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FISSION TRACK DATA BASE

JOHN BRADSHAW & JOHN VIZY

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BUREAU OF MINERAL RESOURCES,
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FISSION TRACK DATA BASE

JOHN BRADSHAW & JOHN VIZY

BUREAU OF MINERAL RESOURCES, GEOLOGY AND GEOPHYSICS &
AUSTRALIAN PETROLEUM INDUSTRY RESEARCH ASSOCIATION



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- PERMIAN 248 - 286 MA	
- CARBONIFEROUS 286 - 354 MA	

MAP ENCLOSURES

					SCALE (MILLION)
1)	TOTAL DATA SET				10
2)	TERTIARY	0	- 66.4	MA	"
3)	CRETACEOUS	66.4	- 144	MA	"
4)	JURASSIC	144	- 213	MA	"
5)	TRIASSIC	213	- 248	MA	"
6)	PERMIAN	248	- 286	MA	"
7)	CARBONIFEROUS	286	- 354	MA	"
8)	DEVONIAN	354	- 408	MA	"
9)	SILURIAN	408	- 434	MA	"
10)	ORDOVICIAN	434	- 505	MA	"
11)	S.E. AUSTRALIA				5
12)	ADELAIDE REGION				"
13)	YILGARN				"
14)	PILBARA				"
15)	AMADEUS				"
16)	CANNING				"
17)	McARTHUR				"
18)	PAPUA NEW GUINEA				"

SUMMARY

This data base comprises fission track analyses initially compiled by the Fission Track Research Group, Department of Geology, Latrobe University. It consists of 425 data points from Open File sources for Australia and Papua New Guinea, for most of the Phanerozoic. The dates, source and location of each data point are presented in table format. Statistical plots of the frequency versus Apatite age (Ma) are plotted for nine periods (Ordovician to Tertiary) and for eight geographical areas (S.E. Australia, Adelaide Region, Yilgarn, Pilbara, Amadeus, Canning, McArthur, Papua New Guinea). Total plots for the entire Phanerozoic of Australia and Papua New Guinea are made, as well as for selected areas for individual periods (eg. Papua New Guinea for the Tertiary). Maps of the total area by periods are plotted at 1:10 000 000 scale and for all eight areas at 1:5 000 000 scale. Limited interpretation is provided as to the implications of the distributions of the ages, because they are "apparent" ages and need to be interpreted in conjunction with the distribution of the track lengths. However, possible trends that are evident include the Palaeozoic central and eastern Australia tectonics associated with the Alice Springs and Tabberabberan Orogenies, Cretaceous opening of the Coral Sea, and Tertiary tectonics in Papua New Guinea.

INTRODUCTION

As part of the BMR/APIRA Phanerozoic History of Australia Project, a data base was assembled of all of the Open File fission track determinations for Australia and Papua New Guinea. The initial tabulation was done by the Fission Track Research Group in the Department of Geology at Latrobe University, and includes both well and outcrop samples (Appendix 1).

PRESENTATION FORMAT

The initial tabulated Apatite data has been re-assembled in the following formats :

1) TABLE : Appendix 1 (Fission Track Research Group, Department of Geology, Latrobe University)

i) with the sample number, location, elevation, lithology, formation, apatite and sphene ages, and reference source of each data point,

2) MAP (Apatite ages) : Enclosures 1 - 18

i) plotted at 1:10 000 000 for all of Australia and Papua New Guinea for the Phanerozoic showing every data point location,

ii) plotted at 1:10 000 000 for all of Australia and Papua New Guinea for each of the following periods;

a) Tertiary	0	-	66.4	Ma
b) Cretaceous	66.4	-	144	Ma
c) Jurassic	144	-	213	Ma
d) Triassic	213	-	248	Ma
e) Permian	248	-	286	Ma
f) Carboniferous	286	-	354	Ma
g) Devonian	354	-	408	Ma
h) Silurian	408	-	434	Ma
i) Ordovician	434	-	505	Ma

iii) plotted at 1:5 000 000 for the Phanerozoic for the following eight areas;

- 1) S.E. Australia
- 2) Adelaide Region
- 3) Yilgarn
- 4) Pilbara
- 5) Amadeus
- 6) Canning
- 7) McArthur

8) Papua New Guinea

NOTE : The maps are drawn using a simple conical projection and with standard parallels of 18°00'S and 36°00'S.

3) STATISTICAL PLOTS (Apatite ages) : Appendix 2 - 5

i) plots of Australia and Papua New Guinea for the Phanerozoic, showing frequency versus age (bar chart), frequency and cumulative frequency tables with relative percentages, and pie diagram of frequency distribution by Period;

- 1) All data points
- 2) Only outcrop data points (75%)

ii) plots as summary sheets for all data points showing frequency versus age (bar chart) by;

- 1) Area
- 2) Period

iii) plots for the Phanerozoic sub-divided into the following eight areas, showing frequency versus age (bar chart), frequency and cumulative frequency tables with relative percentages, and pie diagram of frequency distribution by Period;

- 1) S.E. Australia
- 2) Adelaide Region
- 3) Yilgarn
- 4) Pilbara
- 5) Amadeus
- 6) Canning
- 7) McArthur
- 8) Papua New Guinea

iv) plots for the following nine periods showing frequency versus age (bar chart), frequency and cumulative frequency tables with relative percentages, and pie diagram of relative distribution of samples by Area;

1) Tertiary	0	-	66.4	Ma
2) Cretaceous	66.4	-	144	Ma
3) Jurassic	144	-	213	Ma
4) Triassic	213	-	248	Ma
5) Permian	248	-	286	Ma
6) Carboniferous	286	-	354	Ma
7) Devonian	354	-	408	Ma
8) Silurian	408	-	434	Ma
9) Ordovician	434	-	505	Ma

v) plots for the following selected areas for selected time periods, showing frequency versus age (bar chart), frequency and cumulative frequency tables with relative percentages, and pie diagram of frequency distribution by age ;

1) P.N.G.	- Tertiary	0 - 66.4	Ma
2) Yilgarn	- Carboniferous	286 - 354	Ma
3) S.E. Australia	- Triassic	213 - 248	Ma
	- Permian	248 - 286	Ma
	- Carboniferous	286 - 354	Ma

NOTE : The areas were selected only where there was a large enough number of samples to be statistically significant (30 samples).

INTERPRETATION

Only a limited amount of interpretation is made on this data set because the statistical plots and maps are only examining the "apparent" fission track age and do not include the distribution of the track lengths or the relationship of ages and track length distribution with depth in a well. Also the samples are from both well (25%) and outcrop locations (75%) and thus ages will become younger with depth in a well, therefore further complicating regional analysis. Interpretation is hampered in that the ages may have been derived from various paths of heating, be they either slow cooling or a later heating event (Gleadow et al., 1986). Analysis of the distribution of the track lengths will isolate the most appropriate model. Thus, where required it may be necessary to access the original Open File reference for the individual data points to derive unique solutions to the trends that appear in this data base and refer to publications listed below.

SUMMARY CHART - AUSTRALIA & PNG (By Areas)

The Alice Springs Orogeny as suggested by Shaw et al (1984) and defined by Bradshaw and Evans (1988), is a complex period of tectonics in central Australia that ranged from the Devonian to the Carboniferous (300 - 400 Ma). Maximum peaks in the bar charts which may relate to this period of tectonism occur in the Amadeus (Tingate, in press), Adelaide, Pilbara, Yilgarn and McArthur regions. Several of these areas also record later events (250 - 300 Ma) which could be related to the Waite Creek Movement (Bradshaw and Evans, 1988).

South Eastern Australia data has some ages around an Alice Springs Orogeny time (310 - 410 Ma - 17%) probably reflecting the Tabberabberan Orogeny which was most intense in the southern part of the continent during the Mid Devonian. South Eastern Australia data contains maximum peaks from 210 - 310 Ma (55%) which may

relate to the Hunter-Bowen Orogeny and final cratonisation of the Australian continent along the New England - Yarrol Fold Belt (Plumb, 1979).

Papua New Guinea records maximum peaks in the late Tertiary (0 - 20 Ma - 27%) and also from 100 - 120 Ma (15%). Hill and Gleadow (1989) interpret these data to indicate late Miocene collision of New Guinea with an island arc to the north, producing uplift erosion and cooling from the earliest Pliocene (5 Ma), and heating in the Late Cretaceous associated with the opening of the Coral Sea. Conversely, Pigram et al., (1989) when analysing the Tertiary event believe that the regional geology and structural fabric indicates it is a longer lived episode that was initiated in the north during the Oligocene when the passive margin was first influenced by southward movement of an island arc and progressively affected areas to the south.

SUMMARY CHART - AUSTRALIA AND PNG (By Period)

The plots for individual periods through time are difficult to interpret as the samples are often from widely separated areas. However, despite the inherent interpretation problems, a relationship to the "time slice" approach of the BMR/APIRA Phanerozoic History of Australia Project was considered desirable. Numerous patterns are evident in the distributions of the ages, with symmetric shapes (Cretaceous, Triassic, Permian) perhaps reflecting discrete events, to blocky shapes (Jurassic, Carboniferous) perhaps reflecting more complex periods of tectonics. Over 44% of dates originate from 250 - 350 Ma, reflecting in part the central and eastern Australian tectonics. Significant overprinting and masking of events earlier than this must have occurred, thus further complicating the patterns. Whilst considering the possibility of overprinting, it is worth noting the apparent absence of dates for the Silurian which was generally a period of non-deposition in Australia, and the concentration of Ordovician dates which are derived from the Yilgarn (80%).

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APPENDIX 1

FISSION TRACK DATABASE

COMPILED BY
FISSION TRACK RESEARCH GROUP, DEPARTMENT OF GEOLOGY,
LATROBE UNIVERSITY

Sample Number	Irrad. No.	Longitude, Latitude	Grid Reference	Rock Type	Formation Name	Stratigraphic Age	Location	Elev. (m)	Apatite Age ± 1 sigma	Mean Length ± 1 sigma	Std. Dev.	Sphene Age ± 1 sigma	State	Reference
70-1038		146°21'E 33°31'S		leucitite	Begargo Hill series	~14	Begargo Hill		13.1 $\pm$ 1.2				NSW	Cundari et al, 1978
70-1039		146°21'E 33°31'S		leucitite	Begargo Hill series	~14	Begargo Hill		14.5 $\pm$ 1.2				NSW	Cundari et al, 1978
7222-097	PT041	141°11'E 37°17'S		granite	Dergholm Granite	460-480 Ma	Bailey's Rocks, Dergholm - Dundas Tableland		316 $\pm$ 14	12.57 $\pm$ 0.15	1.47	484 $\pm$ 24 452 $\pm$ 22	VIC	Gleadow & Lovering, 1978b
7222-099	PT022	141°28'E 37°14'S		granodiorite	Chetwynd River	460-480 Ma	Moree - Dundas Tableland		347 $\pm$ 17	12.85 $\pm$ 0.12	1.24		VIC	Gleadow & Lovering, 1978b
7222-100	PT022	141°17'E 37°16'S		diorite	Ferres Creek	460-480 Ma	Capaul, N of Dergholm - Dundas Tableland		361 $\pm$ 17	12.93 $\pm$ 0.12	1.24	428 $\pm$ 18	VIC	Gleadow & Lovering, 1978b
7222-102	PT041	142°34'E 37°23'S		granodiorite	Mafeking Granodiorite	~385 Ma	Mafeking - Grampians		319 $\pm$ 13	13.31 $\pm$ 0.13	1.36		VIC	Gleadow & Lovering, 1978b
7222-106	PT054	143°27'E 37°18'S		granodiorite	Burnbank Granodiorite	Early to Middle Devonian	Granite Hill, Lexton - Ballarat Trough		317 $\pm$ 11	12.57 $\pm$ 0.15	1.51	384 $\pm$ 12 374 $\pm$ 11	VIC	Gleadow & Lovering, 1978b
7222-107	PT041	143°18'E 37°21'S		granite	Mt Cole Granite	Early to Middle Devonian	Mt Cole - Ballarat Trough		308 $\pm$ 12	12.59 $\pm$ 0.14	1.41	393 $\pm$ 17	VIC	Gleadow & Lovering, 1978b
7222-111		143°07'E 37°17'S		granite	Langi Ghiran Granite	Early to Middle Devonian	Mt Langhi Ghiran - Ballarat Trough					407 $\pm$ 22	VIC	Gleadow & Lovering, 1978b
7222-112	PT054	143°20'E 37°13'S		granite	Mt Direction (Glenlogie)	Early to Middle Devonian	Mt Direction, E of Elmhurst - Ballarat Trough		308 $\pm$ 10	12.84 $\pm$ 0.13	1.27	393 $\pm$ 14	VIC	Gleadow & Lovering, 1978b
7222-113	PT054	142°47'E 39°09'S		granite	Stawell Granite	Early to Middle Devonian	S of Stawell - Ballarat Trough		295 $\pm$ 9	11.99 $\pm$ 0.21	2.11		VIC	Gleadow & Lovering, 1978b
7222-114	PT041	142°52'E 37°22'S		granodiorite	Burrumbeet	Early to Middle Devonian	SSW of Ararat - Ballarat Trough		342 $\pm$ 14	12.97 $\pm$ 0.17	1.75	385 $\pm$ 12	VIC	Gleadow & Lovering, 1978b
7222-115	PT041	141°43'E 37°32'S		granite	Konong Wootong	460-480 Ma	Hassall's Creek, NNE of Coleraine - Dundas Tableland		381 $\pm$ 15 368 $\pm$ 19	13.34 $\pm$ 0.12	1.15	412 $\pm$ 21 405 $\pm$ 21 410 $\pm$ 18	VIC	Gleadow & Lovering, 1978b
7222-116	PT041	141°27'E 37°29'S		granodiorite	Wando Bridge	484 $\pm$ 9 (biotite)	Wando Vale		370 $\pm$ 16	13.30 $\pm$ 0.15	1.50	470 $\pm$ 28	VIC	Gleadow & Lovering, 1978b
7222-121	PT041	141°36'E 37°10'S		granite	Harrow Granite	460-480 Ma	Harrow - Dundas Tableland		370 $\pm$ 13 398 $\pm$ 16	12.74 $\pm$ 0.13	1.33		VIC	Gleadow & Lovering, 1978b
7222-125	PT064	143°56'E 37°33'S		granodiorite	Gong Gong Granodiorite		Gong Gong Res., Ballarat		290 $\pm$ 12	12.57 $\pm$ 0.15	1.53		VIC	Gleadow & Lovering, 1978b
7222-126	PT064	143°32'E 37°43'S		granite	Warrawidgee Granite		SW of Linton - Ballarat Trough		274 $\pm$ 12	11.42 $\pm$ 0.21	2.35		VIC	Gleadow & Lovering, 1978b
7222-129	PT064	143°40'E 37°22'S		granite	Bolton Granite		Mt Bolton - Ballarat Trough		289 $\pm$ 11	12.49 $\pm$ 0.13	1.41		VIC	Gleadow & Lovering, 1978b
7222-130	PT064	143°41'E 37°16'S		granite	Beckworth Granite		NNW of Mt Beckworth - Ballarat Trough		307 $\pm$ 12	13.04 $\pm$ 0.16	1.56		VIC	Gleadow & Lovering, 1978b

Sample Number	Irrad. No.	Longitude, Latitude	Grid Reference	Rock Type	Formation Name	Stratigraphic Age	Location	Elev. (m)	Apatite Age ± 1 sigma	Mean Length ± 1 sigma	Std. Dev.	Sphene Age ± 1 sigma	State	Reference
7222-131	PT063	143°41'E 36°45'S		granite	Moliagul Granite	Early to Middle Devonian	E of Moliagul - Ballarat Trough		276 $\pm$ 13	12.78 $\pm$ 0.12	1.24	390 $\pm$ 20	VIC	Gleadow & Lovering, 1978b
7222-132	PT063	143°44'E 36°28'S		granite	Wedderburn (Mt Hoogly)		Mt Korong - Ballarat Trough		282 $\pm$ 11	12.77 $\pm$ 0.12	1.19		VIC	Gleadow & Lovering, 1978b
7222-133	PT078	143°32'E 36°15'S		granite	Buckrabanyule Granite		Mt Buckrabanyule - Ballarat Trough		322 $\pm$ 14	12.71 $\pm$ 0.12	1.19		VIC	Gleadow & Lovering, 1978b
7222-134	PT078	144°08'E 36°03'S		granite	Pyramid Hill Granite	Late Devonian	Pyramid Hill - Ballarat Trough		295 $\pm$ 14	12.76 $\pm$ 0.11	1.12		VIC	Gleadow & Lovering, 1978b
7222-135	PT078	143°15'E 36°05'S		granite	Wycheproof Granite	406 $\pm$ 8 (mu) Early to Middle Devonian	Wycheproof - Ballarat Trough		331 $\pm$ 15	13.03 $\pm$ 0.11	1.20		VIC	Gleadow & Lovering, 1978b
7222-136	PT078	139°54'E 36°40'S		granite			N of Kingston, S.A.		330 $\pm$ 14	13.37 $\pm$ 0.10	1.04		SA	Gleadow & Lovering, 1978b
7222-141	PT054	143°39'E 36°55'S		granite	Natte Yallock Granite	399 $\pm$ 8 Early to Middle Devonian	Mt Hoogly - Ballarat Trough		337 $\pm$ 11	12.75 $\pm$ 0.16	1.61	384 $\pm$ 17	VIC	Gleadow & Lovering, 1978b
7315-012				migmatite		~2700 Ma Archaean	Pilbara Block-Tambourah		291 $\pm$ 7			1325 $\pm$ 43	W.A.	Ferguson, 1981; Oversby, 1976
7315-018				gneissic granite		~2700 Ma Archaean	Pilbara Block-Coolgelong		331 $\pm$ 7			1390 $\pm$ 46	W.A.	Ferguson, 1981; Oversby, 1976
7315-027				gneissic granite		~2700 Ma Archaean	Pilbara Block-Woodstock		320 $\pm$ 8				W.A.	Ferguson, 1981; Oversby, 1976
7315-035				foliated granite		~2700 Ma Archaean	Pilbara Block- Mt Newman, 27 mile quarry		340 $\pm$ 8			~1903 $\pm$ 100	W.A.	Ferguson, 1981; Oversby, 1976
7315-041				granite		~2700 Ma Archaean	Pilbara Block- Mt Newman, 70 mile quarry		328 $\pm$ 7				W.A.	Ferguson, 1981; Oversby, 1976
7315-050				foliated granite		~2700 Ma Archaean	Pilbara Block- Mt Newman, 13 mile quarry		317 $\pm$ 6				W.A.	Ferguson, 1981; Oversby, 1976
7315-051						~2700 Ma Archaean	Pilbara Block		321 $\pm$ 6				W.A.	Ferguson, 1981;
7322-022		144°27'E 37°52'S		granite	You Yangs Granite	Upper Devonian	You Yangs, 2km E of Flinders Pk - Ballarat Trough					365 $\pm$ 18		Gleadow & Lovering, 1978b
7322-024	PT078	143°21'E 37°57'S		granodiorite	Lismore Granodiorite	Lower Carboniferous, ~345 Ma	Lismore - Ballarat Trough		146 $\pm$ 16	12.08 $\pm$ 0.20	2.47	369 $\pm$ 18		Gleadow & Lovering, 1978b
7322-051	PT079	144°04'E 40°03'S		granodiorite	Grassy Granodiorite	Lower Carboniferous, ~345 Ma	Grassy Mine, King Is.		269 $\pm$ 12			351 $\pm$ 14	TAS	Gleadow & Lovering, 1978a
7322-052	PT079	144°04'E 40°03'S		granodiorite	Grassy Granodiorite	Lower Carboniferous, ~345 Ma	Grassy Mine, King Is.		260 $\pm$ 12			347 $\pm$ 13	TAS	Gleadow & Lovering, 1978a
7322-058	PT079	144°05'E 40°01'S		granodiorite	Bold Head Granodiorite	Lower Carboniferous, ~345 Ma	Bold Head Mine, King Is.		112 $\pm$ 5			310 $\pm$ 11	TAS	Gleadow & Lovering, 1978a

Sample Number	Irrad. No.	Longitude, Latitude	Grid Reference	Rock Type	Formation Name	Stratigraphic Age	Location	Elev. (m)	Apatite Age ± 1 sigma	Mean Length ± 1 sigma	Std. Dev.	Sphene Age ± 1 sigma	State	Reference
7322-059	PT079	144°00'E 40°04'S		granodiorite		Lower Carboniferous, ~345 Ma	6km WSW of Grassy Mine, King Is.		214±10			347±14	TAS	Gleadow & Lovering, 1978a
7322-061	PT079	143°52'E 40°04'S		granodiorite	West Coast Granites	~750 Ma	1km E of Cataraque Pt, King Is.		131±6			307±11	TAS	Gleadow & Lovering, 1978a
7322-062	PT079	143°51'E 39°56'S		granodiorite	West Coast Granites	~750 Ma	Currie Harbour, King Is.		136±6				TAS	Gleadow & Lovering, 1978a
7322-063	PT080	143°52'E 39°51'S		granodiorite	West Coast Granites	~750 Ma	1km N of Porky's Ck, King Is.		157±7				TAS	Gleadow & Lovering, 1978a
7322-066	PT080	143°51'E 39°43'S		granodiorite	West Coast Granites	~750 Ma	1km NW of Whistler Pt, King Is.		230±10				TAS	Gleadow & Lovering, 1978a
7322-067	PT080	143°51'E 39°43'S		granodiorite	West Coast Granites	~750 Ma	1km NW of Whistler Pt, King Is.		220±10				TAS	Gleadow & Lovering, 1978a
7322-070	PT080	143°58'E 39°35'S		granite	West Coast Granites	~750 Ma	1km SE of Cape Wickham, King Is.		173±8				TAS	Gleadow & Lovering, 1978a
7322-073	PT080	143°58'E 39°36'S		granite	West Coast Granites	~750 Ma	2.4km S of Cape Wickham, King Is.		203±9				TAS	Gleadow & Lovering, 1978a
7322-087	PT082	144°46'E 37°07'S		granodiorite	Baynton Granodiorite	363±6 (bi) Upper Devonian	Cobaw - Ballarat Trough		282±15	13.03±0.14	1.44	355±19		Gleadow & Lovering, 1978b
7322-092	PT082	144°18'E 36°59'S		granodiorite	Harcourt Granodiorite	375 Ma (bi)	Harcourt - Ballarat Trough		278±12	13.20±0.14	1.45			Gleadow & Lovering, 1978b
7322-093	PT082	~143°51'E 39°43'S		granodiorite		Lower Carboniferous, ~345 Ma	Mt Counsel, King Is.		223±10			351±14	TAS	Gleadow & Lovering, 1978a
7610-012		120°57'E 31°08'S	Boorabbin (SH51-13)	porph. granodiorite		~2670 Ma Archaean	Central Yilgarn Block-Gnarlbine Rocks, Blast Site 1		414±17				W.A.	Ferguson, 1981; Errey, 1977
7610-013		120°33'E 31°09'S	Boorabbin (SH51-13)	amphibolite xen.		~2670 Ma Archaean	Central Yilgarn Block-Woolgangle Rock Res.		407±16			~1698±120	W.A.	Ferguson, 1981; Errey, 1977
7610-016				banded gneiss		~2670 Ma Archaean	Central Yilgarn Block-Pioneer Dome, Blast Site 2, 50 mile tank locality		503±50				W.A.	Ferguson, 1981; Errey, 1977
7610-022				amphibolite talc		~2670 Ma Archaean	Central Yilgarn Block- Silver L. Shaft, Lunnon Shoot, Kambalda		498±20				W.A.	Ferguson, 1981; Errey, 1977
7610-024		120°37'E 29°36'S	Menzies (SH51-5)	banded gneiss		~2670 Ma Archaean	Central Yilgarn Block- 18 Mile Well		457±22				W.A.	Ferguson, 1981; Errey, 1977
7610-025A		120°44'E 29°31'S	Menzies (SH51-5)	banded gneiss		~2670 Ma Archaean	Central Yilgarn Block- 29 Mile Well		453±13				W.A.	Ferguson, 1981; Errey, 1977
7610-026		120°36'E 28°36'S		gneissic granite		~2670 Ma Archaean	Central Yilgarn Block- Leonara		491±34				W.A.	Ferguson, 1981; Errey, 1977
7610-027		122°43'E 29°39'S		gneissic granite		~2670 Ma Archaean	Central Yilgarn Block- Barret Well, 170 km NE of Kalgoorlie		487±20			~1952±115	W.A.	Ferguson, 1981; Errey, 1977

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7610-029			L. Johnston (SI51-1) 346016	granod. gneiss		~2670 Ma Archaean	Central Yilgarn Block		453 $\pm$ 18			1977 $\pm$ 235	W.A.	Ferguson, 1981; Errey, 1977
7610-030			Barlee (SH50-8) 206358	biotite tonalite		~2670 Ma Archaean	Central Yilgarn Block- Mondie Rocks		417 $\pm$ 29				W.A.	Ferguson, 1981; Errey, 1977
7610-031			Southern Cr. (SH50-16) 259050	tonalite gneiss		~2670 Ma Archaean	Central Yilgarn Block- Split Rocks		400 $\pm$ 12				W.A.	Ferguson, 1981; Errey, 1977
7622-002		139°18'E 35°08'S		granite	Murray Bridge Granite	Middle Ordovician	Murray Bridge- river outcrop near bridge					467 $\pm$ 15	S.A.	Ferguson, 1981 (M.Sc.)
7622-044		~143°40'E 35°30'S		granodiorite	Lake Boga Granodiorite	~366 $\pm$ 5 (mu) Upper Devonian	Lake Boga - Ballarat Trough		311 $\pm$ 15	13.48 $\pm$ 0.12	1.18			Gleadow & Lovering, 1978b
7700-005 R19316		145°00'E 37°35'S		biotite granite			Greenvale Res.	180	247 $\pm$ 14				VIC	Moore, 1982 (PhD); Moore et al, 1986
7710-044						~2670 Ma Archaean	Yilgarn Block- West Coast, near Darling Fault		260 $\pm$ 6			586 $\pm$ 15	W.A.	Ferguson, 1981 (M.Sc.)
7710-060		121°45'E 33°13'S		basic gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, 75 km N of Esperance		489 $\pm$ 11				W.A.	Ferguson, 1981 (M.Sc.)
7710-064		123°34'E 32°44'S		granite		~2670 Ma Archaean	Yilgarn Block- South Coast, on Balladonia/ Israelite Bay track		354 $\pm$ 9				W.A.	Ferguson, 1981 (M.Sc.)
7710-065		123°30'E 32°55'S		migmatite		~2670 Ma Archaean	Yilgarn Block- South Coast, Coragina Rocks		330 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7710-080		123°52'E 33°38'S		gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, Pt Dempster		349 $\pm$ 10				W.A.	Ferguson, 1981 (M.Sc.)
7710-081		123°45'E 33°47'S		banded gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, Point Malcolm		338 $\pm$ 7			1203 $\pm$ 37	W.A.	Ferguson, 1981 (M.Sc.)
7710-083		123°42'E 33°40'S		granite		~2670 Ma Archaean	Yilgarn Block- South Coast, Tookle-Jenna Rocks		341 $\pm$ 8				W.A.	Ferguson, 1981 (M.Sc.)
7710-090		123°09'E 33°58'S		granite		~2670 Ma Archaean	Yilgarn Block- South Coast, Mt Arid		316 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7710-092		123°01'E 33°52'S		banded gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, Thomas River		301 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7710-093		122°53'E 33°53'S		granite gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, 7 km E of Alexander Point		288 $\pm$ 7			71106 $\pm$ 31	W.A.	Ferguson, 1981 (M.Sc.)
7710-100		122°07'E 33°59'S		gneissic granite		~2670 Ma Archaean	Yilgarn Block- South Coast, Cape Le Grand		365 $\pm$ 9				W.A.	Ferguson, 1981 (M.Sc.)
7710-101		122°36'E 33°55'S		augen gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, High Island, E of Mt Belches		337 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7710-102		121°59'E 33°50'S		foliated granite		~2670 Ma Archaean	Yilgarn Block- South Coast, Wyllie Head		312 $\pm$ 6				W.A.	Ferguson, 1981 (M.Sc.)

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7710-103		121°48'E 33°54'S		banded gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, Observatory Head		286 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7710-104		121°46'E 33°54'S		granitic gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, 0.5 km W of 7710-103		337 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7710-108		121°53'E 33°53'S		granite		~2670 Ma Archaean	Yilgarn Block- South Coast, Dempster Head		290 $\pm$ 6				W.A.	Ferguson, 1981 (M.Sc.)
7710-109		121°41'E 33°52'S		garnet gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, 11 Mile Beach, W of Esperance		333 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7710-117		121°59'E 34°29'S		biotite gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, Termination Island		324 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7710-121		122°03'E 34°08'S		granodiorite		~2670 Ma Archaean	Yilgarn Block- South Coast, Hood Island		347 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7710-122		121°32'E 33°50'S		micaceous gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, S of Quallilup Lake		314 $\pm$ 8				W.A.	Ferguson, 1981 (M.Sc.)
7710-129		120°40'E 33°41'S		amphibolite		~2670 Ma Archaean	Yilgarn Block- South Coast, Esperance to Ravensthorpe road		364 $\pm$ 8				W.A.	Ferguson, 1981 (M.Sc.)
7710-131		120°08'E 33°58'S		leuco. gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, beach at Hopetoun		322 $\pm$ 8				W.A.	Ferguson, 1981 (M.Sc.)
7710-132		120°14'E 33°54'S		granitic gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, on road near Hopetoun		318 $\pm$ 8				W.A.	Ferguson, 1981 (M.Sc.)
7710-136		120°33'E 33°56'S		biotite gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, beach below Channel Hill		326 $\pm$ 8			1317 $\pm$ 75	W.A.	Ferguson, 1981 (M.Sc.)
7710-137		120°44'E 33°51'S		banded gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, 3km W of Coxall/ Springdale intersection		328 $\pm$ 8				W.A.	Ferguson, 1981 (M.Sc.)
7710-138		120°48'E 33°54'S		biotite gneiss		~2670 Ma Archaean	Yilgarn Block- South Coast, Munglinup beach						W.A.	Ferguson, 1981 (M.Sc.)
7710-142		133°50'E 32°30'S		gneissic granite		~1600 Ma	Gawler Block- Cape Brown		356 $\pm$ 8			1239 $\pm$ 55	S.A.	Ferguson, 1981 (M.Sc.)
7710-143		133°40'E 32°07'S		biotite gneiss			Gawler Block- Theverard Pt.		408 $\pm$ 10				S.A.	Ferguson, 1981 (M.Sc.)
7710-147		134°05'E 32°55'S		leuco. gneiss			Gawler Block- Pt. Westall		348 $\pm$ 7				S.A.	Ferguson, 1981 (M.Sc.)
7710-148		135°15'E 34°10'S		biotite gneiss		~1800 Ma	Gawler Block- Hall Bay, SW Eyre Peninsula		340 $\pm$ 7			1230 $\pm$ 43	S.A.	Ferguson, 1981 (M.Sc.)
7710-151		135°20'E 34°23'S		biotite gneiss		~1800 Ma	Gawler Block- Mt Greenly Bay, SW Eyre Peninsula		349 $\pm$ 7				S.A.	Ferguson, 1981 (M.Sc.)
7710-152		135°22'E 34°30'S		quartz gneiss		~1800 Ma	Gawler Block- Farmers Beach, SW Eyre Peninsula		333 $\pm$ 7				S.A.	Ferguson, 1981 (M.Sc.)

