G<br>Cape Robinson RM                 | 178±2 MY RS6I3/0.7068±0.0002 WR 'Younger' granite;<br>--. PAN82                                                                                      |
| 66°42S 64°10W R<br>N. end, Mt. Hayes                | 176±7 MY (TL.228;IDB998,IDB1002)KA9 BT Tonalite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                                              |
| 66°30S 62°45W G<br>N end, Churchill<br>Peninsula RM | 82±1 MY RS12I3/0.7042±0.0001 WR Pink granite/diorite;<br>Andean Intrusive Suite. PAN82                                                               |
| 66°30S 62°45W G<br>Churchhill Pen. RM               | 99±8 MY RS3I3/0.7083±0.0010 WR Rhyolite inclusions in<br>pink granite; Andean Intrusive Suite. PAN82                                                 |
| 66°25S 62°20W G<br>Adie Inlet area                  | 203±24 MY RSI3/0.7164±0.0003 Amphibolite and quartzo-<br>feldspathic bands from banded gneiss;--. PAN83                                              |
| 66°25S 62°20W G<br>head, Adie Inlet                 | 246±4 MY RS3I3/0.7065±0.0001 BT,HB,PL Amphibolitic<br>inclusion in the gneisses;--. PAN83                                                            |
| 66°23S 63°47W R<br>W of Cape Casey                  | 174±7 MY (TL.517.3;IDB1019)KA9 BT Granite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                                                    |
| 66°23S 63°47W R<br>W of Cape Casey                  | 176±7 MY (TL.517.3)RSM4/0.709 BT Granite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                                                     |
| 66°14S 62°53W R<br>W of Gulliver Nunatak            | 83±4 MY (TL.872.1;IDB1158)KA9 BT Diorite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                                                     |
| 66°13S 62°48W R<br>W of Gulliver Nunatak            | 243±10 MY (TL.866.3;IDB1067)KA9 HB Gneiss;<br>basement complex. REX76                                                                                |
| 66°12S 62°40W G<br>Gulliver Nunatak RM              | 174±2 MY RS5I3/0.7075±0.0001 WR Rhyolite/dacite;<br>overlie migmatitic gneisses. PAN82                                                               |
| 66°12S 62°40W G<br>Gulliver Nunatak                 | 98 MY RS3I3/0.7088 WR Granite gneiss;--. PAN83<br>(inclusion of 2 data points for granodioritic gneiss<br>yields age of 174±30 MY, IR=0.7080±0.0003) |
| 66°12S 62°40W G<br>Gulliver Nunatak                 | 240±4 MY RSI3/0.7070±0.0001 BT Pegmatitic phase of<br>granite gneiss;--. PAN83<br>("WR intersection age")                                            |
| 66°08S 62°56W R<br>W of Gemini Nunatak              | 182±7 MY (TL.846.1;IDB1139)KA9 BT Granite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                                                    |
| 66°08S 62°56W R<br>W of Gemini Nunatak              | 179±7 MY (TL.846.1;IDB1440)KA9 HB Granite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                                                    |
| 66°05S 61°21W R<br>Jason Peninsula                  | 186±8 MY (D.2133.1;IDC293)KA9 WR Basalt;<br>--. REX72 REX76                                                                                          |
| 66°05S 61°21W R<br>Jason Peninsula                  | 156±6 MY (D.2136.1;IDC301)KA9 WR Basalt;<br>--. REX72 REX76                                                                                          |
| 66°03S 62°46W G<br>McCarrol Peak RM                 | 170±2 MY RS6I3/0.7063±0.0001 WR Granite/granodiorite;<br>--. PAN82                                                                                   |
| 66°02S 63°13W R<br>Leppard Glacier                  | 164±6 MY (TL.778.1;IDB1046,IDC45)KA9 BT Granite<br>gneiss; basement complex. REX76                                                                   |
| 66°02S 63°13W R<br>Leppard Glacier                  | 237±9 MY (TL.778.1;IDB1066)KA9 HB Granite gneiss;<br>basement complex. REX76                                                                         |
| 66°00S 62°42W G<br>Mt Fritsche RM                   | 164±2 MY RS5I3/0.7070±0.0001 WM Diorite;<br>--. PAN82                                                                                                |

|                                         |                                                                                                                             |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| 66°00S 62°57W G<br>Target Hill RM       | 180±5 MY RS5I3/0.7063±0.0001 WM Adamellite/<br>granodiorite;--. PAN82                                                       |
| 66°00S 62°57W G<br>W of Target Hill     | 167±17 MY RS7I3/0.7072±0.0000 WR, PL Biotite-gneisses;<br>--. PAN83<br>(6 WR samples give date of 141±49 MY)                |
| 66°00S 62°57W G<br>W of Target Hill     | 336±34 MY RS3I3/0.7054±0.0005 WR Granitic sheets;<br>in banded migmatite. PAN83                                             |
| 66°00S 63°00W RM<br>'D' Nunatak         | 173±6 MY RS7I3/0.7065±0.0001 WR Granodiorite;<br>--. PAN82                                                                  |
| 66°00S 63°00W RM<br>'D' Nunatak         | 169±3 MY RS3I3/0.7067±0.0002 WR Granite boss;<br>intruded into granodiorite. PAN82                                          |
| 66°00S 63°00W RM<br>'D' Nunatak         | 159 MY RSM3/0.7065 WR Cross-cutting pink quartz<br>feldspar porphyry dike;--. PAN82                                         |
| 65°55S 64°16W G<br>Argentine Is. RM     | 55±3 MY RS13I3/0.7038±0.0001 WR Diorite/granodiorite/<br>aplite;--. PAN82<br>(strat. may be Andean Intrusive Suite)         |
| 65°49S 62°36W G<br>SW of Bildad Peak RM | 167±2 MY RS28I3/0.7062±0.0001 WR Tonalite and<br>overlying granodiorite;--. PAN82                                           |
| 65°49S 62°36W G<br>SW of Bildad Peak RM | 163±2 MY RS13I3/0.7066±0.0001 WR Adamellite<br>intruding tonalite and granodiorite;--. PAN82                                |
| 65°47S 62°37W R<br>NW of Bildad Peak    | 163±6 MY (TL.659.1; IDB1167) KA9 BT Quartz diorite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                  |
| 65°47S 62°37W R<br>NW of Bildad Peak    | 158±16 MY (TL.659.1) RS2I4/0.7075 BT, KF Quartz diorite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)             |
| 65°19S 64°10W R<br>Berthelot Islands    | 73±6 MY (TL.49.2; IDB597) KA9 PY Diorite;--. REX76<br>(appears to be Andean Intrusive Suite)                                |
| 65°15S 64°05W G<br>Rasmussen I. RM      | 128±3 MY RS3I3/0.7041±0.0002 WR Pink granite;<br>--. PAN82<br>(strat. may be Andean Intrusive Suite)                        |
| 65°15S 64°15W G<br>Galindez Island      | 721±105 BP( #?) 14C PE Near the base of a small deep<br>(max. 170 cm) moss ( <i>Chorisodontium</i> ) bank. SMI82            |
| 65°14S 64°0W R<br>Forge Islands         | 54±2 MY (IDB801, IDB807) KA9 HB Hornblende;--. REX76<br>(appears to be Andean Intrusive Suite)                              |
| 65°14S 64°20W R<br>South Island         | 56±2 MY (TL.40.3; IDB574) KA9 BT Quartz-diorite;--. REX76<br>(appears to be Andean Intrusive Suite)                         |
| 65°14S 64°20W R<br>South Island         | 56±2 MY (TL.41.1; IDB701) KA9 BT Quartz-diorite;--. REX76<br>(appears to be Andean Intrusive Suite)                         |
| 65°14S 64°20W R<br>South Island         | 57±2 MY (TL.41.3; IDB583) KA9 BT Quartz-diorite;--. REX76<br>(appears to be Andean Intrusive Suite)                         |
| 65°14S 64°20W G<br>The Barchans         | 57±2 MY (BS103.11) KA9 BT Perthite dike in contact with<br>granodiorite pluton; cuts Antarct. Pen. Volc. Group.<br>GLE82    |
| 65°14S 64°20W G<br>South Island         | 57±2 MY (BS103.12) KA9 BT Perthite dike in contact with<br>granodiorite pluton; cuts Antarct. Pen. Volc. Group.<br>GLE82    |
| 65°14S 64°20W G<br>South Island         | 72±1 MY RS4I2/0.7036 WR Perthite dike and normal<br>facies of granodiorite pluton; cuts Antarct. Pen.<br>Volc. Group. GLE82 |
| 65°10S 64°11W G<br>Rouch Point RM       | 93±8 MY RS5I3/0.7045±0.0001 WR Late granite-diorite<br>intrusion;--. PAN82<br>(strat. may be Andean Intrusive Suite)        |

|                                           |                                                                                                                   |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| 65°08S 59°50W R<br>Oceana Volcano         | 2.8±0.5 MY(??)K/A WR Volcanic deposits;<br>Seal Nunataks Volc. Gp. GON83<br>(Del Valle and Fourcade, pers. comm.) |
| 65°07S 61°59W R<br>nr Punchbowl Glacier   | 98±4 MY(TL.10.1;IDB1159)KA9 BT Granite dike;<br>Andean Intrusive Suite. FLE68 REX76                               |
| 65°07S 61°59W R<br>nr Punchbowl Glacier   | 99±4 MY(TL.10.2;IDB1121)KA9 BT Granite;<br>Andean Intrusive Suite. FLE68 REX76                                    |
| 65°07S 61°59W R<br>nr Punchbowl Glacier   | 94±5 MY(TL.10.2;IDB1130)KA9 HB Granite;<br>Andean Intrusive Suite. FLE68 REX76                                    |
| 65°07S 61°59W R<br>nr Punchbowl Glacier   | 102±8 MY(TL.10.1)RS2I4/0.7044 BT,KF Granite dike;<br>Andean Intrusive Suite. FLE68 REX76                          |
| 65°06'30"S 60°05W R<br>Gray Volcano       | IT 0.2 MY(??)K/A WR Volcanic deposits;<br>Seal Nunataks Volc. Gp. GON83<br>(Del Valle and Fourcade, pers. comm.)  |
| 65°06'30"S 60°02W R<br>Arctowski Volcano  | 1.4±0.3 MY(??)K/A WR Volcanic deposits;<br>Seal Nunataks Volc. Gp. GON83<br>(Del Valle and Fourcade, pers. comm.) |
| 65°05S 60°10W R<br>Seal Nunataks          | IT 0.1 MY(D.727.2)KA9 WR Basalt;<br>James Ross Island group. REX72 REX76                                          |
| 65°05S 60°10W R<br>Seal Nunataks          | IT 0.1 MY(D.727.3)KA9 WR Basalt;<br>James Ross Island group. REX72 REX76                                          |
| 65°05S 59°35W R<br>Christensen Volcano    | 0.7±0.3 MY(??)K/A WR Volcanic deposits;<br>Seal Nunataks Volc. Gp. GON83<br>(Del Valle and Fourcade, pers. comm.) |
| 65°04'30"S 60°15W R<br>Bruce Volcano      | 1.5±0.3 MY(??)K/A WR Volcanic deposits;<br>Seal Nunataks Volc. Gp. GON83<br>(Del Valle and Fourcade, pers. comm.) |
| 65°04'30"S 60°07W R<br>Donald Volcano     | IT 0.2 MY(??)K/A WR Volcanic deposits;<br>Seal Nunataks Volc. Gp. GON83<br>(Del Valle and Fourcade, pers. comm.)  |
| 65°03S 60°11W R<br>Akerlundh Nunatak      | IT 0.1 MY(D.4105.1)KA9 WR Basalt;<br>James Ross Island group. REX72 REX76                                         |
| 65°03S 60°11W R<br>Akerlundh Volcano      | 0.7±0.3 MY(??)K/A WR Volcanic deposits;<br>Seal Nunataks Volc. Gp. GON83<br>(Del Valle and Fourcade, pers. comm.) |
| 65°00S 61°01W G<br>nr Cape Fairweather RM | 101±2 MY RS15I3/0.7055±0.0002 WR Adamellite;<br>--. PAN82                                                         |
| 65°00S 61°01W G<br>Cape Fairweather RM    | 111±2 MY RS3I3/0.7071±0.0002 WR Garnetiferous<br>granite; within the Trinity Pen. Group. PAN82                    |
| 65°00S 61°01W G<br>Cape Fairweather RM    | 92±2 MY RS6I3/0.7046±0.0001 WR Pink granite/diorite;<br>Andean Intrusive suite. PAN82                             |
| 65°00S 61°01W G<br>Cape Fairweather RM    | 93±2 MY RS3I3/0.7047±0.0001 WR Dolerite-felsite dike<br>cutting adamellite; Andean Intrusive Suite. PAN82         |
| 64°59S 61°04W R<br>Cape Fairweather       | 100±4 MY(D.4664.1;IDB1146)KA9 BT Quartz-diorite;<br>Andean Intrusive Suite. FLE68 REX76                           |
| 64°59S 61°04W R<br>Cape Fairweather       | 97±4 MY(D.4664.1;IDB1147)KA9 HB Quartz-diorite;<br>Andean Intrusive Suite. FLE68 REX76                            |
| 64°59S 61°032W G<br>Mural Nunatak         | 244±27 MY("R.372.1")RS3I3/0.7074±0.0003 WR Biotite-<br>schist; Trinity Pen. Gp. PAN83                             |
| 64°59S 60°22W R<br>Evenson Volcano        | 1.4±0.3 MY(??)K/A WR Volcanic deposits;<br>Seal Nunataks Volc. Gp. GON83<br>(Del Valle and Fourcade, pers. comm.) |
| 64°58S 60°05W R<br>Larsen Nunatak         | IT 0.1 MY(D.4114.1)KA9 WR Olivine-basalt;<br>James Ross Island group. REX72 REX76                                 |