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7710-153		135°55'E 34°45'S		granitic gneiss			Gawler Block- Stamford Hill		331±7				S.A.	Ferguson, 1981 (M.Sc.)
7710-155		135°52'E 34°43'S		amphibolite			Gawler Block- Caravan Park Pt Lincoln		326±8				S.A.	Ferguson, 1981 (M.Sc.)
7710-156		135°45'E 34°42'S		augen gneiss			Gawler Block- Winter Hill Quarry, 5 km NW of Pt Lincoln		313±7				S.A.	Ferguson, 1981 (M.Sc.)
7710-158		135°40'E 34°55'S		amphibolite			Gawler Block- Cowrie Beach near Cape Carnot		282±7				S.A.	Ferguson, 1981 (M.Sc.)
7710-164		136°20'E 34°07'S		biotite gneiss			Gawler Block- Salt Creek, 14 km N of Tumby bay		311±7			1148±37	S.A.	Ferguson, 1981 (M.Sc.)
7710-165		136°20'E 34°07'S		feldspar gneiss			Gawler Block- Cape Burr, Eastern Eyre Peninsula		294±6				S.A.	Ferguson, 1981 (M.Sc.)
7710-168		137°05'E 33°22'S		porphy. granite			Gawler Block- Whyalla Road, 39 km N of Cowell		318±7				S.A.	Ferguson, 1981 (M.Sc.)
7759-004 R19132		147°52'E 39°45'S		biotite granite			W end of bay, Palana, Flinders Is.	0	185±9	10.8±0.31	3.1		TAS	Moore, 1982 (PhD); Moore et al, 1986
7759-008 R19135			Ulladulla (8927) 2664 6090	monzonite		Permian	quarry N of Milton, Princes Hwy	60	92±2 87±5	13.4±0.38	2.7		NSW	Moore, 1982(PhD); Moore et al, 1986
7759-009 R19136			Bateman's Bay (8926) 2340 60547	biotite granodiorite	Nelligen Granodiorite/ Bega Batho.	~412 Ma	8km W of Nelligen, Braidwood Rd	140	81±5	13.2±0.23	1.7		NSW	Moore, 1982 (PhD); Moore et al, 1986
7759-010 R19137			Bateman's Bay (8926) 2385 60168	tonalite	Moruya Tonalite/ Moruya Batho.	~390 Ma	6km S of Moruya, Princes Hwy	80	103±5	12.7±0.24	2.4		NSW	Moore, 1982 (PhD); Moore et al, 1986
7759-011 R19138			Narooma (8925) 2376 59978	felsic adamellite	Bodalla Adamellite/ Moruya Batho.	~390 Ma	5km S of Bodalla, Princes Hwy	40	126±8	13.2±0.24	1.7		NSW	Moore, 1982 (PhD); Moore et al, 1986
7759-014 R19141			Bega (8824) 7521 59410	hornblende-biotite intrusive	Brogo Granodiorite/ Bega Batho.	~412 Ma	3km N of Bega, Princes Hwy	70	215±15				NSW	Moore, 1982 (PhD); Moore et al, 1986
7759-017 R19144			Mallacoota (8822) 7321 58429	coarse pink biotite granite	Genoa Peak Granite/ Maramingo G.		Genoa Peak summit	489	194±12				VIC	Moore, 1982 (PhD); Moore et al, 1986
7759-018 R19145			Craigie (8723) 7189 58683	hornblende granodiorite	Nungatta G'diorite/ Bega Batholith	~412 Ma	Nungatta South - Genoa road at Vic.-N.S.W. border	400	206±16	10.9±0.31	2.2		NSW	Moore, 1982 (PhD); Moore et al, 1986
7759-019 R19146			Cann (8722) 7198 58184	grey biotite granite	Maramingo Granite/ Bega Batholith	~412 Ma	Wingan Inlet, coastline 1km E of Ram Head	0	153±7	13.2±0.29	2.5		VIC	Moore, 1982 (PhD); Moore et al, 1986
7759-020 R19148			Craigie (8723) 6950 58623	hornblende-biotite granodiorite	Noorinbee G'diorite/ Bega Batholith	~412 Ma	Cann R., east branch, Weeragua	170	224±6 218±7					Moore, 1982 (PhD); Moore et al, 1986
7759-022 R19150			Cann (8722) 7008 58216	biotite granite			Pt. Hicks track, W of Mt Everard	80	182±10				VIC	Moore, 1982 (PhD); Moore et al, 1986
7759-023 R19151			Murrungowar (8622) 6726 58220	biotite granodiorite	Noorinbee G'diorite/ Bega Batholith	~412 Ma	Bemm River	40	151±4 133±8				VIC	Moore, 1982 (PhD); Moore et al, 1986

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7759-024 R19152			Murrungowar (8622) 6520 58135	foliated biotite granite			W of Cape Conran	0	135 $\pm$ 8 145 $\pm$ 8	12.4 $\pm$ 0.32	2.5		VIC	Moore, 1982 (PhD); Moore et al, 1986	
7759-026 R19153			Murrungowar (8622) 6508 58359	hornblende-biotite granodiorite	Murrungowar G'diorite	387 Ma	Murrungowar, road cutting	360	209 $\pm$ 9	11.8 $\pm$ 0.22	2.2		VIC	Moore, 1982 (PhD); Moore et al, 1986	
7759-033 R19160		147°16'E 37°29'S		quartz diorite			6km S of Dargo	240	278 $\pm$ 22				VIC	Moore, 1982 (PhD); Moore et al, 1986	
7759-034 R19161		146°20'E 39°00'S		granite			Derby Saddle, Wilson's Promontary	200	263 $\pm$ 12	12.4 $\pm$ 0.24	2.4		VIC	Moore, 1982 (PhD); Moore et al, 1986	
7759-035 R19162			Mallacoota (8822) 7568 58392	red felsic granite	Gabo Island Granite	371 Ma	Gabo Island, quarry near jetty	10	102 $\pm$ 17				VIC	Moore, 1982 (PhD); Moore et al, 1986	
7759-042 R19167		150°08'E 34°22'S		hypersthene dacite	Bindook Porphyry		Wollundilly R. bridge	600	235 $\pm$ 38						Moore, 1982 (PhD); Moore et al, 1986
7759-044 R19168		145°15'E 37°45'S		biotite granite			Lysterfield Res.	180	234 $\pm$ 14	12.7 $\pm$ 0.22	2.2		VIC	Moore, 1982 (PhD); Moore et al, 1986	
7759-045 R19169			Queenscliff (SJ55-9) 357 5732	potassic granite	Cape Woolamai Granite		Cape Woolamai, Phillip Is.	100	271 $\pm$ 30				VIC	Moore, 1982 (PhD); Moore et al, 1986	
7759-048 R19172		146°15'E 37°50'S		biotite granite			9.5km NE of Tanjil Bren, Mt Baw Baw Rd	1,280	194 $\pm$ 14				VIC	Moore, 1982 (PhD); Moore et al, 1986	
7759-049 R19173		145°45'E 37°50'S		leucocratic granite	Tynong Granite		1km E of Powelltown, Noojee Rd	300	84 $\pm$ 6	14.8 $\pm$ 0.20	1.1		VIC	Moore, 1982 (PhD); Moore et al, 1986	
7859-053 R19178		138°00'E 36°00'S		felsic granite			15km N of Tintaldra	550	274 $\pm$ 19				NSW	Moore, 1982 (PhD); Moore et al, 1986	
7859-054 R19179			Tallangatta (SJ55-3) 602 6033	muscovite-biotite granite	Corryong Batholith	~420 Ma	20km S of Tumbarumba	600	315 $\pm$ 31	12.3 $\pm$ 0.20	2.0		NSW	Moore, 1982 (PhD); Moore et al, 1986	
7859-058 R19182			Cootamundra (8528) 6192 61437	biotite-muscovite granite			3km S of Jugiong, Hume Hwy		293 $\pm$ 16	12.7 $\pm$ 0.15	1.5		NSW	Moore et al, 1986	
7859-059 R19183			Gunning (8728) 7098 61495	biotite-muscovite granite			Gunning, Hume Hwy	640	230 $\pm$ 38	10.8 $\pm$ 0.31	2.2		NSW	Moore, 1982 (PhD); Moore et al, 1986	
7859-064			Canberra (8727) 7268 61006				8km N of Bungendore	700	219 $\pm$ 8?				NSW	Moore, 1982 (PhD); Moore et al, 1986	
7859-065 R19188			Braidwood (8827) 7521 60799	foliated granite	Braidwood Granite	400 Ma	5km N of Braidwood	640	189 $\pm$ 22	11.4 $\pm$ 0.20	2.3		NSW	Moore, 1982 (PhD); Moore et al, 1986	
7859-066 R19189			Araluen (8826) 7344 60599	biotite granite			Gap Ck		162 $\pm$ 13				VIC	Moore, 1982 (PhD); Moore et al, 1986	
7859-068 R19191			Bateman's Bay (8926) 2376 60265	felsic granodiorite	Pollwombra Granodiorite/ Moruya Batho.	~390 Ma	Pollwombra Rd, near Moruya	40	107 $\pm$ 8				NSW	Moore, 1982 (PhD); Moore et al, 1986	
7859-069 R19192			Bateman's Bay (8926) 2348 60270	biotite granodiorite	Mogendoura G'diorite/ Moruya Batho.	~390 Ma	Mogendoura, Buckenbowra Track	80	105 $\pm$ 14				NSW	Moore, 1982 (PhD); Moore et al, 1986	

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7859-071 R19194			Bateman's Bay (8926) 2404 60225	tonalite	Moruya Tonalite/ Moruya Batho.	~390 Ma	Dorman Long Quarry, Moruya	10	102 $\pm$ 7				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-073 R19196			Bateman's Bay (8926) 2386 60154	part of tonalitic pluton	Moruya Tonalite/ Moruya Batho.	~390 Ma	1km N of Bergalia	60	110 $\pm$ 7	13.2 $\pm$ 0.29	2.9		NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-074 R19198			Bateman's Bay (8926) 2428 60152	hornblende-biotite comp. intrusive	Tuross Head Tonalite/ Moruya Batho.	~390 Ma	Meringo Creek	40	106 $\pm$ 18				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-075 R19199			Cobargo (8825) 7559 59774	felsic granite	Bega Batholith	~412 Ma	Wandellow Ck, Yowrie		179 $\pm$ 14				VIC	Moore, 1982 (PhD); Moore et al, 1986
7859-078 R19203			Bega (8824) 7524 59502	hornblende-biotite intrusive	Brogo Granodiorite/ Bega Batho.	~412 Ma	Brogo	100	211 $\pm$ 26	11.4 $\pm$ 0.24	2.4		NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-079 R19206			Bega (8824) 7328 59401	hornblende-biotite granodiorite	Bemboka Granodiorite		4km E of Bemboka	185	238 $\pm$ 37				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-081 R19208			Bombala (8724) 7088 59567	hornblende-biotite granodiorite	Glenbog Granodiorite	412 Ma	4km E of Nimmitabel	1,120	248 $\pm$ 22				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-083 R19210			Cooma (8725) 7208 59899	hornblende-biotite granite	Nimmitabel Adamellite		Countegany airstrip	960	233 $\pm$ 21	12.3 $\pm$ 0.23	1.9		NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-087 R19214			Michelago (8726) 7007 60435	granite	north of Bega Batholith		Jingera - Michelago Rd	830	273 $\pm$ 37				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-088 R19215			Cooma (8725) 6897 59877	gneissic granodiorite	Cooma Granodiorite	~410 Ma	Nanny Goat Hill, Cooma	850	293 $\pm$ 20				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-089 R19216			Berridale (8625) 6718 59918	hornblende-biotite granodiorite	Cootralantra G'diorite/ Berridale Batho	~415 Ma	Wambrook, 26km NW of Cooma	950	255 $\pm$ 16				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-090 R19217			Berridale (8625) 6572 60146	biotite granite	Gingera Granite		Adaminaby	1,100	254 $\pm$ 22				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-091 R19218			Tantangara (8626) 6415 60245	biotite granite	northern Kosciusko Batholith	~415 Ma	Tantangara, 13.5km S of Kiandra		304 $\pm$ 26				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-092 R19219			Wagga Wagga (S155-15) 615 6068	felsic rhyolite	Cumberland Rhyolite		Blowering, 8km NW of Talbingo	650	295 $\pm$ 19				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-093 R19221			Wagga Wagga (S155-15) 626 6093	foliated granite			Argalong Rd	650	225 $\pm$ 22				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-094 R19222			Wagga Wagga (S155-15) 574 6104	felsic granite			Yaven, Hume Hwy	650	280 $\pm$ 18				NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-095 R19223			Wagga Wagga (S155-15) 555 6076	granite	Kyeamba Adamellite	~409 Ma	Burngoogee, 5km S of Kyeamba	600	228 $\pm$ 12	13.6 $\pm$ 0.14	1.5		NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-100 R19187			Warragul (8021) 4039 57933	biotite granite			Tarago Res.	160	244 $\pm$ 4?	11.5 $\pm$ 0.45	2.3		NSW	Moore, 1982 (PhD); Moore et al, 1986
7859-101 R19229			Bairnsdale (8422) 5744 58480	quartz diorite			1km S of Tambo Crossing	160	303 $\pm$ 22				VIC	Moore, 1982 (PhD); Moore et al, 1986

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7859-102 R19230			Ormeo (8423) 5669 58701	quartz diorite			Doctor's Flat, Ormeo Hwy	280	288 $\pm$ 29				VIC	Moore, 1982 (PhD); Moore et al, 1986
7859-103R 19231			Benambra (8424) 5848 59215	biotite-muscovite granite			Mt Misery Tk		244 $\pm$ 13				VIC	Moore, 1982 (PhD); Moore et al, 1986
7859-106 R19233			Murrindal (8523) 6254 58949	granite	Kosciusko Batholith	~415 Ma	McKillop's Bridge, Snowy R.	180	301 $\pm$ 34				VIC	Moore, 1982 (PhD); Moore et al, 1986
7859-107 R19234			Bairnsdale (8422) 5803 58280	felsic granite			Dead Horse Ck. Tk.	220	222 $\pm$ 20				VIC	Moore, 1982 (PhD); Moore et al, 1986
7910-126		119°52'E 33°36'S		banded gneiss		~2670 Ma	Yilgarn Block-South Coast, 1 km E of Phillips River bridge		368 $\pm$ 6				W.A.	Ferguson, 1981 (M.Sc.)
7910-127		118°55'E 33°55'S		granite		~2670 Ma	Yilgarn Block-South Coast, Gairdner River crossing		336 $\pm$ 6				W.A.	Ferguson, 1981 (M.Sc.)
7910-128		119°25'E 34°24'S		basic rafts in leuco. gneiss		~2670 Ma	Yilgarn Block-South Coast, Beach Bremer Bay		318 $\pm$ 6				W.A.	Ferguson, 1981 (M.Sc.)
7910-129		118°39'E 34°31'S		mafic migmatite		~2670 Ma	Yilgarn Block-South Coast, quarry 13 km W of Beaufort Inlet Road		327 $\pm$ 8				W.A.	Ferguson, 1981 (M.Sc.)
7910-130		118°45'E 34°36'S		banded gneiss		~2670 Ma	Yilgarn Block-South Coast, headland N of Eyre River mouth		348 $\pm$ 6				W.A.	Ferguson, 1981 (M.Sc.)
7910-131		118°23'E 34°54'S		foliated granite		~2670 Ma	Yilgarn Block-West Coast, Headland Cheyne beach		294 $\pm$ 5				W.A.	Ferguson, 1981 (M.Sc.)
7910-132		118°22'E 34°54'S		foliated granite		~2670 Ma	Yilgarn Block-West Coast, Cheyne beach		263 $\pm$ 4				W.A.	Ferguson, 1981 (M.Sc.)
7910-133		117°51'E 34°40'S		foliated granite		~2670 Ma	Yilgarn Block-West Coast, 2.5 km E of Woodland Rd intersect.		303 $\pm$ 5				W.A.	Ferguson, 1981 (M.Sc.)
7910-133A		117°49'E 35°01'S		coarse granite	Albany Granite (coarse phase)	~2670 Ma	Yilgarn Block-West Coast, Halyfax St quarry		285 $\pm$ 5			1079 $\pm$ 39	W.A.	Ferguson, 1981 (M.Sc.)
7910-134		117°49'E 35°01'S		fine granite	Albany Granite (fine grained phase)	~2670 Ma	Yilgarn Block-West Coast, Halyfax St quarry		286 $\pm$ 5			1144 $\pm$ 46	W.A.	Ferguson, 1981 (M.Sc.)
7910-136		117°50'E 34°57'S		granite		~2670 Ma	Yilgarn Block-West Coast, Readymix quarry		306 $\pm$ 5				W.A.	Ferguson, 1981 (M.Sc.)
7910-138		116°40'E 34°57'S		porphy. granite		~2670 Ma	Yilgarn Block-West Coast, 4 km N of Crystal Springs		273 $\pm$ 4				W.A.	Ferguson, 1981 (M.Sc.)
7910-140		116°00'E 34°51'S		granulite		~2670 Ma	Yilgarn Block-West Coast, Windy Harbour		298 $\pm$ 6				W.A.	Ferguson, 1981 (M.Sc.)
7910-141		115°10'E 34°20'S		coarse granulite		~2670 Ma	Yilgarn Block-West Coast, Dukes Point		276 $\pm$ 7				W.A.	Ferguson, 1981 (M.Sc.)
7910-142		115°10'E 34°21'S		granulite		~2670 Ma	Yilgarn Block-West Coast, 3.1 km from 7910-142 near l/house		268 $\pm$ 6			616 $\pm$ 15	W.A.	Ferguson, 1981 (M.Sc.)

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7910-143		115°08'E 34°22'S		gneiss granite		~2670 Ma	Yilgarn Block-West Coast. N of Cape Leewin		269±5				W.A.	Ferguson, 1981 (M.Sc.)
7910-144		115°00'E 34°03'S		granulite		~2670 Ma	Yilgarn Block-West Coast. End of Bob's Hollow Road		285±6				W.A.	Ferguson, 1981 (M.Sc.)
7910-145		114°58'E 33°53'S		granulite		~2670 Ma	Yilgarn Block-West Coast. Gracetown, Pt Cowaramup		281±6				W.A.	Ferguson, 1981 (M.Sc.)
7910-146		114°59'E 33°53'S		basic granulite		~2670 Ma	Yilgarn Block-West Coast. Gracetown beach						W.A.	Ferguson, 1981 (M.Sc.)
7910-147		115°00'E 33°34'S		felsic gneiss		~2670 Ma	Yilgarn Block-West Coast. Sugarloaf Rocks		239±5				W.A.	Ferguson, 1981 (M.Sc.)
7910-148		115°05'E 33°35'S		porphy. granite		~2670 Ma	Yilgarn Block-West Coast. 2 km N of Dunsborough turnoff		218±4				W.A.	Ferguson, 1981 (M.Sc.)
7910-149		115°06'E 33°35'S		granitic gneiss		~2670 Ma	Yilgarn Block-West Coast. Dunsborough					601±15	W.A.	Ferguson, 1981 (M.Sc.)
7910-150		115°46'E 33°59'S		dolerite dyke		~2670 Ma	Yilgarn Block-West Coast. Bridgetown Road, near Nannup					491±14	W.A.	Ferguson, 1981 (M.Sc.)
7910-151		116°07'E 33°55'S		gneiss	Hester Hill Gneiss	~2670 Ma	Yilgarn Block-West Coast. 5 km N of Bridgetown		266±5			587±14	W.A.	Ferguson, 1981 (M.Sc.)
7910-153		115°56'E 33°05'S		porphy. granite		~2670 Ma	Yilgarn Block-West Coast. Quarry above Harvey Weir		232±5				W.A.	Ferguson, 1981 (M.Sc.)
7910-154		115°56'E 33°04'S		foliated granite		~2670 Ma	Yilgarn Block-West Coast. Harvey Dam spillway		208±4				W.A.	Ferguson, 1981 (M.Sc.)
7920-008 R19150a			Mallacoota (8822) 7219 58299	biotite granite	Maramingo Granite/ Bega Batholith	~412 Ma	East Wingan Track	80	164±11				VIC	Moore, 1982 (PhD); Moore et al, 1986
7922-001		116°40'E 31°34'S		granitic gneiss		~2670 Ma	Yilgarn Block-Northam Borehole		273±6				W.A.	Ferguson, 1981 (M.Sc.)
7922-002		116°40'E 31°34'S		granitic gneiss		~2670 Ma	Yilgarn Block-Northam Borehole		282±7				W.A.	Ferguson, 1981 (M.Sc.)
7922-003		116°40'E 31°34'S		granitic gneiss		~2670 Ma	Yilgarn Block-Northam Borehole		276±6				W.A.	Ferguson, 1981 (M.Sc.)
7922-004		116°40'E 31°34'S		granitic gneiss		~2670 Ma	Yilgarn Block-Northam Borehole		294±7				W.A.	Ferguson, 1981 (M.Sc.)
7959-111 R19237			Berridale (8625) 6458 59665	hornblende-biotite tonalite	Jindabyne Tonalite/ Kosciusko Bath	~415 Ma	Jindabyne	980	358±29	13.2±0.16	1.6		NSW	Moore, 1982 (PhD); Moore et al, 1986
7959-112 R19238			Berridale (8625) 6347 59748	biotite granodiorite	Mowambah G'diorite/ Kosciusko Bath	~415 Ma	Rennix Gap		304±17				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-113 R19239			Numbla (8624) 6627 59414	biotite granite	Numbla Vale Adamellite/ Berridale Batho	~415 Ma	Numbla Vale	860	323±25				NSW	Moore, 1982 (PhD); Moore et al, 1986

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7959-114R 19240			Numbla (8624) 6653 59368	hornblende-b iotite	Finister Granodiorite/ Berridale Batho	~415 Ma	Finister, 4km N of Jimembuen		281 $\pm$ 43				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-115 R19241			Numbla (8624) 6658 59342	felsic granite	Jimembuen Adamellite/ Berridale Batho	~415 Ma	1km N of Jimembuen	780	349 $\pm$ 36	13.5 $\pm$ 0.25	1.6		NSW	Moore, 1982 (PhD); Moore et al, 1986
7959-116 R19242			Numbla (8624) 6620 59573	hornblende-b iotite	Dalgety Granodiorite/ Berridale Batho	~415 Ma	Dalgety	720	351 $\pm$ 44				NSW	Moore, 1982 (PhD); Moore et al, 1986
7959-118 R19244			Berridale (8625) 6746 59634	biotite granite	Jimembuen Adamellite/ Berridale Batho	~415 Ma	Buckley's Lake	860	361 $\pm$ 42	14.0 $\pm$ 0.31	1.4		NSW	Moore, 1982 (PhD); Moore et al, 1986
7959-119 R19245			Berridale (8625) 6711 59601	biotite granodiorite	Wullwye Granodiorite/ Berridale Batho	~415 Ma	Wullwye Hill	900	317 $\pm$ 25	12.8 $\pm$ 0.30	2.3		NSW	Moore, 1982 (PhD); Moore et al, 1986
7959-121 R19247			Wangaratta (S.J55-2) 389 5923	aluminous biotite granite	Strathbogie Granite	370 Ma	4km N of Strathbogie	500	346 $\pm$ 19	12.6 $\pm$ 0.17	1.7		VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-122 R19248		147°20'E 39°30'S		felsic granite			Deal Island	0	226 $\pm$ 15	13.0 $\pm$ 0.33	2.3		TAS	Moore, 1982 (PhD); Moore et al, 1986
7959-123 R19249			Wangaratta (S.J55-2) 417 5922	aluminous biotite granite	Barjarg Granite/ Tolmie Igneous Complex	370 Ma	Mt Samaria, 200m S of summit	900	325 $\pm$ 9 297 $\pm$ 18				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-124 R19250			Murrindal (8523) 5965 58622	biotite granite			Timbarra R.	380	234 $\pm$ 16				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-126R 19252			Craigie (8723) 7184 58836	hornblende-b iotite granite	western Bega Batholith	~412 Ma	Mt Imlay Rd N of Nungatta Ck		248 $\pm$ 19				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-130 R19253			Bombala (8724) 7165 59204	biotite granite	Bega Batholith	~412 Ma	4km NE of Cathcart	820	292 $\pm$ 28				NSW	Moore, 1982 (PhD); Moore et al, 1986
7959-131 19254			Bombala (8724) 7209 59250	biotite granite	Bega Batholith	~412 Ma	"Glenbog" forest, SW limit of Tantawanglo State Forest	900	271 $\pm$ 43				NSW	Moore, 1982 (PhD); Moore et al, 1986
7959-132 R19255			Berridale (8625) 6675 59856	biotite granodiorite	Cootralantra Granodiorite/ Berridale Batho	~415 Ma	Cootralantra	1,040	253 $\pm$ 19				NSW	Moore, 1982 (PhD); Moore et al, 1986
7959-133 R19256			Jacob's River (8524) 6278 59308	biotite granite	Kosciusko Batholith	~415 Ma	Snowy R. S of Jacob's Ladder		246 $\pm$ 17				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-135 R19258			Kosciusko (8525) 6058 59726	foliated biotite granite	Kosciusko Batholith	~415 Ma	Swampy Plains R. at Geehi		254 $\pm$ 14				NSW	Moore, 1982 (PhD); Moore et al, 1986
7959-136 R19259		147°50'E 36°18'S		biotite granite	Corryong Batholith	~420 Ma	Corryong	550	289 $\pm$ 15				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-137 R19260			Benambra (8424) 5533 59540	granodiorite			Dartmouth	400	275 $\pm$ 23				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-139 R19261			Albury (8225) 4823 59657	felsic granite			Mt Stanley, summit	1,051	298 $\pm$ 41				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-140 R19262			Albury (8225) 4701 59879	felsic granite	Pilot Range Granite		Mt Pilot, summit	500	232 $\pm$ 19				VIC	Moore, 1982 (PhD); Moore et al, 1986

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7959-141 R19263		146°30'E 37°13'S		granodiorite			Mt Buller, below Tip Corner		272 $\pm$ 24	13.7 $\pm$ 0.14	1.4		VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-142 R19264		145°10'E 37°10'S		aluminous biotite granite	Strathbogie Igneous Complex	~370 Ma	Granite Park, 2km E of Trawool pub	210	300 $\pm$ 24				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-143 R19265		145°15'E 37°00'S		felsic granite	Strathbogie Igneous Complex	~370 Ma	Avenel	180	308 $\pm$ 22				VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-145 R19267		144°48'E 37°38'S		biotite & cordierite granite			Deep Ck, Bulla	150	258 $\pm$ 16	12.8 $\pm$ 0.15	1.5		VIC	Moore, 1982 (PhD); Moore et al, 1986
7959-146 R19268		148°04'E 40°12'S		leucocratic granite			Strzelecki Peak, Flinders Is., 789m elev.	850	236 $\pm$ 21				TAS	Moore, 1982 (PhD); Moore et al, 1986
7959-147 R19269		148°04'E 40°12'S		leucocratic granite			Strzelecki Peak, Flinders Is., 730m elev.	350	204 $\pm$ 18				TAS	Moore, 1982 (PhD); Moore et al, 1986
7959-149 R19271		148°01'E 40°13'S		biotite granite			Trouser Pt Beach, Flinders Is.	0	128 $\pm$ 9				TAS	Moore, 1982 (PhD); Moore et al, 1986
8222-016 R29120	PT522	122°44'30"E 16°49'59"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Curringa-1	d-1000	403 $\pm$ 34 (707 $\pm$ 87)	12.78 $\pm$ 1.25			WA	Gleadow & Duddy, 1984
8222-018		122°44'30"E 16°49'59"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Curringa-1	d-1500	333 $\pm$ 19 (648 $\pm$ 93)	11.84 $\pm$ 1.38			WA	Gleadow & Duddy, 1984
8222-019 R29123	PT522	122°44'30"E 16°49'59"S		sand to silt sized clastic detritus	Anderson/ Grant	310-320	Northwestern Canning Basin, Curringa-1	d-1800	344 $\pm$ 21 (542 $\pm$ 99)	11.86 $\pm$ 1.42			WA	Gleadow & Duddy, 1984
8222-021 R29125	PT522	122°44'30"E 16°49'59"S		sand to silt sized clastic detritus	Gogo	370-380	Northwestern Canning Basin, Curringa-1	d-1960	263 $\pm$ 13	11.65 $\pm$ 1.31			WA	Gleadow & Duddy, 1984
8222-023 R29127	PT522	122°44'30"E 16°49'59"S		sand to silt sized clastic detritus	Gogo	370-380	Northwestern Canning Basin, Curringa-1	d-2110	214 $\pm$ 11	11.81 $\pm$ 1.65			WA	Gleadow & Duddy, 1984
8222-024 R29128	PT522	122°44'30"E 16°49'59"S		sand to silt sized clastic detritus	Gogo	370-380	Northwestern Canning Basin, Curringa-1	d-2300	132 $\pm$ 8 (352 $\pm$ 39)	11.32 $\pm$ 1.36			WA	Gleadow & Duddy, 1984
8322-075 BMR R126- 37/ R13442	PT548			tuff?	Fagan Volcanics		Mc Arthur Basin		284 $\pm$ 58				NT	Gleadow et al, 1985
8322-076 BMR R134- 49/50/51	PT588			sandstone	Sheridan Formation		Mc Arthur Basin		233 $\pm$ 10				NT	Gleadow et al, 1985
8322-078 BMR R98- 81/87/89	PT588			sandstone	Yiyintji Sandstone		Mc Arthur Basin		169 $\pm$ 34				NT	Gleadow et al, 1985
8322-080 BMR R135- 33/34	PT588			sandstone	Kombolgie Formation		Mc Arthur Basin		4.9 $\pm$ 1.2				NT	Gleadow et al, 1985
8322-082 BMR R12042	PT588			graywacke	Gundi Graywacke		Mc Arthur Basin		296 $\pm$ 37				NT	Gleadow et al, 1985
8322-089	PT580	122°26'15"E 16°44'35"S		sand to silt sized clastic detritus	Poole	275	Northwestern Canning Basin, Kambara-1	d-830	272 $\pm$ 14	13.03 $\pm$ 1.09			WA	Gleadow & Duddy, 1984

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8322-090	PT580	122°26'15"E 16°44'35"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Kambara-1	d-860	338±19 (677±74)	12.72±1.30			WA	Gleadow & Duddy, 1984
8322-092	PT580	122°26'15"E 16°44'35"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Kambara-1	d-945	298±16	12.75±1.38			WA	Gleadow & Duddy, 1984
8322-093	PT580	122°26'15"E 16°44'35"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Kambara-1	d-1050	281±13	12.78±1.06			WA	Gleadow & Duddy, 1984
8322-094	PT580	122°26'15"E 16°44'35"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Kambara-1	d-1160	291±15	12.48±1.08			WA	Gleadow & Duddy, 1984
8322-095	PT580	122°26'15"E 16°44'35"S		sand to silt sized clastic detritus	Mid Dev sands	370-380	Northwestern Canning Basin, Kambara-1	d-1805	260±12	11.97±1.43			WA	Gleadow & Duddy, 1984
8322-096	PT580	122°26'15"E 16°44'35"S		sand to silt sized clastic detritus	Mid Dev sands	370-380	Northwestern Canning Basin, Kambara-1	d-1838	276±15	11.64±1.22			WA	Gleadow & Duddy, 1984
8322-097	PT580	122°26'15"E 16°44'35"S		sand to silt sized clastic detritus	Gogo	370-380	Northwestern Canning Basin, Kambara-1	d-2925	151±10	10.06±2.50			WA	Gleadow & Duddy, 1984
8322-098	PT580	122°26'15"E 16°44'35"S		sand to silt sized clastic detritus	Gogo	370-380	Northwestern Canning Basin, Kambara-1	d-3075	46±8	9.69±2.50			WA	Gleadow & Duddy, 1984
8322-125	PT580	122°15'47"E 16°49'42"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Perindi-1	d-880	250±12	12.96±0.98			WA	Gleadow & Duddy, 1984
8322-126	PT580	122°15'47"E 16°49'42"S		sand to silt sized clastic detritus	dolerite/ Grant	280-300	Northwestern Canning Basin, Perindi-1	d-1382	266±25 251±15	13.06±1.31			WA	Gleadow & Duddy, 1984
8322-128	PT580	122°15'47"E 16°49'42"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Perindi-1	d-1592	191±10	12.00±1.21			WA	Gleadow & Duddy, 1984
8351-023	PT700	133°53'00"E 23°54'47"S		conglomerate	Brewer Conglomerate		Amadeus Basin, Alice-1	d-160	410±55	12.17±0.47	1.96		NT	Tingate, 1990 (in press)
8351-024	PT700	133°53'00"E 23°54'47"S		sandstone	Hermannsburg Sandstone		Amadeus Basin, Alice-1	d-251	381±20	12.35±0.22	1.45		NT	Tingate, 1990 (in press)
8351-025	PT700	133°53'00"E 23°54'47"S		sandstone	Hermannsburg Sandstone		Amadeus Basin, Alice-1	d-343	413±45	11.38±0.26	1.98		NT	Tingate, 1990 (in press)
8351-028	PT700	133°53'00"E 23°54'47"S		sandstone	Pacoota Sandstone		Amadeus Basin, Alice-1	d-658	348±28	12.52±0.16	1.61		NT	Tingate, 1990 (in press)
8351-030	PT700	133°53'00"E 23°54'47"S		sandstone	Goyder Formation		Amadeus Basin, Alice-1	d-1093	230±30	11.50±0.25	2.20		NT	Tingate, 1990 (in press)
8351-050	PT626		Hermannsburg (SF53-13) LP027644	sandstone	Stairway Sandstone		Amadeus Basin, Ellery Creek		298±22	12.59±0.20	1.51		NT	Tingate, 1990 (in press)
8351-055	PT626		Hermannsburg (SF53-13) LP025656	sandstone	Pacoota Sandstone		Amadeus Basin, Ellery Creek		227±25				NT	Tingate, 1990 (in press)
8351-075			Hermannsburg (SF53-13) KP315849	sandstone	Pacoota Sandstone		Amadeus Basin, Tyler Pass		223±15	12.65±0.45	1.51		NT	Tingate, 1990 (in press)

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8351-110	PT646		Mt Leilbig (SF52-16) GU915572	sandstone	Pacoota Sandstone		Amadeus Basin, Gardiner Range		311 $\pm$ 16	12.09 $\pm$ 0.28	1.38		NT	Tingate, 1990 (in press)
8351-121	PT683		Henbury (SG53-1) 65039481	sandstone	Pacoota Sandstone		Amadeus Basin, Chandler Range		414 $\pm$ 57 mean	12.52 $\pm$ 0.27	1.53		NT	Tingate, 1990 (in press)
8351-128	PT646		Lake Amadeus (SG52-4) GU540278	sandstone	Pacoota Sandstone		Amadeus Basin, Johnny Creek Anticline		267 $\pm$ 19	12.79 $\pm$ 0.71	2.01		NT	Tingate, 1990 (in press)
8351-129	PT683		Lake Amadeus (SG52-4) GU534269	sandstone	Pacoota Sandstone		Amadeus Basin, Johnny Creek Anticline		204 $\pm$ 16	12.41 $\pm$ 0.28	1.46		NT	Tingate, 1990 (in press)
8351-133	PT646		Henbury (SG53-1) 51579539	sandstone	Pacoota Sandstone		Amadeus Basin, George Gill Range		315 $\pm$ 24	11.98 $\pm$ 0.23	1.39		NT	Tingate, 1990 (in press)
8351-140	PT685		Henbury (SG53-1) 53799649	sandstone	Pacoota Sandstone		Amadeus Basin, Levi Range		363 $\pm$ 106				NT	Tingate, 1990 (in press)
8351-151	PT683		Rodinga (SG53-2) 14489659	sandstone	Pacoota Sandstone		Amadeus Basin, James Range		323 $\pm$ 42				NT	Tingate, 1990 (in press)
8351-152	PT685		Rodinga (SG53-2) 14479642	sandstone	Pacoota Sandstone		Amadeus Basin, James Range		355 $\pm$ 21	12.61 $\pm$ 0.17	1.72		NT	Tingate, 1990 (in press)
8351-160	PT685	131°38'50"E 24°02'47"S		sandstone	Pacoota Sandstone		Amadeus Basin, East Mereenie-2	d-1267	237 $\pm$ 26	10.44 $\pm$ 0.34	2.51		NT	Tingate, 1990 (in press)
8351-167	PT685	131°38'50"E 24°02'47"S		sandstone	Pacoota Sandstone		Amadeus Basin, East Mereenie-2	d-1512	186 $\pm$ 9	11.04 $\pm$ 0.17	1.69		NT	Tingate, 1990 (in press)
8410-028	PT666	125°28'E 18°10'S			Grant Gp	Upper Carboniferous/Permian	Lennard Shelf-Fitzroy Crossing		432 $\pm$ 28	12.90 $\pm$ 0.18	1.29		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-030	PT666	126°25'E 18°40'S		granite	basement	Precambrian	Lennard Shelf-92km from Bugle Gap		333 $\pm$ 22	12.10 $\pm$ 0.23	1.60		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-032	PT666	125°45'E 18°20'S		granite	basement	Precambrian	Lennard Shelf-Pillara Range		349 $\pm$ 16	12.24 $\pm$ 0.21	2.10		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-034	PT666	125°53'E 17°49'S		granite	Old Leopold Hill Contact Suite	Precambrian	Lennard Shelf-Old Leopold Hill, 2-20 cm from contact		18.7 $\pm$ 1.9	14.36 $\pm$ 0.15	1.09		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-037	PT666	125°53'E 17°49'S		granite	Old Leopold Hill Contact Suite	Precambrian	Lennard Shelf-Old Leopold Hill, 10m from contact		14.8 $\pm$ 1.8	14.16 $\pm$ 0.15	0.93		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-038	PT666	125°53'E 17°49'S		granite	Old Leopold Hill Contact Suite	Precambrian	Lennard Shelf-Old Leopold Hill, 30m from contact		211 $\pm$ 14	9.92 $\pm$ 0.28	2.75		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-039	PT666	125°53'E 17°49'S		granite	Old Leopold Hill Contact Suite	Precambrian	Lennard Shelf-Old Leopold Hill, 200m from contact		318 $\pm$ 16	12.98 $\pm$ 0.19	1.86		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-040	PT666	125°10'E 17°37'S		granite	basement	Precambrian	Lennard Shelf-McSherry's Gap		389 $\pm$ 16	13.22 $\pm$ 0.14	1.36		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-041	PT666	124°55'E 17°25'S		granite	basement	Precambrian	Lennard Shelf-Billyara Dam		317 $\pm$ 17	12.89 $\pm$ 0.21	1.89		W.A.	Arne, 1989 (PhD); Arne et al, 1989