- 64°57S 61°21W R  
nr Skilly Peak  
64°57S 61°21W R  
nr Skilly Peak  
64°57S 60°05W R  
Larsen Volcano
- 64°56S 62°00W R  
Hectoria Glacier  
64°56S 62°00W R  
Hectoria Glacier  
64°55S 62°03W R  
Rugate Ridge  
64°54S 63°03W G  
Mount Banck RM  
64°52S 61°02W G  
nr Andersson Peak RM  
64°51S 62°54W G  
Paradise Harbor RM
- 64°51S 63°35W G  
Doumer Island
- 64°51S 63°35W G  
Doumer Island
- 64°50S 62°33W G  
Neko Harbour RM  
64°50S 63°31W R  
Gouldier Island  
nr Port Lockroy  
64°50S 63°31W R  
Gouldier Island  
nr Port Lockroy  
64°49S 63°30W R  
Port Lockroy
- 64°49S 63°30W R  
Port Lockroy
- 64°49S 63°30W R  
Port Lockroy
- 64°48S 62°49W G  
"Canelo Point"  
(=Duthiers Point)  
64°47S 64°05W G  
Bonaparte Point
- 64°47S 64°05W G  
Bonaparte Point
- 64°47S 64°05W G  
Bonaparte Point
- 99+4 MY(D.4655.1;IDC90)KA9 BT Microgranite dike;  
Andean Intrusive Suite. FLE68 REX76  
84+3 MY(D.4655.1)RS2I4/0.7173 BT,KF Microgranite dike;  
Andean Intrusive Suite. FLE68 REX76  
1.5+0.5 MY(??)K/A WR Volcanic deposits;  
Seal Nunataks Volc. Gp. GON83  
(Del Valle and Fourcade, pers. comm.)  
105+4 MY(D.4642;IDB1059,IDC46)KA9 HB Gabbro;--. REX76  
(appears to be Andean Intrusive Suite)  
92+5 MY(D.4642.3;IDB1148)KA9 HB Gabbro;--. REX76  
(appears to be Andean Intrusive Suite)  
98+10 MY(D.4636.2;IDB1076)KA9 HB Diorite;--. REX76  
(appears to be Andean Intrusive Suite)  
131+4 MY RS7I3/0.7060+0.0010 WR Granite intrusion;  
pre-volcanic. PAN82  
95+1 MY RS5I3/0.7045+0.0003 WM Pink granite;  
Andean Intrusive Suite. PAN82  
120 MY(30b)KA6 WR Greenstone-altered plagiobasalt;  
--. GRI70  
(sample from vicinity of Almirante Brown Sta.)  
52.5+2 MY(??)KAl1 BT Quartz diorite pluton;  
--. SCO65  
(sample is from "Peninsula Patagonia" RM)  
45+5 MY(??)P/a Quartz diorite pluton;--. SCO65  
(C. Ruiz, pers. comm.; sample is from "Peninsula  
Patagonia" RM)  
114+11 MY RS6I3/0.7054+0.0006 WR Granite intrusion;  
pre-volcanic. PAN82  
51+2 MY(?.201.3;IDB514)KA9 BT Quartz-diorite;  
--. REX76  
(appears to be Andean Intrusive Suite)  
51+2 MY(?.201.3;IDB539)KA9 HB Quartz-diorite;  
--. REX76  
(appears to be Andean Intrusive Suite)  
48+2 MY(?.204.2;IDB687)KA9 BT Quartz-diorite;  
--. REX76  
(appears to be Andean Intrusive Suite)  
51+2 MY(?.204.2;IDB711)KA9 HB Quartz-diorite;  
--. REX76  
(appears to be Andean Intrusive Suite)  
49+2 MY(?.204.3;IDB603)KA9 BT Quartz-diorite;  
--. REX76  
(appears to be Andean Intrusive Suite)  
94+8 MY(??)KAl1 BT Diorite;  
--. SCO65
- 630+50 BP(??)14C PE On terrace 0.25 m from glacier  
snout, thought to represent base of former moss bank  
(*Polytrichum-Chorisodontium*). SMI82  
425+40 BP(??)14C PE On terrace 5-6 m from glacier  
snout, thought to represent base of former moss bank  
(*Polytrichum-Chorisodontium*). SMI82  
501+40 BP(??)14C PE On terrace 10-12 m from glacier  
snout, thought to represent base of former moss bank  
(*Polytrichum-Chorisodontium*). SMI82

|                                                               |                                                                                                                                        |
|---------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 64°47S 64°05W G<br>NE of Bonaparte Point<br>nr Palmer station | 19.8±0.8 MY(BS104.2)KA9 BT Hybrid pluton;<br>intrudes Antarct. Pen. Volc. Gp. GLE82<br>(assoc. with gabbro and tonalite plutons)       |
| 64°47S 64°05W G<br>NE of Bonaparte Point<br>nr Palmer station | 20.1±0.8 MY(BS104.3A)KA9 HB Hybrid pluton;<br>intrudes Antarct. Pen. Volc. Gp. GLE82<br>(assoc with gabbro and tonalite plutons)       |
| 64°47S 64°05W G<br>NE of Bonaparte Point<br>nr Palmer station | 20.8±1.0 MY(BS104.3B)KA9 HB Hybrid pluton;<br>intrudes Antarct. Pen. Volc. Gp. GLE82<br>(assoc with gabbro and tonalite plutons)       |
| 64°47S 64°05W G<br>NE of Bonaparte Point<br>nr Palmer station | 35±6 MY("BS104.1")RS8I2/0.7037 WR Hybrid pluton;<br>intrudes Antarct. Pen. Volc. Gp. GLE82<br>(assoc with gabbro and tonalite plutons) |
| 64°47S 64°05W G<br>NE of Bonaparte Point<br>nr Palmer station | 21 MY(BS104.1)RSM2/0.7037 BT Hybrid pluton;<br>intrudes Antarct. Pen. Volc. Gp. GLE82<br>(assoc. with gabbro and tonalite plutons)     |
| 64°46S 64°06W G<br>Litchfield Island                          | 495±85 BP(#?)14C FE Base (47.5 cm deep) of extensive<br>moss ( <i>Polytrichum</i> ) bank. SMI82                                        |
| 64°44S 61°21W R<br>SW of Drygalski Gl.                        | 73±4 MY(D.4822.2;IDB933)KA9 HB Hornblende-gabbro;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                               |
| 64°44S 61°21W R<br>SW of Drygalski Gl.                        | 75±3 MY(D.4822.1;IDB937,IDB961)KA9 HB Diorite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                                  |
| 64°40S 60°56W R<br>Bekker Nunataks                            | 117±5 MY(D.4844.3;IDB865)KA9 BT Granodiorite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                                   |
| 64°27S 59°11W G<br>Porphyry Bluff RM                          | 117±4 MY RS6I3/0.7153±0.0003 WR Rhyolite;--. PAN82<br>(may be the youngest member of the volcanic<br>succession on Trinity Peninsula)  |
| 64°25S 59°18W G<br>Hampton Bluffs RM                          | 130±7 MY RS5I3/0.7091±0.0006 WR Rhyodacite;<br>--. PAN82                                                                               |
| 64°18S 61°03W G<br>(Spring Point)                             | 96±6 MY(#?)K/A WR Rhyodacites from lava flow;<br>Andean igneous complex. VAL79<br>(loc. given as "Cerro Escombrera" in "Cape Spring")  |
| 64°18S 61°03W G<br>(NE of Spring Point)                       | 102±5 MY(#?)K/A WR Rhyodacites from dike;<br>cut Andean Intrusives. VAL79<br>(loc. given as NE of "Cape Spring")                       |
| 64°10S 60°58W R<br>"Tisné Point"                              | 96±2 MY(B-2)RS2I2/0.705 WM Granodiorite;<br>--. HAL67                                                                                  |
| 64°08S 61°04W R<br>Two Hummock Island                         | 37±2 MY(BS.1.2;AR187)KA9 WR Basalt;<br>--. REX72 REX76                                                                                 |

## GEOGRAPHIC AREA 33:

TRINITY PENINSULA (samples from west to east by coordinates)

|                                                             |                                                                                                             |
|-------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|
| 63°32S 59°50W R<br>Tower Island                             | 58±2 MY(BS.52.3;AR189)KA9 WR Basalt;<br>--. REX72 REX76                                                     |
| 63°32S 59°50W R<br>Tower Island                             | 63±2 MY(BS.52.11;AR188)KA9 WR Basalt;<br>--. REX72 REX76                                                    |
| 63°32S 59°50W R<br>Tower Island                             | 54±2 MY(B5.53.2;AR272)KA9 WR Basalt;<br>--. REX76                                                           |
| 64°14S 59°15W R<br>Sjögren Glacier                          | 113±4 MY(D.3961.1;IDB902)KA9 BT Diorite;--. REX76<br>(appears to be Andean Intrusive Suite)                 |
| 64°14S 59°15W R<br>Sjögren Glacier                          | 111±4 MY(D.3961.1;IDB909)KA9 HB Diorite;--. REX76<br>(appears to be Andean Intrusive Suite)                 |
| 64°14S 59°15W R<br>Sjögren Glacier                          | 92±5 MY(D.3966.1;IDB951)KA9 BT Amphibolite;--. REX76<br>(appears to be Andean Intrusive Suite)              |
| 64°14S 59°15W R<br>Sjögren Glacier                          | 103±4 MY(D.3966.1;IDB913, IDB962)KA9 HB Amphibolite;<br>--. REX76<br>(appears to be Andean Intrusive Suite) |
| NE of Mount Hornsby                                         | 110 MY(1b)KA6 WR Metagranodiorite;<br>Cretaceous intrusive complex. GRI70                                   |
| 63°33S 58°56W G<br>Cape Roquemaurel RM                      | 100 MY(1g)KA6 WR Coarse-grained leucocratic granite;<br>Cretaceous intrusive complex. GRI70                 |
| 63°33S 58°56W G<br>Cape Roquemaurel RM                      | 100 MY(1i)KA6 WR Cataclasized leucocratic biotite<br>granite; Cretaceous intrusive complex. GRI70           |
| 63°33S 58°56W G<br>Cape Roquemaurel RM                      | 137±6 MY(D.4463.2;IDB903)KA9 BT Hornfels;<br>--. REX76<br>(appears to be Andean Intrusive Suite)            |
| 63°37S 58°49W R<br>Wimple Dome                              | 139±6 MY(D.3550.1;IDB678)KA9 BT Granite;--. REX76<br>(appears to be Andean Intrusive Suite)                 |
| 63°37S 58°49W R<br>Wimple Dome                              | 143±6 MY(D.3550.2;IDB790)KA9 BT Granite;--. REX76<br>(appears to be Andean Intrusive Suite)                 |
| 63°37S 58°49W R<br>N face, Wimple Dome                      | 139±6 MY(D.3850.1;IDB821)KA9 BT Granodiorite;--. REX76<br>(appears to be Andean Intrusive Suite)            |
| 63°37S 58°49W R<br>nr Wimple Dome                           | 131±6 MY(D.3852.1;IDB860)KA9 BT Granite;--. REX76<br>(appears to be Andean Intrusive Suite)                 |
| 63°27S 58°47W R<br>NE of Aitkenhead Gl.                     | 170±7 MY(D.4257.1;IDB925)KA9 BT Granodiorite;--. REX76<br>(appears to be Andean Intrusive Suite)            |
| 63°27S 58°47W R<br>NE of Aitkenhead Gl.                     | 169±7 MY(D.4258.2;IDB916)KA9 BT Granodiorite;--. REX76<br>(appears to be Andean Intrusive Suite)            |
| 63°52S 58°38W R<br>W of Mount Bradley                       | 156±6 MY(D.3662.4;IDB825)KA9 BT Granite;--. REX76<br>(appears to be Andean Intrusive Suite)                 |
| 63°52S 58°38W R<br>NW of Mount Bradley                      | 155±6 MY(D.3663.1;IDB832)KA9 BT Tonalite;--. REX76<br>(appears to be Andean Intrusive Suite)                |
| 63°48S 58°35W R<br>Victory Glacier                          | 165±7 MY(D.3524.1;IDB768)KA9 BT Granite;--. REX76<br>(appears to be Andean Intrusive Suite)                 |
| 63°48S 58°35W R<br>NW-facing buttress<br>of Victory Glacier | 136±6 MY(D.3667.2;IDB874)KA9 BT Metamorphosed<br>laminated siltstone;--. REX76                              |
| 64°10S 58°30W R<br>James Ross Island                        | 3.0±0.5 MY(D.2144.1;IDC306)KA9 WR Basalt;<br>James Ross Island Group. REX72 REX76                           |
| 64°04S 58°15W R<br>SW Palisade Nun. RM                      | 6.5±0.3 MY(D.4086.1;AR609)KA9 WR Olivine-dolerite;<br>James Ross I. Volc. Gp. NEL66 REX76                   |
| 64°04S 58°15W R<br>SW Palisade Nun. RM                      | 5.4±0.3 MY(D.4086.1;AR693)KA9 WR Olivine-dolerite;<br>James Ross I. Volc. Gp. NEL66 REX76                   |



|                                                                |                                                                                                                                                                 |
|----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 63°50S 58°15W R<br>Carlson Island                              | 2.0±0.5 MY(D.2166.1;IDC316)KA9 WR Basalt;<br>James Ross Island Group. REX72 REX76                                                                               |
| 63°50S 58°15W R<br>Carlson Island                              | 1.4±0.3 MY(D.2166.1;AR197)KA9 WR Basalt;<br>James Ross Island Group. REX72 REX76                                                                                |
| 63°50S 58°15W R<br>Carlson Island                              | 1.4±0.2 MY(D.2166.1;AR204)KA9 WR Basalt;<br>James Ross Island Group REX72 REX76                                                                                 |
| 64°00S 58°13W R<br>James Ross Island RM                        | 3.5±0.5 MY(D.4085.2;AR183)KA9 WR Olivine-basalt;<br>extrusive phase IV, James Ross I. Volc. Gp.<br>NEL66 REX72 REX76                                            |
| 63°56S 58°13W R<br>James Ross Island                           | 4.6±0.4 MY(D.4096.1;AR181)KA9 WR Basalt;<br>James Ross Island Group. REX72 REX76                                                                                |
| 63°55S 58°13W R<br>S of Lagrelius Pt.,<br>James Ross Island RM | 2.1±1.0 MY(D.4097.2;AR182)KA9 WR Olivine-basalt in<br>palagonite tuff; James Ross I. Volc. Gp.<br>NEL66 REX72 REX76                                             |
| 63°25S 58°03W R<br>SE end, Cape Ducorps                        | 75±8 MY(1;H-62-19)KA4 PY Quartz-diorite;<br>Plutonic Intrusive Suite. HAL62 HAL64                                                                               |
| 63°17S 57°58W R<br>Bulnes Island area                          | 100±20 MY(2;H-62-14)KA4 PY Gabbro;<br>poss. Plutonic Intrusive Suite. HAL62 HAL64                                                                               |
| 63°19S 57°54W RM*<br>"Base O'Higgins" area                     | 74.7±2.8 MY(H-62-4)KA4 PY Porphyritic andesite dike;<br>cuts unnamed fm. HAL64<br>(*avg. coords. for the area)                                                  |
| 63°19S 57°54W RM*<br>"Base O'Higgins" area                     | 116±4 MY(H-62-26)KA4 HB Diorite pebble;<br>"pebbly mudstone unit" of unnamed fm. HAL64<br>(*avg. coords. for the area)                                          |
| 63°19S 57°54W RM*<br>"Base O'Higgins" area                     | 86±7 MY(H-62-76)KA4 PY Porphyritic andesite;-- HAL64<br>(*avg coords. for the area)                                                                             |
| 63°44S 57°52W G<br>Red Island RM                               | 1.6±0.2 MY(27812)KA9 WR Alkali basalt;<br>James Ross I. Volc. Gp. BAK77                                                                                         |
| 63°50S 57°52W R<br>James Ross Island RM                        | 4.6±0.4 MY(D.3753.5;AR692)KA9 WR Microdiorite;<br>-- NEL66 REX76<br>(may be extrusive phase II, James Ross I.<br>Volc. Gp. from Lachman Crags)                  |
| 63°40S 57°37W R<br>S side,<br>South Tail I RM                  | 2.7±0.5 MY(D.3771.1)KA9 WR Basalt;<br>extrusive phase I, James Ross I. Volc. Gp.<br>NEL66 REX72                                                                 |
| 63°16S 57°36W R<br>Coupvent Point                              | 90±4 MY(D.3510.1;IDB778)KA9 HB Quartz-diorite;<br>-- REX76<br>(appears to be Andean Intrusive Suite)                                                            |
| 63°16S 57°36W R<br>Coupvent Point                              | 89±5 MY(D.3510.1;IDB789)KA9 BT Quartz-diorite;<br>-- REX76<br>(appears to be Andean Intrusive Suite)                                                            |
| 63°38S 57°25W R<br>Eagle Island                                | 2.0±0.2 MY(D.3776.1;AR603)KA9 WR Olivine-basalt;<br>-- REX76                                                                                                    |
| 63°38S 57°25W R<br>Eagle Island                                | 1.7±0.2 MY(D.3776.1;AR712)KA9 WR Olivine-basalt;<br>-- REX76                                                                                                    |
| 63°33S 57°22W G<br>View Point                                  | 386±40 MY RS8I3/0.7108±0.0010 WR Detrital granite<br>cobbles in a cgl; View Pt. Fm., Trinity Pen. Gp.<br>BRI81 PAN83<br>("errorchron" date; BAS "unpubl. data") |
| 63°36S 57°22W R<br>Beak Island                                 | 1.7±0.2 MY(D.3711.3;AR597)KA9 WR Olivine-basalt;<br>-- REX76                                                                                                    |
| 63°36S 57°22W R<br>Beak Island                                 | 2.0±0.2 MY(D.3711.3;AR694)KA9 WR Olivine-basalt;<br>-- REX76                                                                                                    |

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| 64°16S 57°21W R<br>nr Gourden Glacier,<br>James Ross Island RM | 3.3±0.8 MY(D.4053.6;AR606)KA9 WR Basalt;<br>--. NEL66 REX76<br>(may be extrusive phase III, James Ross I Volc. Gp.)                                                                                                                       |
| 64°16S 57°21W R<br>nr Gourdon Gl. RM                           | 2.2±0.5 MY(D.4053.11;AR180)KA9 WR Olivine-basalt;<br>extrusive phase III, James Ross I. Volc. Gp.<br>NEL66 REX72 REX76                                                                                                                    |
| 63°14S 57°08W R<br>NW of Mt. Bransfield                        | 101±5 MY(D.3504.4;IDB780)KA9 HB Quartz-diorite;<br>--. REX76<br>(appears to be Andean Intrusive Suite)                                                                                                                                    |
| 63°17S 57°06W R<br>Mount Bransfield                            | 93±4 MY(D.3504.1;IDB706)KA9 BT Hypersthene-quartz-<br>diorite;--. REX76<br>(appears to be Andean Intrusive Suite)                                                                                                                         |
| 63°17S 57°06W R<br>Mount Bransfield                            | 97±5 MY(D.3504.1;IDB731)KA9 HB Hypersthene-quartz-<br>diorite;--. REX76<br>(appears to be Andean Intrusive Suite)                                                                                                                         |
| 63°31S 57°01W G<br>Lizard Hill RM                              | 92±2 MY RS8I3/0.7040±0.0001 WM Granodiorite;<br>--. PAN82                                                                                                                                                                                 |
| 63°31S 57°01W R<br>Lizard Hill                                 | 384±15 MY(D.17;IDB696)KA9 BT Granite;<br>Paleozoic Intrusive Suite. REX76                                                                                                                                                                 |
| 63°31S 57°01W R<br>Lizard Hill                                 | 351±14 MY(D.19;IDB714)KA9 BT Granite;<br>Paleozoic Intrusive Suite. REX76                                                                                                                                                                 |
| 63°31S 57°01W R<br>Lizard Hill                                 | 374±15 MY(D.19;IDB724)KA9 MC Granite;<br>Paleozoic Intrusive Suite. REX76                                                                                                                                                                 |
| 63°25S 57°01W G<br>Scar Hills                                  | 281±16 MY("BR.072.1")RS7I3/0.7069±0.0001 WR Red arkosic<br>grit(1), grey-green grit(1), banded mud/<br>siltstone(5); Hope Bay Fm., Trinity Pen. Gp. PAN83<br>("errorchron" date; isochron of 5 samples=296±4 MY<br>with IR=0.7063±0.0001) |
| 63°32S 57°00W G<br>NW Tabarin Pen. RM                          | 0.9±0.2 MY(27831)KA9 WR Alkali basalt (hawaiiite);<br>James Ross I. Volc. Gp. BAK77                                                                                                                                                       |
| 63°23S 57°00W G<br>Hope Bay                                    | 242±50 MY RS2I WR Shale;<br>Trinity Pen. Fm. DAL72A DAL82                                                                                                                                                                                 |
| 63°32S 56°57W R<br>Tabarin Pen.                                | 1.1±0.1 MY(D.3787.1;AR600)KA9 WR Basalt;<br>--. REX76                                                                                                                                                                                     |
| 63°32S 56°57W R<br>Tabarin Pen.                                | 1.1±0.1 MY(D.3783.1;AR701)KA9 WR Basalt;<br>--. REX76                                                                                                                                                                                     |
| 64°17S 56°45W G<br>Seymour Island                              | 6.8 MY(??)K/A WR Dike;--. ZIN82<br>(quoted from RIN78)                                                                                                                                                                                    |
| 63°30S 55°55W G<br>Islet E of<br>Dundee Island RM              | 72±3 MY(27809)KA9 WR Basaltic andesite;<br>--. BAK77                                                                                                                                                                                      |
| 63°35S 55°47W G<br>N end Paulet I. RM                          | 0.3±0.1 MY(27788)KA9 WR Alkali basalt;<br>James Ross I. Volc. Gp. BAK77                                                                                                                                                                   |

| GEOGRAPHIC AREA 34:                                                                                                                                                                                                                                                                                                                                                                                  | SOUTH SHETLAND ISLANDS AND SOUTH ORKNEY ISLANDS<br>(samples from west to east by coordinates)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 63°00S 62°30W G<br>Smith Island<br>63°00S 62°30W G<br>Smith Island RM                                                                                                                                                                                                                                                                                                                                | 58 MY(##?)K/A GU Metamorphic rocks;<br>likely pre-middle Jurassic basement complex. DAL82<br>c.70 MY RS7I3/0.704* WR Schist (Terrane A);<br>Scotia Metamorphic Complex. TAN92<br>(*date based on broad concordance of these 7<br>samples with isochron listed for 2/46, Elephant I.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 63°00S 62°30W G<br>Smith Island<br>63°13S 62°15W G<br>Cape Wallace, Low I.<br>63°13S 62°15W G<br>Cape Wallace,<br>Low Island                                                                                                                                                                                                                                                                         | IT 135 MY(4.831.3)RSM3/0.703 WR Schist (Terrane A);<br>Scotia Metamorphic Complex. TAN82<br>121±3 MY(P.407.4)KA17 WR Granodiorite pluton;<br>cuts later Jurassic marine beds. PAN83B<br>127 MY(##?)A/A WR Dacitic intrusion;<br>--. PAN83B<br>(Elliot, Dupré and Gracanic, pers. comm.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 63°18S 61°59W G<br>nr Cape Hooker, Low I.<br>62°35S 61°13W G<br>Start Point Pen. RM<br>62°35S 61°13W G<br>Start Point Pen. RM<br>62°35S 61°13W G<br>Start Point Pen. RM<br>62°35S 61°13W G<br>Start Point Pen. RM<br>62°44S 61°12W G<br>President Head,<br>Snow Island                                                                                                                               | 120±5 MY(P.215.1)KA17 WR Micro-ademellite pluton;<br>cuts later Jurassic marine beds. PAN83B<br>129±4 MY(P.862.3)KA17 WR Andesite dike (coarse mesh);<br>cuts "younger" agglomeratic unit. PAN80<br>127±4 MY(P.862.3)KA17 WR Andesite dike (coarse mesh);<br>cuts "younger" agglomeratic unit. PAN80<br>127±7 MY(P.862.4)KA17 WR Basalt sill (coarse mesh);<br>nr. base of "younger" agglomeratic unit. PAN80<br>119±4 MY(P.862.4)KA17 WR Basalt sill (coarse mesh);<br>nr. base of "younger" agglomeratic unit. PAN80<br>46±2 MY(P.417.2)KA17 WR Dacite extrusive;<br>--. PAN83B                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 62°41S 61°06W G<br>Vietor Rk area RM<br>62°41S 61°06W G<br>Vietor Rk area RM<br>62°41S 61°06W G<br>Vietor Rk area RM                                                                                                                                                                                                                                                                                 | 108±4 MY(P.845.1b)KA17 WR Basalt lava (fine mesh);<br>youngest of three lava flows with tuffs. PAN80<br>103±4 MY(P.845.1b)KA17 WR Basalt lava (coarse mesh);<br>youngest of three lava flows with tuffs. PAN80<br>107±4 MY(P.845.2c)KA17 WR Basaltic andesite<br>(fine mesh); from sequence of three lava flows with<br>tuffs. PAN80                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 62°41S 61°06W G<br>Vietor Rk area RM<br>62°41S 61°06W G<br>Vietor Rk area RM<br>62°41S 61°06W G<br>Vietor Rk area RM<br>62°41S 61°06W G<br>Vietor Rk area RM<br>62°41S 61°06W G<br>Vietor Rk area RM<br>62°41S 61°06W G<br>Vietor Rk area RM<br>62°41S 61°06W G<br>Vietor Rk area RM<br>62°38S 61°05W G<br>Byers Pen. RM<br>62°38S 61°05W G<br>E Byers Pen. RM<br>62°38S 61°05W G<br>E Byers Pen. RM | 109±4 MY(P.845.2c)KA17 WR Lava (coarse mesh);<br>from sequence of three lava flows with tuffs. PAN80<br>86±3 MY(P.845.3a)KA17 WR Basaltic andesite (fine mesh);<br>oldest of three lava flows with tuffs. PAN80<br>91±4 MY(P.845.3a)KA17 WR Lava (fine mesh);<br>oldest of three lava flows with tuffs. PAN80<br>82±3 MY(P.845.3a)KA17 WR Lava (coarse mesh);<br>oldest of three lava flows with tuffs. PAN80<br>74±3 MY(P.845.3b)KA17 WR Basaltic andesite (fine mesh);<br>oldest of three lava flows with tuffs. PAN80<br>73±3 MY(P.845.3b)KA17 WR Lava (coarse mesh);<br>oldest of three lava flows with tuffs. PAN80<br>108±4 MY(P.845.8)KA17 WR Dolerite plug (coarse mesh);<br>cuts tuffaceous sediments underlying lava. PAN80<br>109±4 MY(P.845.9)KA17 WR Dolerite plug (coarse mesh);<br>cuts tuffaceous sediments underlying lava. PAN80<br>111±4 MY RS10I3/0.7051±0.0002 WR Rhyolite;<br>--. PAN82<br>74±3 MY(P.850.5)KA17 WR Basalt sill (fine mesh);<br>from sequence of lavas. PAN80<br>77±4 MY(P.850.5)KA17 WR Basalt sill (fine mesh);<br>from sequence of lavas. PAN80 |