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8410-042	PT666	124°53'E 17°20'S		gabbro	basement	Precambrian	Lennard Shelf-Kongorow		313±29	12.24±0.15	1.51		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-047	PT666	124°43'E 17°15'S		clastic material		?	Lennard Shelf - Narlarla		301±21	12.55±0.17	1.69		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8410-048	PT666	124°07'E 17°55'S		sandstone	Poole Sandstone	Permian	Lennard Shelf-near Liveringa		195±18	13.15±0.21	1.48		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8422-001		123°09'39"E 17°25'04"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Fraser River-1	d-790	233±14	12.84±1.03			WA	Gleadow & Duddy, 1984
8422-002		123°09'39"E 17°25'04"S		sand to silt sized clastic detritus	Grant	280-300	Northwestern Canning Basin, Fraser River-1	d-1070	223±13	12.52±1.27			WA	Gleadow & Duddy, 1984
8422-003		123°09'39"E 17°25'04"S		sand to silt sized clastic detritus	Anderson	320-340	Northwestern Canning Basin, Fraser River-1	d-2160	110±5	10.66±1.60			WA	Gleadow & Duddy, 1984
8422-004		123°09'39"E 17°25'04"S		dolerite			Northwestern Canning Basin, Fraser River-1	d-3060	26±4	9.35±2.59			WA	Gleadow & Duddy, 1984
8422-008		121°29'28"E 17°14'26"S		sand to silt sized clastic detritus	Anderson	320-340	Northwestern Canning Basin, Wamac-1	d-2190	166±12	10.18±2.37			WA	Gleadow & Duddy, 1984
8422-009		121°29'28"E 17°14'26"S		dolerite			Northwestern Canning Basin, Wamac-1	d-2410	201±18	11.86±1.43			WA	Gleadow & Duddy, 1984
8422-010		121°29'28"E 17°14'26"S		sand to silt sized clastic detritus	dolerite/ Anderson	320-340	Northwestern Canning Basin, Wamac-1	d-2730	173±11	11.04±1.52			WA	Gleadow & Duddy, 1984
8422-012		122°42'40"E 17°48'25"S		sand to silt sized clastic detritus	Anderson	320-340	Northwestern Canning Basin, Barlee-1	d-2330	113±6	10.38±2.08			WA	Gleadow & Duddy, 1984
8422-013		122°42'40"E 17°48'25"S		sand to silt sized clastic detritus	dolerite/ Anderson	320-340	Northwestern Canning Basin, Barlee-1	d-2390	124±7	10.33±2.14			WA	Gleadow & Duddy, 1984
8422-021 BMR 83430026	PT633			sandstone	Bukalara Sandstone		Mc Arthur Basin		272±32				NT	Gleadow et al, 1985
8422-022 BMR 83430014	PT633			sandstone	Roper Group, base Abner Sandstone		Mc Arthur Basin		320±35				NT	Gleadow et al, 1985
8422-024 BMR 83430117	PT633			sandstone	Roper Group, Bessie Creek Sandstone		Mc Arthur Basin		341±17	13.01	1.41		NT	Gleadow et al, 1985
8422-025 BMR 83430133	PT633			sandstone	Roper Group, Bessie Creek Sandstone		Mc Arthur Basin		340±24	12.00	1.72		NT	Gleadow et al, 1985
8422-026 BMR 83430145	PT633			sandstone	Roper Group, Limmen Sandstone		Mc Arthur Basin		302±27	12.57	1.85		NT	Gleadow et al, 1985
8422-027 BMR 83431068	PT633			sandstone	Roper Group, Corcoran Formation		Mc Arthur Basin		282±29	13.14	2.16		NT	Gleadow et al, 1985
8422-028 BMR 83430160	PT633			sandstone	Yiyintji Sandstone		Mc Arthur Basin		307±12	12.98	1.42		NT	Gleadow et al, 1985

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8422-029		~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass		293±14	12.55±0.22	2.16		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8422-030		~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass		264±15	11.74±0.28	2.82		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8422-033		~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass		327±30	12.47±0.15	1.48		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8422-035		~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass		2696±13	12.49±0.14	1.44		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8422-036		~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass		302±15	12.36±0.17	1.74		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8422-037		~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass		294±17	12.72±0.17	1.67		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8422-038		~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass		273±17	12.36±0.16	1.68		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8422-080		152°30'E 30°29'S	SH56-10 or 9437	gabbro	The Crescent Complex	~18 Ma	Dorrigo Plateau, The Crescent	700	18.2±2.2	15.36±0.79			N.S.W.	Gleadow & Ollier, 1987
8451-055 a PT683			Kulgera (SG53-5) 63148778	sandstone	Stairway Sandstone		Amadeus Basin, Erdunda Range		273±58	12.14±0.30	0.93		NT	Tingate, 1990 (in press)
8451-055b PT685			Kulgera (SG53-5) 58398777	sandstone	Stairway Sandstone		Amadeus Basin, Basedow Range		349±29	12.88±0.20	1.63		NT	Tingate, 1990 (in press)
8451-064 PT683			Mt Leibig (SF52-16) GU112453	sandstone	Pacoota Sandstone		Amadeus Basin, Watson Range		232±26	13.19±0.23	1.00		NT	Tingate, 1990 (in press)
8451-067 PT683			Mt Leibig (SF52-16) GU262712	sandstone	Pacoota Sandstone		Amadeus Basin, Glen Edith Anticline		317±31				NT	Tingate, 1990 (in press)
8451-070 PT772			Mt Leibig (SF52-16) GU336651	sandstone	Stairway Sandstone		Amadeus Basin, Glen Edith Anticline		345±39	12.93±0.21	1.50		NT	Tingate, 1990 (in press)
8451-072		131°38'50"E 24°02'47"S		siltstone	Parke Siltstone		Amadeus Basin, East Mereenie-2	surface	265±29	12.00±0.27	1.58		NT	Tingate, 1990 (in press)
8451-109 PT700		133°53'00"E 23°54'47"S		conglomerate	Brewer Conglomerate		Amadeus Basin, Alice-1	surface	315±12	12.64±0.18	1.50		NT	Tingate, 1990 (in press)
8451-114 PT684			Rodinga (SG53-2) 18329667	sandstone	Pacoota Sandstone		Amadeus Basin, James Range		301±23				NT	Tingate, 1990 (in press)
8451-115b PT684			Rodinga (SG53-2) 18189548	sandstone	Pacoota Sandstone		Amadeus Basin, Mt Burrell Anticlinorium		306±29	12.60±0.18	1.43		NT	Tingate, 1990 (in press)
8451-123 PT684			Henbury (SG53-1) 56069650	sandstone	Pacoota Sandstone		Amadeus Basin, Petermann Anticline		448±86	12.70±0.21	1.14		NT	Tingate, 1990 (in press)
8451-128 PT684			Henbury (SG53-1) 55029712	sandstone	Pacoota Sandstone		Amadeus Basin, Illara Springs		462±141	12.39±0.34	1.59		NT	Tingate, 1990 (in press)

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8522-081	PT720	~124°43'E 17°15'S			Napier Fm	Devonian	Lennard Shelf - Narlarla, Narl 84/1		294±10	12.72±0.22	2.17		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8522-082	PT730	~124°43'E 17°15'S			Napier Fm	Devonian	Lennard Shelf - Narlarla, Narl 84/3		252±19	12.41±0.15	1.43		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8522-085	PT720	~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass, NRD-23	d-244	284±13	12.82±0.14	1.41		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8522-087	PT720	~124°37'E 17°10'S			Van Emerick Fm	Devonian	Lennard Shelf - Wagon Pass, NRD-24	d-347	300±12	12.61±0.20	12.61		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8522-088	PT730	~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass, NRD-25	d-77	280±16	12.40±0.17	1.72		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8522-090	PT730	~124°37'E 17°10'S			Napier Fm	Devonian	Lennard Shelf - Wagon Pass, NRD-23	d-237	259±13	12.60±0.16	1.63		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8522-093	PT720	~125°45'E 18°21'S			Virgin Hills Fm	Devonian	Lennard Shelf - Blendevalle, PD298A	d-20.2	301±14	12.71±0.16	1.63		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8522-094	PT720	~125°45'E 18°21'S			Virgin Hills Fm	Devonian	Lennard Shelf - Blendevalle, PD298A	d-21	333±11	12.98±0.12	1.20		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8522-095	PT720	~125°45'E 18°21'S			Virgin Hills Fm	Devonian	Lennard Shelf - Blendevalle, PD298A	d-22	356±17	12.97±0.14	1.35		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8551-003	PT739		Alice Springs (geol) (5650) MP293788	sandstone	Pacoota Sandstone		Amadeus Basin, Ross River Syncline		282±14	12.71±0.25	1.87		NT	Tingate, 1990 (in press)
8551-006	PT739		Rodinga (SG53-2) 20229638	sandstone	Pacoota Sandstone		Amadeus Basin, New Year Dam		366±54	12.70±0.21	1.14		NT	Tingate, 1990 (in press)
8551-018	PT742			sandstone	Arumbera Sandstone		Amadeus Basin, Wallaby-1	d-1921	144±10	10.83±0.21	1.84		NT	Tingate, 1990 (in press)
8551-024	PT742		Alice Springs (geol) (5650) LP616475	sandstone	Pacoota Sandstone		Amadeus Basin, Waterhouse Range		325±20	12.93±0.17	1.20		NT	Tingate, 1990 (in press)
8551-027	PT742		Henbury (SG53-1) 58859738	sandstone	Pacoota Sandstone		Amadeus Basin, Illamurta Structure		372±23	12.98±0.17	1.48		NT	Tingate, 1990 (in press)
8551-028	PT742		Henbury (SG53-1) 58939738	sandstone	Pacoota Sandstone		Amadeus Basin, Illamurta Structure		355±19	12.86±0.15	1.36		NT	Tingate, 1990 (in press)
8551-029	PT742		Henbury (SG53-1) 57689631	sandstone	Pacoota Sandstone		Amadeus Basin, Illamurta Structure		650±173	13.17±0.21	1.28		NT	Tingate, 1990 (in press)
8551-030	PT742		Henbury (SG53-1) 57789497	sandstone	Pacoota Sandstone		Amadeus Basin, Ayers Lookout Plain		360±17	12.79±0.13	1.24		NT	Tingate, 1990 (in press)
8551-038	PT769		Petermann Ra. (SG52-7) FT076259	sandstone	Stairway Sandstone		Amadeus Basin, Irving creek		341±58	12.05±0.36	2.33		NT	Tingate, 1990 (in press)
8622-139 R22735	PT812		Skipton (7522) 686400E 5792800N	granite			Geelangah-10 (39-84-7)	61 d-104	125±6	13.04±0.21			VIC	A.J.W. Gleadow

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8663-021	PT821	125°37'58"E 18°21'16"S		carbonate		Devonian	Lennard Shelf - Grevillea-1	d-565	256±29	11.59±0.34	1.51		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8663-022	PT821	125°37'58"E 18°21'16"S		carbonate		Devonian	Lennard Shelf - Grevillea-1	d-825	296±53	11.44±0.29	1.88		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8663-023	PT821	125°37'58"E 18°21'16"S		carbonate		Devonian	Lennard Shelf - Grevillea-1	d-1,147	138±23	10.90±0.46	2.06		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8663-024	PT821	125°37'58"E 18°21'16"S		carbonate		Devonian	Lennard Shelf - Grevillea-1	d-1,347	135±38	11.06±0.29	1.24		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8663-025	PT821	125°37'58"E 18°21'16"S		carbonate		Devonian	Lennard Shelf - Grevillea-1	d-1,402	147±38	9.84±1.05	2.97		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8663-026	PT821	125°37'58"E 18°21'16"S		carbonate		Devonian	Lennard Shelf - Grevillea-1	d-1,475	145±16	11.42±0.33	1.79		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8663-031	PT821	124°36'19"E 17°45'15"S			Fairfield Gp	Lower Carboniferous	Lennard Shelf - Kennedia-1	d-1,025	236±27	11.19±0.39	2.15		W.A.	Arne, 1989 (PhD); Arne et al, 1989
8663-033	PT821	124°36'19"E 17°45'15"S		clastics		Upper Devonian	Lennard Shelf - Kennedia-1	d-2,775	13±4.2				W.A.	Arne, 1989 (PhD); Arne et al, 1989
8663-034	PT821	124°36'19"E 17°45'15"S		clastics		Upper Devonian	Lennard Shelf - Kennedia-1	d-3,225	1.4±0.4				W.A.	Arne, 1989 (PhD); Arne et al, 1989
8822-001	PT938		Sorrento (7821) CT250615	granite-dyke			Mt Martha	2	117±6	13.26±0.22			VIC.	A.J.W. Gleadow
8822-002	PT938		Sorrento (7821) CT250615	granite-dyke			Mt Martha	2	176±11	12.14± 0.30			VIC.	A.J.W. Gleadow
8822-003	PT938		Sorrento (7821) CT250615	granite-dyke			Mt Martha	2		12.33±0.47			VIC.	A.J.W. Gleadow
8863-002 *	PT942	146°07'E 37°10'S	Mansfield (8123) 214868	red beds		Upper Devonian	Mansfield, Delatite River near Piries		197±18	12.88±0.22			VIC.	D. Arne (unpub.)
8863-101 *		146°06'E 37°01'S	Mansfield (8123)	red beds		Upper Devonian	Mansfield		272±35	12.77±0.23			VIC.	D. Arne (unpubl.)
8863-102 *		146°06'E 36°58'S	Whitfield (8124) 204073	red beds		Upper Devonian	Mansfield, Broken River		177±24				VIC.	D. Arne (unpubl.)
8863-103 *		146°17'E 37°06'S	Mansfield (8123)	red beds		Upper Devonian	Mansfield, Delatite River near Timbertop School		149±17	12.81±0.48			VIC.	D. Arne (unpubl.)
BEH-A		146°21'E 33°31'S		leucitite	Begargo Hill series	13.3 (K-Ar)	Begargo Hill		14.1±1.2				NSW	Cundari et al, 1978
LTU 9493 *	LU018	147°14'20"E 36°52'30"S	Bogong (8324) 216187	gneissic granite	High Plains Gneiss	Upper Ordovician?	Mt McKay summit, Falls Creek Region	1,840	301 ±24	13.47±0.18	1.40		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9494 *	LU018	147°15'00" E 36°52'10"S	Bogong (8324) 224192	gneissic granite	High Plains Gneiss	Upper Ordovician?	Mt McKay, Falls Creek Region	1,730	288 ±12	13.29±0.15	1.53		VIC.	Byrnes, 1989 (B.Sc. Hons)

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LTU 9495 *	LU018	147°15' 00"E 36°52'10"S	Bogong (8324) 224192	foliated granite	High Plains Gneiss	Upper Ordovician?	Mt McKay, Falls Creek Region	1,720	279 ± 11	13.32 ± 0.15	1.23		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9496 *	LU018	147°15'10"E 36°52'00"S	Bogong (8324) 227194	gneissic granite	High Plains Gneiss	Upper Ordovician?	Mt McKay, Falls Creek Region	1,650	265 ± 12	12.98 ± 0.14	1.31		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9497 *	LU018	147°17'00"E 36°51'55"S	Bogong (8324) 254199	gneissic granite	High Plains Gneiss	Upper Ordovician?	Falls Creek	1,560	282 ± 18	13.24 ± 0.33	1.41		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9498 *	LU022	147°16'10"E 36°51'30"S	Bogong (8324) 242210	gneissic granite	High Plains Gneiss	~410-420 Ma Upper Silurian	Falls Creek Region	1,440	279 ± 11	13.33 ± 0.13	1.27		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9499 *	LU018	147°15'45"E 36°51'00"S	Bogong (8324) 235221	gneissic granite	High Plains Gneiss	~410-420 Ma Upper Silurian	Falls Creek Region	1,340	288 ± 19	12.52 ± 0.28	1.61		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9500 *	LU018	147°14'55"E 36°50'45"S	Bogong (8324) 222223	granodiorite	Falls Creek G/diorite	~410-420 Ma Upper Silurian	Falls Creek Region	1,220	373 ± 18	13.15 ± 0.22	1.48		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9501 *	LU018	147°14'20"E 36°51'10"S	Bogong (8324) 216218	granodiorite	Falls Creek G/diorite	~410-420 Ma Upper Silurian	Falls Creek Region	1,150	319 ± 15	12.7 ± 0.14	1.42		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9502 *	LU018	147°13'50"E 36°50'20"S	Bogong (8324) 208229	granodiorite	Falls Creek G/diorite	~410-420 Ma Upper Silurian	Falls Creek Region	1,030	260 ± 16	11.35 ± 0.27	1.70		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9503 *	LU018	147°13'40"E 36°49'55"S	Bogong (8324) 205239	granodiorite	Falls Creek G/diorite	~410-420 Ma Upper Silurian	Falls Creek Region	950	314 ± 17	11.48 ± 0.19	1.94		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9504 *	LU018	147°13'37"E 36°49'20"S	Bogong (8324) 204252	granodiorite	Falls Creek G/diorite	~410-420 Ma Upper Silurian	Falls Creek Region	850	241 ± 10	11.73 ± 0.18	1.81		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9505 *	LU018	147°13'30"E 36°49'17"S	Bogong (8324) 201253	granodiorite	Falls Creek G/diorite	~410-420 Ma Upper Silurian	Falls Creek Region	740	241 ± 10	11.51 ± 0.23	2.32		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9506 *	LU018	147°12'50"E 36°48'10"S	Bogong (8324) 192273	gneissic granite	High Plains Gneiss	Upper Ordovician?	Falls Creek Region	660	228 ± 10	11.91 ± 0.21	2.11		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9507 *	LU018	147°11'50"E 36°45'00"S	Bogong (8324) 172327	weathered joint?	High Plains Gneiss	Upper Ordovician?	Falls Creek Region	550	242 ± 20	12.98 ± 0.53	1.67		VIC.	Byrnes, 1989 (B.Sc. Hons)
LTU 9508 *	LU018	147°11'50"E 36°45'00"S	Bogong (8324) 172327	jointed granite	High Plains Gneiss	Upper Ordovician?	Falls Creek Region	550	234 ± 2.217	9.83 ± 0.45	2.67		VIC.	Byrnes, 1989 (B.Sc. Hons)
R17685		143°11.43'E 6°54.76'S		sandstone	Otway Group	Lower Cretaceous	Otway Basin		121 ± 3			118 ± 2	VIC	Gleadow & Duddy, 1981a, b
R17686		143°11.43'E 6°54.76'S		sandstone	Otway Group	Upper Cretaceous	Otway Basin		120 ± 2			128 ± 3	VIC	Gleadow & Duddy, 1981a, b
R19124		143°11.43'E 6°54.76'S		sandstone	Otway Group	Upper Cretaceous	Otway Basin		120 ± 3			118 ± 3	VIC	Gleadow & Duddy, 1981a, b
R19125		143°11.43'E 6°54.76'S		trachyandesite		Upper Cretaceous	Cape Portland, NE Tasmania		98 ± 4				TAS	Gleadow & Duddy, 1981a
R19263		146°25'E 37°15'S					Mt Buller		272 ± 24	13.7 ± 0.14	1.4		VIC	Moore et al, 1986

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R25290		142°46'00"E 38°33'00"S		sandstone	Otway Group	Upper Cretaceous	Otway Basin, Flaxmans-1	d-2280				115±5	VIC	Gleadow & Duddy, 1981b
R25299		142°46'00"E 38°33'00"S		sandstone	Otway Group	Upper Cretaceous	Otway Basin, Flaxmans-1	d-3431				118±5	VIC	Gleadow & Duddy, 1981b
R34801	PT748	143°52.11'E 6°57.10'S		sandstone	Ieru	Early to Late Cretaceous	264m below base Darai, lehi-1, core 18	375 d-933	104.1±10.6	14.52±0.11	1.06		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34802	PT748	143°52.11'E 6°57.10'S		sandstone	Toro	Late Jurassic to Early Cretaceous	770m below base Darai, lehi-1, core 26	-131 d-1,439	159.1±20.4	10.94±0.49	2.17		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34803	PT748	143°52.11'E 6°57.10'S		sandstone	Toro	Late Jurassic to Early Cretaceous	1020m below base Darai, lehi-1, core 34	-381 d-1,689	102.0±6.4	11.36±0.22	2.32		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34804	PT748	143°52.11'E 6°57.10'S		mudstone	Imburu?	Late Jurassic	1316m below base Darai, lehi-1, core 37	-677 d-1,985	115.6±13.3	11.04±0.27	2.69		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34805	PT748	143°52.11'E 6°57.10'S		sandstone	Koi-lange	Middle to Late Jurassic	1811m below base Darai, lehi-1, core 42	-1,172 d-2,480	59.1±7.2	8.77±0.35	3.49		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34806	PT748	143°52.11'E 6°57.10'S		sandstone	Toro (repeat)	Late Jurassic to Early Cretaceous	~1000m below base Darai, lehi-1, core 44	-1,416 d-2,724	171.7±34.3	10.49±0.45	2.75		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34807	PT748	143°52.11'E 6°57.10'S		mudstone	Imburu?	Late Jurassic	~1300m below base Darai, lehi-1, core 48	-1,752 d-3,060	142.1±11.1	11.08±0.25	2.65		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34808	PT748	142°5.68'E 5°23.53'S		granite basement		Triassic	Base of Strickland Gorge section, 2300m below base Darai, MND 31A, 31	300	3.8±0.6	14.12±0.30	1.80		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989;
R34809	PT748	142°8.81'E 5°21.85'S		sandstone	Ieru	Early to Late Cretaceous	131m below base Darai	530	54.3±8.6	10.26±0.22	2.23		PNG	Jenkins & White 1970 Hill, 1989 (PhD); Hill & Gleadow, 1989;
R34810	PT748	142°8.73'E 5°22.17'S		sandstone	Ieru	Early to Late Cretaceous	424m below base Darai	520	49.6±5.7	10.87±0.22	2.16		PNG	Jenkins & White 1970 Hill, 1989 (PhD); Hill & Gleadow, 1989;
R34811	PT748	142°8.27'E 5°24.95'S		sandstone	Toro	Late Jurassic to Early Cretaceous	1079m below base Darai	900	19.9±12.1	10.11±0.35	3.15		PNG	Jenkins & White 1970 Hill, 1989 (PhD); Hill & Gleadow, 1989;
R34812	PT748	142°6.57'E 5°23.70'S		sandstone	Koi-lange	Middle to Late Jurassic	1958m below base Darai	800	2.0±0.5	10.16±1.33	4.42		PNG	Jenkins & White 1970 Hill, 1989 (PhD); Hill & Gleadow, 1989;
R34813	PT748	142°8.05'E 5°24.54'S		sandstone	Imburu	Late Jurassic	1554m below base Darai	800	23.1±9.6	10.95±0.89	2.66		PNG	Jenkins & White 1970 Hill, 1989 (PhD); Hill & Gleadow, 1989;
R34814	PT748	141°34.11'E 5°21.49'S		granite wash	Bol Arkose	Late Triassic? to Middle Jurassic	Top of creek section, 450m above basement	1,260	4.0±0.8	13.18±0.42	2.73		PNG	Jenkins & White 1970 Hill, 1989 (PhD); Hill & Gleadow, 1989;
R34815	PT748	145°16.68'E 6°13.70'S		tuffaceous sandstone	Yaveufa Fm (Aure Beds)	Late Oligocene to Late Miocene	Base of 6000m Miocene sequence	2,255	33.2±11.9 11.6±2.2L 208.8±8.2H	13.99±0.44 11.85±0.17	2.47 1.41		PNG	White et al 1973 Hill, 1989 (PhD); Hill & Gleadow, 1989;
R34816	PT809	143°55.35'E 7°6.87'S		sandstone	Ieru	Early to Late Cretaceous	325m below base Darai, Barikewa-1, core 15	-1,150 d-1,285	149.9±6.6	12.86±0.16	1.55		PNG	Stanley et al 1950 Hill, 1989 (PhD); Hill & Gleadow, 1989
R34817	PT809	143°55.35'E 7°6.87'S		sandstone	Top Toro	Late Jurassic to Early Cretaceous	700m below base Darai, Barikewa-1	-1,525 d-1,660	163.6±15.4	11.61±0.27	2.22		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989

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R34818	PT809	143°55.35'E 7°6.87'S		sandstone	Toro	Late Jurassic to Early Cretaceous	874m below base Darai, Barikewa-1	-1,699 d-1,834	134.9 $\pm$ 17.2	10.30 $\pm$ 0.30	2.58		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34819	PT809	143°55.35'E 7°6.87'S		sandstone	Koi-lange	Middle to Late Jurassic	1678m below base Darai, Barikewa-1	-2,503 d-2,638	84.7 $\pm$ 15.7	9.77 $\pm$ 0.38	2.94		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34820	PT809	143°55.35'E 7°6.87'S		sandstone	Bol Arkose?	Late Triassic? to Middle Jurassic	3146m below base Darai, Barikewa-1	-3,971 d-4,106	44.1 $\pm$ 11.9	9.68 $\pm$ 0.57	2.48		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34821	PT809	143°55.35'E 7°6.87'S		arkose congl.	Bol Arkose	Late Triassic? to Middle Jurassic	3247m below base Darai, Barikewa-1	-4,072 d-4,207	1.5 $\pm$ 0.6				PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989
R34822	PT809	145°17.91'E 6°13.75'S		tuffs and lavas	Yaveufa Fmn (Aure Beds)	Late Oligocene to Late Miocene	4650m below top of Miocene tuff section	2,100	15.2 $\pm$ 5.5	14.60 $\pm$ 0.45	1.50		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; Stanley et al 1950
R34823	PT809	145°17.37'E 6°13.78'S		tuffs and lavas	Yaveufa Fmn (Aure Beds)	Late Oligocene to Late Miocene	5180m below top of Miocene tuff section	2,040	13.9 $\pm$ 2.7				PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; Stanley et al 1950
R34824	PT809	144°16.43'E 5°56.90'S		granite basement		Triassic	Near top basement, W end Kubor anticline	2,240	3.9 $\pm$ 0.5	14.50 $\pm$ 0.19	1.50		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; Stanley et al 1950
R34826	PT809	144°14.86'E 5°58.04'S		volcanic sandstone	Maril	Middle to Late Jurassic	300m above top basement	1,630	18.1 $\pm$ 6.1	13.03 $\pm$ 0.19	1.79		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; Stanley et al 1950
R34827	PT809	144°29.72'E 6°9.53'S		gabbro			3340m below top of section through Kondaku Tuff and Maril Shale	980	5.3 $\pm$ 0.8	14.79 $\pm$ 0.23	1.34		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; Findlay et al 1972
R34830	PT809	144°29.79'E 6°10.87'S		sandstone	Kondaku Tuff	Early Cretaceous Aptian-Albian	1500m below top of section through Kondaku Tuff and Maril Shale	920	67.0 $\pm$ 38.1				PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; Findlay et al 1972
R34831	PT825	141°54.81'E 5°21.20'S		sandstone	Ieru Giero Mbr	Early to Late Cretaceous	718 $\pm$ 30m below top Ieru	1,000	66.7 $\pm$ 12.8	10.69 $\pm$ 0.24	1.85		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; White et al 1973
R34832	PT825	141°55.19'E 5°19.84'S		sandstone	Ieru Haito Mbr	Early to Late Cretaceous	120 $\pm$ 18m below top Ieru	1,345	91.4 $\pm$ 10.1	12.05 $\pm$ 0.18	1.77		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; White et al 1973
R34833	PT825	142°0.22'E 5°32.85'S		sandstone	Koi-lange	Middle to Late Jurassic	1830 $\pm$ 5m below top Ieru	800	10.8 $\pm$ 3.6	9.45 $\pm$ 0.60	3.96		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; White et al 1973
R34835	PT825	141°59.08'E 5°34.43'S		sandstone	Ieru Giero Mbr	Early to Late Cretaceous	690m from top Ieru	290	76.1 $\pm$ 7.8	11.12 $\pm$ 0.26	2.58		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1989; White et al 1973
R34836	PT825	141°59.62'E 5°34.02'S		sandstone	Base Toro	Late Jurassic to Early Cretaceous	1235 $\pm$ 20m from top Ieru	360	18.7 $\pm$ 5.6	9.82 $\pm$ 0.38	3.03		PNG	Hill, 1989 (PhD); White et al 1973
R34837	PT853	141°34.14'E 5°21.49'S		granite wash	Bol Arkose	Late Triassic? to Middle Jurassic	Est. 170m above granite bsmt	1,250	13.2 $\pm$ 4.0	13.14 $\pm$ 0.77	3.25		PNG	Hill, 1989 (PhD); White et al 1973
R34852	PT825	144°2.54'E 6°25.56'S		sandstone	Chim (Pangia ss KS2)	Late Cretaceous to Palaeocene		1,590	37.2 $\pm$ 7.7	11.00 $\pm$ 0.18	1.84		PNG	Hill, 1989 (PhD); Buchan & Robinson 1969
R34853	PT825	142°32.08'E 5°45.82'S		sandstone	Ieru Giero Mbr	Early to Late Cretaceous	550m below base Darai	2,550	5.5 $\pm$ 1.9	13.39 $\pm$ 0.57	2.35		PNG	Hill, 1989 (PhD); Findlay & Leckie 1973
R34854	PT853	142°31.30'E 5°46.00'S		sandstone	Ieru Haito Mbr	Early to Late Cretaceous	120m below base Darai	2,880	57.0 $\pm$ 7.5	10.57 $\pm$ 0.27	2.27		PNG	Hill, 1989 (PhD); Findlay & Leckie

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R34855	PT825	142°33.49'E 5°6.09'S		sandstone	Toro	Late Jurassic to Early Cretaceous	850m below base Darai	2,670	2.5±0.8	8.07±0.54	0.93		PNG	Hill, 1989 (PhD); Findlay & Leckie 1973
R34856	PT825	141°39.59'E 5°5.00'S		sandstone?	Top Toro	Late Jurassic to Early Cretaceous	on Ok Tol between Telefomin & Eliptamin	2,100	11.1±3.7	9.43±1.83	4.48		PNG	Hill, 1989 (PhD); White 1972
R34862	PT832	143°02.70'E 7°18.05'S		calcarene	Darai	Late Oligocene to Middle Miocene	302m above base Darai, Komewu-1	-1,228 d-1,255	102.4±5.2	13.20±0.22	1.43		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34863	PT832	143°02.70'E 7°18.05'S		sandstone	Koi-lange?	Middle to Late Jurassic	47m below base Darai, Komewu-1	-1,577 d-1,604	100.7±17.0	13.24±0.79	2.96		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34864	PT832	143°02.70'E 7°18.05'S		dacite lava flow	Dacite lava basement	Triassic	353m below base Darai, Komewu-1	-1,882 d-1,909	172.8±38.0	12.06±0.34	1.67		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34865	PT832	143°04.18'E 7°17.15'S		sandstone & siltstone	Top Ieru	Early to Late Cretaceous	30m below base Darai, Komewu-2	-1,518 d-1,545	95.0±6.7	13.31±0.247	2.42		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34866	PT832	143°04.18'E 7°17.15'S		sandstone	Top Toro	Late Jurassic to Early Cretaceous	355m below base Darai, Komewu-2	-1,832 d-1,870	155.2±14.4	10.77±1.03	3.70		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34867	PT832	143°04.18'E 7°17.15'S		sandstone	Top Koi- lange	Middle to Late Jurassic	724m below base Darai, Komewu-2	-2,201 d-2,239	131.5±12.5	12.16±0.57	1.70		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34869	PT832	143°04.18'E 7°17.15'S		pink granite basement		Triassic	1525m below base Darai, Komewu-2	-3,002 d-3,040	117.6±14.4	14.28±0.25	0.50		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34870	PT832	142°18.00'E 7°49.76'S		muddy sandstone	Ieru	Early to Late Cretaceous	66m below base Darai, Aramia-1	-1,110 d-1,134	110.7±6.0	13.67±0.18	1.76		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34871	PT832	142°18.00'E 7°49.76'S		sandstone	Base Toro	Late Jurassic to Early Cretaceous	532m below base Darai, Aramia-1	-1,576 d-1,600	147.4±13.8	11.40±0.46	1.77		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34872	PT832	142°18.00'E 7°49.76'S		siltstone, sandstone & mudstone	Koi-lange	Middle to Late Jurassic	743m below base Darai, Aramia-1	-1,787 d-1,811	184.8±19.0	13.64±0.35	1.45		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34873	PT832	142°18.00'E 7°49.76'S		deeply weathered granite	Granite basement	Triassic	951m below base Darai, Aramia-1	-1,995 d-2,019	29.4±7.1				PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34874	PT832	141°31.58'E 8°44.77'S		sandstone	Mendi Group	Middle to Late Eocene	112m below base Darai, Morehead-1	-1,128 d-1,148	115.4±9.3	13.53±0.14	1.29		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34875	PT832	141°31.58'E 8°44.77'S		sandstone	Ieru	Early to Late Cretaceous	226m below base Darai, Morehead-1	-1,242 d-1,262	108.2±4.6	13.35±0.15	0.52		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34876	PT832	141°31.58'E 8°44.77'S		sandstone	Ieru	Early to Late Cretaceous	634m below base Darai, Morehead-1	-1,650 d-1,670	99.2±4.2	12.27±0.17	1.69		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34877	PT832	141°31.58'E 8°44.77'S		sandstone interbed in shale	Ieru	Early to Late Cretaceous	999m below base Darai, Morehead-1	-2,015 d-2,035	103.4±11.0	11.44±0.62	1.76		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34878	PT832	141°31.58'E 8°44.77'S		arkosic sandstone	Koi-lange	Middle to Late Jurassic	1391m below base Darai, Morehead-1	-2,407 d-2,427	20.4±18.0				PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34879	PT841	143°16.87'E 8°31.50'S		limestone	Base Darai	Late Oligocene to Middle Miocene	15m above base Darai, Magobu Island-1	-917 d-926	~65	12.5			PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990