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| 62°38S 61°00W R<br>Byers Peninsula                           | 3130±40 BP(SRR-1087)14C2 CO Whalebone, 200 m from<br>SRR-1086. HAR81                                                                                                                |
| 62°42S 60°56W R<br>E South Beaches RM                        | 1056±130 BP(Birm-50)14C2 CO Whalebone centrum, c.<br>3 m a.s.l., embedded in emerged beach;--SHO71 SUG73                                                                            |
| 62°41S 60°23W G<br>Hurd Peninsula                            | 197 MY R/S WR Five samples from mudstone layer w/ crude<br>slaty cleavage; Miers Bluff Fm. DAL72A<br>(recalc. as 204±10 MY, RS5I3/0.7091±0.0011 in PAN83)                           |
| 62°40S 60°22W G<br>nr Johnson's Dock<br>Livingston Island RM | 55 MY(101/1)KA6 WR Altered basalt porphyry from<br>dike;-- GRI70                                                                                                                    |
| 62°43S 60°22W G<br>False Bay                                 | 38 MY(##)A/A BT Pluton;-- ELL83<br>(cooling date)                                                                                                                                   |
| 62°46S 60°21W G<br>Barnard Point                             | 40±1 MY(P.1259.2)KA17 BT Tonalite pluton;<br>-- PAN83B                                                                                                                              |
| 62°46S 60°21W G<br>Barnard Point                             | 46±2 MY(P.1259.2)KA17 HB Tonalite pluton;<br>-- PAN83B                                                                                                                              |
| 62°42S 60°16W R<br>E side, False Bay                         | 39±4 MY(LI110)RS*/0.706 BT Tonalite;<br>"Andean" intrusives. DAL73<br>(*mineral data set the age; WR and BT analyses<br>determined the IR; avg of three LI110 samples=<br>40±10 MY) |
| 62°42S 60°16W R<br>E side, False Bay                         | 38±8 MY(LI110)RS*/0.712 BT Tonalite;<br>"Andean" intrusives. DAL73<br>(*mineral data set the age; WR and BT analyses<br>determined the IR; avg of three LI110 samples=<br>40±10 MY) |
| 62°42S 60°16W R<br>E side, False Bay                         | 42±5 MY(LI110)RS*/0.707 BT Tonalite;<br>"Andean" intrusives. DAL73<br>(*mineral data set the age; WR and BT analyses<br>determined the IR; avg of three LI110 samples=<br>40±10 MY) |
| 62°35S 60°15W G<br>Gleaner Heights                           | 0.1±0.4 MY(P.51.1)KA17 WR Basalt extrusive;<br>-- PAN83B                                                                                                                            |
| 62°28S 60°08W*<br>Sayer Nunatak                              | 74±2 MY(P.225.1a)KA17 WR Basalt sill;-- PAN83B<br>(*coords. taken from Antarct. J1. U.S. 17(4):9-12)                                                                                |
| 62°28S 60°08W*<br>Sayer Nunatak                              | 79±2 MY(P.225.1b)KA17 WR Basalt sill;-- PAN83B<br>(*coords. taken from Antarct. J1. U.S. 17(4):9-12)                                                                                |
| 62°28S 60°08W*<br>Sayer Nunatak                              | 81±2 MY(P.428.3)KA17 WR Clast in vent;-- PAN83B<br>(*coords. taken from Antarct. J1. U.S. 17(4):9-12)                                                                               |
| 62°33S 60°01W G<br>Edinburgh Hill                            | c.1 MY(##)A/A WR Plug;<br>-- ELL83                                                                                                                                                  |
| 62°27S 59°59W*<br>Express Island                             | 84±2 MY(P.926.1)KA17 WR Microgabbro extrusive;<br>-- PAN83B<br>(*coords. taken from Antarct. J1. U.S. 17(4):9-12)                                                                   |
| 62°36S 59°55W G<br>Half Moon Island RM                       | 105 MY(4a)KA6 WR Quartz-bearing diorite;<br>outcrop amongst effusive strata. GRI70                                                                                                  |
| 62°28S 59°49W G<br>Mt. Plymouth                              | 0.2±0.3 MY(P.54.1)KA17 WR Basalt extrusive;<br>-- PAN83B                                                                                                                            |
| 62°28S 59°49W G<br>Mt. Plymouth                              | 0.2±0.4 MY(P.55.1)KA17 WR Basalt extrusive;<br>-- PAN83B                                                                                                                            |
| 62°31S 59°47W G<br>Greenwich Island                          | 80±2 MY(P.485.1)KA17 WR Basalt sill;<br>-- PAN83B                                                                                                                                   |
| 62°22S 59°43W G<br>Coppermine Pen.                           | 82±2 MY(P.840.4)KA17 WR Basalt extrusive;<br>-- PAN83B                                                                                                                              |

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| 62°22S 59°43W G<br>Coppermine Pen.                   | 83±3 MY(P.840.5)KA17 WR Basalt extrusive;<br>--. PAN83B                                                                               |
| 62°22S 59°43W G<br>Coppermine Pen.                   | 80±2 MY(P.840.6)KA17 WR Basalt extrusive;<br>--. PAN83B                                                                               |
| 62°22S 59°43W G<br>Coppermine Pen.                   | 84±2 MY(P.842.6)KA17 WR Basalt extrusive;<br>--. PAN83B                                                                               |
| 62°22S 59°43W G<br>Coppermine Pen.                   | 82±3 MY(P.842.9)KA17 WR Basalt extrusive;<br>--. PAN83B                                                                               |
| 62°22S 59°43W G<br>Coppermine Pen.                   | 60±1 MY(P.1613.1)KA17 WR Basalt extrusive;<br>--. PAN83B                                                                              |
| 62°24S 59°30W G<br>"Kitchen Point,"<br>Robert Island | 53±1 MY(P.477.1)KA17 WR Andesite extrusive;<br>--. PAN83B                                                                             |
| 62°13S 59°02W G<br>(Flat Top Pen.)                   | 61±3 MY(A24K)K/A WR Andesite lava flow;<br>may be Andean igneous complex. VAL79<br>(loc. given as "E. Flat Top Point")                |
| 62°13S 59°02W G<br>(Flat Top Pen.)                   | 88±5 MY(A11)K/A WR Andesite lava flow;<br>may be Andean igneous complex. VAL79<br>(loc. given as "E. Flat Top Point")                 |
| 62°13S 59°01W G<br>Horatio Stump RM                  | 54.3±0.6 MY(??)KA3 WR Basaltic plug;<br>Fildes Peninsula Group. WAT82                                                                 |
| 62°13S 59°01W G<br>Horatio Stump                     | 51±1 MY(P.619.1)KA17 WR Cross-cutting andesite plug;<br>--. PAN83B                                                                    |
| 62°14S 59°00W G<br>Fildes Strait                     | 110±10 MY(A23)K/A WR Andesite lava flow;<br>may be Andean igneous complex. VAL79                                                      |
| 62°15S 58°59W R<br>S of Rip Point RM                 | 802±43 BP(Birm-14)14C2 WD <u>Austrocedrus chilensis</u><br>(Chilean Pine), in raised beach gravel, c. 6.5 m<br>a.s.l.;--. SHO68 SUG73 |
| 62°12S 58°58W G<br>S end, Fildes Pen. RM             | 79.2±2.6 MY(??)KA3 WR Basaltic dike;<br>Upper Jurassic Volcanic Group. WAT82                                                          |
| 62°12S 58°58W G<br>S end, Fildes Pen. RM             | 64.4±0.8 MY(1)KA3 WR Basaltic lava;<br>Upper Jurassic Volcanic Group. WAT82                                                           |
| 62°12S 58°58W G<br>S end, Fildes Pen. RM             | 106.0±1.2 MY(2)KA3 WR Basaltic lava;<br>Upper Jurassic Volcanic Group. WAT82                                                          |
| 62°12S 58°58W G<br>Fildes Peninsula                  | 85 MY(20a)KA6 WR Mantle facies of olivine-pyroxene<br>basalt; "Andean intrusive complex." GRI70                                       |
| 62°12S 58°58W G<br>Fildes Peninsula                  | 45 MY(134)KA6 WR Vent facies of andesite-basalt;<br>"Andean intrusive complex." GRI70                                                 |
| 62°12S 58°58W G<br>S. Fildes Pen.                    | 51±1 MY(P.615.1)KA17 WR Andesite extrusive;<br>--. PAN83B                                                                             |
| 62°12S 58°58W G<br>S. Fildes Pen.                    | 59±2 MY(P.604.1)KA17 WR Andesite extrusive;<br>--. PAN83B                                                                             |
| 62°12S 58°58W G<br>S. Fildes Pen.                    | 58±1 MY(P.608.5a)KA17 WR Andesite extrusive;<br>--. PAN83B                                                                            |
| 62°12S 58°58W G<br>S. Fildes Pen.                    | 58±2 MY(P.609.3)KA17 WR Andesite extrusive;<br>--. PAN83B                                                                             |
| 62°12S 58°58W G<br>S. Fildes Pen.                    | 58±1 MY(P.627.1)KA17 WR Altered lava;<br>--. PAN83B                                                                                   |
| 62°12S 58°58W G<br>S. Fildes Pen.                    | 31±3 MY(P.629.1)KA17 WR Altered lava;<br>--. PAN83B                                                                                   |
| 62°12S 58°58W G<br>N. Fildes Pen.                    | 58±4 MY(P.1149.1)KA17 WR Andesite extrusive;<br>--. PAN83B                                                                            |
| 62°12S 58°58W G<br>N. Fildes Pen.                    | 52±1 MY(P.1166.7)KA17 WR Andesite extrusive;<br>--. PAN83B                                                                            |