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R34881	PT841	143°16.87'E 8°31.50'S		sandstone	Koi-lange	Middle to Late Jurassic	823m below base Darai, Magobu Island-1	-1,755 d-1,764	153.1 $\pm$ 8.5	12.35 $\pm$ 0.17	1.57		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34882	PT861	143°16.87'E 8°31.50'S		sandstone	Barikewa	Middle Jurassic	1409m below base Darai, Magobu Island-1	-2,341 d-2,350	134.6 $\pm$ 9.3	11.06 $\pm$ 0.18	1.76		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34883	PT841	143°16.87'E 8°31.50'S		dacite basement	Dacite basement	Triassic	1635m below base Darai, Magobu Island-1	-2,567 d-2,576	96.0 $\pm$ 51.1	13.29			PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34885	PT841	142°56.32'E 8°24.07'S		sandstone	Koi-lange	Middle to Late Jurassic	364m below base Darai, lamara-1	-1,268 d-1,279	128.8 $\pm$ 9.6	12.42 $\pm$ 0.43	2.18		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34886	PT861	142°56.32'E 8°24.07'S		sandstone	Barikewa	Middle Jurassic	641m below base Darai, lamara-1	-1,545 d-1,556	176.0 $\pm$ 11.2	12.78 $\pm$ 0.18	1.78		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34888	PT841	142°56.32'E 8°24.07'S		rhyolite tuff	Magobu tuff	Late Triassic? to Middle Jurassic	896m below base Darai, lamara-1	-1,800 d-1,811	110.0 $\pm$ 23.3	13.73 $\pm$ 1.07	1.51		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34889	PT841	144°46.50'E 7°35.90'S		sandstone	Era Beds	Pliocene to Pleistocene	2403m above base limestone (Darai/Eocene), Iviri-1	-758 d-764	55.6 $\pm$ 12.5	11.30 $\pm$ 0.90	2.10		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34891	PT841	144°46.50'E 7°35.90'S		mudstone	Orubadi Fm	Late Miocene to Pliocene	1024m above base limestone (Darai/Eocene), Iviri-1	-2,137 d-2,143	20.7 $\pm$ 4.1	12.88 $\pm$ 0.32	1.60		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34892	PT861	144°46.50'E 7°35.90'S		calcareous sandstone	Mendi Group	Middle to Late Eocene	314m above base limestone (Darai/Eocene), Iviri-1	-2,847 d-2,853	64.1 $\pm$ 8.0	11.75 $\pm$ 0.69	2.50		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34893	PT841	144°46.50'E 7°35.90'S		interbedded sandstone & mudstone	Maril Shale	Middle to Late Jurassic	298m below base limestone (Darai/Eocene), Iviri-1	-3,459 d-3,465	67.3 $\pm$ 22.8	9.88			PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34894	PT861	143°11.43'E 6°54.76'S		sandstone	Top Toro	Late Jurassic to Early Cretaceous	833m below base Darai, Kanau-1	-366 d-1,333	98.9 $\pm$ 7.1	11.55 $\pm$ 0.86	3.54		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34895	PT861	143°11.43'E 6°54.76'S		sandstone	Koi-lange	Middle to Late Jurassic	1473m below base Darai, Kanau-1	-1,006 d-1,973	113.8 $\pm$ 14.8	12.16 $\pm$ 0.34	1.75		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34896	PT861	143°11.43'E 6°54.76'S		sandstone	Bol Arkose	Late Triassic? to Middle Jurassic	2500m below base Darai, Kanau-1	-2,035 d-3,002	76.9 $\pm$ 14.2	10.81 $\pm$ 0.22	1.88		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34897	PT861	143°11.43'E 6°54.76'S		sandstone	Kana volcanics	Late? Triassic	2977m below base Darai, Kanau-1	-2,510 d-3,477	34.5 $\pm$ 6.1	9.24 $\pm$ 2.10	4.03		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34898	PT861	142°33.66'E 5°46.29'S		sandstone	Toro	Late Jurassic to Early Cretaceous	Lavani-1	2,618 d-55	6.3 $\pm$ 1.0	15.28 $\pm$ 0.14	0.24		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34899	PT861	142°33.66'E 5°46.29'S		sandstone	Toro repeat?	Late Jurassic to Early Cretaceous	Lavani-1	1,728 d-945	14.2 $\pm$ 5.3	10.22 $\pm$ 1.27	2.21		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34900	PT861	142°33.66'E 5°46.29'S		sandstone	Top Koi-lange?	Middle to Late Jurassic	Lavani-1	1,050 d-1,623	16.0 $\pm$ 5.1	10.55 $\pm$ 0.58	1.00		PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34901	PT861	142°33.66'E 5°46.29'S		sandstone	Koi-lange (Magobu?)	Middle to Late Jurassic	Lavani-1	431 d-2,242	13.9 $\pm$ 7.8	13.20 $\pm$ 1.00			PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990
R34902	PT861	142°33.66'E 5°46.29'S		sandstone	Bol equivalent ss	Late Triassic? to Middle Jurassic	Lavani-1	-299 d-2,972	7.7 $\pm$ 2.5	14.2			PNG	Hill, 1989 (PhD); Hill & Gleadow, 1990

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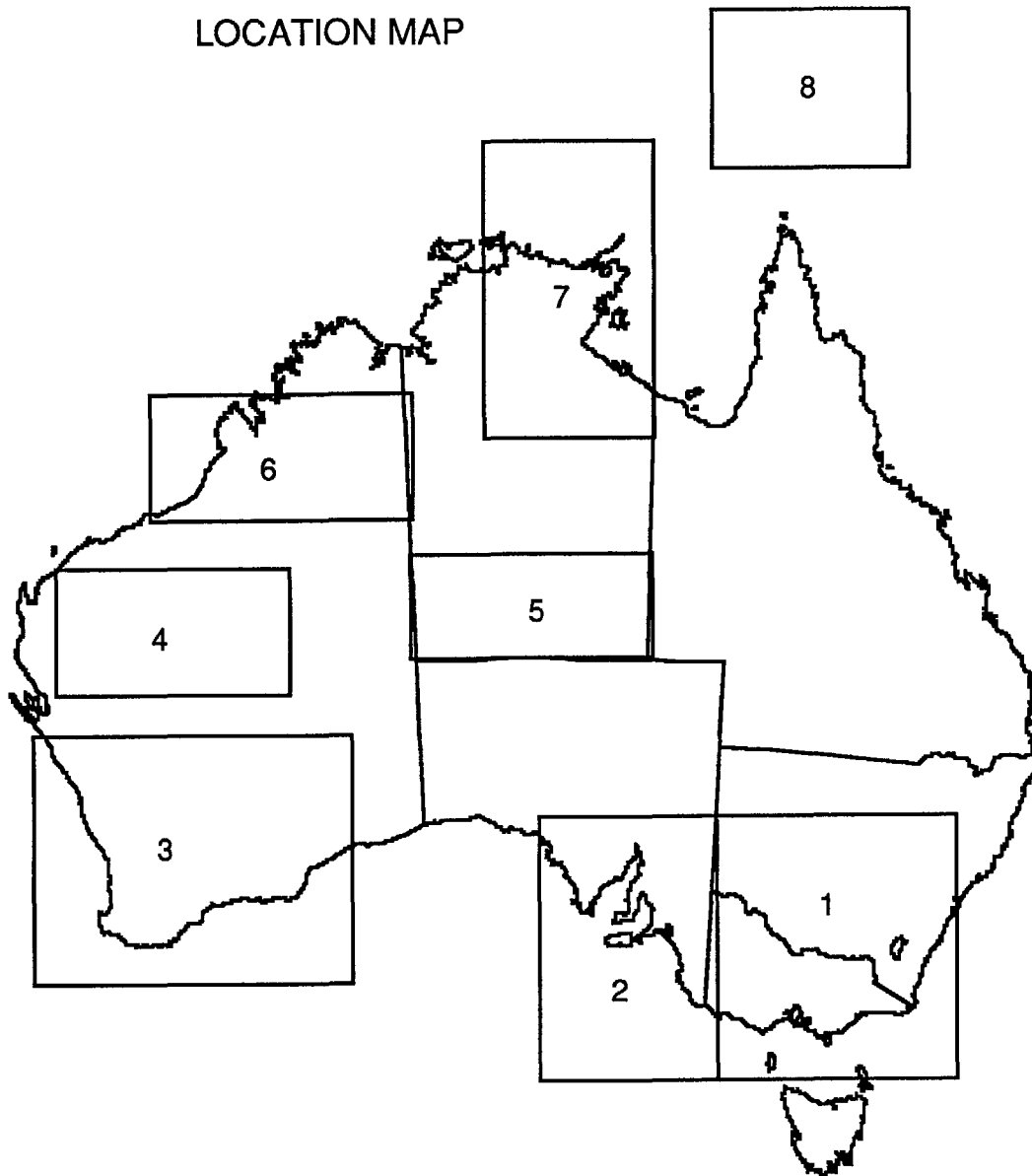
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APPENDIX 2

STATISTICAL PLOTS - SUMMARY

LOCATION MAP



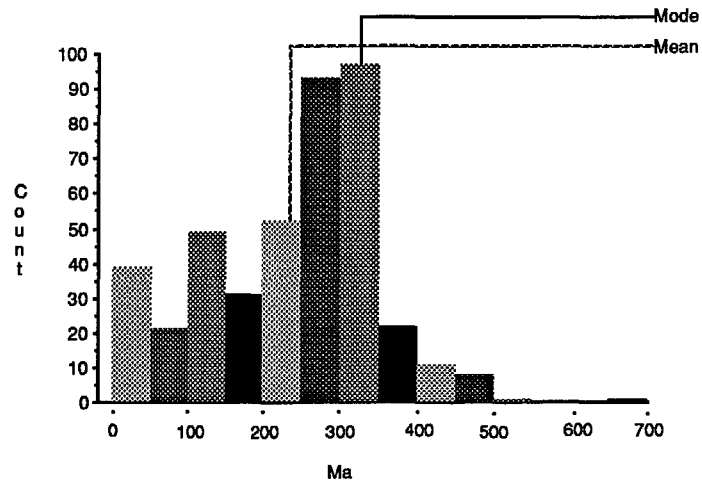
AREAS

- 1- S.E AUSTRALIA
- 2 - ADELAIDE REGION
- 3 - YILGARN
- 4 - PILBARA
- 5 - AMADEUS
- 6 - CANNING
- 7 - McARTHUR
- 8 - P.N.G

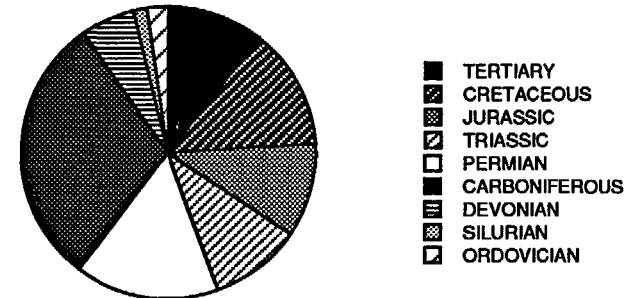
Australia & P.N.G.- Phanerozoic Plot (All data)

(0 to 550 Ma - Phanerozoic)

FREQUENCY DISTRIBUTION



PIE CHART BY PERIOD



	From: (≥)	To: (<)	Count:	Percent:	
1	0	50	39	9.176	
2	50	100	21	4.941	
3	100	150	49	11.529	
4	150	200	31	7.294	
5	200	250	52	12.235	
6	250	300	93	21.882	
7	300	350	97	22.824	- Mode
8	350	400	22	5.176	
9	400	450	11	2.588	
10	450	500	8	1.882	
11	500	550	1	.235	
12	550	600	0	0	
13	600	650	0	0	
14	650	700	1	.235	

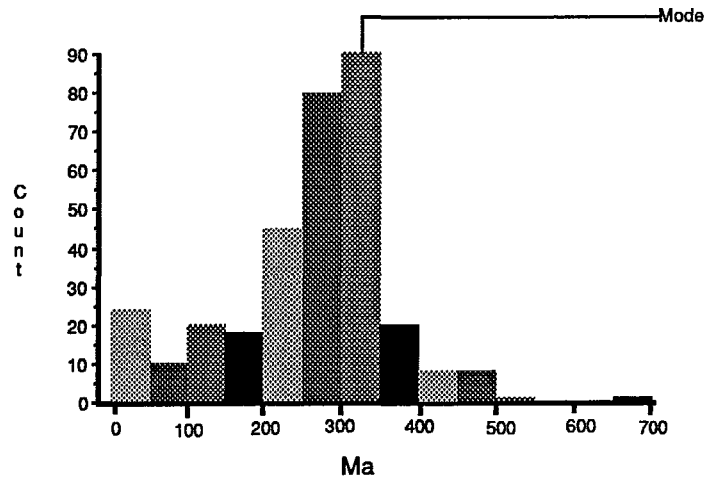
FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	0	50	39	9.176	
2	50	100	60	14.118	
3	100	150	109	25.647	
4	150	200	140	32.941	
5	200	250	192	45.176	
6	250	300	285	67.059	
7	300	350	382	89.882	- Mode
8	350	400	404	95.059	
9	400	450	415	97.647	
10	450	500	423	99.529	
11	500	550	424	99.765	
12	550	600	424	99.765	
13	600	650	424	99.765	
14	650	700	425	100	

CUMULATIVE FREQUENCY

Australia & P.N.G.- Phanerozoic Plot (Only outcrop data)

FREQUENCY DISTRIBUTION



	From: (≥)	To: (<)	Count:	Percent:
1	0	50	24	7.385
2	50	100	10	3.077
3	100	150	20	6.154
4	150	200	18	5.538
5	200	250	45	13.846
6	250	300	80	24.615
7	300	350	90	27.692
8	350	400	20	6.154
9	400	450	8	2.462
10	450	500	8	2.462
11	500	550	1	.308
12	550	600	0	0
13	600	650	0	0
14	650	700	1	.308

- Mode

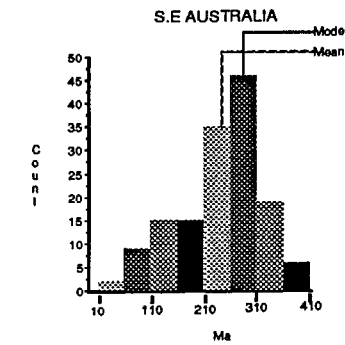
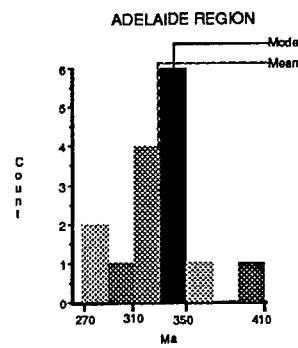
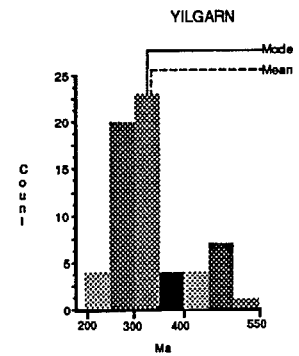
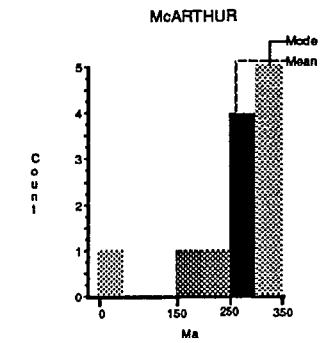
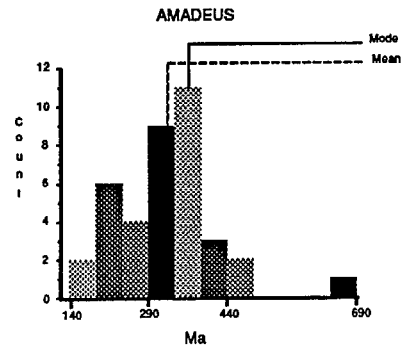
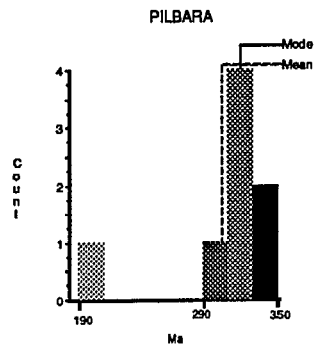
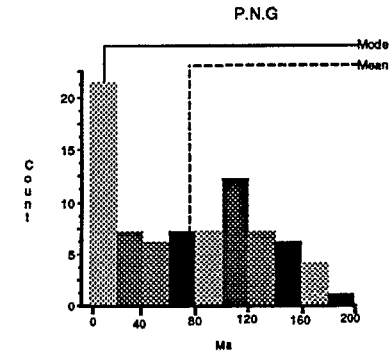
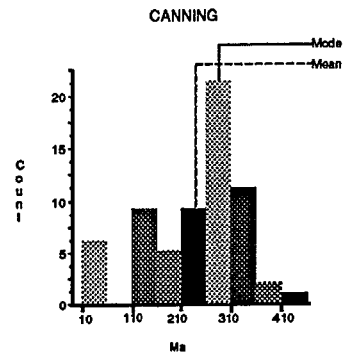
FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:
1	0	50	24	7.385
2	50	100	34	10.462
3	100	150	54	16.615
4	150	200	72	22.154
5	200	250	117	36
6	250	300	197	60.615
7	300	350	287	88.308
8	350	400	307	94.462
9	400	450	315	96.923
10	450	500	323	99.385
11	500	550	324	99.692
12	550	600	324	99.692
13	600	650	324	99.692
14	650	700	325	100

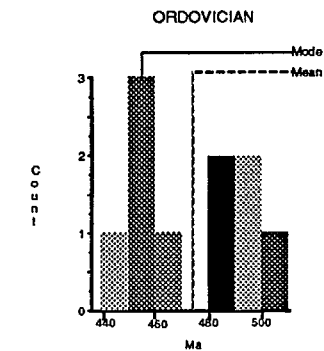
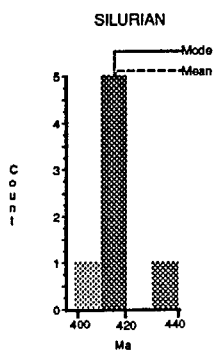
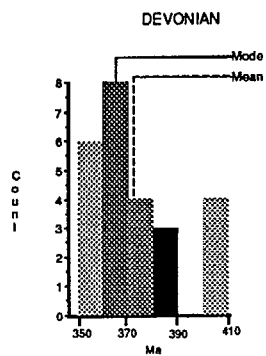
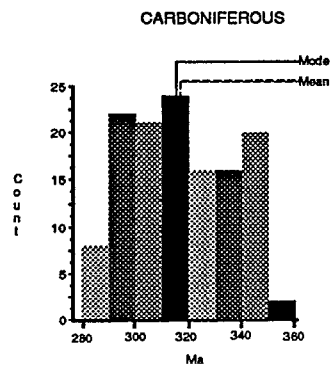
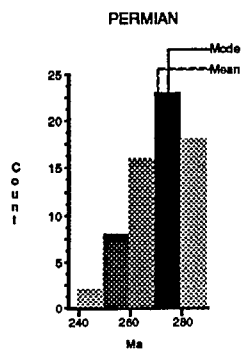
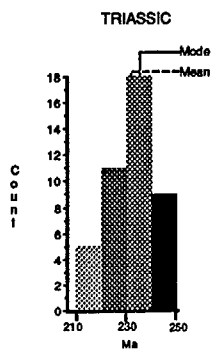
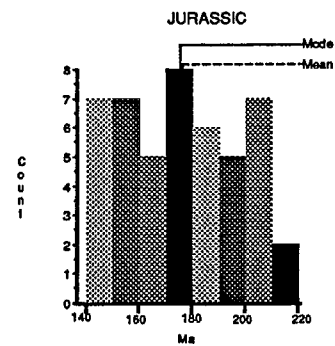
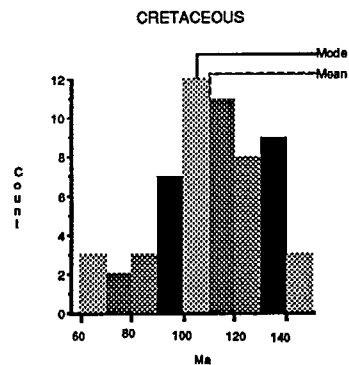
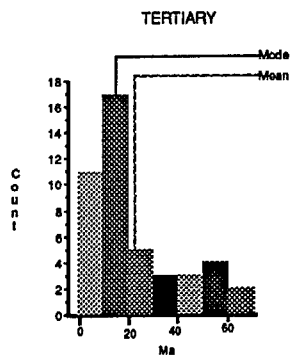
- Mode

CUMULATIVE FREQUENCY

Australia & P.N.G. - Summary Chart FREQUENCY DISTRIBUTION (BY AREA)



AUSTRALIA & P.N.G.- Summary Chart FREQUENCY DISTRIBUTION (BY PERIOD)



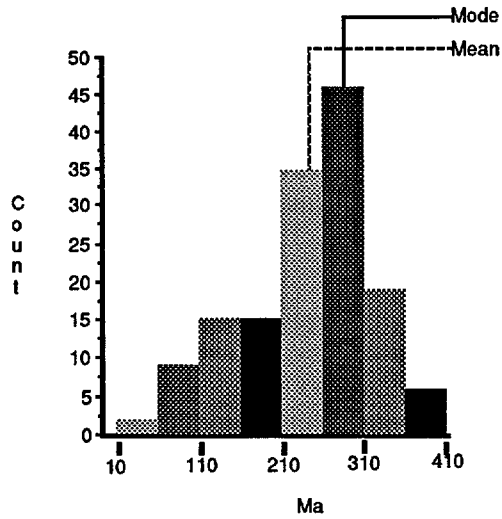
APPENDIX 3

STATISTICAL PLOTS - AREA

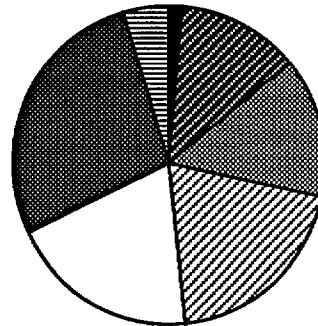
Area 1, S.E Australia - Statistical Plot-Area

(0 to 550 Ma - Phanerozoic)

FREQUENCY DISTRIBUTUION



PIE CHART BY PERIOD



- TERTIARY
- ▨ CRETACEOUS
- ▩ JURASSIC
- ▧ TRIASSIC
- ▦ PERMIAN
- ▤ CARBONIFEROUS
- ▥ DEVONIAN

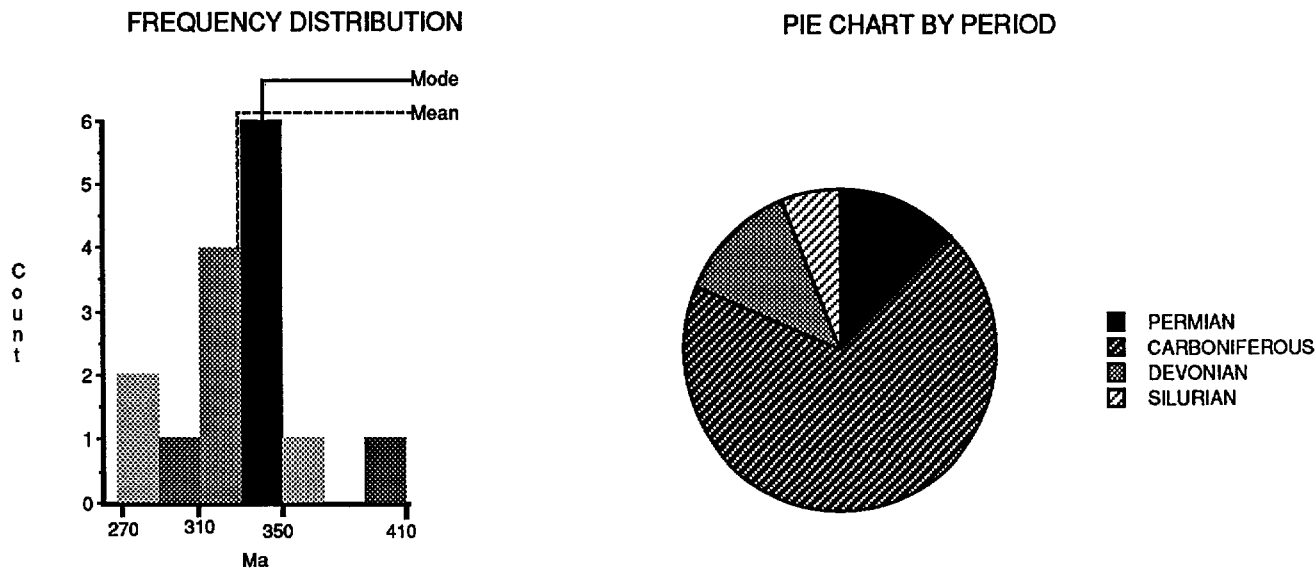
	From: (≥) Ma	To: (<) Ma	Count:	Percent:	
1	10	60	2	1.361	
2	60	110	9	6.122	
3	110	160	15	10.204	
4	160	210	15	10.204	
5	210	260	35	23.81	
6	260	310	46	31.293	- Mode
7	310	360	19	12.925	
8	360	410	6	4.082	

FREQUENCY

	From: (≥) Ma	To: (<) Ma	Cumul:	Percent:	
1	10	60	2	1.361	
2	60	110	11	7.483	
3	110	160	26	17.687	
4	160	210	41	27.891	
5	210	260	76	51.701	
6	260	310	122	82.993	- Mode
7	310	360	141	95.918	
8	360	410	147	100	

CUMULATIVE FREQUENCY

Area 2, Adelaide Region -Statistical Plot-Area
(0 to 550 Ma - Phanerozoic)



	From: (≥) Ma	To: (<) Ma	Count:	Percent:	
1	270	290	2	13.333	
2	290	310	1	6.667	
3	310	330	4	26.667	
4	330	350	6	40	- Mode
5	350	370	1	6.667	
6	370	390	0	0	
7	390	410	1	6.667	

FREQUENCY

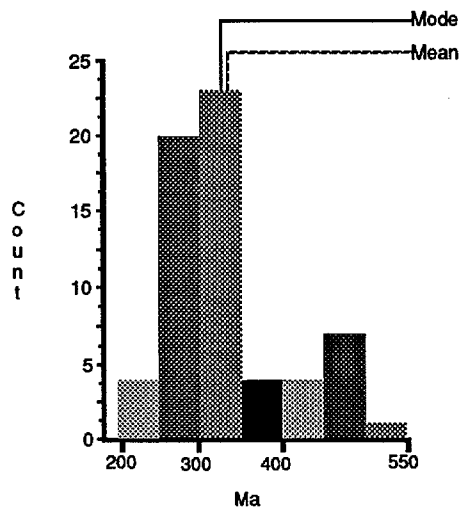
	From: (≥) Ma	To: (<) Ma	Cumul:	Percent:	
1	270	290	2	13.333	
2	290	310	3	20	
3	310	330	7	46.667	
4	330	350	13	86.667	- Mode
5	350	370	14	93.333	
6	370	390	14	93.333	
7	390	410	15	100	

CUMULATIVE FREQUENCY

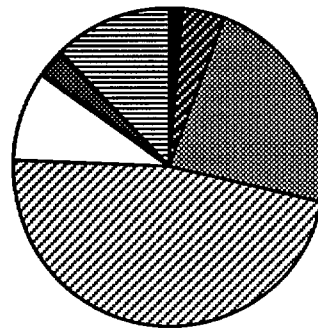
Area 3, Yilgarn - Statistical Plot - Area

(0 to 550 Ma - Phanerozoic)

FREQUENCY DISTRIBUTION



PIE CHART BY PERIOD



- JURASSIC
- TRIASSIC
- PERMIAN
- CARBONIFEROUS
- DEVONIAN
- SILURIAN
- ORDOVICIAN

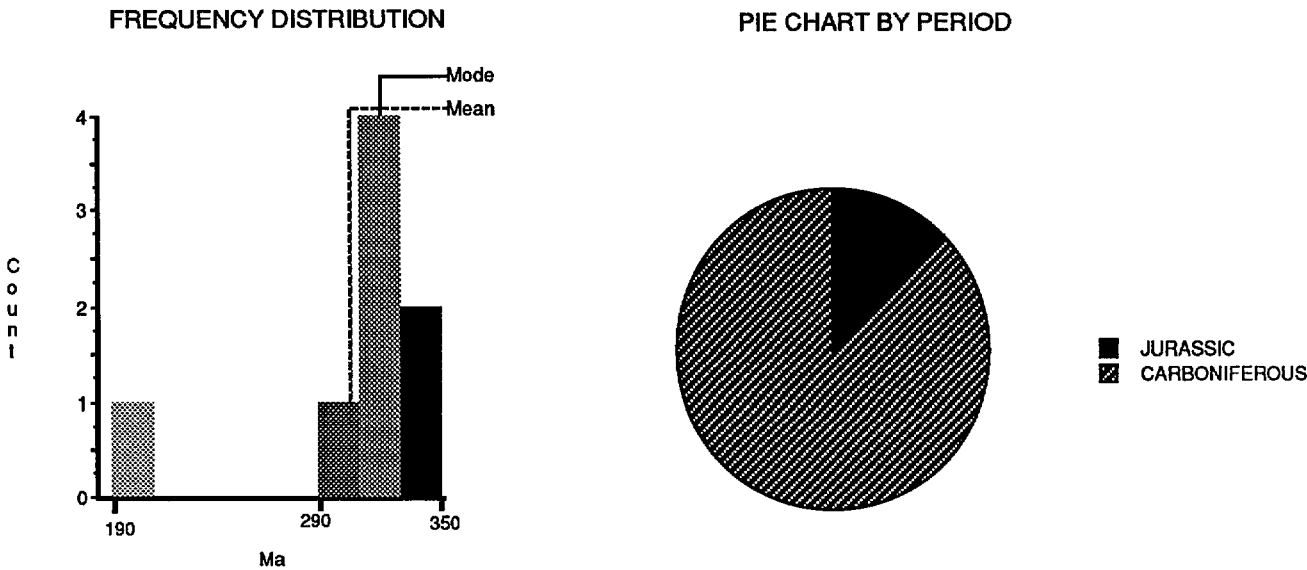
	From: (≥) Ma	To: (<) Ma	Count:	Percent:	
1	200	250	4	6.349	
2	250	300	20	31.746	
3	300	350	23	36.508	- Mode
4	350	400	4	6.349	
5	400	450	4	6.349	
6	450	500	7	11.111	
7	500	550	1	1.587	

FREQUENCY

	From: (≥) Ma	To: (<) Ma	Cumul:	Percent:	
1	200	250	4	6.349	
2	250	300	24	38.095	
3	300	350	47	74.603	- Mode
4	350	400	51	80.952	
5	400	450	55	87.302	
6	450	500	62	98.413	
7	500	550	63	100	

CUMULATIVE FREQUENCY

Area 4, Pilbara - Statistical Plot - Area
(0 to 550 Ma - Phanerozoic)



	From: (≥) Ma	To: (<) Ma	Count	Percent:
1	190	210	1	12.5
2	210	230	0	0
3	230	250	0	0
4	250	270	0	0
5	270	290	0	0
6	290	310	1	12.5
7	310	330	4	50
8	330	350	2	25

- Mode

FREQUENCY

	From: (≥) Ma	To: (<) Ma	Cumul:	Percent:
1	190	210	1	12.5
2	210	230	1	12.5
3	230	250	1	12.5
4	250	270	1	12.5
5	270	290	1	12.5
6	290	310	2	25
7	310	330	6	75
8	330	350	8	100

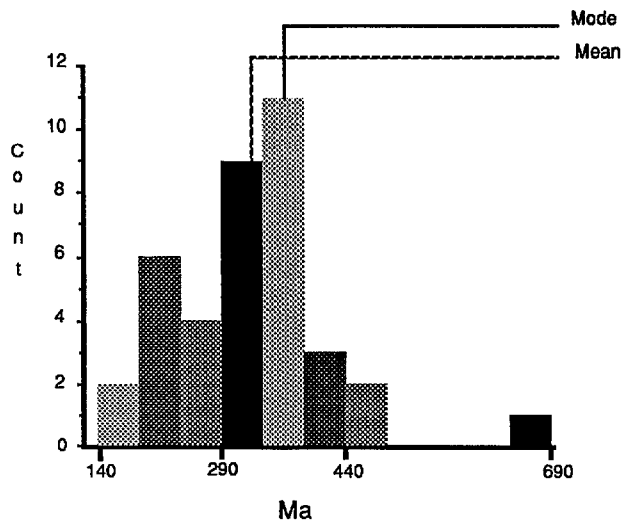
- Mode

CULMULATIVE FREQUENCY

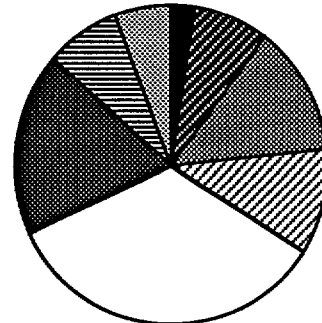
Area 5, Amadeus - Statistical Plot - Area

(0 to 550 Ma - Phanerozoic)

FREQUENCY DISTRIBUTION



PIE CHART BY PERIOD



- CRETACEOUS
- ▨ JURASSIC
- ▩ TRIASSIC
- ▧ PERMIAN
- CARBONIFEROUS
- ▦ DEVONIAN
- ▨ SILURIAN
- ▩ ORDOVICIAN

	From: (≥) Ma	To: (<) Ma	Count:	Percent:	
1	140	190	2	5.263	
2	190	240	6	15.789	
3	240	290	4	10.526	
4	290	340	9	23.684	
5	340	390	11	28.947	- Mode
6	390	440	3	7.895	
7	440	490	2	5.263	
8	490	540	0	0	
9	540	590	0	0	
10	590	640	0	0	
11	640	690	1	2.632	

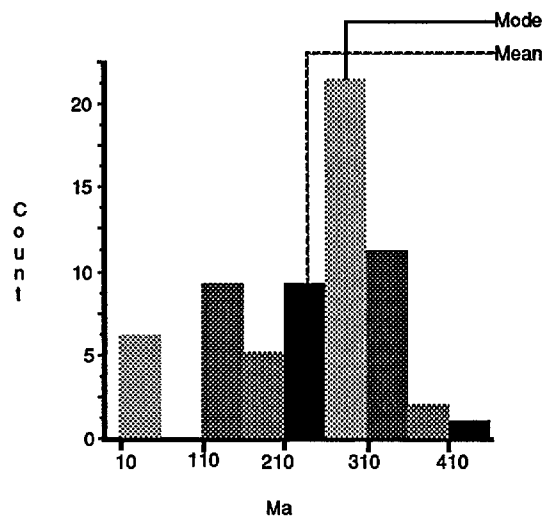
FREQUENCY

	From: (≥) Ma	To: (<) Ma	Cumul:	Percent:	
1	140	190	2	5.263	
2	190	240	8	21.053	
3	240	290	12	31.579	
4	290	340	21	55.263	
5	340	390	32	84.211	- Mode
6	390	440	35	92.105	
7	440	490	37	97.368	
8	490	540	37	97.368	
9	540	590	37	97.368	
10	590	640	37	97.368	
11	640	690	38	100	

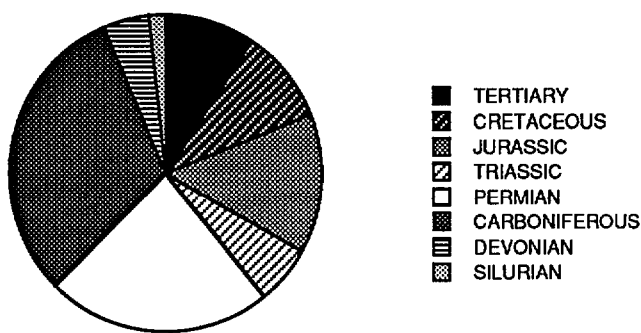
CUMULATIVE FREQUENCY

Area 6, Canning - Statistical Plot - Area
(0 - 550 Ma - Phanerozoic)

FREQUENCY DISTRIBUTION



PIE CHART BY PERIOD



	From: (≥) Ma	To: (<) Ma	Count:	Percent:	
1	10	60	6	9.375	
2	60	110	0	0	
3	110	160	9	14.062	
4	160	210	5	7.812	
5	210	260	9	14.062	
6	260	310	21	32.812	- Mode
7	310	360	11	17.188	
8	360	410	2	3.125	
9	410	460	1	1.562	

FREQUENCY

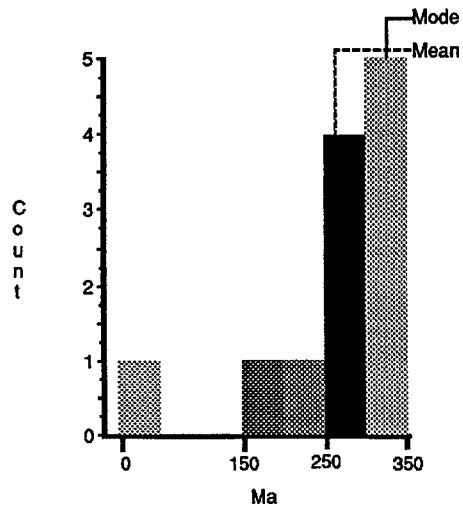
	From: (≥) Ma	To: (<) Ma	Cumul:	Percent:	
1	10	60	6	9.375	
2	60	110	6	9.375	
3	110	160	15	23.438	
4	160	210	20	31.25	
5	210	260	29	45.312	
6	260	310	50	78.125	- Mode
7	310	360	61	95.312	
8	360	410	63	98.438	
9	410	460	64	100	

CUMULATIVE FREQUENCY

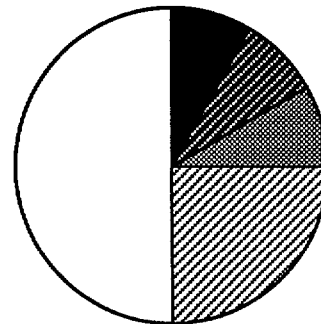
Area 7, McArthur - Statistical Plot - Area

(0 to 550 Ma - Phanerozoic)

FREQUENCY DISTRIBUTION



PIE CHART BY PERIOD



- TERTIARY
- ▨ JURASSIC
- ▩ TRIASSIC
- ▧ PERMIAN
- CARBONIFEROUS

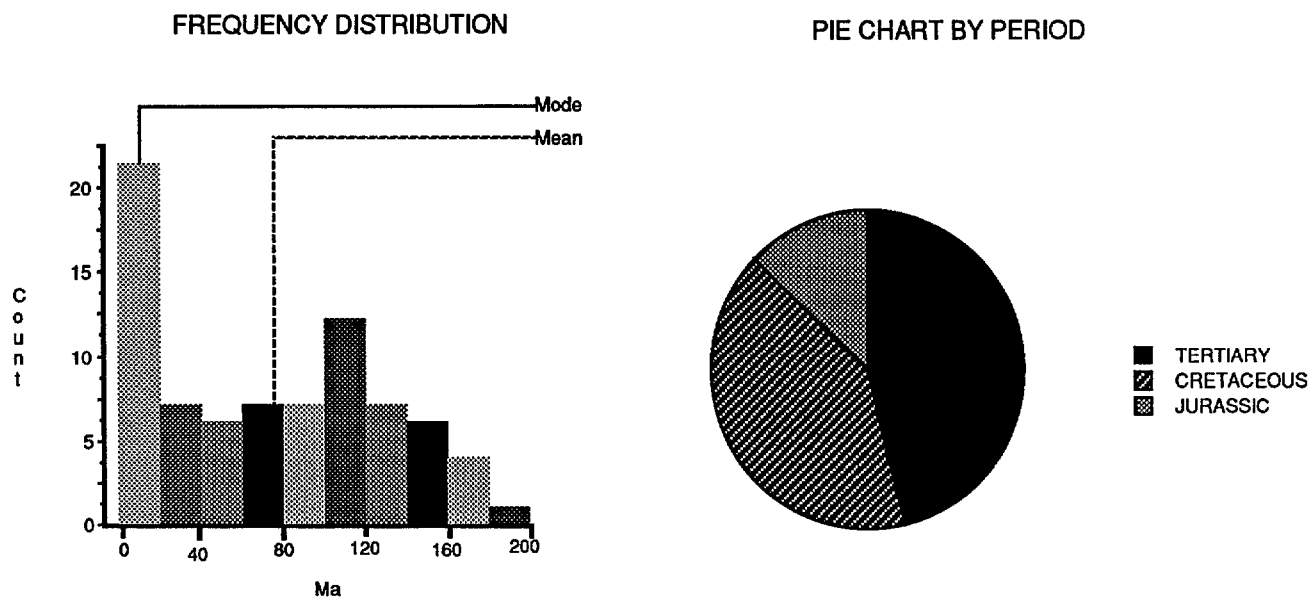
	From: (≥) Ma	To: (<) Ma	Count:	Percent:	
1	0	50	1	8.333	
2	50	100	0	0	
3	100	150	0	0	
4	150	200	1	8.333	
5	200	250	1	8.333	
6	250	300	4	33.333	
7	300	350	5	41.667	- Mode

FREQUENCY

	From: (≥) Ma	To: (<) Ma	Cumul:	Percent:	
1	0	50	1	8.333	
2	50	100	1	8.333	
3	100	150	1	8.333	
4	150	200	2	16.667	
5	200	250	3	25	
6	250	300	7	58.333	
7	300	350	12	100	- Mode

CUMULATIVE FREQUENCY

Area 8, P.N.G. - Statistical Plot - Area
(0 to 550 Ma - Phanerozoic)



	From: (≥) Ma	To: (<) Ma	Count:	Percent:	
1	0	20	21	26.923	- Mode
2	20	40	7	8.974	
3	40	60	6	7.692	
4	60	80	7	8.974	
5	80	100	7	8.974	
6	100	120	12	15.385	
7	120	140	7	8.974	
8	140	160	6	7.692	
9	160	180	4	5.128	
10	180	200	1	1.282	

FREQUENCY

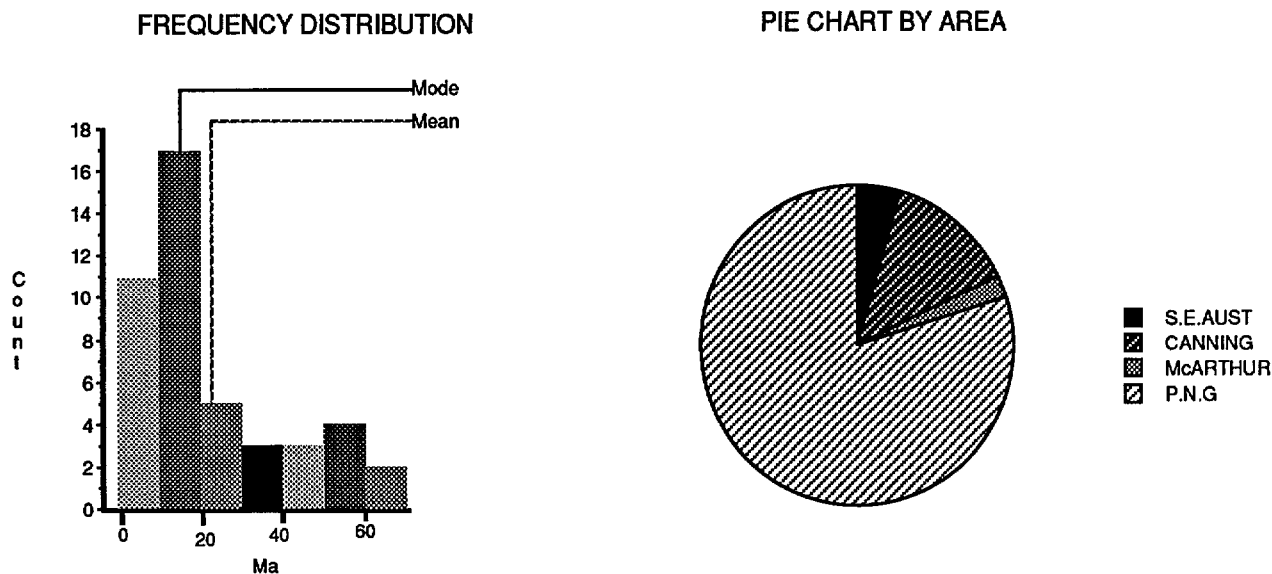
	From: (≥) Ma	To: (<) Ma	Cumul:	Percent:	
1	0	20	21	26.923	- Mode
2	20	40	28	35.897	
3	40	60	34	43.59	
4	60	80	41	52.564	
5	80	100	48	61.538	
6	100	120	60	76.923	
7	120	140	67	85.897	
8	140	160	73	93.59	
9	160	180	77	98.718	
10	180	200	78	100	

CUMULATIVE FREQUENCY

APPENDIX 4

STATISTICAL PLOTS - PERIOD

Tertiary, 0 - 66.4 Ma -Statistical Plot -Period



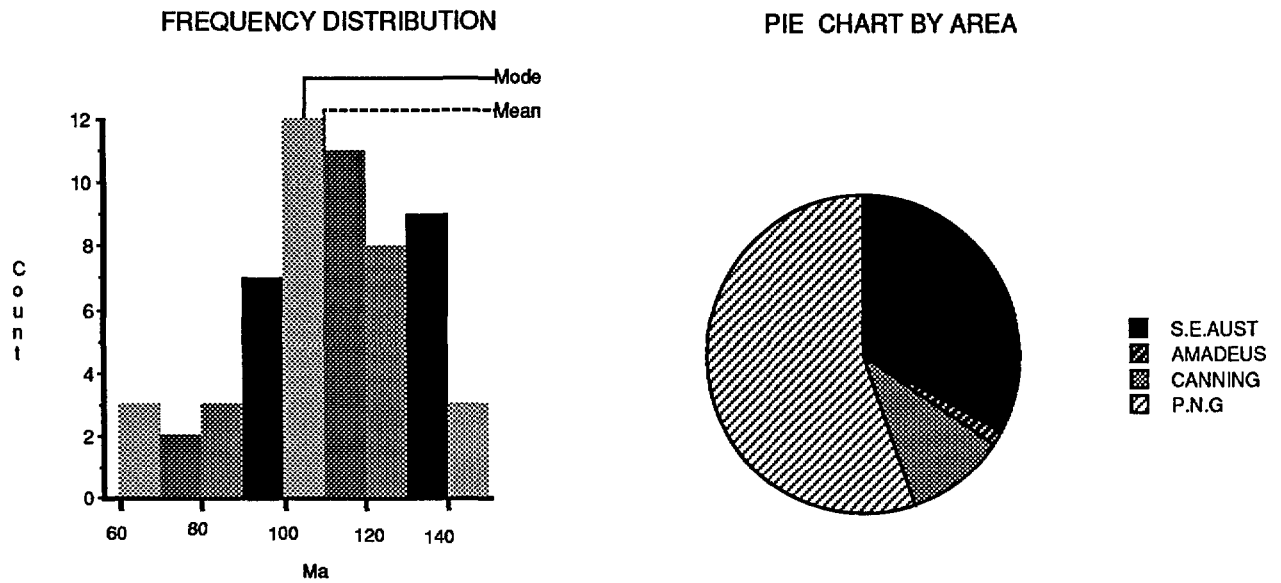
	From: (≥)	To: (<)	Count:	Percent:	
1	0	10	11	24.444	
2	10	20	17	37.778	- Mode
3	20	30	5	11.111	
4	30	40	3	6.667	
5	40	50	3	6.667	
6	50	60	4	8.889	
7	60	70	2	4.444	

FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	0	10	11	24.444	
2	10	20	28	62.222	- Mode
3	20	30	33	73.333	
4	30	40	36	80	
5	40	50	39	86.667	
6	50	60	43	95.556	
7	60	70	45	100	

CUMULATIVE FREQUENCY

Cretaceous, 66.4 - 144 Ma - Statistical Plot - Period



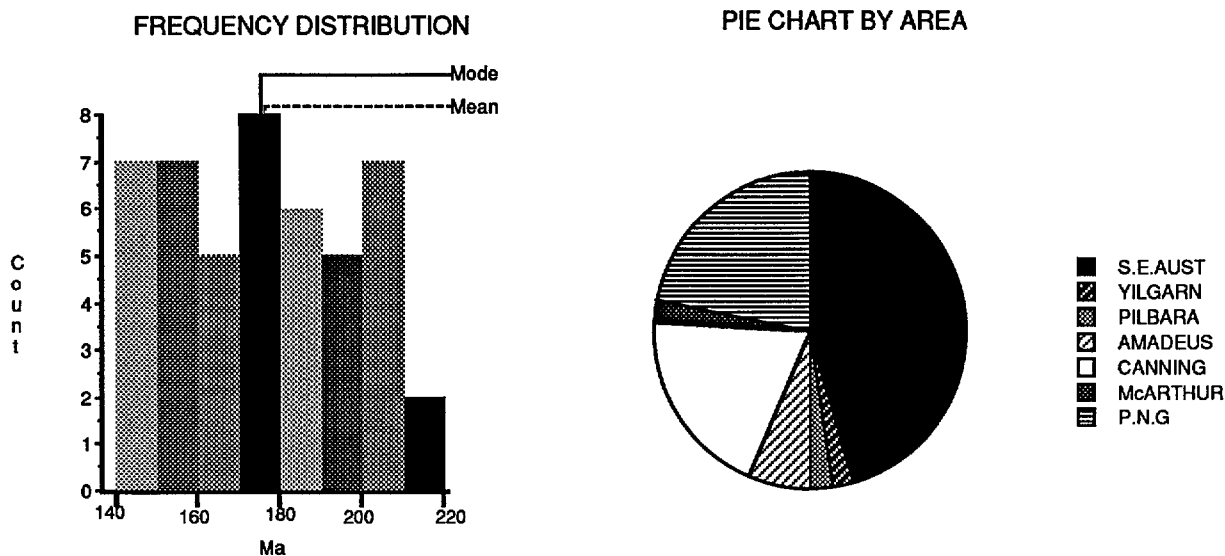
	From: (≥)	To: (<)	Count:	Percent:	
1	60	70	3	5.172	
2	70	80	2	3.448	
3	80	90	3	5.172	
4	90	100	7	12.069	
5	100	110	12	20.69	- Mode
6	110	120	11	18.966	
7	120	130	8	13.793	
8	130	140	9	15.517	
9	140	150	3	5.172	

FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	60	70	3	5.172	
2	70	80	5	8.621	
3	80	90	8	13.793	
4	90	100	15	25.862	
5	100	110	27	46.552	- Mode
6	110	120	38	65.517	
7	120	130	46	79.31	
8	130	140	55	94.828	
9	140	150	58	100	

CUMULATIVE FREQUENCY

Jurassic, 144 - 213 Ma -Statistical Plot - Period



	From: (≥)	To: (<)	Count:	Percent:	
1	140	150	7	14.894	
2	150	160	7	14.894	
3	160	170	5	10.638	
4	170	180	8	17.021	- Mode
5	180	190	6	12.766	
6	190	200	5	10.638	
7	200	210	7	14.894	
8	210	220	2	4.255	

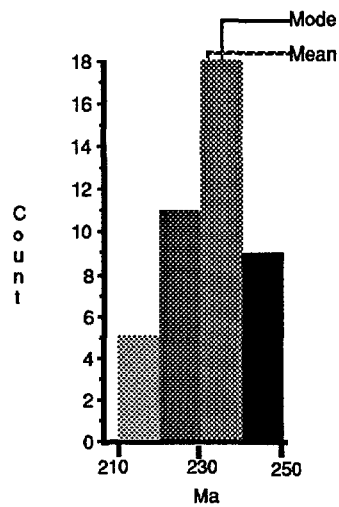
FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	140	150	7	14.894	
2	150	160	14	29.787	
3	160	170	19	40.426	
4	170	180	27	57.447	- Mode
5	180	190	33	70.213	
6	190	200	38	80.851	
7	200	210	45	95.745	
8	210	220	47	100	

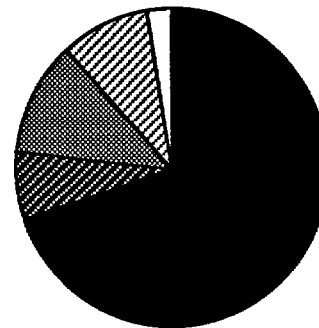
CUMULATIVE FREQUENCY

Triassic, 213 - 248 Ma - Statistical Plot - Area

FREQUENCY DISTRIBUTION



PIE CHART BY AREA



■ S.E.AUST
 ▨ YILGARN
 ▩ AMADEUS
 ▧ CANNING
 □ McARTHUR

	From: (≥)	To: (<)	Count:	Percent:	
1	210	220	5	11.628	
2	220	230	11	25.581	
3	230	240	18	41.86	- Mode
4	240	250	9	20.93	

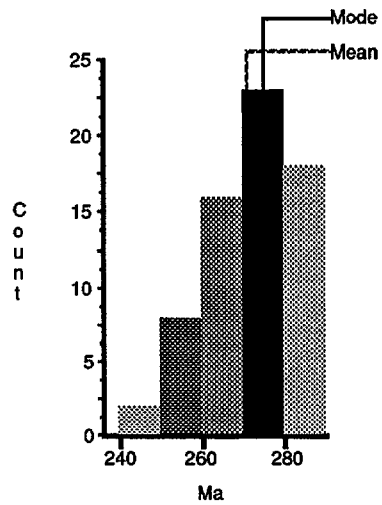
FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	210	220	5	11.628	
2	220	230	16	37.209	
3	230	240	34	79.07	- Mode
4	240	250	43	100	

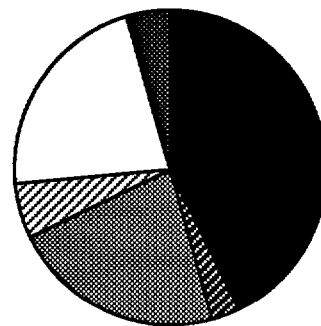
CUMULATIVE FREQUENCY

Permian, 248 - 286 Ma - Statistical Plot - Area

FREQUENCY DISTRIBUTION



PIE CHART BY AREA



■ S.E.AUST
 ▨ ADELAIDE
 ▩ YILGARN
 ▧ AMADEUS
 □ CANNING
 ■ McARTHUR

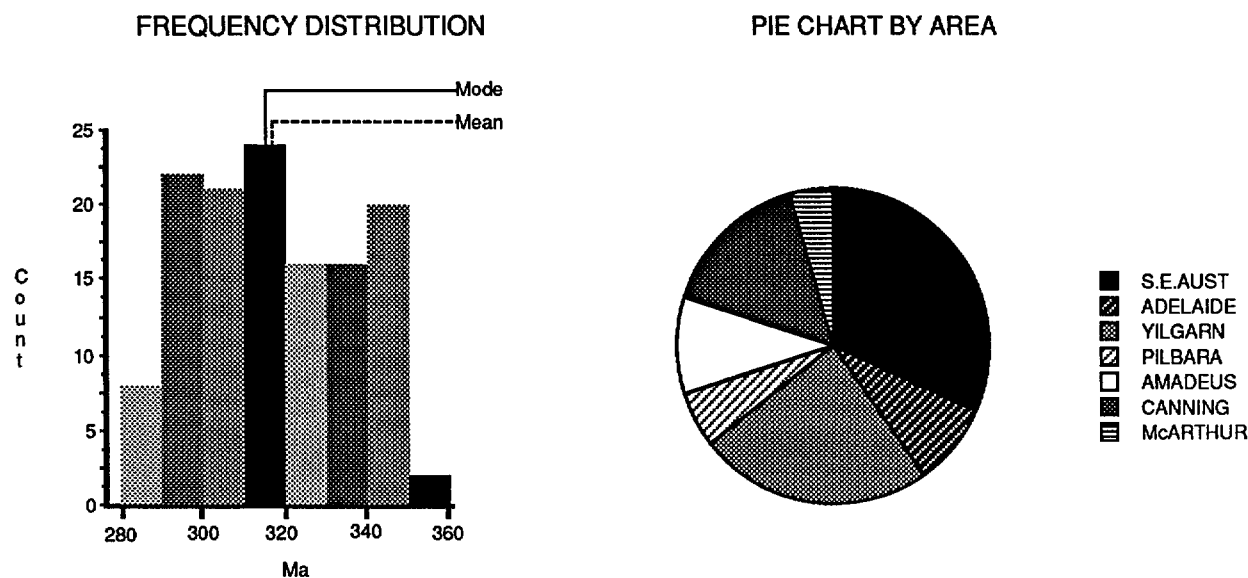
	From: (≥)	To: (<)	Count:	Percent:	
1	240	250	2	2.985	
2	250	260	8	11.94	
3	260	270	16	23.881	
4	270	280	23	34.328	- Mode
5	280	290	18	26.866	

FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	240	250	2	2.985	
2	250	260	10	14.925	
3	260	270	26	38.806	
4	270	280	49	73.134	- Mode
5	280	290	67	100	

CUMULATIVE FREQUENCY

Carboniferous, 286 - 354 Ma -Statistical Plot - Area



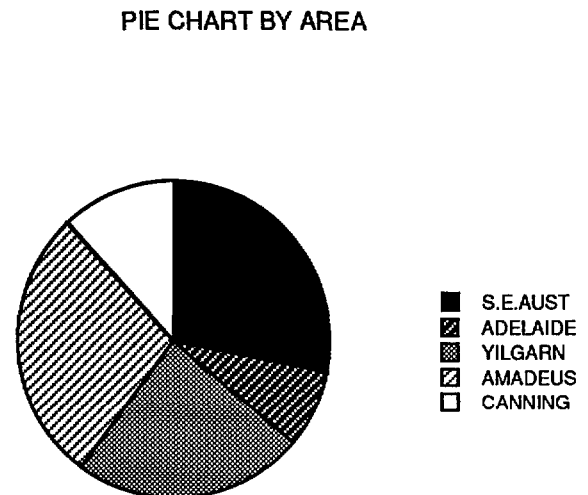
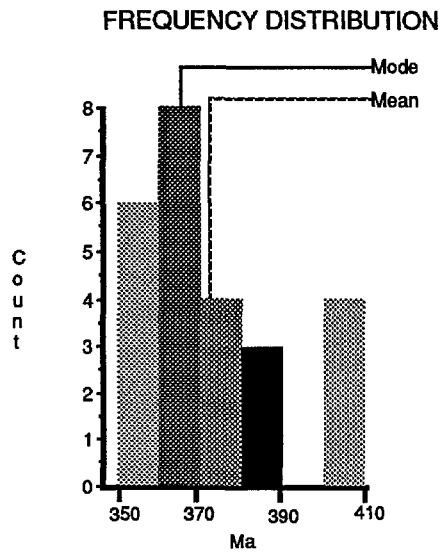
	From: (≥)	To: (<)	Count:	Percent:	
1	280	290	8	6.202	
2	290	300	22	17.054	
3	300	310	21	16.279	
4	310	320	24	18.605	- Mode
5	320	330	16	12.403	
6	330	340	16	12.403	
7	340	350	20	15.504	
8	350	360	2	1.55	

FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	280	290	8	6.202	
2	290	300	30	23.256	
3	300	310	51	39.535	
4	310	320	75	58.14	- Mode
5	320	330	91	70.543	
6	330	340	107	82.946	
7	340	350	127	98.45	
8	350	360	129	100	

CUMULATIVE FREQUENCY

Devonian, 354 - 408 Ma - Statistical Plot - Area



	From: (≥)	To: (<)	Count:	Percent:	
1	350	360	6	24	- Mode
2	360	370	8	32	
3	370	380	4	16	
4	380	390	3	12	
5	390	400	0	0	
6	400	410	4	16	

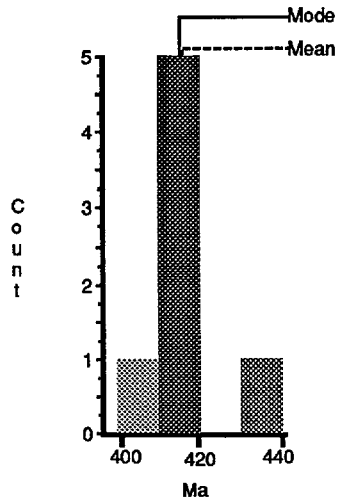
FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	350	360	6	24	- Mode
2	360	370	14	56	
3	370	380	18	72	
4	380	390	21	84	
5	390	400	21	84	
6	400	410	25	100	

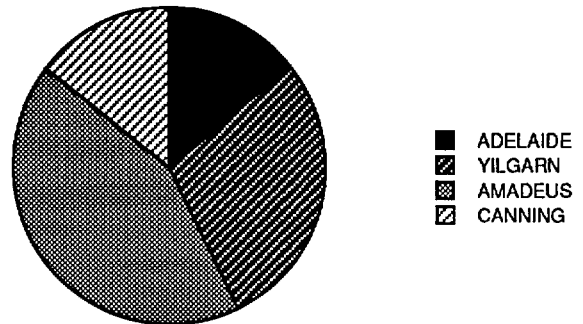
CUMULATIVE FREQUENCY

Silurian, 408 - 434 Ma - Statistical Plot - Area

FREQUENCY DISTRIBUTION



PIE CHART BY AREA



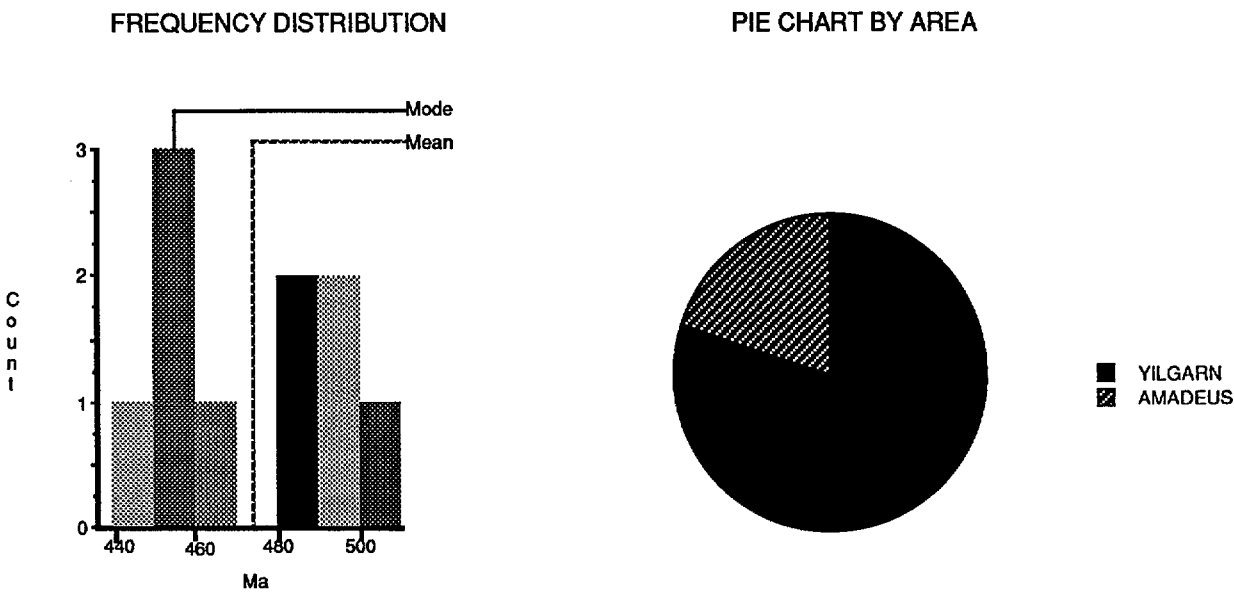
	From: (≥)	To: (<)	Count:	Percent:	
1	400	410	1	14.286	
2	410	420	5	71.429	- Mode
3	420	430	0	0	
4	430	440	1	14.286	

FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	400	410	1	14.286	
2	410	420	6	85.714	- Mode
3	420	430	6	85.714	
4	430	440	7	100	

CUMULATIVE FREQUENCY

Ordovician, 434 - 505 Ma -Statistical Plot -Area



	From: (≥)	To: (<)	Count:	Percent:	
1	440	450	1	10	- Mode
2	450	460	3	30	
3	460	470	1	10	
4	470	480	0	0	
5	480	490	2	20	
6	490	500	2	20	
7	500	510	1	10	

FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	440	450	1	10	- Mode
2	450	460	4	40	
3	460	470	5	50	
4	470	480	5	50	
5	480	490	7	70	
6	490	500	9	90	
7	500	510	10	100	

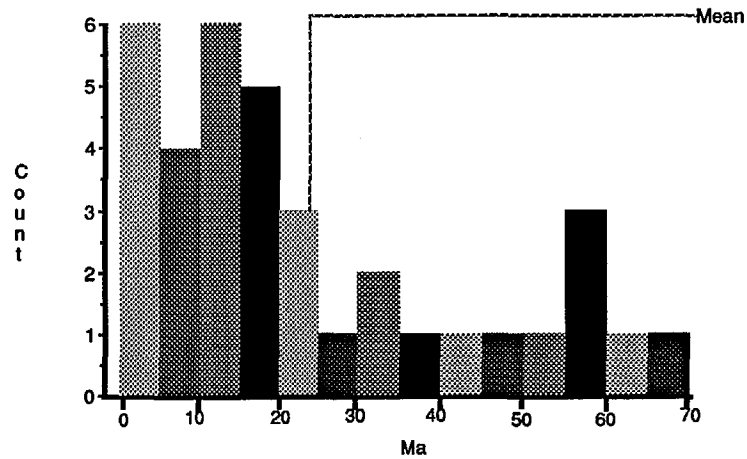
CUMULATIVE FREQUENCY

APPENDIX 5

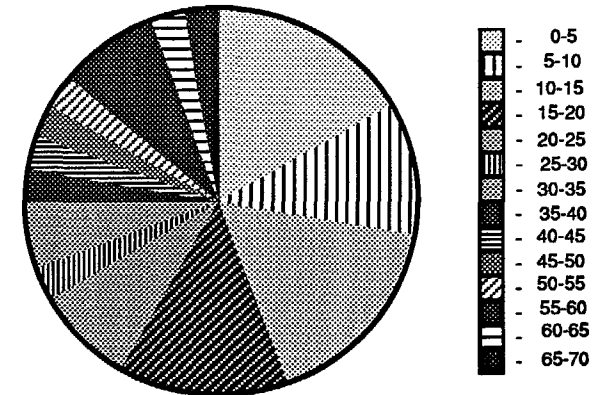
STATISTICAL PLOTS - AREA/PERIOD

P.N.G.,Tertiary 0 - 66.4 Ma Statistical Plot - Area/Period

FREQUENCY DISTRIBUTION



PIE CHART OF FREQUENCY DISTRIBUTION



	From: ($\geq$)	To: ($<$)	Count:	Percent:
1	0	5	6	16.667
2	5	10	4	11.111
3	10	15	6	16.667
4	15	20	5	13.889
5	20	25	3	8.333
6	25	30	1	2.778
7	30	35	2	5.556
8	35	40	1	2.778
9	40	45	1	2.778
10	45	50	1	2.778
11	50	55	1	2.778
12	55	60	3	8.333
13	60	65	1	2.778
14	65	70	1	2.778