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| 62°12S 58°58W G        | 48±1 MY(P.1147.3)KA17 WR Basalt extrusive;            |
| N. Fildes Pen.         | --. PAN83B                                            |
| 62°12S 58°58W G        | 48±1 MY(P.1147.4)KA17 WR Basalt extrusive;            |
| N. Fildes Pen.         | --. PAN83B                                            |
| 62°12S 58°58W G        | 57±3 MY(P.1162.5)KA17 WR Basalt extrusive;            |
| N. Fildes Pen.         | --. PAN83B                                            |
| 62°12S 58°58W G        | 43±1 MY(P.1125.1)KA17 WR Basalt andesite extrusive;   |
| N. Fildes Pen.         | --. PAN83B                                            |
| 62°12S 58°58W G        | 42±1 MY(P.1182.1/2)KA17 WR Dacite extrusive;          |
| N. Fildes Pen.         | --. PAN83B                                            |
| 62°12S 58°58W G        | 46±1 MY(P.1183.2/7)KA17 WR Dacite extrusive;          |
| N. Fildes Pen.         | --. PAN83B                                            |
| 62°13S 58°56W G        | 27±2 MY(A6)K/A WR Andesite lava flow;                 |
| Ardley Island          | may be Andean igneous complex. VAL79                  |
| 62°12S 58°55W G        | 44±1 MY(P.611.1)KA17 WR Cross-cutting andesite plug;  |
| Suffield Point         | --. PAN83B                                            |
| 62°13S 58°48W G        | 47.8±1.8 MY(1)K/A WR Type 1 dolerite;                 |
| (N of Marian Cove)     | Andean Intrusive Suite. DAV82                         |
|                        | (loc.="Weaver Pen."; R.J. Pankhurst, pers. comm.)     |
| 62°13S 58°48W R        | 1430-470 BP(Birm-17)14C2 SW Inclined sheets of gravel |
| E of South Spit,       | beneath truncation layer, c. 3 m a.s.l.;--.           |
| Marian Cove RM         | SHO70 SUG73                                           |
| 62°13S 58°48W G        | 55 MY(27b)KA6 WR Granodiorite from small intrusive    |
| Marian Cove RM         | stock of gabbroids;--. GRI70                          |
| 62°13S 58°48W R        | 1223±81 BP(Birm-16)14C2 SW Truncation layer above     |
| E of South Spit,       | inclined sheets of beach gravel, c. 5m a.s.l.         |
| Marian Cove RM         | SHO68 SUG73                                           |
|                        | (apparently younger than modern seaweed Birm-15)      |
| 62°13S 58°48W G        | 46±1 MY(P.1473.5)KA17 WR Basaltic andesite extrusive; |
| Marian Cove            | --. PAN83B                                            |
| 62°14S 58°47W R        | 1390±140 BP(Birm-224)14C2 CO Whalebone rib, from      |
| E of penguin rookery,  | face of raised beach gravel, c. 6-7 m a.s.l.          |
| S Barton Pen. RM       | SHO71 SUG73                                           |
| 62°14S 58°46W G        | 1440±55 BP(MB-2;DIC-373)14C3 CO Whale vertebrae,      |
| Barton Peninsula RM    | foreslope below 6 m raised beach, alt. 5.2 m CUR80    |
|                        | (age corrected for 14C deficiency is 500±55 BP)       |
| 62°14S 58°46W G        | 1210±55 BP(MB-4;DIC369)14C3 CO Whale ear bone,        |
| Barton Peninsula RM    | foreslope of 2.5-3 m raised beach, alt. 2 m. CUR80    |
|                        | (age corrected for 14C deficiency is 270±55 BP)       |
| 62°14S 58°46W G        | 46.0±0.7 MY(1)KA3 WR Granodiorite;                    |
| Noel Hill RM           | Andean Intrusive Suite. WAT82                         |
| 62°14S 58°46W G        | 50.2±0.6 MY(2)KA3 WR Granodiorite;                    |
| Noel Hill RM           | Andean Intrusive Suite. WAT82                         |
| 62°14S 58°46W G        | 48±1 MY(P.533.1)KA17 WR Cross-cutting granodiorite    |
| Noel Hill              | plug;--. PAN83B                                       |
| 62°14S 58°46W G        | 46±1 MY(P.533.2/3)KA17 WR Cross-cutting granodiorite  |
| Noel Hill              | plug;--. PAN83B                                       |
| 62°14S 58°42W G        | 49.1±0.9 MY(1)KA3 WR Upper andesite lava;             |
| Potter Cove RM         | Ezcurra Inlet Group. WAT82                            |
| 62°14S 58°42W G        | 57.9±0.8 MY(2)KA3 WR Middle andesite lava;            |
| Potter Cove RM         | Ezcurra Inlet Group. WAT82                            |
| 62°14S 58°42W G        | 49.7±1.7 MY(3)KA3 WR Lower andesite lava;             |
| Potter Cove RM         | Ezcurra Inlet Group. WAT82                            |
| 62°15S 58°41W G        | 50.6±0.7 MY(4)KA3 WR Basaltic plug;                   |
| Three Brothers Hill RM | Ezcurra Inlet Group. WAT82                            |

|                                                 |                                                                                                                                                                  |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 62°15S 58°41W G<br>nr Three Brothers<br>Hill RM | 1360±65 BP(MB-3;DIC-371)14C3 CO Whale vertebrae, top<br>of 6 m raised beach, alt. 6 m. CUR80<br>(age corrected for 14C deficiency is 420±65 BP)                  |
| 62°15S 58°41W G<br>nr Three Brothers<br>Hill RM | 1200±110 BP(SP-1;DIC-368)14C3 CO Whale vertebrae, in<br>foreslope of 2.5-3 m raised beach, alt. 2.1 m. CUR80<br>(age corrected for 14C deficiency is 260±110 BP) |
| 62°14S 58°41W G<br>S shore,<br>Potter Cove RM   | 7683±860 BP(Birm-23)14C2 SW Iron-stained sand layer<br>"C", c. 4 m a.s.l., beneath till. SHO68 SUG73                                                             |
| 62°14S 58°41W R<br>S shore,<br>Potter Cove RM   | 9670±230 BP(Birm-48a)14C2 SH Inner fraction, <u>Laternula</u><br>sp., junction of dark silt horizon (A) and sandy<br>horizon (B) beneath till. SHO69 SUG73       |
| 62°14S 58°41W R<br>S shore,<br>Potter Cove RM   | 8790±260 BP(Birm-48b)14C2 SH Middle fraction, <u>Laternula</u><br>sp., junction of dark silt horizon (A) and sandy<br>horizon (B) beneath till. SHO69 SUG73      |
| 62°15S 58°41W G<br>Three Brothers Hill          | 47±1 MY(P.685.4)KA17 WR Cross-cutting andesite plug;<br>--. PAN83B                                                                                               |
| 62°15S 58°40W*<br>Potter Peninsula              | 44±1 MY(P.232.1)KA17 WR Basalt extrusive;<br>Fildes Fm. PAN83B<br>(*coords. taken from Antarct. Jl. U.S. 17(4):9-12)                                             |
| 62°15S 58°40W*<br>Potter Peninsula              | 45±1 MY(P.696.1)KA17 WR Basaltic andesite extrusive;<br>Fildes Fm. PAN83B<br>(*coords. taken from Antarct. Jl. U.S. 17(4):9-12)                                  |
| 62°15S 58°40W*<br>Potter Peninsula              | 42±1 MY(P.750.1)KA17 WR Basaltic andesite extrusive;<br>Fildes Fm. PAN83B<br>(*coords. taken from Antarct. Jl. U.S. 17(4):9-12)                                  |
| 62°15S 58°40W*<br>Potter Peninsula              | 47±1 MY(P.758.1)KA17 WR Basaltic andesite extrusive;<br>Fildes Fm. PAN83B<br>(*coords. taken from Antarct. Jl. U.S. 17(4):9-12)                                  |
| 62°15S 58°40W*<br>Potter Peninsula              | 48±1 MY(P.757.2)KA17 WR Andesite extrusive;<br>Fildes Fm. PAN83B<br>(*coords. taken from Antarct. Jl. U.S. 17(4):9-12)                                           |
| 62°05S 58°26W G<br>Keller Peninsula             | 41±1 MY(P.560.1)KA17 WR Unaltered andesite dike cross-<br>cutting altered lavas;--. PAN83B                                                                       |
| 62°05S 58°26W G<br>Keller Peninsula             | 44±1 MY(P.1452.2)KA17 WR Unaltered andesite dike cross-<br>cutting altered lavas;--. PAN83B                                                                      |
| 62°05S 58°26W G<br>Keller Peninsula             | 42±1 MY(P.1454.1)KA17 WR Unaltered andesite dike cross-<br>cutting altered lavas;--. PAN83B                                                                      |
| 62°10S 58°25W G<br>SW of Admiralty Bay          | 67-77 MY(#?)K/A -- Lowest exposed part<br>of volcanic succession. PAN83B<br>(K. Birkenmajer and W. Narebski, pers. comm.)                                        |
| 62°08S 58°24W G<br>Point Hennequin              | 45±1 MY(P.831.2)KA17 WR Andesite lava;<br>Hennequin Fm. PAN83B                                                                                                   |
| 62°08S 58°24W G<br>Point Hennequin              | 27±1 MY(P.831.3)KA17 WR Andesite lava;<br>Hennequin Fm. PAN83B                                                                                                   |
| 62°08S 58°24W G<br>Point Hennequin              | 32±1 MY(P.831.4)KA17 WR Andesite lava;<br>Hennequin Fm. PAN83B                                                                                                   |
| 62°08S 58°24W G<br>Point Hennequin              | 46±1 MY(P.831.5)KA17 WR Andesite lava;<br>Hennequin Fm. PAN83B                                                                                                   |
| 62°08S 58°24W G<br>Point Hennequin              | 47±1 MY(P.831.8)KA17 WR Andesite lava;<br>Hennequin Fm. PAN83B                                                                                                   |
| 62°08S 58°07W G<br>Lion's Rump                  | 42±1 MY(P.438.1)KA17 WR Andesite lava;<br>beneath Plio-Pleistocene cgl. PAN83B                                                                                   |
| 61°57S 57°50W G<br>Esther Nunatak               | 32±1 MY(G.28.1)KA17 WR Andesite plug;<br>--. PAN83B                                                                                                              |



|                        |                                                         |
|------------------------|---------------------------------------------------------|
| 61°30S 55°58W G        | 28.6 MY(OB5)KA17 HB Schist;                             |
| O'Brien Island RM      | Scotia metamorphic complex. TAN82                       |
| 61°30S 55°58W G        | 29.4 MY(OB5)KA17 HB Schist;                             |
| O'Brien Island RM      | Scotia metamorphic complex. TAN82                       |
| 61°15S 55°20W RM       | 100+4 MY(JSE2/36/7)KA9 MI Quartz-albite-muscovite-      |
| SW coast, Elephant I.  | schist;-- REX73                                         |
| 61°10S 55°14W G        | 105 MY(2/44/2)KA17 AM Schist;                           |
| N Elephant I. RM       | Scotia metamorphic complex. TAN82                       |
| 61°10S 55°14W G        | 118 MY(3/38/2)KA17 HB Albite-hornblende-epidote-schist; |
| S Elephant I. RM       | Scotia metamorphic complex. TAN82                       |
| 61°10S 55°14W G        | 75+16 MY(2/46*)RS6I3/0.7044 WR Phyllite;                |
| N Elephant I. RM       | Terrane A, Scotia metamorphic complex. TAN82            |
|                        | (*locality number; max age=250 MY for IR=0.703)         |
| 61°10S 55°14W G        | 270 MY(2/36*)RSR3/0.704 WR Schist (Terrane B);          |
| N Elephant I. RM       | Scotia metamorphic complex. TAN82                       |
|                        | (*locality number; isochron drawn through 4 close       |
|                        | data points)                                            |
| 61°10S 55°14W G        | 96+3 MY(2/36*)RS5I3 MC,WR Schist (Terrane B);           |
| S Elephant I. RM       | Scotia metamorphic complex. TAN82                       |
|                        | (*locality number)                                      |
| 61°10S 55°14W G        | 102+2 MY(2/36*)RS5I3 MC,WR Schist (Terrane B);          |
| S Elephant I. RM       | Scotia metamorphic complex. TAN82                       |
|                        | (*locality number)                                      |
| 61°10S 55°14W R        | 82.7+3.5 MY(E62-1)KA12 WR Quartz-calcite-amphibole      |
| nr "Wreck Cove"        | schist; Elephant Island subgroup. DAL72                 |
| SW Elephant I. RM      |                                                         |
| 61°10S 55°14W R        | 77.6+1.6 MY(E62-4)KA12 WR Quartz-calcite-amphibole      |
| nr "Wreck Cove"        | schist; Elephant Island subgroup. DAL72                 |
| SW Elephant I. RM      |                                                         |
| 61°10S 55°14W R        | 88.3+1.6 MY(E62-5)KA12 WR Quartz-calcite-amphibole      |
| nr "Wreck Cove"        | schist; Elephant Island subgroup. DAL72                 |
| SW Elephant I. RM      |                                                         |
| 61°10S 55°14W R        | 81.4+1.6 MY(E62-8)KA12 WR Quartz-calcite-amphibole      |
| nr "Wreck Cove"        | schist; Elephant Island subgroup. DAL72                 |
| SW Elephant I. RM      |                                                         |
| 61°10S 55°14W R        | 1515+36 BP(##)14C MO Bank, c. 240 cm depth. COL76       |
| Elephant Island        | (may be same sample as SRR-27 of HAR79 dated            |
|                        | as 1520+40 BP)                                          |
| 61°S 55°W M            | 104-105 MY(##)K/A MC Glaucophane schist;                |
| Clarence and/or N.     | suggested correlation with Paleozoic-lower Mesozoic     |
| Elephant Islands       | complex of South Orkneys. DAL82                         |
| 61°08S 54°42W G        | 1520+40 BP(SRR-28)14C1 MO Peat from eroded bank. HAR79  |
| N of Walker Point      | (loc. described as SE slope; may be same sample         |
|                        | dated as 1515+36 BP in COL76)                           |
| 61°04S 54°28W G        | 9.5+0.4 MY(JSE2/106/6)KA9 BT Granodiorite;              |
| S Cornwallis I. RM     | Andean Intrusive Suite. REX73                           |
| 61°19S 54°06W R        | 71+40 MY RS7I3/0.7094+0.0005 WR Phyllites and/or        |
| Cape Bowles,           | schists; blueschist-greenschist facies,                 |
| Clarence Island        | Scotia Metamorphic Complex. HER84                       |
|                        | ("errorchron"; model ages=300-800 MY if IR=0.704)       |
| 61°12S 54°05W G        | 30 MY(31a)KA6 WR Sericite-chlorite-quartz schist;       |
| E Clarence Island RM   | contains Upper Precambrian microfossils. GRI70          |
| 61°12S 54°05W G        | 55 MY(31b)KA6 WR Chlorite-epidote schist;               |
| E Clarence Island RM   | contains Upper Precambrian microfossils. GRI70          |
| 60°45S 45°41W R        | 186+7 MY(H.135B.1;IDC74)KA9 MC Schist;                  |
| N of Snipe Pk., Moe I. | Basement complex. REX76                                 |

|                                                      |                                                                                                                                                                                                                                                                       |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 60°45S 45°41W R<br>N of Snipe Pk., Moe I.            | 178±7 MY(H.135.B1;IDC63)KA9 BT Schist;<br>Basement complex. REX76                                                                                                                                                                                                     |
| 60°40S 45°40W R<br>E of Rusty Bluff                  | 814C=-13.9±8.5°/oo=Modern (SRR-515)14C1 MO Peat<br>( <u>Chorisodontium aciphyllum</u> , w/ <u>Polytrichum alpestre</u> ), bank between ice and rock outcrop.<br>HAR79<br>(infer="1770-1910 or 1850-1920 AD" sample in FEN82A with site shown on RM)                   |
| 60°40S 45°40W R<br>E of Rusty Bluff                  | 814C=-6.0±8.3°/oo=Modern (SRR-514)14C1 MO Peat<br>( <u>Chorisodontium aciphyllum</u> , w/ <u>Polytrichum alpestre</u> ), base of deposit, under 65 cm of ice.<br>HAR79<br>(may not be in situ; infer="1814-1944 or 1850-1910 AD" sample in FEN82A w/site shown on RM) |
| 60°40S 45°40W R<br>Signy Island                      | d14C=-20.5±4.6°/oo=Modern (SRR-897)14C1 MO Shallow<br>bank of <u>Chorisodontium aciphyllum</u> , c. 10 cm deep.<br>HAR81<br>(infer="1731-1811 or 1900-1930 AD" sample in FEN82A with site shown on RM)                                                                |
| 60°40S 45°40W R<br>Signy Island                      | 470±60 BP(SRR-898;8)14C1 MO Lower edge (1 m above<br>present ice) of bank of <u>Chorisodontium aciphyllum</u><br>w/ some <u>Polytrichum alpestre</u> , c. 15-20 cm deep.<br>HAR81<br>(infer="1425-1535 AD" sample in FEN82A with site shown on RM)                    |
| 60°40S 45°40W R<br>Signy Island                      | d14C=+24.5±5.5°/oo=Modern (SRR-899;9)14C1 MO<br><u>Chorisodontium aciphyllum</u> , c. 10-15 cm deep, on<br>level ground. HAR81<br>(infer="Post-1950 AD" sample in FEN82A with site shown on RM)                                                                       |
| 60°40S 45°40W AR<br>Signy Island                     | d14C=+6.9±4.3°/oo=Modern (SRR-901;11)14C1 MO<br><u>Chorisodontium aciphyllum</u> bank, 10-15 cm deep at<br>lower end, 2 m from permanent ice. HAR81<br>(infer="Post-1950 AD" sample in FEN82A with site shown on RM)                                                  |
| 60°42S 45°40W G<br>NW coast above<br>Spindrift Rocks | 1843±96 BP(Q-801)14C2 MO <u>Polytrichum-Dicranum</u> , from<br>base (150-170 cm from surface) of large frozen moss<br>bank, 150-200 ft. a.s.l. GOD66                                                                                                                  |
| 60°41S 45°38W R<br>Spindrift, Signy I.               | 3380±100 BP(SRR-1088;13)14C1 MO Peat ( <u>Chorisodontium aciphyllum</u> ) bank overlying bedrock, sample from<br>base of bank, c. 2 m depth. HAR81                                                                                                                    |
| 60°41S 45°38W R<br>Spindrift, Signy I.               | 4800±300 BP(SRR-1089;14)14C1 MO Peat ( <u>Chorisodontium aciphyllum</u> ) bank overlying bedrock, sample from<br>base of bank, c. 1.25 m depth. HAR81<br>(reported as 4801±300 BP in FEN82B)                                                                          |
| 60°41S 45°38W R<br>Spindrift, Signy I.               | 1210±40 BP(SRR-1090;14)14C1 MO Peat ( <u>Chorisodontium aciphyllum</u> ) bank overlying bedrock, sample from<br>base of front face, c. 2 m depth. HAR81                                                                                                               |
| 60°41S 45°38W R<br>Spindrift, Signy I.               | 1150±40 BP(SRR-1091;16)14C1 MO Peat ( <u>Chorisodontium aciphyllum</u> ) bank overlying bedrock, sample from<br>front face, c. 1.95 m depth. HAR81                                                                                                                    |
| 60°41S 45°38W R<br>Spindrift, Signy I.               | 1050±40 BP(SRR-1092;17)14C1 MO Peat ( <u>Chorisodontium aciphyllum</u> ) bank overlying bedrock, sample from<br>front face, c. 1.6 m depth. HAR81                                                                                                                     |

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|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 60°41S 45°38W R<br>Spindrift, Signy I.                       | 480±40 BP(SRR-1093;18)14C1 MO Peat ( <u>Chorisodontium aciphyllum</u> ) bank overlying bedrock, sample from front face, c. 1.3 m depth. HAR81                       |
| 60°41S 45°38W R<br>Spindrift, Signy I.                       | 430±40 BP(SRR-1094;19)14C1 MO Peat ( <u>Chorisodontium aciphyllum</u> ) bank overlying bedrock, sample from ceiling of overhang, c. 1 m deep in base of bank. HAR81 |
| 60°43S 45°38W G<br>Signy Island RM                           | 191 MY(H.173.7A)KA17 HB Albite-epidote-amphibolite facies (Terrane B); Scotia meta. complex. TAN82                                                                  |
| 60°43S 45°38W G<br>Signy Island RM                           | 185 MY(H.173.7A)KA17 HB Albite-epidote-amphibolite facies (Terrane B); Scotia meta. complex. TAN82                                                                  |
| 60°43S 45°38W G<br>Signy Island RM                           | 183 MY(H.173.7B)KA17 HB Albite-epidote-amphibolite facies (Terrane B); Scotia meta. complex. TAN82                                                                  |
| 60°43S 45°38W G<br>Signy Island RM                           | 184 MY(H.173.7B)KA17 HB Albite-epidote-amphibolite facies (Terrane B); Scotia meta. complex. TAN82                                                                  |
| 60°43S 45°38W G<br>Signy Island RM                           | 192 MY(H.206.2A)KA17 HB Albite-epidote-amphibolite facies (Terrane B); Scotia meta. complex. TAN82                                                                  |
| 60°43S 45°38W G<br>Signy Island RM                           | 188 MY(H.206.2B)KA17 HB Albite-epidote-amphibolite facies (Terrane B); Scotia meta. complex. TAN82                                                                  |
| 60°43S 45°38W G<br>Signy Island RM                           | 193 MY(H.900)KA17 HB Albite-epidote-amphibolite facies (Terrane B); Scotia meta. complex. TAN82                                                                     |
| 60°43S 45°38W G<br>Signy Island RM                           | 190 MY(H.950)KA17 HB Albite-epidote-amphibolite facies (Terrane B); Scotia meta. complex. TAN82                                                                     |
| 60°43S 45°38W R<br>Berntsen Pt., Signy I.                    | 177±7 MY(H.220.1;IDC54)KA9 BT Schist;<br>Basement complex. REX76                                                                                                    |
| 60°43S 45°38W G<br>Signy I.<br>and 60°45S 45°42W G<br>Moe I. | 193 MY(H.1,365.1 and H.1,384.1)KA14 BT Quartz-mica-schist; basement schist. MIL60<br>(composite sample)                                                             |
| 60°43S 45°38W G<br>Signy Island                              | 286±57 MY RS8I2/0.7122±0.002 WR Schist;<br>Basement complex. REX76<br>(date=271±54 MY using RS8I4; coords. of each sample are listed in REX76)                      |
| 60°43S 45°38W G<br>Signy Island                              | 176 MY(H.60.3)KA14 BT Quartz-mica-schist;<br>basement schists. MIL60                                                                                                |
| 60°43S 45°38W G<br>Signy Island                              | 199 MY(H.86.1)KA14 BT Quartz-mica-schist;<br>basement schists. MIL60                                                                                                |
| 60°43S 45°38W G<br>Signy Island                              | 183 MY(H.154.8)KA14 BT Quartz-mica-schist;<br>basement schists. MIL60                                                                                               |
| 60°43S 45°38W G<br>Signy Island                              | 184 MY(H.164.2)KA14 BT Quartz-mica-schist;<br>basement schists. MIL60                                                                                               |
| 60°43S 45°38W G<br>Signy Island                              | 195 MY(H.205.2)KA14 BT Quartz-mica-schist;<br>basement schists. MIL60                                                                                               |
| 60°43S 45°38W G<br>Signy Island                              | 195 MY(H.507.3)KA14 BT Quartz-mica-schist;<br>basement schists. MIL60                                                                                               |
| 60°43S 45°38W G<br>Signy Island                              | 176 MY(H.507.3)KA14 BT Quartz-mica-schist;<br>basement schists. MIL60                                                                                               |
| 60°43S 45°38W G<br>Signy Island                              | 189 MY(H.1,369.1)KA14 BT Quartz-mica-schist;<br>basement schists. MIL60                                                                                             |
| 60°41S 45°38W R<br>Spindrift, Signy I.                       | 1010±40 BP(SRR-1095;20)14C1 MO Peat( <u>Chorisodontium aciphyllum</u> ) bank overlying bedrock, sample from below vertical edge. HAR81                              |