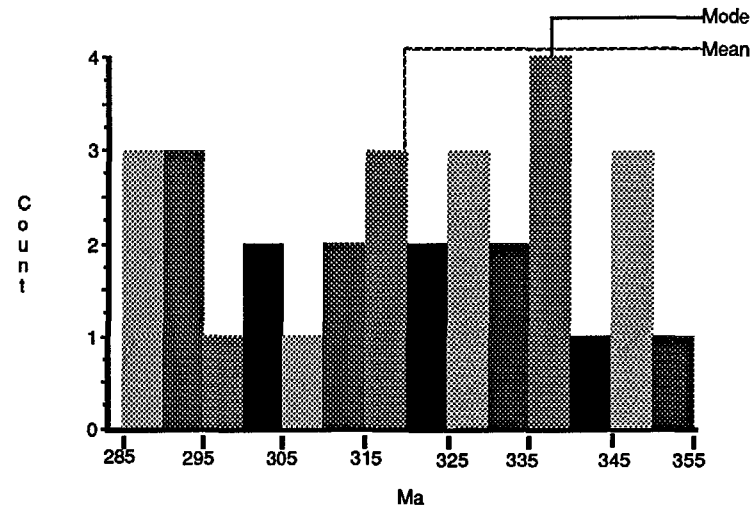
FREQUENCY

	From: ($\geq$)	To: ($<$)	Cumul:	Percent:
1	0	5	6	16.667
2	5	10	10	27.778
3	10	15	16	44.444
4	15	20	21	58.333
5	20	25	24	66.667
6	25	30	25	69.444
7	30	35	27	75
8	35	40	28	77.778
9	40	45	29	80.556
10	45	50	30	83.333
11	50	55	31	86.111
12	55	60	34	94.444
13	60	65	35	97.222
14	65	70	36	100

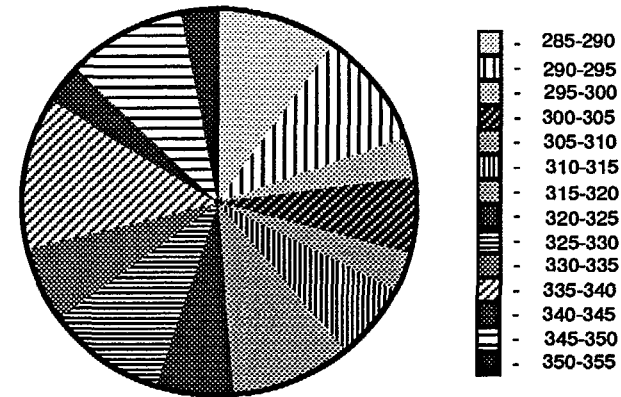
CUMULATIVE FREQUENCY

Yilgarn.,Carboniferous 286 - 354 Ma Statistical Plot - Area/Period

FREQUENCY DISTRIBUTION



PIE CHART OF FREQUENCY DISTRIBUTION



	From: (≥)	To: (<)	Count:	Percent:	
1	285	290	3	9.677	
2	290	295	3	9.677	
3	295	300	1	3.226	
4	300	305	2	6.452	
5	305	310	1	3.226	
6	310	315	2	6.452	
7	315	320	3	9.677	
8	320	325	2	6.452	
9	325	330	3	9.677	
10	330	335	2	6.452	
11	335	340	4	12.903	- Mode
12	340	345	1	3.226	
13	345	350	3	9.677	
14	350	355	1	3.226	

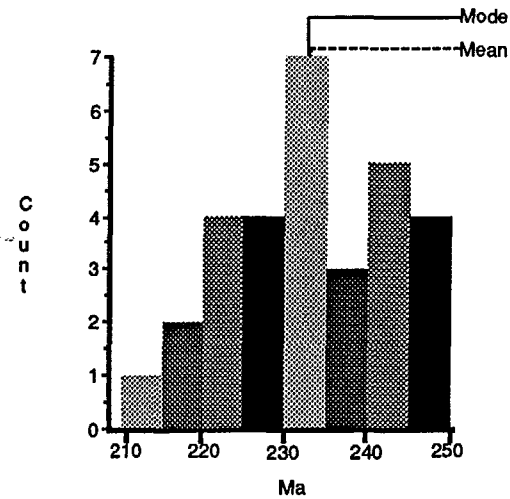
FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:	
1	285	290	3	9.677	
2	290	295	6	19.355	
3	295	300	7	22.581	
4	300	305	9	29.032	
5	305	310	10	32.258	
6	310	315	12	38.71	
7	315	320	15	48.387	
8	320	325	17	54.839	
9	325	330	20	64.516	
10	330	335	22	70.968	
11	335	340	26	83.871	- Mode
12	340	345	27	87.097	
13	345	350	30	96.774	
14	350	355	31	100	

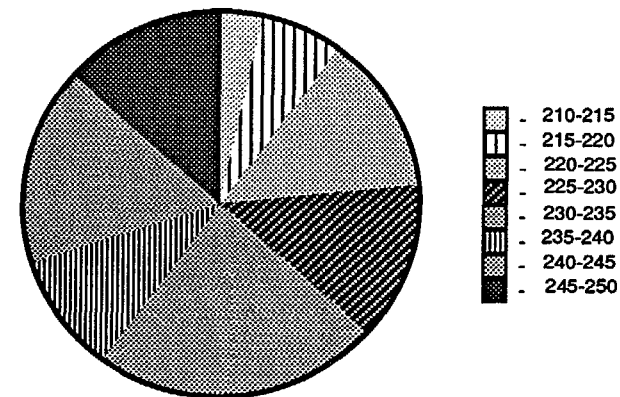
CUMULATIVE FREQUENCY

S.E. Australia., Triassic 213 - 248 Ma Statistical Plot - Area/Period

FREQUENCY DISTRIBUTION



PIE CHART OF FREQUENCY DISTRIBUTION



	From: (≥)	To: (<)	Count:	Percent:
1	210	215	1	3.333
2	215	220	2	6.667
3	220	225	4	13.333
4	225	230	4	13.333
5	230	235	7	23.333
6	235	240	3	10
7	240	245	5	16.667
8	245	250	4	13.333

- Mode

FREQUENCY

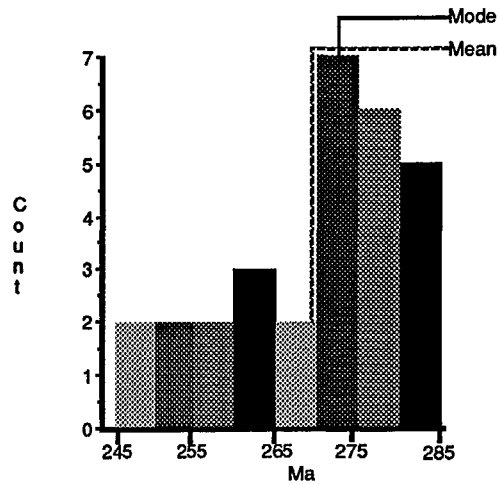
	From: (≥)	To: (<)	Cumul:	Percent:
1	210	215	1	3.333
2	215	220	3	10
3	220	225	7	23.333
4	225	230	11	36.667
5	230	235	18	60
6	235	240	21	70
7	240	245	26	86.667
8	245	250	30	100

- Mode

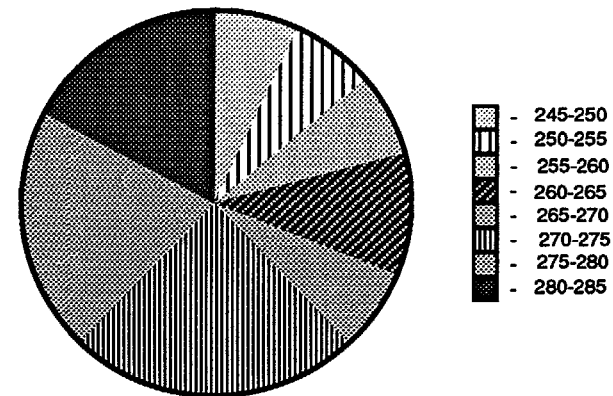
CUMULATIVE FREQUENCY

S.E. Australia., Permian 248 - 286 Ma Statistical Plot - Area/Period

FREQUENCY DISTRIBUTION



PIE CHART OF FREQUENCY DISTRIBUTION



	From: (≥)	To: (<)	Count:	Percent:
1	245	250	2	6.897
2	250	255	2	6.897
3	255	260	2	6.897
4	260	265	3	10.345
5	265	270	2	6.897
6	270	275	7	24.138
7	275	280	6	20.69
8	280	285	5	17.241

- Mode

FREQUENCY

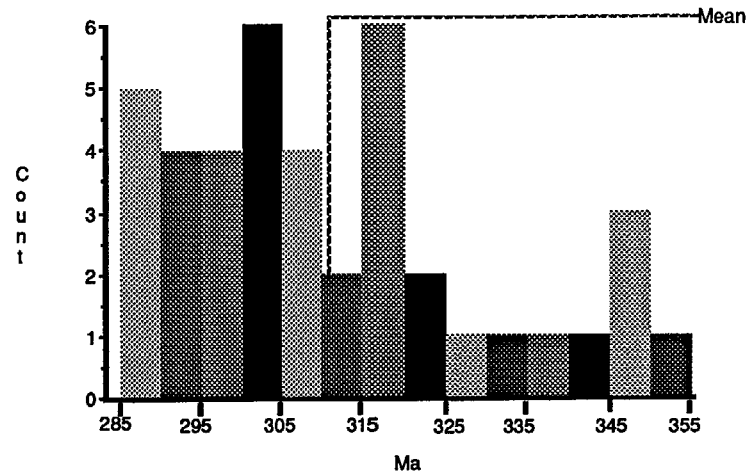
	From: (≥)	To: (<)	Cumul:	Percent:
1	245	250	2	6.897
2	250	255	4	13.793
3	255	260	6	20.69
4	260	265	9	31.034
5	265	270	11	37.931
6	270	275	18	62.069
7	275	280	24	82.759
8	280	285	29	100

- Mode

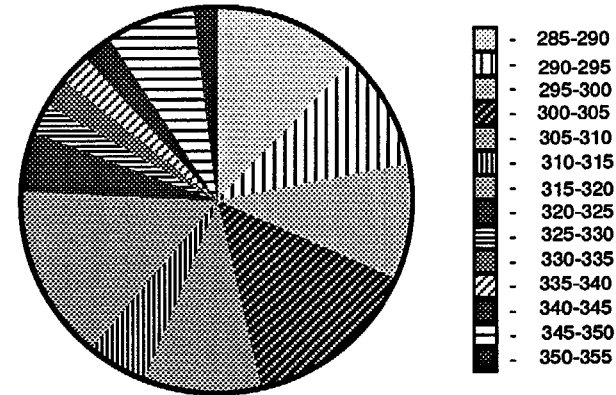
CUMULATIVE FREQUENCY

S.E. Australia., Carboniferous 286 - 354 Ma Statistical Plot - Area/Period

FREQUENCY DISTRIBUTION



PIE CHART OF FREQUENCY DISTRIBUTION



	From: (≥)	To: (<)	Count:	Percent:
1	285	290	5	12.195
2	290	295	4	9.756
3	295	300	4	9.756
4	300	305	6	14.634
5	305	310	4	9.756
6	310	315	2	4.878
7	315	320	6	14.634
8	320	325	2	4.878
9	325	330	1	2.439
10	330	335	1	2.439
11	335	340	1	2.439
12	340	345	1	2.439
13	345	350	3	7.317
14	350	355	1	2.439

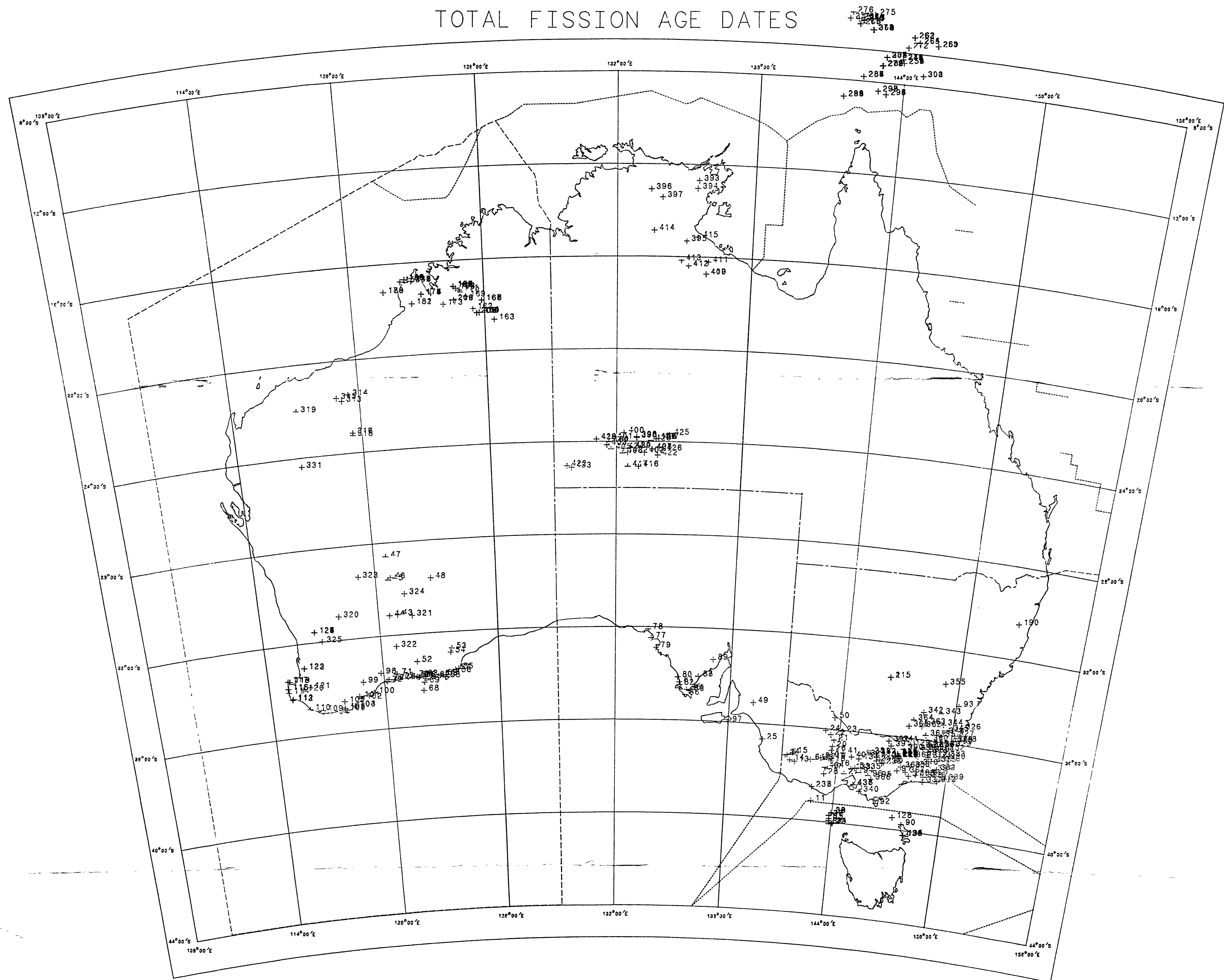
FREQUENCY

	From: (≥)	To: (<)	Cumul:	Percent:
1	285	290	5	12.195
2	290	295	9	21.951
3	295	300	13	31.707
4	300	305	19	46.341
5	305	310	23	56.098
6	310	315	25	60.976
7	315	320	31	75.61
8	320	325	33	80.488
9	325	330	34	82.927
10	330	335	35	85.366
11	335	340	36	87.805
12	340	345	37	90.244
13	345	350	40	97.561
14	350	355	41	100

CUMULATIVE FREQUENCY

MAP ENCLOSURES

TOTAL FISSION AGE DATES



Scale 1 10000000
200 0 200 400 600 800 1000 kilometres

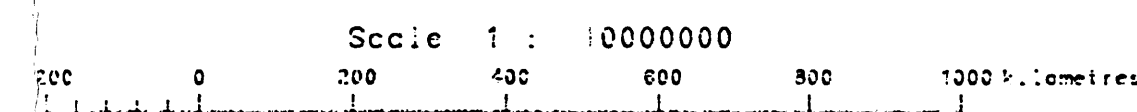
Simple Conic Projection
Standard parallels
18°00'S and 36°00'S
+ 437pts FISSION DATA

Enclosure 1

Produced by MAPDAT select LON LAT, to-char(ROWNUM), ' ' ' from FISSION order by LON

Fission Track
Enclosure 1
Total Data Set
Seipia

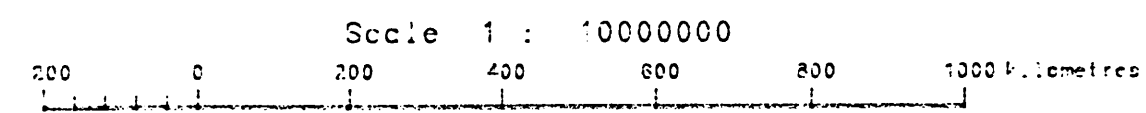
$$\div 28 \quad \div 35 \quad \div 42$$



Produced by MAPDAT select LOCLAT, SIZENO, LOCATION, ROCKTYPE, FORMATION, STRATAGE, tendor(APATITE+GLS) from BEDDION where AP-TITLE+GLS BETWEEN 0 AND 66.4 order by LOCLAT

* R 9 1 0 0 2 1 5 *

22

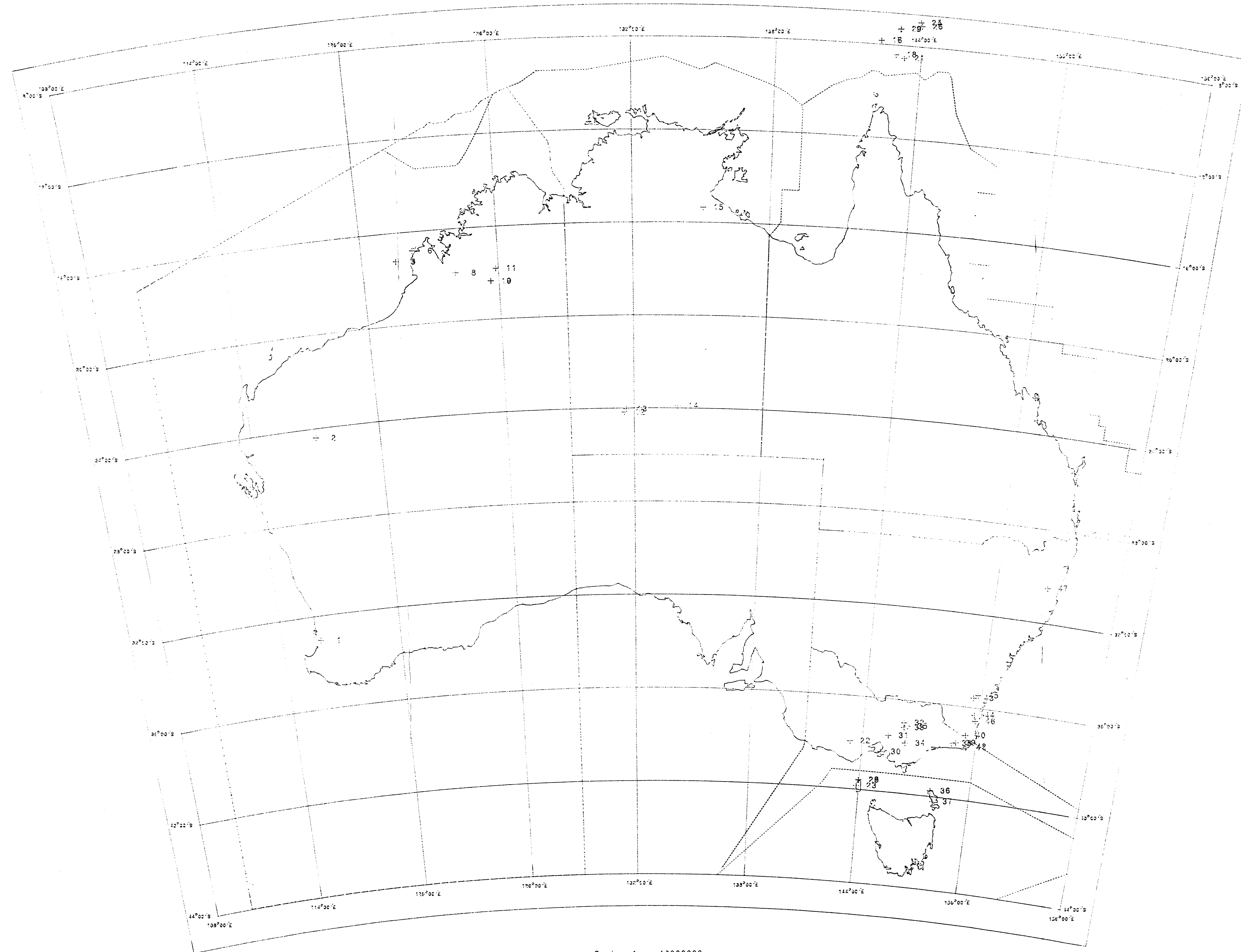


Enclosure 3

Produced by: MAPDAT select LONG, LAT, S, I, NO, LOCATION, ROCKTYPE, FORMATION, STRATAGE, to-ether(-PATITE=GL1) from FISSION where APATITE=GL1 BATHYMET 66.4 AND 141 order by LONG



JURASSIC FISSION AGE DATES 144 - 213 Ma



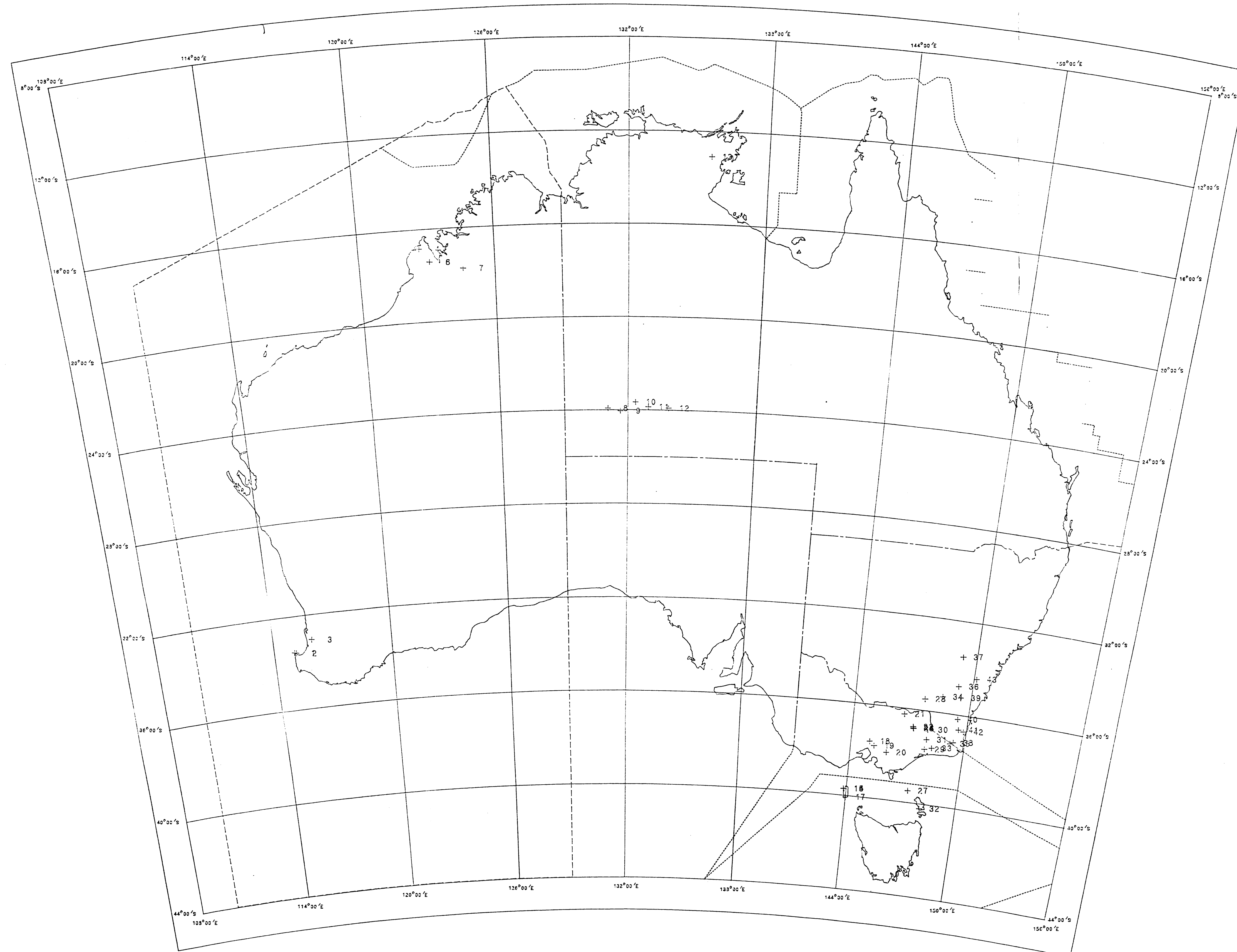
No.	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	2σ-95% AGE
1	1073-017	Yalgorup Creek, West Coast, Harvey Dam spillway	metasedimentary	Yalgorup Creek	144-146 Ma	145
2	1073-017	Yalgorup Creek, West Coast, Harvey Dam spillway	metasedimentary	Yalgorup Creek	144-146 Ma	145
3	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
4	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
5	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
6	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
7	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
8	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
9	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
10	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
11	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
12	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
13	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
14	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
15	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
16	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
17	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
18	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
19	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
20	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
21	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
22	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
23	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
24	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
25	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
26	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
27	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
28	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
29	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
30	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
31	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
32	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
33	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
34	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
35	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
36	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
37	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
38	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
39	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
40	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
41	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
42	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
43	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
44	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
45	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
46	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145
47	8129-108	Northwestern Corral, Bussell's Range	metasedimentary	Northwestern Corral	144-146 Ma	145

Simple Conic Projection
Standard parallels
18°00'S and 36°00'S

Scale 1 : 1000000
0 200 400 600 800 1000 Kilometres

Enclosure 4

TRIASSIC FISSION AGE DATES 213 - 248 Ma



No.	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	7913-147	Yilgarn Block-West Coast Superleaf Rocks	felsic gneiss	-	-	339
2	7910-148	Yilgarn Block-West Coast 2 km N of Dunsborough turnoff	porphy. granite	-	-2670 Ma	218
3	7910-153	Yilgarn Block-West Coast Quarry above Harvey Weir	porphy. granite	-	-2670 Ma	232
4	8222-023 R29127	Northwestern Canning Basin, Curriaga-1	sand to silt sized clastic detritus	Gogo	270-300	214
5	8422-001	Northwestern Canning Basin, Fraser River-1	sand to silt sized clastic detritus	Grant	280-300	233
6	8422-002	Northwestern Canning Basin, Fraser River-1	sand to silt sized clastic detritus	Grant	280-300	236
7	8663-031	Lennard Shelf - Kennedia-1	sandstone	Fairfield Gp	-	237
8	8451-064	"Amadeus Basin, Walker Range"	sandstone	Pacoota Sandstone	-	232
9	8351-160	"Amadeus Basin, East Nereenie-2"	sandstone	Pacoota Sandstone	-	237
10	8351-075	"Amadeus Basin, Tyler Pass"	sandstone	Pacoota Sandstone	-	233
11	8351-055	"Amadeus Basin, Filley Creek"	sandstone	Pacoota Sandstone	-	237
12	8351-030	"Amadeus Basin, Alice-1"	sandstone	Gwyder Formation	-	230
13	8322-076 R134-49/50/51	"Mt. Arthur Basin"	granodiorite	Sheridan Formation	-750 Ma	320
14	7322-066	"1km NW of Whistler Pt. King Is."	granodiorite	West Coast Granites	-750 Ma	320
15	7322-067	"1km NW of Whistler Pt. King Is."	granodiorite	West Coast Granites	-	320
16	7322-093	"Mt. Counsel, King Is."	granodiorite	West Coast Granites	-	320
17	7322-098	"6km WSW of Grassy Mtn, King Is."	granodiorite	West Coast Granites	-	320
18	7700-005 R19316	Greenough Res.	biotite granite	-	"Lower Carboniferous, -345 Ma"	214
19	7759-044 R19163	Lyttelton Res.	biotite granite	-	-	247
20	7838-100 R19197	Orange Res.	biotite granite	-	-	247
21	7959-140 R19262	"Mt. Pilot, summit"	felsic granite	Pilot Range Granite	-	244
22	LTU 9507	Falls Creek Region	weathered joint?	High Plains Gneiss	Upper Ordovician?	242
23	LTU 9508	Falls Creek Region	jointed granite	High Plains Gneiss	Upper Ordovician?	234
24	LTU 9509	Falls Creek Region	gneissic granite	High Plains Gneiss	Upper Ordovician?	229
25	LTU 9504	Falls Creek Region	granodiorite	Falls Creek G/diorite	-410-420 Ma Upper Silurian	241
26	LTU 9504	Falls Creek Region	granodiorite	Falls Creek G/diorite	-410-420 Ma Upper Silurian	241
27	7858-122 R19248	Jacal Island	felsic granite	-	-	226
28	7859-085 R19223	"Bungagee, 5km S of Kyeamba"	granite	Kyeamba Adamellite	-409 Ma	228
29	7859-107 R19234	Dead Horse Gk. road.	granite	-	-	228
30	7859-103 R19231	Timbarra R.	biotite-muscovite granite	-	-	222
31	7859-124 R19250	"Grizek's Peak, Flinders Is., 788m elev."	biotite granite	-	-	244
32	7859-126 R19268	leucocratic granite	-	-	-	234
33	7859-133 R19256	Snowy R. S of Jacob's Ladder	biotite granite	Kosciuszko Batholith	-415 Ma	236
34	7859-083 R19221	Argalons Rd	foliated granite	-	-	246
35	7759-020 R19148	"Cann R., east branch, Weeragah"	hornblende-biotite granodiorite	Nearinbee G/diorite/ Soga Batholith	-412 Ma	225
36	7859-058 R19183	"Gurring, Hume Hwy"	biotite-muscovite granite	-	-	244
37	7859-081 R19203	4km E of Nimmistabul	hornblende-biotite granodiorite	Glenbeg Granodiorite	-412 Ma	230
38	7859-128 R19252	8km N of Bungendore	hornblende-biotite granodiorite	western Soga Batholith	-412 Ma	248
39	7859-084	Courtegang airstrip	hornblende-biotite granite	Nimmistabul Adamellite	-	219
40	7859-085 R19210	4km E of Benboka	hornblende-biotite granodiorite	Benboka Granodiorite	-	233
41	7859-078 R19206	"3km N of Soga, Princes Hwy"	hornblende-biotite intrusive	Soga Granodiorite/ Soga Bath.	-412 Ma	238
42	7759-014 R19141	Nallandilly R. bridge	hypersthene eclogite	Bindook Porphyry	-	235
43	7759-042 R19167					

Simple Conic Projection. + 43pts. FISSION DATA
Standard parallels
18° 00' S and 36° 00' S

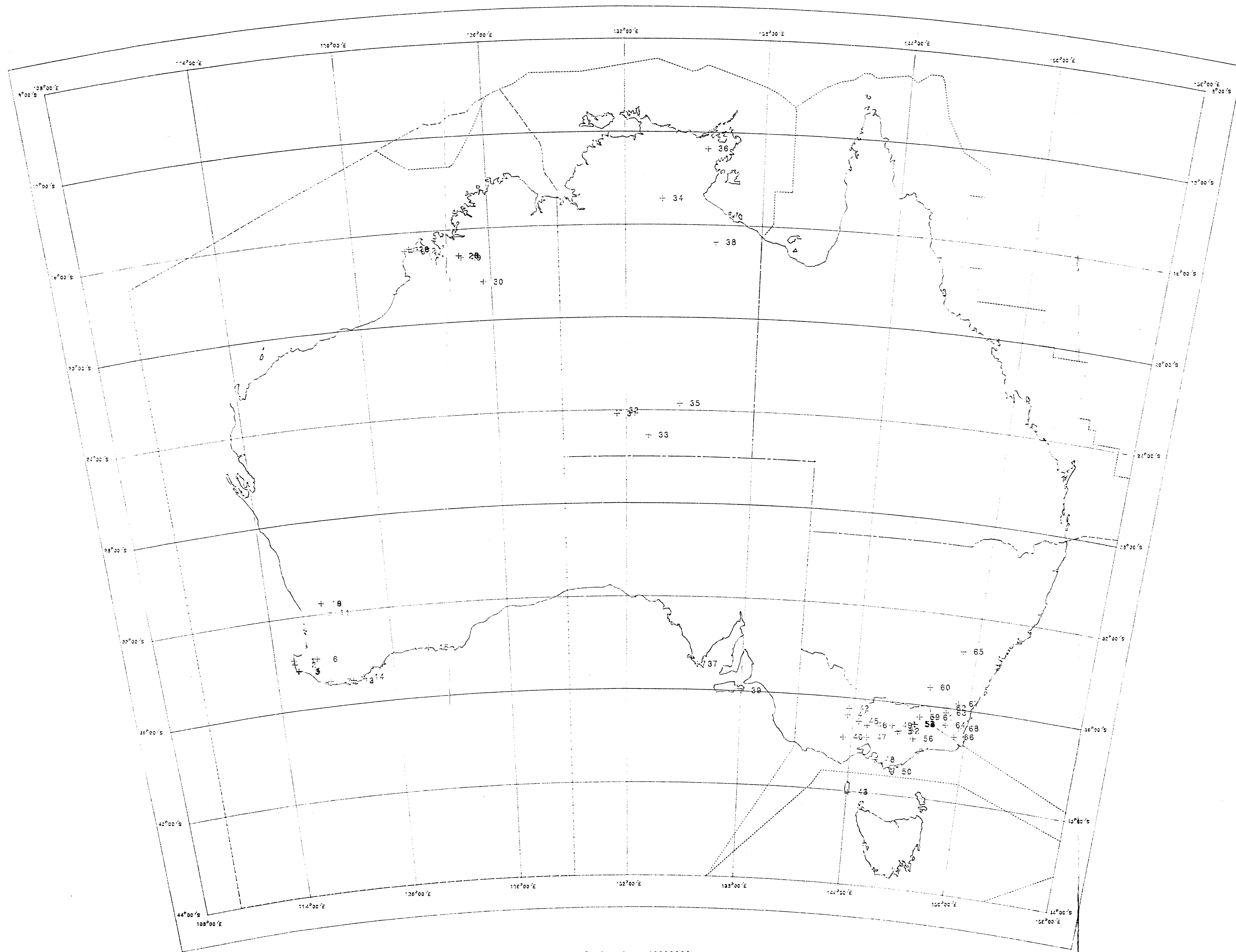
Produced by MAPDAT select LON, LAT, SAMNO, LOCATION, ROCKTYPE, FORMATION, STRATAGE, to-ther (APATITEAGE1) from FISSION where APATITEAGE1 BETWEEN 213 AND 248 order by LON