|                                                        |                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 60°41S 45°38W R<br>Signy I.                            | 235 MY(11)KA6 WR Plagioclase-actinolite schist;<br>--. GRI67                                                                                                                                                                                                      |
| 60°43S 45°38W G<br>Signy I.                            | 225 MY(12)KA6 WR Garnet-quartz-mica schist;<br>--. GRI67                                                                                                                                                                                                          |
| 60°43S 45°38W G<br>Signy I.                            | 205 MY(13)KA6 MC Garnet-quartz-mica schist;<br>--. GRI67                                                                                                                                                                                                          |
| 60°43S 45°38W G<br>below Jane Peak RM                  | 254±35 BP(13*)14C MO Base of re-exposed 30 cm thick<br><u>Chorisodontium aciphyllum</u> peat bank. COL76<br>(*site number; appears to be same sample as SRR-27<br>of HAR79 listed from below Jane Peak)                                                           |
| 60°43S 45°38W G<br>below Jane Peak,<br>Signy I.        | 814C=-26.3±3.8°/oo=Modern (SRR-27)14C1 MO Exposed peat<br>from base of bank, c. 30 cm deep. HAR79<br>(infer="1661-1731 or 1935-1950 AD" sample in<br>FEN82A with site shown on RM)                                                                                |
| 60°44S 45°38W G<br>in McLeod Glacier                   | dl4C=+42.0±4.9°/oo=Modern (SRR-895;5)14C1 MO Carpet<br>of <u>Drepanocladus uncinatus</u> on rk. outcrop. HAR81<br>(infer="Post-1950 AD" sample in FEN82A with site<br>shown on RM)                                                                                |
| 60°44S 45°38W G<br>in McLeod Glacier                   | dl4C=-13.4±6.5°/oo=Modern (SRR-900;10)14C1 LI <u>Usnea<br/>antarctica</u> on same rock outcrop as SRR-895. HAR81<br>(infer="1799-1909 or 1850-1910 AD" sample in<br>FEN82A with site shown on RM)                                                                 |
| 60°44S 45°38W G<br>E of Rusty Bluff                    | 814C=-24.3±6.6°/oo=Modern (SRR-513)14C1 MO Peat<br>( <u>Chorisodontium aciphyllum</u> w/ <u>Polytrichum<br/>alpestre</u> ), upper layer of deposit, under 65 cm of<br>ice. HAR79<br>(infer="1733-1843 or 1900-1935 AD" sample in<br>FEN82A with site shown on RM) |
| 60°41S 45°37W G<br>below Spindrift Col                 | dl4C=+1.9±6.5°/oo=Modern (SRR-896;6)14C1 MO<br><u>Polytrichum juniperinum</u> cushion on rk. outcrop.<br>HAR81<br>(infer="Post-1950 AD" sample in FEN82A with site<br>shown on RM)                                                                                |
| 60°40S 45°35W G<br>nr Cape Hansen                      | 168±60 BP(13*)14C MO Re-exposed moss. HAR81                                                                                                                                                                                                                       |
| 60°38S 45°35W G<br>W of Shingle Cove,<br>Coronation I. | dl4C=-23.2±4.9°/oo=Modern (SRR-902)14C1 MO<br><u>Polytrichum alpestre</u> and <u>Chorisodontium aciphyllum</u><br>re-exposed turf bank, c. 20 cm deep. HAR81<br>(infer="1738-1818 or 1910-1940 AD" sample of FEN82A)                                              |
| 60°38S 45°35W R<br>Coronation I.                       | 189±7 MY(H.1374.1;IDC48)KA9 MC Schist;<br>Basement complex. REX76                                                                                                                                                                                                 |
| 60°38S 45°35W R<br>Coronation I.                       | 187±7 MY(H.246.1;IDC35)KA9 MC Schist;<br>Basement complex. REX76                                                                                                                                                                                                  |
| 60°39S 45°32W R<br>Cape Hansen,<br>Coronation I.       | 814C=-17.0±7.5°/oo=Modern (SRR-512)14C1 MO Basal<br>3.5 cm of re-exposed 10 cm-thick peat bank<br>( <u>Chorisodontium aciphyllum</u> ). HAR79<br>(infer="1722-1842 or 1890-1945 AD" sample of FEN82A)                                                             |
| 60°45S 45°09W G<br>Matthews I. RM                      | c.90 MY(13)KA6 WR Basic doleritic dike;<br>cuts Spence Harbour Conglomerate. THO81<br>(based on 3 samples analyzed by R.J. Pankhurst)                                                                                                                             |

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|---------------------|----------------------------------------------------------------------------------------------------------------------------|
| GEOGRAPHIC AREA 35: | OCEAN SITES WITHIN C. 250 KM OF THE WEST ANTARCTIC COAST, EXCLUDING WEDDELL SEA (samples from west to east by coordinates) |
| 64°05'30"S          | 18,240±1050 BP(FSU-46)14C2 FO <u>Globigerina parhyderma</u> ;                                                              |
| 75°19'42"W R        | Core No. 10-15, 0-10 cm from top. STI66                                                                                    |
| SE Pacific Basin    |                                                                                                                            |
| 64°05'30"S          | 23,940±925 BP(FSU-48)14C2 FO <u>Globigerina parhyderma</u> ;                                                               |
| 75°19'42"W R        | Core No. 10-15, 20-30 cm from top. STI66                                                                                   |
| SE Pacific Basin    |                                                                                                                            |
| 64°10'30"S          | 22,460±925 BP(FSU-47)14C2 FO <u>Globigerina parhyderma</u> ;                                                               |
| 75°18'00"W R        | Core No. 10-14, 5-15 cm from top. STI66                                                                                    |
| SE Pacific Rise     |                                                                                                                            |
| 60°02'00"S          | GT 23,600 BP(FSU-49)14C2 FO <u>Globigerina parhyderma</u> ;                                                                |
| 64°54'00"W R        | Core No. 4-14, 85-95 cm from top. STI66                                                                                    |
| mid. Drake Passage  |                                                                                                                            |

GEOGRAPHIC AREA 36: FILCHNER ICE SHELF, RONNE ICE SHELF, WEDDELL SEA,  
AND ASSOCIATED ISLANDS (samples from south to north by  
coordinates)

74°22.57S 37°45.50W R 31,290+4330-2800 BP(212/15;T-3,625)14C SH Fragments  
SE Weddell Sea 1-10 mm in size, from overconsolidated till from  
shelf edge at water depth 512 m. ELV81

74°16.15S 39°26.44W R GT 35,100 BP(214/175;T-3,835)14C SH Bivalves in situ  
SE Weddell Sea in glaciomarine deposits from upper continental  
slope at water depth 730 m. ELV81

72°10S 16°35W R 21,240+760 BP(234/35;T-3,617)14C Bryozoan debris, in  
SE Weddell Sea glaciomarine deposits from upper continental  
slope at water depth 650 m. ELV81

72°10S 16°35W R 28,130+1410 BP(234/85;T-3,618)14C Bryozoan debris, in  
SE Weddell Sea glaciomarine deposits from upper continental  
slope at water depth 650 m. ELV81

72°10S 16°35W R 37,830+3110 BP(234/105;T-3,332)14C Bryozoan debris,  
SE Weddell Sea in glaciomarine deposits from upper continental  
slope at water depth 650 m. ELV81

70°00S 2°00W RM 3950+160 BP(206/16;T-3836)14CC Coral, in glaciomarine  
nr SANAE, sediments from outer continental shelf at water  
E edge, Weddell Sea depth 420 m. ELV83  
(date=4700 BP minus 750 yr correction factor)

GEOGRAPHIC AREA 37: CENTRAL EAST ANTIARCTICA (samples from south to north by  
coordinates)

No listings

## LIST 2

RADIOCARBON DATES ON MARINE AND LACUSTRINE MATERIAL, INDEPENDENTLY ESTABLISHED  
OR INFERRED TO BE RECENT (samples arranged by  
coordinates in the same fashion as List 1)

## GEOGRAPHIC AREA 3

|                     |                                                        |
|---------------------|--------------------------------------------------------|
| 74°54S 163°39E G    | 1390±40 BP(QL-171)14C1 SE Weddell seal killed in 1912  |
| Inexpressible I. RM | by Scott's Northern Party. STU81                       |
| 74°54S 163°39E G    | 1770±50 BP(QL-172)14C1 PQ Remains of Adelie penguin in |
| Inexpressible I. RM | rookery on emerged beaches. STU81                      |
| 74°54S 163°39E G    | 1300±50 BP(QL-173)14C1 PQ Emperor penguin killed in    |
| Inexpressible I. RM | 1912 by Scott's Northern Party. STU81                  |
| 75°02S 162°36E G    | 1540±50 BP(QL-175)14C1 SH From surface of floating     |
| Backstairs Passage  | ice tongue. STU81                                      |
| (Glacier) RM        |                                                        |

## GEOGRAPHIC AREA 6

|                        |                                                                |
|------------------------|----------------------------------------------------------------|
| 77°43S 162°25E G       | 615±100 BP(??)14C SE Dead no more than a few weeks.            |
| ice of L. Bonney       | DOR71                                                          |
|                        | (may refer to M-1920)                                          |
| 77°40-43S 162°30-45E R | 615±100 BP(M-1920)14C2 SK Crabeater seal, side away            |
| Suess Gl., L. Bonney,  | from ground; dead no longer than 1 yr. CRA72                   |
| Nussbaum Riegel        |                                                                |
| 77°34S 163°35E G       | 850±50 BP(QL-98)14C1 SH <u>Adamussium colbecki</u> , with soft |
| Explorers Cove         | parts attached, surface of sea ice. STU81                      |
| 77°34S 163°35E G       | 990±50 BP(QL-996)14C1 SH <u>Adamussium colbecki</u> , alive,   |
| Explorers Cove         | from Cove floor at 25 m depth. STU81                           |

## GEOGRAPHIC AREA 19

|                 |                                                        |
|-----------------|--------------------------------------------------------|
| 69°10S 37°30E G | 1190±90 BP(GaK-6789a)14C FL Living <u>Neoliuccinum</u> |
| Lutzow-Holm Bay | <u>eaton</u> , c. -17 to -35 m. YOS79                  |
| 69°10S 37°30E G | 1300±90 BP(GaK-6789b)14C SH Living <u>Neoliuccinum</u> |
| Lutzow-Holm Bay | <u>eaton</u> , c. -17 to -35 m. YOS79                  |
| 69°10S 37°30E G | 1070±90 BP(GaK-6790a)14C FL Living <u>Ophionotus</u>   |
| Lutzow-Holm Bay | <u>victoriae</u> , -92 m. YOS79                        |
| 69°10S 37°30E G | 1210±100 BP(GaK-6790b)14C SH Living <u>Ophionotus</u>  |
| Lutzow-Holm Bay | <u>victoriae</u> , -92 m. YOS79                        |
| 69°10S 37°30E G | 1160±110 BP(GaK-6791a)14C FL Living <u>Sterechinus</u> |
| Lutzow-Holm Bay | <u>neumayeri</u> , -17 m. YOS79                        |
| 69°10S 37°30E G | 860±110 BP(GaK-6791b)14C SH Living <u>Sterechinus</u>  |
| Lutzow-Holm Bay | <u>neumayeri</u> , -17 m. YOS79                        |
| 69°10S 37°30E G | 1160±110 BP(GaK-6792)14C Living <u>Trematomus</u>      |
| Lutzow-Holm Bay | <u>berunacchii</u> , -15 m. YOS79                      |

## (LIST 2 CONTINUED)

|                     |                                                       |
|---------------------|-------------------------------------------------------|
| 69°10S 37°30E G     | 1010±110 BP(GaK-6793)14C Living <u>Zoarcidae</u> sp., |
| Lutzow-Holm Bay     | -500 m. YOS79                                         |
| 69°10S 37°30E G     | 1120 BP Mean value of correction factor determined    |
| Lutzow-Holm Bay     | from Lutzow-Holm Bay samples of YOS79                 |
| 68°44.5S 38°42.0E R | 880±115 BP(N-860)14C2 Sea water, -10m. OMO72          |
| Lutzow-Holm Bay     |                                                       |
| 69°40.0S 39°23.5E R | 814C=+278±19‰/∞=Modern (N-859)14C2 Lake water,        |
| lake nr Syowa Sta.  | -0.5 m. OMO72                                         |
| 69°40.0S 39°23.5E R | 814C=+253±19‰/∞=Modern (N-861)14C2 Lake water,        |
| lake nr Syowa Sta.  | -0.5 m. OMO72                                         |
| 69°16.1S 39°29.5E R | 1455±110 BP(TH-052)14C2 SE Skin from recent seal      |
| S of Ungane Islands | which died on foot ice on 9/2/73. OMO76               |
| 69°00'29"S          | 150±80 BP(GaK-3666)14C2 SH Living sea urchin, on sea  |
| 39°34'30"E R        | bottom, about -10 m a.s.l. OMO74 YOS83                |
| East Ongul Island   | (date for Dr. T. Hoshiai, pers. comm.)                |
| 69°01.0S 39°36.5E R | 2860±125 BP(N-858)14C2 Sea water, -10 m. OMO72        |
| Lutzow-Holm Bay     |                                                       |

## GEOGRAPHIC AREA 22

|                     |                                                        |
|---------------------|--------------------------------------------------------|
| 68°34S 77°55E RM    | 1310±125 BP(SUA 1236)14C Modern marine algal sediment, |
| anchorage off Davis | surface 5 cm of sea floor, 17m water depth.            |
|                     | PIC82 ADA83                                            |
| 68°35S 77°59E RM    | 950±110 BP(SUA 1235)14C SH Modern <u>Laternula</u> .   |
| seashore nr Davis   | PIC82 ADA83                                            |
|                     | (infer age revised from 1295±105 BP in ZHA83)          |
| 68°33S 78°00E RM    | 1312±65 BP(ZDL84)14C SH Modern <u>Laternula</u> .      |
| "Airport beach,"    | ZHA83                                                  |
| near Davis          |                                                        |

## GEOGRAPHIC AREA 26

|                 |                                                     |
|-----------------|-----------------------------------------------------|
| 64°11S 83°59E R | Δ14C=-66.9‰/∞(286;ML2375)14C Seawater, 9 m. depth,  |
| S. Indian Ocean | coll. on 2/13/78. STU83A                            |
| 64°11S 83°59E R | Δ14C=-67.9‰/∞(287;ML2374)14C Seawater, 29 m. depth, |
| S. Indian Ocean | coll. on 2/13/78. STU83A                            |
| 64°11S 83°59E R | Δ14C=-92.9‰/∞(288;ML2373)14C Seawater, 46 m. depth, |
| S. Indian Ocean | coll. on 2/13/78. STU83A                            |
| 64°11S 83°59E R | Δ14C=-147.8‰/∞(290;ML2372)14C Seawater, 210 m.      |
| S. Indian Ocean | depth, coll. on 2/13/78. STU83A                     |
| 64°11S 83°59E R | Δ14C=-155.1‰/∞(292;ML2370)14C Seawater, 674 m.      |
| S. Indian Ocean | depth, coll. on 2/13/78. STU83A                     |
| 64°11S 83°59E R | Δ14C=-159.1‰/∞(293;ML2369)14C Seawater, 905 m.      |
| S. Indian Ocean | depth, coll. on 2/13/78. STU83A                     |
| 64°11S 83°59E R | Δ14C=-164.0‰/∞(294;ML2368)14C Seawater, 1119 m.     |
| S. Indian Ocean | depth, coll. on 2/13/78. STU83A                     |
| 64°11S 83°59E R | Δ14C=-159.5‰/∞(295;ML2367)14C Seawater, 1392 m.     |
| S. Indian Ocean | depth, coll. on 2/13/78. STU83A                     |
| 64°11S 83°59E R | Δ14C=-161.4‰/∞(395;ML2366)14C Seawater, 1665 m.     |
| S. Indian Ocean | depth, coll. on 2/13/78. STU83A                     |
| 64°11S 83°59E R | Δ14C=-161.2‰/∞(394;ML2365)14C Seawater, 1939 m.     |
| S. Indian Ocean | depth, coll. on 2/13/78. STU83A                     |



## (LIST 2 CONTINUED)

|                                                 |                                                                                                                          |
|-------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| 64°11S 83°59E R<br>S. Indian Ocean              | $\Delta 14C = -161.6\text{‰}$ (393;ML2364)14C Seawater, 2214 m.<br>depth, coll. on 2/13/78. STU83A                       |
| 64°11S 83°59E R<br>S. Indian Ocean              | $\Delta 14C = -163.1\text{‰}$ (392;ML2363)14C Seawater, 2490 m.<br>depth, coll. on 2/13/78. STU83A                       |
| 64°11S 83°59E R<br>S. Indian Ocean              | $\Delta 14C = -161.7\text{‰}$ (391;ML2362)14C Seawater, 2763 m.<br>depth, coll. on 2/13/78. STU83A                       |
| 64°11S 83°59E R<br>S. Indian Ocean              | $\Delta 14C = -155.5\text{‰}$ (390;ML2361)14C Seawater, 2975 m.<br>depth, coll. on 2/13/78. STU83A                       |
| 64°11S 83°59E R<br>S. Indian Ocean              | $\Delta 14C = -151.9\text{‰}$ (388;ML2360)14C Seawater, 3186 m.<br>depth, coll. on 2/13/78. STU83A                       |
| 64°11S 83°59E R<br>S. Indian Ocean              | $\Delta 14C = -148.8\text{‰}$ (387;ML2359)14C Seawater, 3396 m.<br>depth, coll. on 2/13/78. STU83A                       |
| 64°11S 83°59E R<br>S. Indian Ocean              | $\Delta 14C = -151.4\text{‰}$ (386;ML2358)14C Seawater, 3580 m.<br>depth, coll. on 2/13/78. STU83A                       |
| 62°-70°S,<br>160°-170°E R<br>"South Polar Seas" | $\Delta 14C = -95 \pm 8\text{‰}$ (#?)14C IC Surface seawater,<br>collected Feb.-Mar. 1971. WIL75<br>(mean value)         |
| 66°14S 166°14E R<br>South Pacific               | $\delta 14C = -44 \pm 20\text{‰}$ (W-2839)14C MU Snipe eel ( <u>Serrivomer</u><br>sp.), -450 m., collected 2/6/72. WIL75 |
| 70°00S 168°34E R<br>"South Polar Seas"          | $\Delta 14C = -112 \pm 8\text{‰}$ (#?)14C IC Surface seawater,<br>collected Feb.-Mar. 1971. WIL75                        |

## GEOGRAPHIC AREA 27

|                                             |                                                                                                                                                                             |
|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 82°22.5S 168°37.5E R<br>J-9, Ross Ice Shelf | $\Delta 14C = -73 \pm 7\text{‰}$ (LJ-4256)14Cl IC Seawater from 20 m<br>below bottom of ice at hole J-9. LIN80                                                              |
| 78°13S 163°54E R<br>at Heald Island         | $\Delta 14C = -111 \pm 7\text{‰}$ (LJ-3955;PP4)14Cl IC Seawater from<br>below ice head, -10 m. (ice thickness c. 10 m).<br>LIN79                                            |
| 78°01S 167°21E R<br>at White Island         | $\Delta 14C = -108 \pm 7\text{‰}$ (LJ-3957;PP6)14Cl IC Seawater from<br>below ice, -3 m. LIN79                                                                              |
| 77°57S 164°38E R<br>at Cape Chocolate       | $\Delta 14C = -116 \pm 7\text{‰}$ (LJ-3956;PP5)14Cl IC Seawater from<br>below ice, -9 m. LIN79                                                                              |
| 77°52S 166°20E R<br>nr McMurdo Sound        | $\Delta 14C = -70 \pm 8\text{‰}$ (LJ-3952;PP1)14Cl IC Seawater from ice<br>hole, -5 m. LIN79                                                                                |
| 77°51S 166°37E R<br>nr NAF, McMurdo Sound   | 1385±200 BP(TAM-14;McMRS-1)14Cl FL Freshly-killed<br>Weddell Seal taken from the ice. NOA64                                                                                 |
| 77°45S 166°30E AR<br>McMurdo Sound          | 1060±40 BP(LJ-3074)14Cl MU Fish ( <u>Dissotichus</u><br><u>mawsoni</u> ), c. -500 m. (nr bottom), coll. Nov. 73.<br>WIL75 LIN77                                             |
| 77°30S 165°00E G<br>McMurdo Sound           | c.1200 BP(#?)14C FL Modern penguin and fish. BAR67<br>( $\delta 14C = -140\text{‰}$ ; T.A. Rafter, pers. comm.; infer=<br>1200 BP fish sample mentioned in CIA65 and DOR81) |
| 77°30S 165°00E G<br>McMurdo Sound           | $\delta 14C = -148\text{‰}$ (R.536/1)14C Surface sea water. BAR67                                                                                                           |
| 77°30S 165°00E G<br>McMurdo Sound           | 1610±90 BP(#?)14C Living fishes caught at a fish-hole<br>near McMurdo Station. YAM67 DOR81                                                                                  |
| 77°11S 172°06E R<br>Ross Sea                | 920±40 BP(LJ-3073)14Cl WB Fish ( <u>Pleurogramma</u><br><u>antarcticum</u> ), 0 to -200 m., 2/24/72. WIL75 LIN77                                                            |

## (LIST 2 CONTINUED)

|                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 77°05S 172°44E R<br>Ross Sea<br>77°S 165°E AR<br>McMurdo Sound                                                                                                                                                                                                                                            | 814C=-107±20°/∞(W-2836)14C Krill ( <i>Euphausia<br/>crystallorophias</i> ) 0 to -200 m., 2/24/72. WIL75<br>1300 BP(L-570)14C1 FL Right rear flipper of freshly<br>killed seal. BRO61<br>(infer= unspecified sample in DOR71)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| GEOGRAPHIC AREA 34                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 62°39S 61°00W R<br>Livingston Island<br>62°38S 60°53W G<br>(by Rotch Ice Dome)<br>Livingston Island<br>62°38S 60°53W G<br>(by Rotch Ice Dome)<br>Livingston Island<br>62°42S 60°24W R<br>Livingston Island<br>62°13S 58°48W R<br>nr South Spit,<br>Marion Cove<br>62°14S 58°41W R<br>S shore, Potter Cove | 840±75 BP(13732;DIC-372)14C3 BN Whale, dead 2-10<br>years, on storm beach. CUR80<br>420±100 BP(??)14C FL "Modern" baby elephant seal.<br>SCH72A SUG73<br><br>LT 250 BP(??)14C BN "Modern" baby elephant seal.<br>SCH72A<br><br>970±50 BP(1373FB;DIC-370)14C3 SE Elephant seal skull<br>intact with flesh on modern storm beach. CUR80<br>2512±50 BP(Birm-15)14C2 Supposed modern seaweed<br>from high water mark. SHO68. SUG73<br>(possibility of contamination with ancient seaweed)<br>850±145 BP(Birm-47a)14C2 Inner fraction, supposed<br>modern bivalve shells (mostly <i>Laternula</i> sp.), just<br>above high water mark. SHO68 SUG73<br>(described as mostly <i>Mya</i> in SHO68)<br>586±113 BP(Birm-47b)14C2 Outer fraction, modern<br>bivalve shells (mostly <i>Mya</i> ) just above high water<br>mark. SHO68<br>(described as mostly <i>Laternula</i> sp. in SUG73)<br>674±66 BP(Birm-49b)14C2 CO fraction of vertebrae of<br>decomposing whale on beach just above high water<br>mark. SHO69 SUG73<br>2810±550 BP(Birm-49a)14C2 Mineral fraction of<br>vertebrae of decomposing whale on beach just above<br>high water mark. SHO69<br>1000±45 BP(AB-1;DIC-367)14C3 Whale ear bones from<br>slaughtered whale on modern storm beach. CUR80<br>(time of death estimated to be 70 BP) |
| 62°14S 58°41W R<br>S shore, Potter Cove<br><br>62°15S 58°41W R<br>Three Brothers Hill<br>Peninsula<br>62°15S 58°41W R<br>Three Brothers Hill<br>Peninsula<br>62°05S 58°23W R<br>Admiralty Bay                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

## GEOGRAPHIC AREA 35

|                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 61°03S 62°58W R<br>Drake Passage<br>61°03S 62°58W R<br>Drake Passage<br>61°03S 62°58W R<br>Drake Passage<br>61°03S 62°58W R<br>Drake Passage<br>61°03S 62°58W R<br>Drake Passage<br>61°03S 62°58W R<br>Drake Passage<br>61°03S 62°58W R<br>Drake Passage | Δ14C=-18.6°/∞(892;QL-477)14C Seawater, 95 m. depth,<br>coll. on 1/3/73. STU80A<br>Δ14C=-62.1°/∞(893;QL-478)14C Seawater, 142 m. depth,<br>coll. on 1/3/73. STU80A<br>Δ14C=-97.0°/∞(894;QL-479)14C Seawater, 189 m. depth,<br>coll. on 1/3/73. STU80A<br>Δ14C=-125.3°/∞(689;QL-480)14C Seawater, 246 m.<br>depth, coll. on 1/3/73. STU80A<br>Δ14C=-132.2°/∞(690;ML 937)14C Seawater, 345 m.<br>depth, coll. on 1/3/73. STU80A<br>Δ14C=-142.4°/∞(691;QL-481)14C Seawater, 445 m.<br>depth, coll. on 1/3/73. STU80A |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

(LIST 2 CONTINUED)

|                     |                                                  |
|---------------------|--------------------------------------------------|
| 61°03S 62°58W R     | Δ14C=-145.8‰/∞(692;QL-482)14C Seawater, 545 m.   |
| Drake Passage       | depth, coll. on 1/3/73. STU80A                   |
| 61°03S 62°58W R     | Δ14C=-147.0‰/∞(693;QL-483)14C Seawater, 671 m.   |
| Drake Passage       | depth, coll. on 1/3/73. STU80A                   |
| 61°03S 62°58W R     | Δ14C=-155.4‰/∞(694;QL-484)14C Seawater, 889 m.   |
| Drake Passage       | depth, coll. on 1/3/73. STU80A                   |
| 61°03S 62°58W R     | Δ14C=-161.9‰/∞(389;QL-485)14C Seawater, 1192 m.  |
| Drake Passage       | depth, coll. on 1/3/73. STU80A                   |
| 61°03S 62°58W R     | Δ14C=-160.6‰/∞(390;QL-486)14C Seawater, 1589 m.  |
| Drake Passage       | depth, coll. on 1/3/73. STU80A                   |
| 61°03S 62°58W R     | Δ14C=-163.2‰/∞(391;QL-487)14C Seawater, 1985 m.  |
| Drake Passage       | depth, coll. on 1/3/73. STU80A                   |
| 61°03S 62°58W R     | Δ14C=-161.9‰/∞(393;QL-489)14C Seawater, 2978 m.  |
| Drake Passage       | depth, coll. on 1/3/73. STU80A                   |
| 61°03S 62°58W R     | Δ14C=-163.3‰/∞(394;ML 1066)14C Seawater, 3478 m. |
| Drake Passage       | depth, coll. on 1/3/73. STU80A                   |
| 59°25.6S 47°57.8W R | Δ14C=-96±13‰/∞(station 130)14C Krill, apparently |
| Scotia Sea          | were living in Weddell Sea water mass. MIC81     |

GEOGRAPHIC AREA 36

|                     |                                                  |
|---------------------|--------------------------------------------------|
| 74°21.4S 31°17.3W R | Δ14C=-92±6‰/∞(station 80)14C Krill, apparently   |
| Weddell Sea         | were living in Weddell Sea water mass. MIC81     |
| 72°00S 45°00W G     | Δ14C=-90‰/∞(?)14C IC Surface seawater, collected |
| Weddell Sea         | Jan.-Mar. 1972. WIL75                            |
|                     | (mean value)                                     |

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