Enclosure 5



R9100217

PERMIAN FISSION AGE DATES 248 - 286 Mc



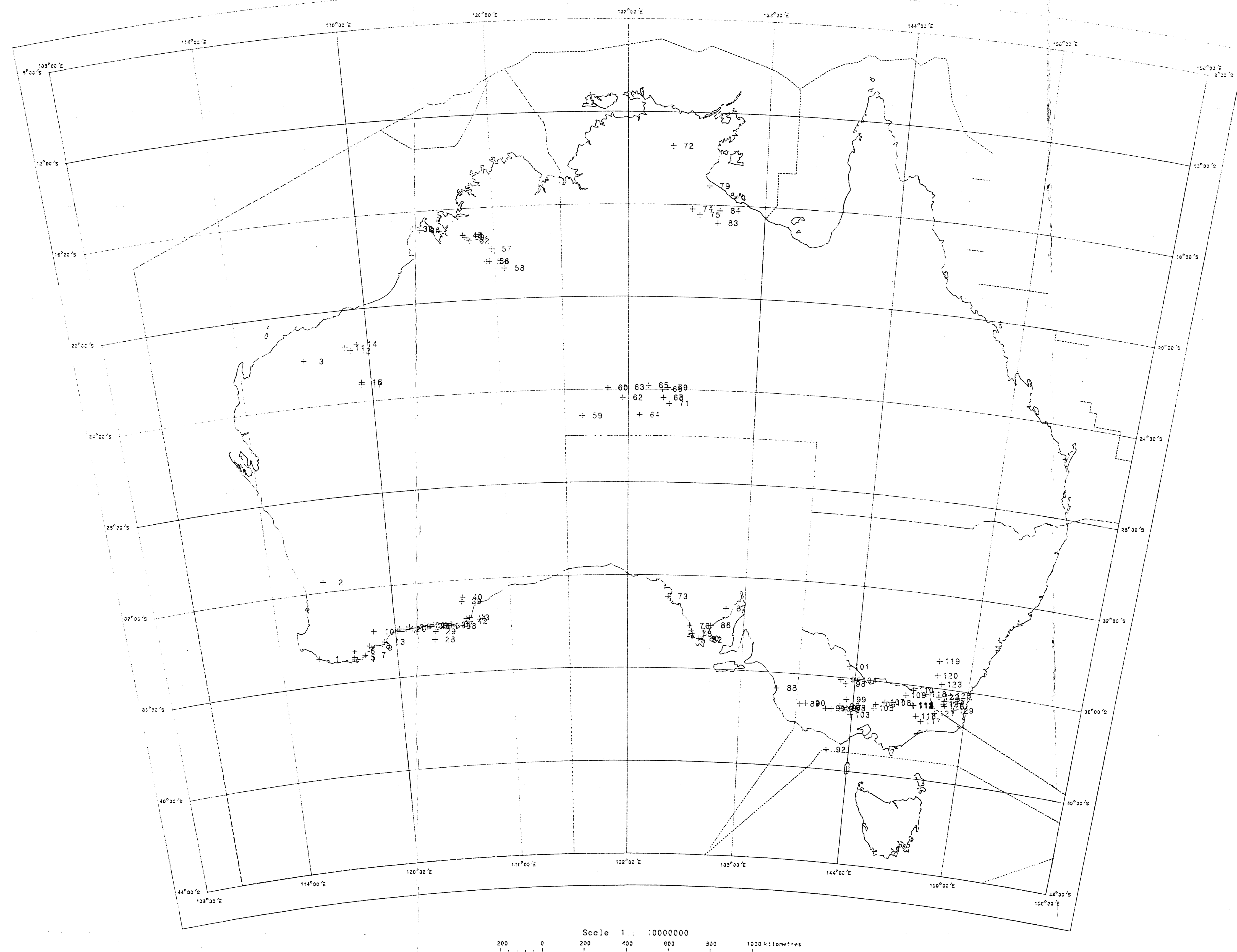
ID	SPECIES	LOCALITY	LOCATION	FOSSIL	FORMATION	STRATIGRAPHIC AGE	WHITE AGE
1	79-10-128		W. Kern Bldg. West Coast, Greer's, at Oquirrh	granulite		79-10	981
2	79-10-129		W. Kern Bldg. West Coast, end of 3rd Major Road	granulite		79-10	982
3	79-10-130		W. Kern Bldg. West Coast, end of Cape Blvd	granulite		79-10	983
4	79-10-131		W. Kern Bldg. West Coast, Devon St.	coarse granulite		79-10	984
5	79-10-132		W. Kern Bldg. West Coast, 3 km. N. of 1910-142 near 1st house	granulite		79-10	985
6	79-10-133		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite	Hester Hill Gneiss	79-10	986
7	79-10-134		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	987
8	79-10-135		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	988
9	79-10-136		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	989
10	79-10-137		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	990
11	79-10-138		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	991
12	79-10-139		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	992
13	79-10-140		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	993
14	79-10-141		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	994
15	79-10-142		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	995
16	79-10-143		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	996
17	79-10-144		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	997
18	79-10-145		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	998
19	79-10-146		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	999
20	79-10-147		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1000
21	79-10-148		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1001
22	79-10-149		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1002
23	79-10-150		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1003
24	79-10-151		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1004
25	79-10-152		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1005
26	79-10-153		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1006
27	79-10-154		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1007
28	79-10-155		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1008
29	79-10-156		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1009
30	79-10-157		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1010
31	79-10-158		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1011
32	79-10-159		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1012
33	79-10-160		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1013
34	79-10-161		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1014
35	79-10-162		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1015
36	79-10-163		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1016
37	79-10-164		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1017
38	79-10-165		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1018
39	79-10-166		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1019
40	79-10-167		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1020
41	79-10-168		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1021
42	79-10-169		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1022
43	79-10-170		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1023
44	79-10-171		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1024
45	79-10-172		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1025
46	79-10-173		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1026
47	79-10-174		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1027
48	79-10-175		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1028
49	79-10-176		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1029
50	79-10-177		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1030
51	79-10-178		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1031
52	79-10-179		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1032
53	79-10-180		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1033
54	79-10-181		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1034
55	79-10-182		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1035
56	79-10-183		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1036
57	79-10-184		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1037
58	79-10-185		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1038
59	79-10-186		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1039
60	79-10-187		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1040
61	79-10-188		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1041
62	79-10-189		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1042
63	79-10-190		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1043
64	79-10-191		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1044
65	79-10-192		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1045
66	79-10-193		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1046
67	79-10-194		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1047
68	79-10-195		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1048
69	79-10-196		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1049
70	79-10-197		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1050
71	79-10-198		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1051
72	79-10-199		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1052
73	79-10-200		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1053
74	79-10-201		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1054
75	79-10-202		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1055
76	79-10-203		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1056
77	79-10-204		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1057
78	79-10-205		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1058
79	79-10-206		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1059
80	79-10-207		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1060
81	79-10-208		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1061
82	79-10-209		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1062
83	79-10-210		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1063
84	79-10-211		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1064
85	79-10-212		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1065
86	79-10-213		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1066
87	79-10-214		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1067
88	79-10-215		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1068
89	79-10-216		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1069
90	79-10-217		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1070
91	79-10-218		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1071
92	79-10-219		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1072
93	79-10-220		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1073
94	79-10-221		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1074
95	79-10-222		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1075
96	79-10-223		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1076
97	79-10-224		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1077
98	79-10-225		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1078
99	79-10-226		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1079
100	79-10-227		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1080
101	79-10-228		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1081
102	79-10-229		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1082
103	79-10-230		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1083
104	79-10-231		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1084
105	79-10-232		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1085
106	79-10-233		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1086
107	79-10-234		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1087
108	79-10-235		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1088
109	79-10-236		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1089
110	79-10-237		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1090
111	79-10-238		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1091
112	79-10-239		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1092
113	79-10-240		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1093
114	79-10-241		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1094
115	79-10-242		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1095
116	79-10-243		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1096
117	79-10-244		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1097
118	79-10-245		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1098
119	79-10-246		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1099
120	79-10-247		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1100
121	79-10-248		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1101
122	79-10-249		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1102
123	79-10-250		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1103
124	79-10-251		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1104
125	79-10-252		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1105
126	79-10-253		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1106
127	79-10-254		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1107
128	79-10-255		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1108
129	79-10-256		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1109
130	79-10-257		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1110
131	79-10-258		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1111
132	79-10-259		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1112
133	79-10-260		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1113
134	79-10-261		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1114
135	79-10-262		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1115
136	79-10-263		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1116
137	79-10-264		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1117
138	79-10-265		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1118
139	79-10-266		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1119
140	79-10-267		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1120
141	79-10-268		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1121
142	79-10-269		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1122
143	79-10-270		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1123
144	79-10-271		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1124
145	79-10-272		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1125
146	79-10-273		W. Kern Bldg. West Coast, 5 km. N. of Bridgegate	granulite		79-10	1126
147	79-10-274		W. Kern				

Enclosure 6

Simple Conic Projection + 68pts. FISSION DATA
Standard parallels
18° 00' S and 36° 00' S

Produced by XAPDAP select LONG, LAT, SNAMEO, LOCATION, ROCKTYPE, FORMATION, STRATAGE, tochar(APATITEAGE1) from FLOSSON where APATITEAGE1 BETWEEN 218 AND 236 order by LONG

CARBONIFEROUS FISSION AGE DATES 286 - 354 Ma



Enclosure 7
Carboniferous.
Sepia

[illegible]

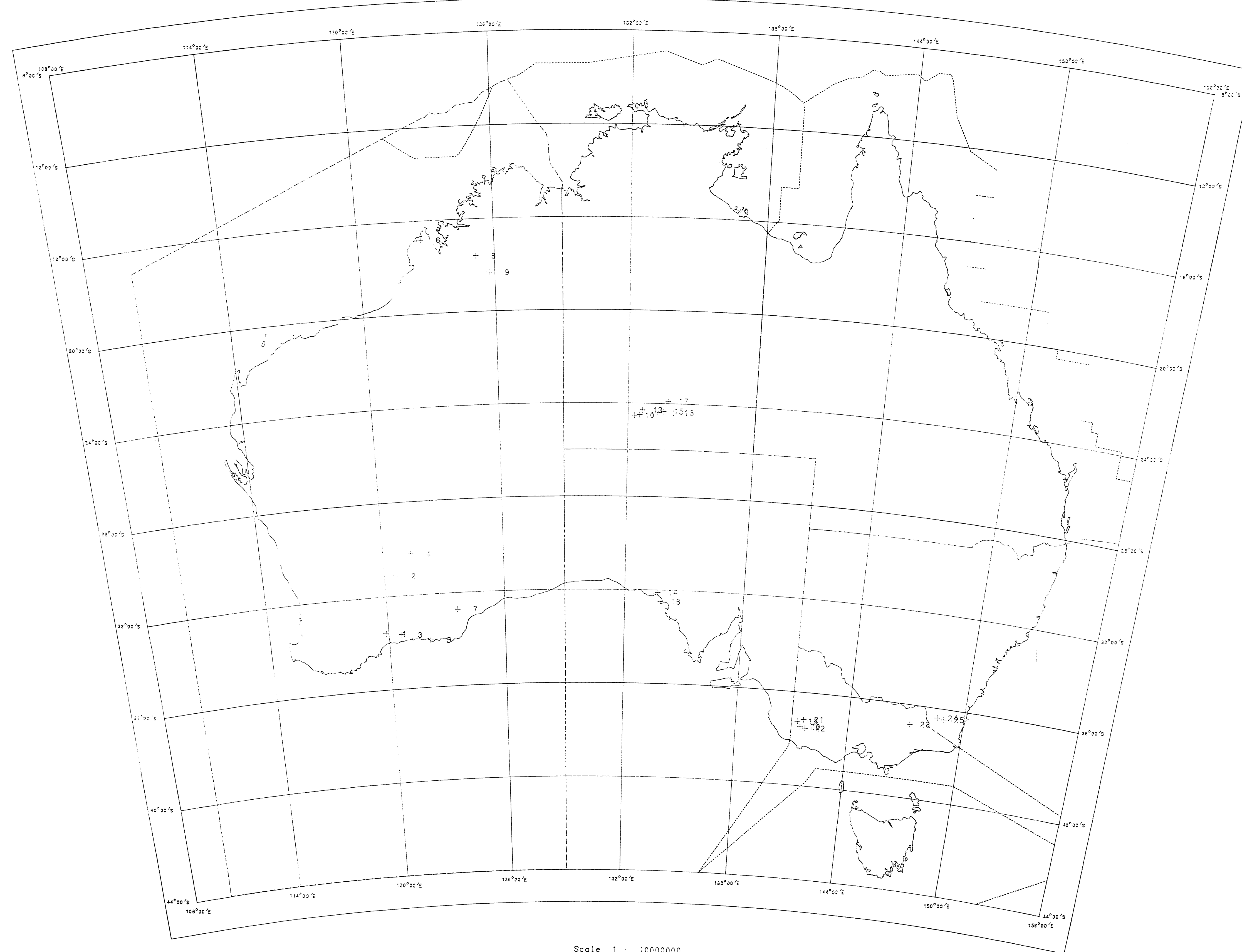
Enclosure 7

Simple Conic Projection + 129pts. MISSION DATA
Standard parallels
 $13^{\circ} 00' S$ and $36^{\circ} 00' S$

Produced by MAPDAT select LON, LAT, SAMPLENO, LOCATION, ROCKTYPE, FORMATION, STRATAGE, to-char(APATITEAGE1) from FISSION where APATITEAGE1 BETWEEN 288 AND 354 order by LON



DEVONIAN FISSION AGE DATES 354 - 408 Ma



No.	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	7910-156	Yilgarn Block-South Coast, 1 km E of Phillips River bridge	barred gneiss	—	—	368
2	7613-013	Central Yilgarn Block-Woodgange Rock Res.	amphibolite xen.	—	—	407
3	7710-139	Yilgarn Block-South Coast, Sparrow to Ravenshorpe road	amphibolite	—	—	364
4	7613-031	Central Yilgarn Block-Sp. 111, Bays	granite	—	—	400
5	7710-100	Yilgarn Block-South Coast, Cape Le Grand	granitic gneiss	—	—	365
6	8322-016	North-western Gairdner Basin, Cuddingee	sand to silt sized clastic detritus	Grant	—	403
7	7710-064	Yilgarn Block-South Coast, on Balladonia/Israelite Bay track	granite	—	—	354
8	8410-010	Leonard Shelf-McGarry Gap	granite	—	—	359
9	8522-005	Leonard Shelf - Biederstele, RD298A	granite	—	—	354
10	8351-110	"Amadeus Basin, Levi Range"	sandstone	—	—	356
11	8551-030	"Amadeus Basin, Jura Lookout Plain"	sandstone	—	—	356
12	8551-027	"Amadeus Basin, Yilamuta Structure"	sandstone	—	—	363
13	8551-028	"Amadeus Basin, Yilamuta Structure"	sandstone	—	—	360
14	7710-143	Gawler Block-Theravard Pt.	biolite gneiss	—	—	372
15	8351-152	"Amadeus Basin, James Range"	sandstone	—	—	355
16	7710-142	Gawler Block-Cape Range	granite	—	—	408
17	8351-024	"Amadeus Basin, Alice"	granite	—	—	355
18	8551-006	"Amadeus Basin, New Year Dam"	granite	—	—	356
19	7222-100	"Capul, N of Dergholm - Dundas Tableland"	granite	—	—	351
20	7222-118	Dundas Vale	granite	—	—	366
21	7222-121	Harrow - Dundas Tableland	granite	—	—	361
22	7222-116	"Hessel Creek, NNE of Coleraine - Dundas Tableland"	granite	—	—	370
23	L10 9500	Falls Creek Region	granite	—	—	373
24	7959-111 R18237	Stabsbyne	granite	—	—	359
25	7959-118 R18244	Sunley Lake	granite	—	—	361

Simple Geoc Projection
Standard parallels
18°00'N and 36°00'N

Scale 1 : 10000000
0 200 400 600 800 1000 kilometres

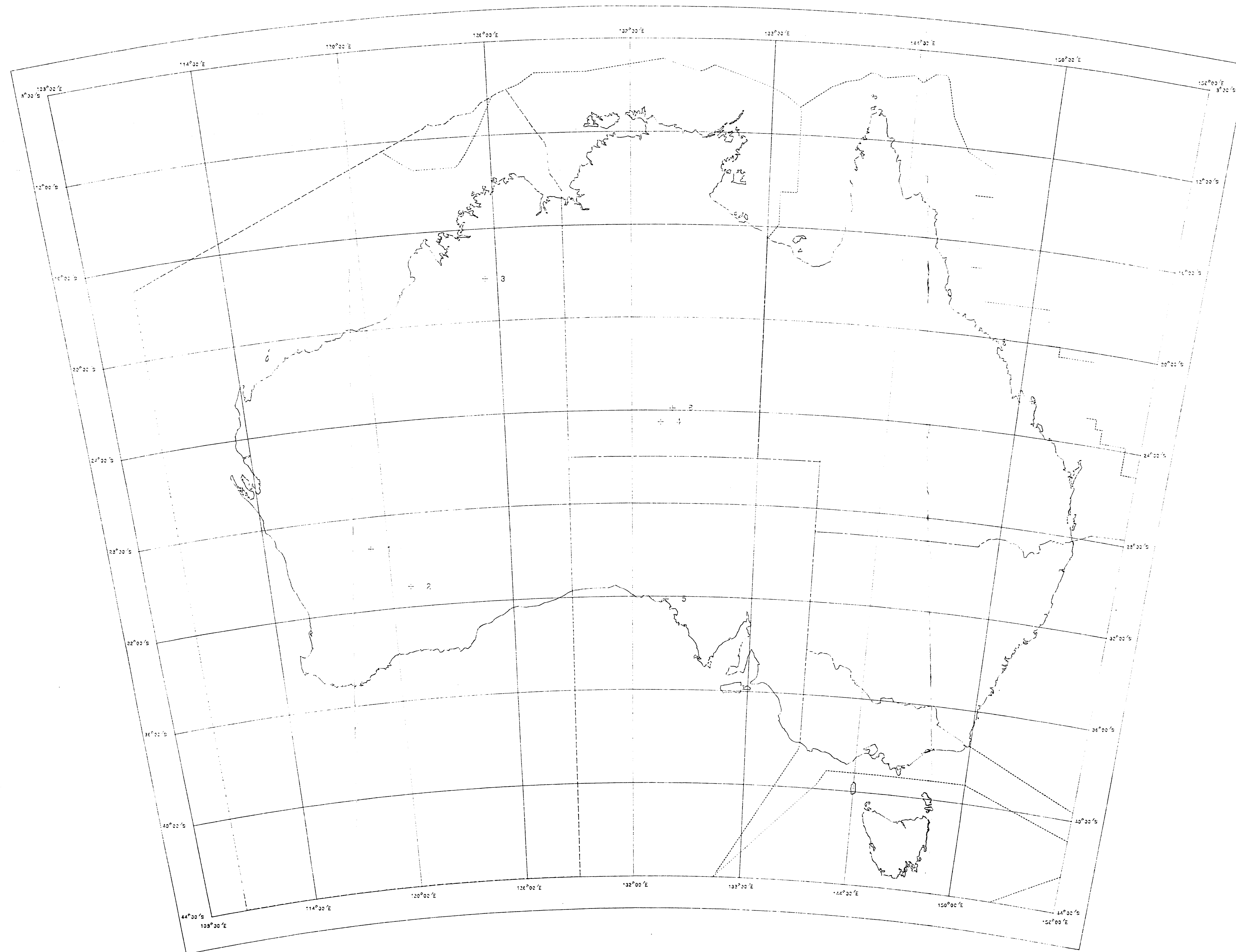
Enclosure 8

Produced by MAPDAT select LON,LAT,SAMPLE,LOCATION,ROCKTYPE,FORMATION,STRATAGE,locater(APATITEAGE1) from FISSION where APATITEAGE1 BETWEEN 354 AND 408 order by LON



R9100202

SILURIAN FISSION AGE DATES 408 - 434 Ma



No.	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	7810-330	Central, Y. leann Block - Yordle Rocks	biotite gneiss	—	—	417
2	7810-332	Central, Y. leann Block - Yordle Rocks, Slat Site 1	biotite gneiss	—	—	414
3	8410-008	Lennard Gneiss - Filzberg Crossing	—	Grant Gneiss	Upper Carboniferous - Permian	402
4	335-131	Amadeus Basin - Chandler Range	sandstone	—	—	412
5	7710-143	Cowler Block - Haverford Pt.	biotite gneiss	—	—	409
6	335-003	Amadeus Basin - Alice Springs	conglomerate	Brewer Conglomerate	—	410
7	335-005	Amadeus Basin - Alice Springs	sandstone	—	—	413

Fission track
Endowment
Silurian

Sepia

Scale 1 : 10000000
200 0 200 400 600 800 1000 Kilometres

Enclosure 9

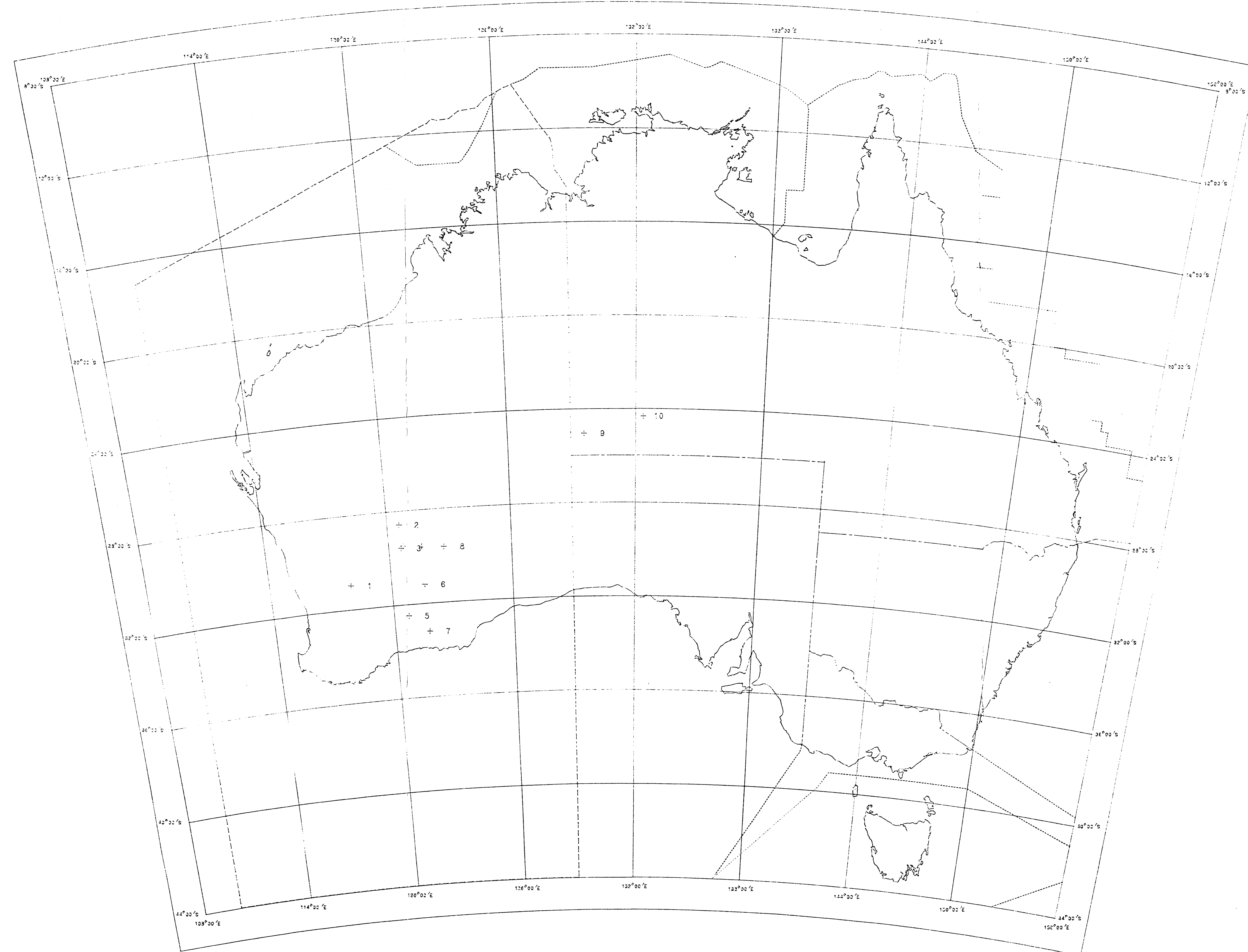
Simple Conic Projection
Standard parallels
36° 00' S and 36° 00' S

Produced by MAPDAT select LON, LAT, SAMPNO, LOCATION, ROCKTYPE, FORMATION, STRATAGE, to where(APATITEAGE1) from FFISSION where APATITEAGE1 BETWEEN 408 AND 434 order by LON



R9100203

ORDOVICIAN FISSION AGE DATES 434 - 505 Ma



Scale 1 : 10000000
200 0 200 400 600 800 1000 kilometres

Simple Conic Projection
Standard parallels
38°00'S and 36°00'S
+ 10pts. FISSION DATA

Enclosure 10

No.	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	78/0-016	Central Vigners Block - Pioneer Dome, Boat Site 9, 50 mile tank locality	banded gneiss	---	~2670 Ma Archaean	503
2	78/0-026	Central Vigners Block - Leonard	gneissic granite	---	~2670 Ma Archaean	491
3	78/0-025	Central Vigners Block - 18 Mile Well	banded gneiss	---	~2670 Ma Archaean	457
4	78/0-025A	Central Vigners Block - 18 Mile Well	banded gneiss	---	~2670 Ma Archaean	453
5	78/0-029	Central Vigners Block	granod. gneiss	---	~2670 Ma Archaean	453
6	78/0-032	Central Vigners Block - Silver L. Shelt, Lunnon Shoot, Kambled	amphibolite gneiss	---	~2670 Ma Archaean	439
7	77/0-050	Vigners Block - South Coast, 75 km N of Esperance	basic gneiss	---	~2670 Ma Archaean	439
8	78/0-027	Central Vigners Block - Barret Well, 10 km NE of Veigourille	gneissic granite	---	~2670 Ma Archaean	437
9	8451-123	Wadeau Basin, Eyreman Hill	sediments	Pacific Sandstone	---	423
10	8451-123	Wadeau Basin, Werra Springs	sediments	Pacific Sandstone	---	402



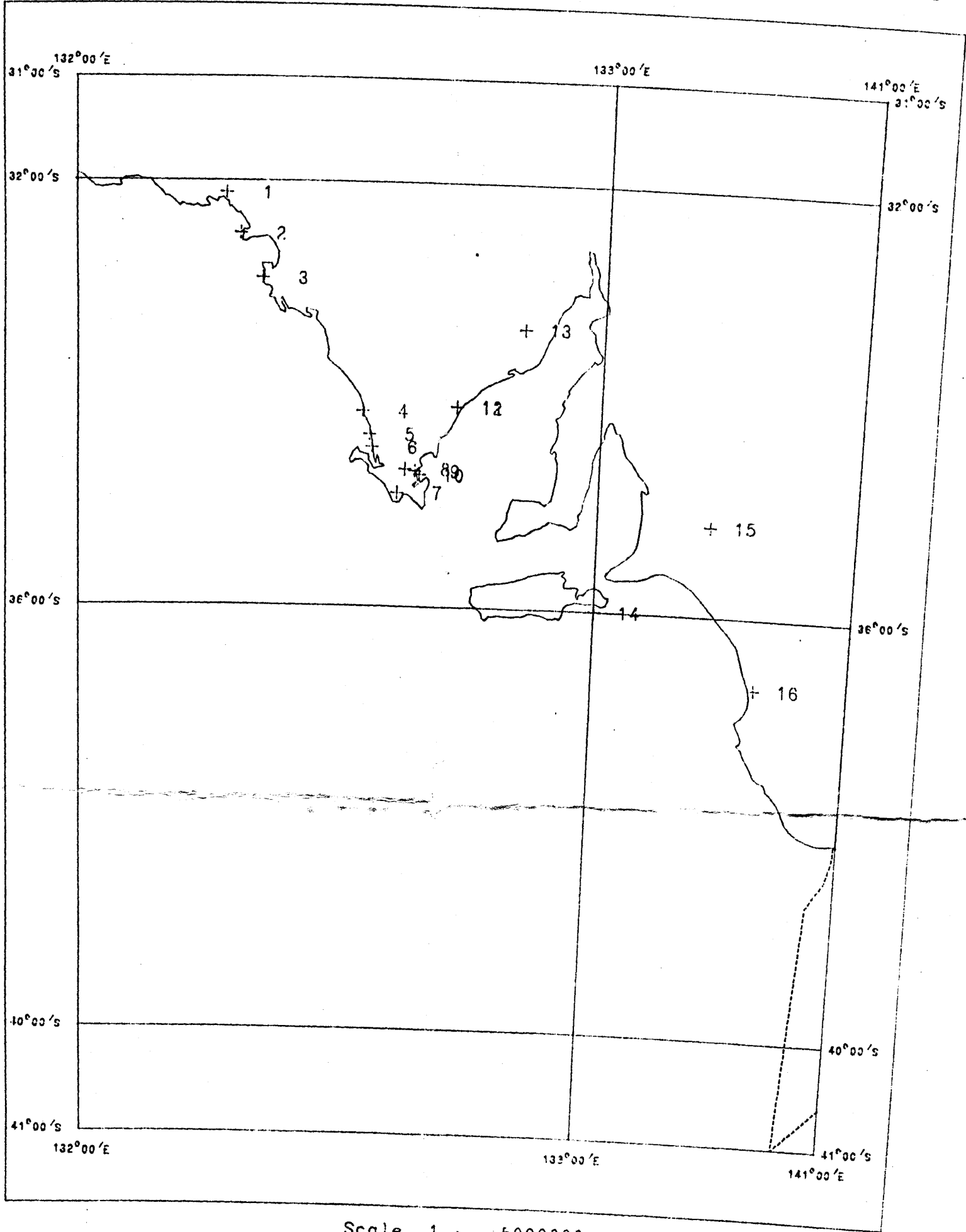
R9100204

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Rec 1991/2

ADELAIDE FISSION AGE DATES



No.	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	7710-143	Gawler Block- Theverard Pt.	biotite gneiss			208
2	7710-142	Gawler Block- Cape Brown	gneissic granite			356
3	7710-147	Gawler Block- Pt. Westall	leuco. gneiss		~1600 Ma	348
4	7710-148	"Gawler Block- Hall Bay, SW Eyre Peninsula"	biotite gneiss			340
5	7710-151	"Gawler Block- Mt Greenly Bay, SW Eyre Peninsula"	biotite gneiss		~1800 Ma	349
6	7710-152	"Gawler Block- Farmers Beach, SW Eyre Peninsula"	quartz gneiss		~1800 Ma	333
7	7710-158	Gawler Block- Cowrie Beach near Cape Corrot	amphibolite			282
8	7710-156	"Gawler Block- Winter Hill Quarry, 5 km NW of Pt Lincoln"	cogen. gneiss			313
9	7710-155	Gawler Block- Caravan Park Pt Lincoln	amphibolite			326
10	7710-153	Gawler Block- Stamford Hill	granitic gneiss			331
11	7710-164	"Gawler Block- Salt Creek, 14 km N of Tumby bay"	biotite gneiss			311
12	7710-165	"Gawler Block- Cape Burr, Eastern Eyre Peninsula"	felsic gneiss			294
13	7710-168	"Gawler Block- Whyalla Road, 39 km N of Cowell"	porphy. granite			318
14	7859-053 R19178	15km N of Tintalura	felsic granite			274
15	7822-002	Murray Bridge- river outcrop near bridge	granite	Murray Bridge Granite	Middle Ordovician	330
16	7222-136	"N of Kingston, S.A."	granite			

Enclosure 12

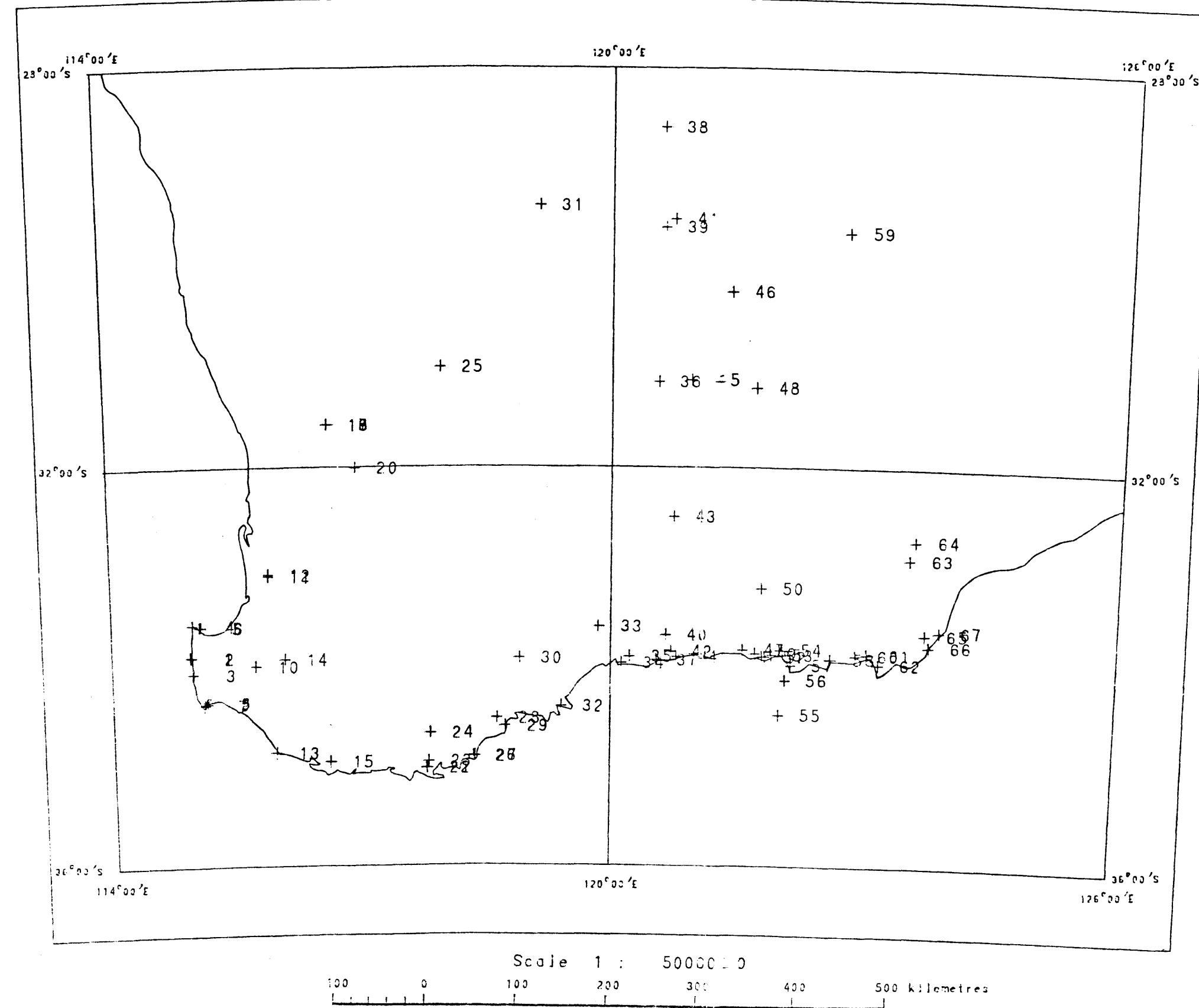
Simple Conic Projection
Standard parallels
18° 00' S and 36° 00' S
+ 18pts. FISSION DATA

Produced by MAPDAT select LON, LAT, SAMPNO, LOCATION, ROCKTYPE, FORMATION, STRATAGE, to-char(APATITEAGE1) from FISSION where LON BETWEEN 132 AND 141 AND LAT BETWEEN -41 AND -31 order by LON

Sepia



YILGARN FISSION AGE DATES



No	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	7910-145	*Yilgarn Block-West Coast, Gracetown, Pi Cowaramup*	granulite	-	-2670 Ma	281
2	7910-146	Yilgarn Block-West Coast, Gracetown beach	basic granulite	-	-2670 Ma	-
3	7910-144	Yilgarn Block-West Coast, End of Bob Hollow Road	granulite	-	-2670 Ma	235
4	7910-147	Yilgarn Block-West Coast, Sugarloaf Rocks	felsic gneiss	-	-2670 Ma	239
5	7910-148	Yilgarn Block-West Coast, 2 km N of Dunsborough turnoff	porphy. granite	-	-2670 Ma	218
6	7910-149	Yilgarn Block-West Coast, Dunsborough	granitic gneiss	-	-2670 Ma	-
7	7910-143	Yilgarn Block-West Coast, N of Cape Leewin	gneiss granite	-	-2670 Ma	269
8	7910-141	Yilgarn Block-West Coast, Dukes Point	coarse granulite	-	-2670 Ma	276
9	7910-142	Yilgarn Block-West Coast, 3.1 km from 7910-142 near J/house	granulite	-	-2670 Ma	263
10	7910-150	*Yilgarn Block-West Coast, Bridgetown Road, near Nannup*	dolerite dyke	-	-2670 Ma	-
11	7910-153	Yilgarn Block-West Coast, Quarry above Harvey Weir	porphy. granite	-	-2670 Ma	232
12	7910-154	Yilgarn Block-West Coast, Harvey Dam spillway	foliated granite	-	-2670 Ma	208
13	7910-140	*Yilgarn Block-West Coast, Windy Harbour*	granulite	-	-2670 Ma	298
14	7910-151	Yilgarn Block-West Coast, 5 km N of Bridgetown	gneiss	Hester Hill Gneiss	-2670 Ma	266
15	7910-138	*Yilgarn Block-West Coast, 4 km N of Crystal Springs*	porphy. granite	-	-2670 Ma	273
16	7922-004	Yilgarn Block-Noriham Borehole	granitic gneiss	-	-2670 Ma	294
17	7922-003	Yilgarn Block-Noriham Borehole	granitic gneiss	-	-2670 Ma	276
18	7922-002	Yilgarn Block-Noriham Borehole	granitic gneiss	-	-2670 Ma	282
19	7922-001	Yilgarn Block-Noriham Borehole	granitic gneiss	-	-2670 Ma	273
20	7710-044	*Yilgarn Block-West Coast, near Darling Fault*	-	-	-2670 Ma	Archaeon 260
21	7910-133A	*Yilgarn Block-West Coast, Halyfax Si quarry*	coarse granite	Albany Granite (coarse phase)	-2670 Ma	235
22	7910-134	*Yilgarn Block-West Coast, Halyfax Si quarry*	fine granite	Albany Granite (fine grained phase)	-2670 Ma	236
23	7910-136	*Yilgarn Block-West Coast, Readymix quarry*	granite	-	-2670 Ma	306
24	7910-133	*Yilgarn Block-West Coast, 2.5 km E of Woodland Rd Intersect.*	foliated granite	-	-2670 Ma	303
25	7610-016	*Central Yilgarn Block-Pioneer Dome, Blast Site 2, 50 mile tank locality*	banded gneiss	-	-2670 Ma	Archaeon 503
26	7910-132	*Yilgarn Block-West Coast, Cheyne beach*	foliated granite	-	-2670 Ma	263
27	7910-131	*Yilgarn Block-West Coast, Headland Cheyne beach*	foliated granite	-	-2670 Ma	294
28	7910-129	*Yilgarn Block-South Coast, quarry 13 km W of Beaufort Inlet Road*	mafic migmatite	-	-2670 Ma	327
29	7910-130	*Yilgarn Block-South Coast, headland N of Eyre River mouth*	banded gneiss	-	-2670 Ma	348
30	7910-127	*Yilgarn Block-South Coast, Gairdner River crossing*	granite	-	-2670 Ma	336
31	7610-030	Central Yilgarn Block- Mondie Rocks	biotite tonalite	-	-2670 Ma	Archaeon 417
32	7910-128	*Yilgarn Block-South Coast, Beach Bremer Bay*	basic rhyolite in leuco gneiss	-	-2670 Ma	318
33	7910-126	*Yilgarn Block-South Coast, 1 km E of Phillips River bridge*	banded gneiss	-	-2670 Ma	369
34	7710-131	*Yilgarn Block-South Coast, beach at Hopetoun*	leuco gneiss	-	-2670 Ma	Archaeon 322
35	7710-132	*Yilgarn Block-South Coast, on road near Hopetoun*	granitic gneiss	-	-2670 Ma	Archaeon 318
36	7610-013	Central Yilgarn Block-Woolgangie Rock Res.	amphibolite xen.	-	-2670 Ma	Archaeon 407
37	7710-136	*Yilgarn Block-South Coast, beach below Channel Hill*	biotite gneiss	-	-2670 Ma	Archaeon 326
38	7610-026	Central Yilgarn Block-Leonara	gneissic granite	-	-2670 Ma	Archaeon 491
39	7610-024	Central Yilgarn Block-18 Mile Well	banded gneiss	-	-2670 Ma	Archaeon 457
40	7710-129	*Yilgarn Block-South Coast, Esperance to Ravenshorpe road*	amphibolite	-	-2670 Ma	Archaeon 364
41	7610-025A	Central Yilgarn Block-29 Mile Well	banded gneiss	-	-2670 Ma	Archaeon 453
42	7710-137	*Yilgarn Block-South Coast, 3km W of Coxall/ Springdale intersection*	banded gneiss	-	-2670 Ma	Archaeon 328
43	7610-029	Central Yilgarn Block	granod. gneiss	-	-2670 Ma	Archaeon 453
44	7710-138	*Yilgarn Block-South Coast, Munglinup beach*	biotite gneiss	-	-2670 Ma	Archaeon
45	7610-012	*Central Yilgarn Block-Gnarbjine Rocks, Blast Site 1*	porph. granodiorite	-	-2670 Ma	Archaeon 414
46	7610-031	Central Yilgarn Block-Spill Rocks	tonalite gneiss	-	-2670 Ma	Archaeon 400
47	7710-122	*Yilgarn Block-South Coast, S of Quailup Lake*	micaceous gneiss	-	-2670 Ma	Archaeon 314
48	7610-022	*Central Yilgarn Block-Silver L. Shaff, Lunnon Shosi, Kambalda*	amphibolite gneiss	-	-2670 Ma	Archaeon 496
49	7710-109	*Yilgarn Block-South Coast, 11 Mile Beach, W of Esperance*	garnet gneiss	-	-2670 Ma	Archaeon 333
50	7710-060	*Yilgarn Block-South Coast, 75 km N of Esperance*	basic gneiss	-	-2670 Ma	Archaeon 489
51	7710-104	*Yilgarn Block-South Coast, 0.5 km W of 7710-103*	granitic gneiss	-	-2670 Ma	Archaeon 337
52	7710-103	*Yilgarn Block-South Coast, Observatory Head*	banded gneiss	-	-2670 Ma	Archaeon 236
53	7710-108	*Yilgarn Block-South Coast, Dempster Head*	granite	-	-2670 Ma	Archaeon 290
54	7710-102	*Yilgarn Block-South Coast, Wyllie Head*	foliated granite	-	-2670 Ma	Archaeon 312
55	7710-117	*Yilgarn Block-South Coast, Termination Island*	biotite gneiss	-	-2670 Ma	Archaeon 324
56	7710-121	*Yilgarn Block-South Coast, Hood Island*	granodiorite	-	-2670 Ma	Archaeon 347
57	7710-100	*Yilgarn Block-South Coast, Cape Le Grand*	gneissic granite	-	-2670 Ma	Archaeon 365
58	7710-101	*Yilgarn Block-South Coast, High Island, E of Mt Belcher*	augen gneiss	-	-2670 Ma	Archaeon 337
59	7610-027	*Central Yilgarn Block-Barret Well, 170 km NE of Kalbarrie*	gneissic granite	-	-2670 Ma	Archaeon 487
60	7710-093	*Yilgarn Block-South Coast, 7 km E of Alexander Point*	granite gneiss	-	-2670 Ma	Archaeon 238
61	7710-092	*Yilgarn Block-South Coast, Thomas River*	banded gneiss	-	-2670 Ma	Archaeon 301
62	7710-090	*Yilgarn Block-South Coast, Mt Arid*	granite	-	-2670 Ma	Archaeon 316
63	7710-065	*Yilgarn Block-South Coast, Coragana Rocks*	migmatite	-	-2670 Ma	Archaeon 330
64	7710-064	*Yilgarn Block-South Coast, on Balladonia-Israelite Bay track*	granite	-	-2670 Ma	Archaeon 354
65	7710-083	*Yilgarn Block-South Coast, Tonkie-Jenna Rocks*	granite	-	-2670 Ma	Archaeon 341
66	7710-081	*Yilgarn Block-South Coast, Point Malcom*	banded gneiss	-	-2670 Ma	Archaeon 338
67	7710-080	*Yilgarn Block-South Coast, Pi Dempster*	gneiss	-	-2670 Ma	Archaeon 349

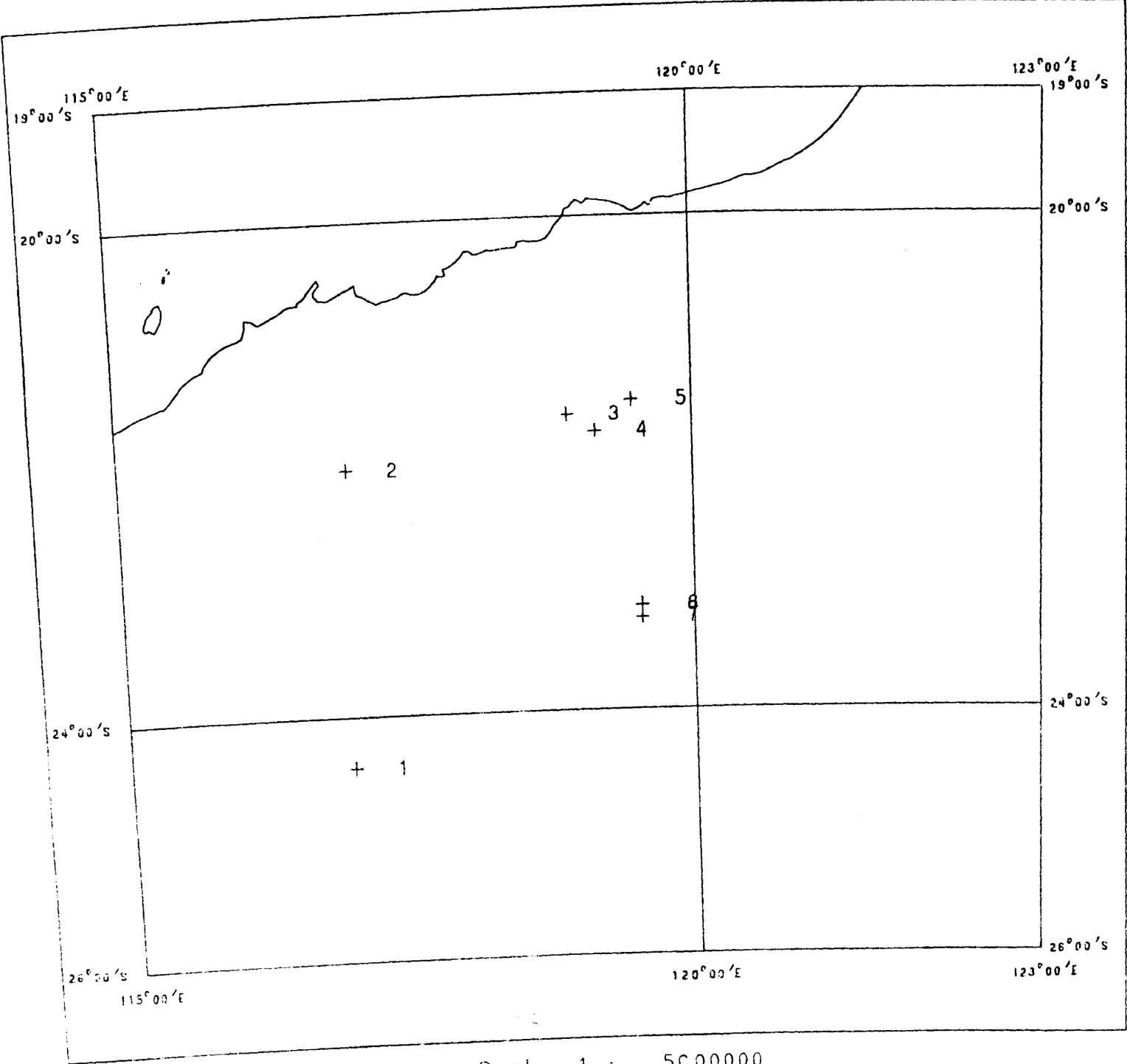
+ 67pts. FISSION DATA

Enclosure 13



Simple Conic Projection
Standard parallels
18°30'S and 36°00'S

PILBARA FISSION AGE DATES



Simple Conic Projection
Standard parallels
13°00'S and 26°00'S

+ 3 is FISSION DATA

Enclosure 14

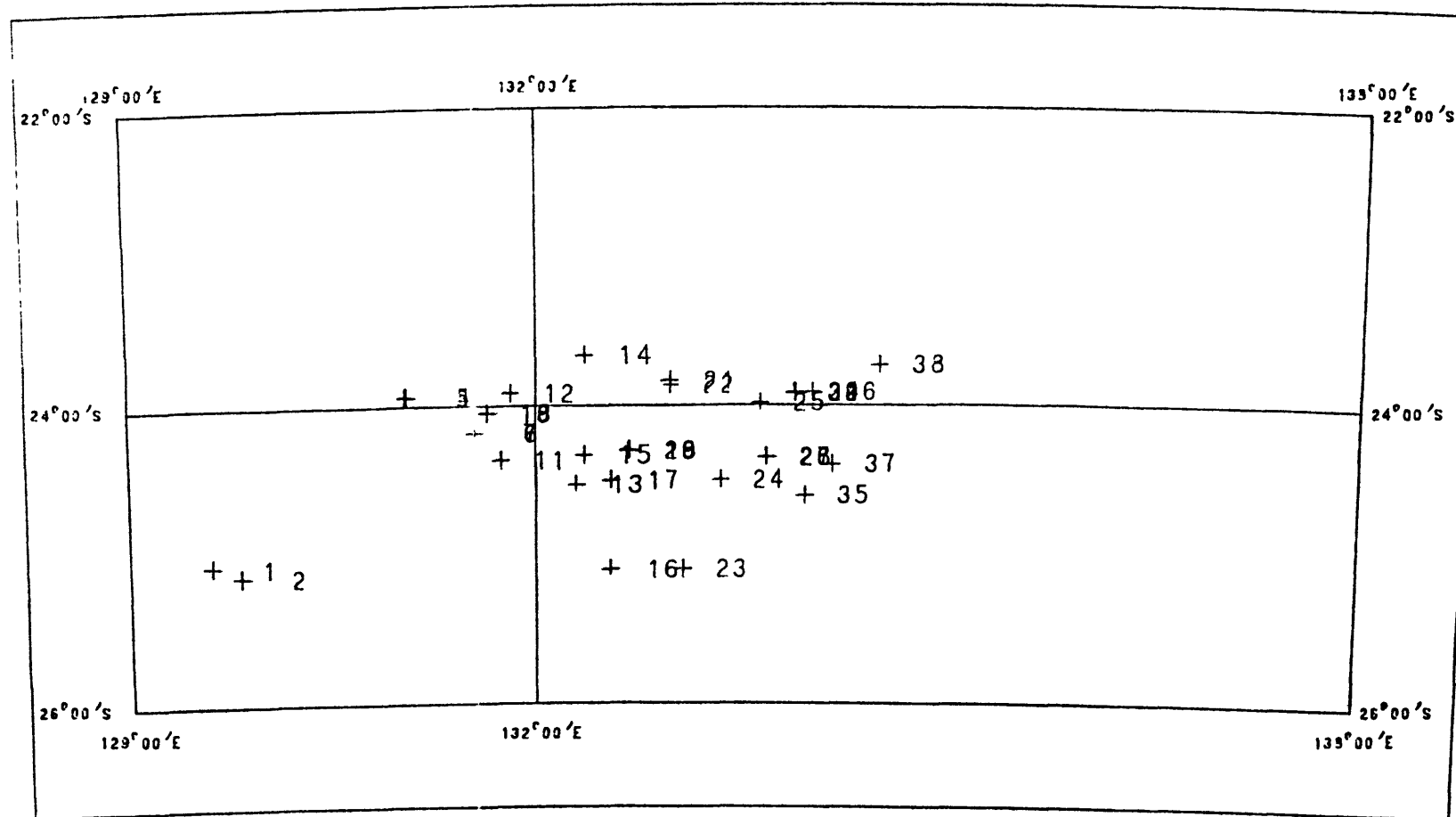
No.	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	7759-017 R19144	Genoa Peak summit	coarse pink biotite granite	Genoa Peak Granite/ Maramingo G.	-	194
2	7315-051	Pilbara Block	gneissic granite	-	~2700 Ma Archaean	321
3	7315-027	Pilbara Block-Woodstock	migmatite	-	~2700 Ma Archaean	320
4	7315-012	Pilbara Block-Tambourah	gneissic granite	-	~2700 Ma Archaean	291
5	7315-018	Pilbara Block-Coalgelong	foliated granite	-	~2700 Ma Archaean	331
6	7315-035	"Pilbara Block- Mt Newman, 27 mile quarry"	foliated granite	-	~2700 Ma Archaean	340
7	7315-050	"Pilbara Block- Mt Newman, 13 mile quarry"	granite	-	~2700 Ma Archaean	317
8	7315-041	"Pilbara Block- Mt Newman, 70 mile quarry"	granite	-	~2700 Ma Archaean	323

Pilbara Block
Woodstock
Tambourah
Coalgelong
Mt Newman



AMADEUS FISSION AGE DATES

Fission Track
Enclosure 15
Amadeus
Sg. 12a



Scale 1 5000000
100 0 100 200 300 400 500 kilometres

Simple Conic Projection
Standard parallels
18°00'S and 36°00'S
+ 38pts FISSION DATA

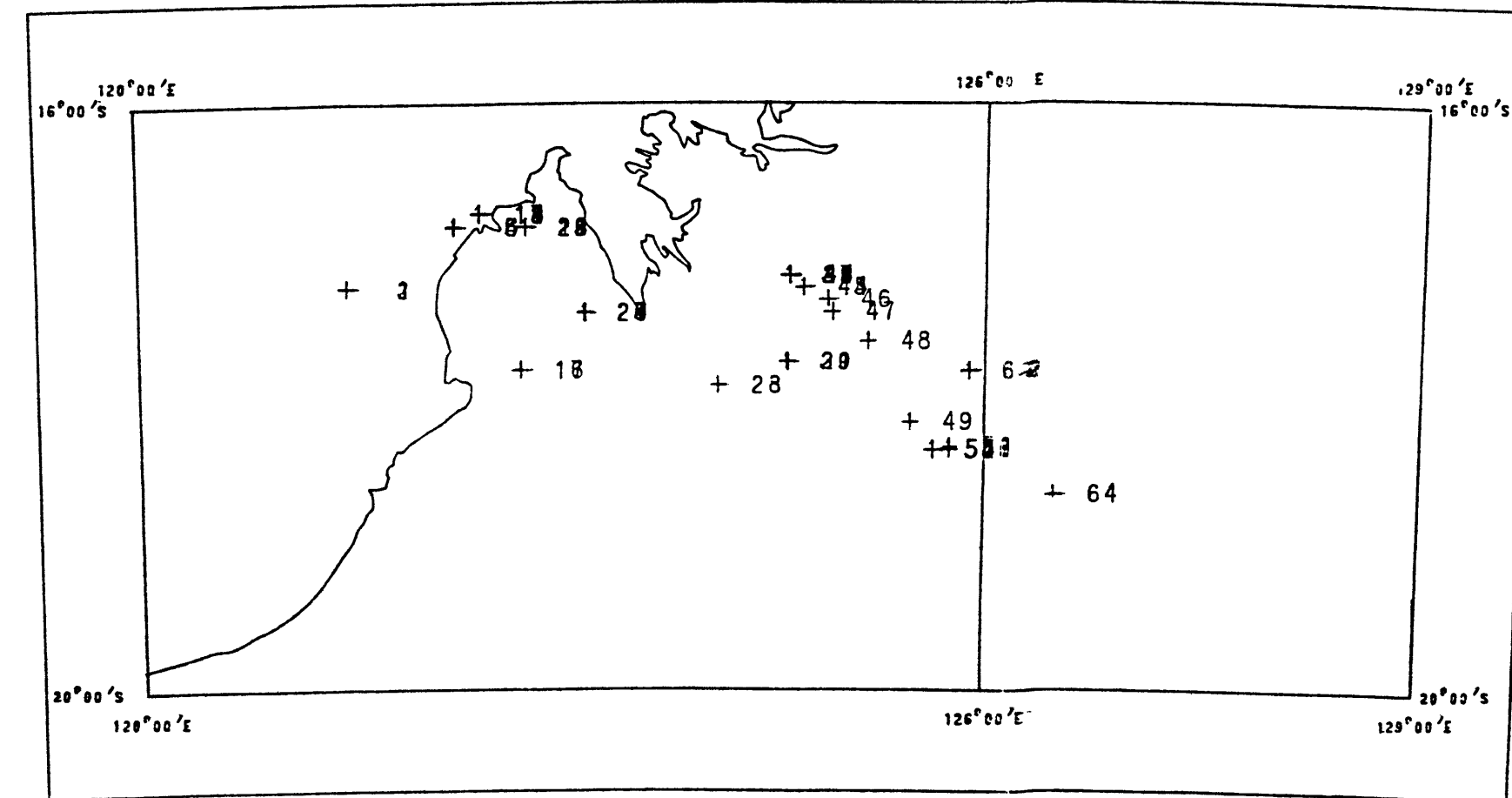
Enclosure 15

No	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	8451-123	*Amadeus Basin, Peiermann Anticline	sandstone	Pacoola Sandstone	-	448
2	8551-038	*Amadeus Basin, Irving Creek	sandstone	Stairway Sandstone	-	341
3	8451-064	*Amadeus Basin, Watson Range	sandstone	Pacoola Sandstone	-	232
4	8451-070	*Amadeus Basin, Glen Edith Anticline	sandstone	Stairway Sandstone	-	345
5	8451-067	*Amadeus Basin, Glen Edith Anticline	sandstone	Pacoola Sandstone	-	317
6	8351-128	*Amadeus Basin, Johnny Creek Anticline	sandstone	Pacoola Sandstone	-	267
7	8351-129	*Amadeus Basin, Johnny Creek Anticline	sandstone	Pacoola Sandstone	-	204
8	8351-160	*Amadeus Basin, East Mereenie-2	sandstone	Pacoola Sandstone	-	237
9	8351-167	*Amadeus Basin, East Mereenie-2	sandstone	Pacoola Sandstone	-	186
10	8451-072	*Amadeus Basin, East Mereenie-2	siltstone	Parke Siltstone	-	265
11	8351-133	*Amadeus Basin, George Gill Range	sandstone	Pacoola Sandstone	-	315
12	8351-110	*Amadeus Basin, Gardiner Range	sandstone	Pacoola Sandstone	-	311
13	8351-140	*Amadeus Basin, Levi Range	sandstone	Pacoola Sandstone	-	363
14	8351-075	*Amadeus Basin, Tyler Pass	sandstone	Pacoola Sandstone	-	223
15	8451-128	*Amadeus Basin, Illara Springs	sandstone	Pacoola Sandstone	-	462
16	8451-055b	*Amadeus Basin, Basedow Range	sandstone	Stairway Sandstone	-	349
17	8551-030	*Amadeus Basin, Ayers Lookout Plain	sandstone	Pacoola Sandstone	-	360
18	8551-027	*Amadeus Basin, Illamuria Structure	sandstone	Pacoola Sandstone	-	372
19	8551-029	*Amadeus Basin, Illamuria Structure	sandstone	Pacoola Sandstone	-	650
20	8551-028	*Amadeus Basin, Illamuria Structure	sandstone	Pacoola Sandstone	-	355
21	8351-050	*Amadeus Basin, Ellery Creek	sandstone	Stairway Sandstone	-	298
22	8351-055	*Amadeus Basin, Ellery Creek	sandstone	Pacoola Sandstone	-	227
23	8451-055	*Amadeus Basin, Erldunda Range	sandstone	Stairway Sandstone	-	273
24	8351-121	*Amadeus Basin, Chandler Range	sandstone	Pacoola Sandstone	-	414
25	8551-024	*Amadeus Basin, Waterhouse Range	sandstone	Pacoola Sandstone	-	325
26	8351-151	*Amadeus Basin, James Range	sandstone	Pacoola Sandstone	-	323
27	8351-152	*Amadeus Basin, James Range	sandstone	Pacoola Sandstone	-	355
28	8451-114	*Amadeus Basin, James Range	sandstone	Pacoola Sandstone	-	301
29	8351-023	*Amadeus Basin, Alice-1	conglomerate	Brewer Conglomerate	-	410
30	8451-109	*Amadeus Basin, Alice-1	conglomerate	Brewer Conglomerate	-	315
31	8351-025	*Amadeus Basin, Alice-1	sandstone	Hermannsburg Sandstone	-	413
32	8351-030	*Amadeus Basin, Alice-1	sandstone	Goyder Formation	-	230
33	8351-028	*Amadeus Basin, Alice-1	sandstone	Pacoola Sandstone	-	348
34	8351-024	*Amadeus Basin, Alice-1	sandstone	Hermannsburg Sandstone	-	381
35	8451-115b	*Amadeus Basin, Mt Burrell Anticlinorium	sandstone	Pacoola Sandstone	-	306
36	8551-018	*Amadeus Basin, Wallaby-1	sandstone	Arumbera Sandstone	-	144
37	8551-006	*Amadeus Basin, New Year Dam	sandstone	Pacoola Sandstone	-	366
38	8551-003	*Amadeus Basin, Ross River Syncline	sandstone	Pacoola Sandstone	-	282

Produced by MAPDAT select LON LAT SAMPNO LOCATION, ROCKTYPE, FORMATION STRATAGE, to-char(APATITEAGE1) from FISSION where LON BETWEEN 129 AND 135 AND LAT BETWEEN -26 AND -22 order by LON



CANNING FISSION AGE DATES



Scale 1 : 5000000
100 0 100 200 300 400 500 kilometres

Simple Conic Projection
Standard parallels
18°00'S and 36°00'S

+ 64pts FISSION

Enclosure 16

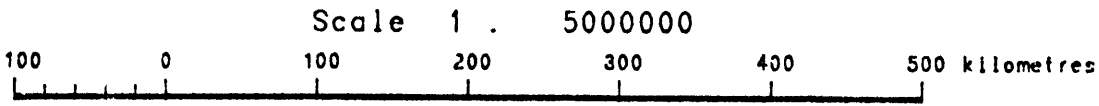
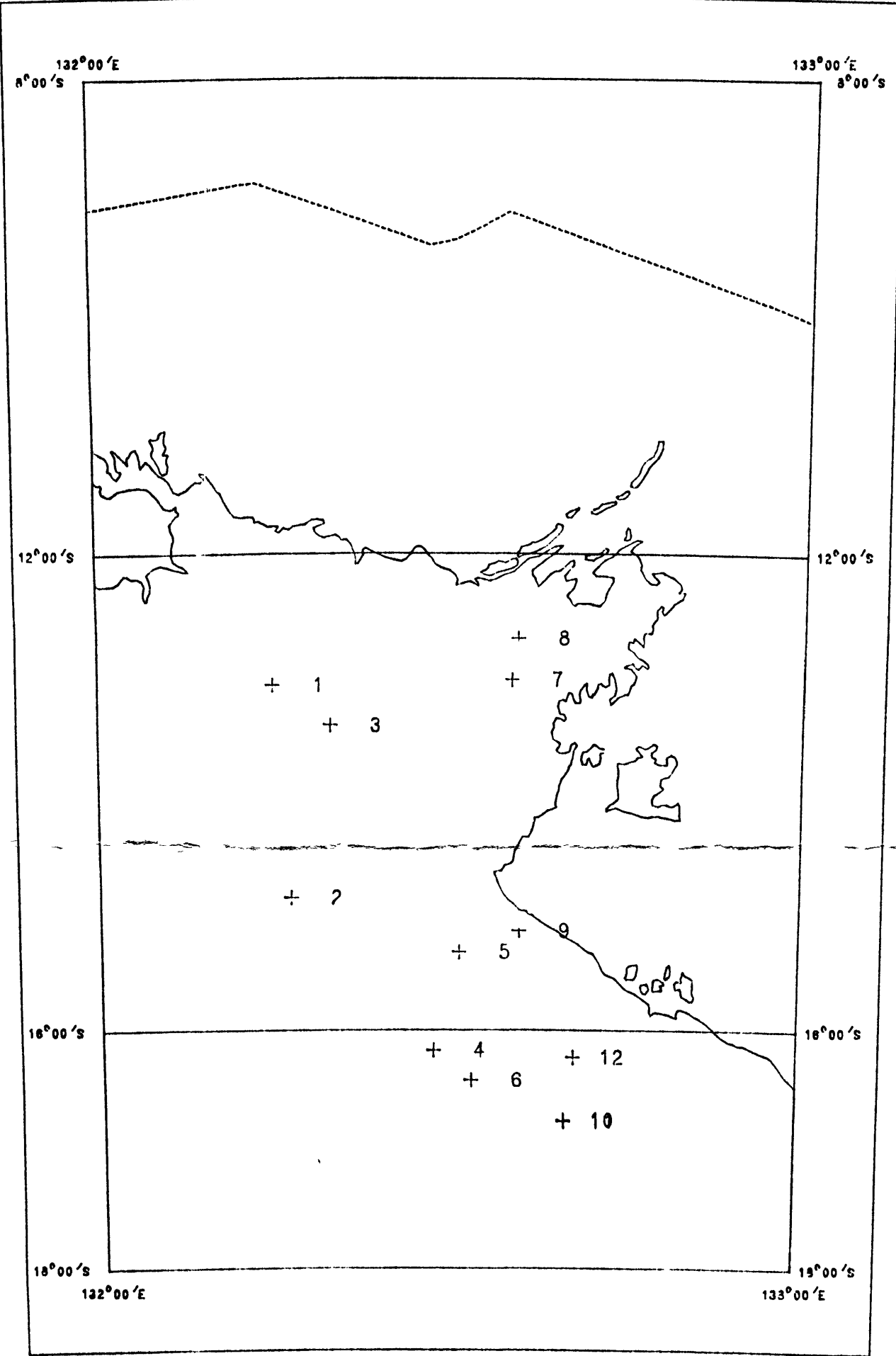
No.	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APPROX. AGE
1	8422-008	Northwestern Carrington Bas.	basaltic	Anderson	320-300	166
2	8422-008	Northwestern Carrington Bas.	basaltic	Anderson	320-300	201
3	8422-010	Northwestern Carrington Bas.	basaltic	Anderson	320-300	173
4	8322-125	Northwestern Carrington Bas.	basaltic	Grant	280-300	250
5	8322-126	Northwestern Carrington Bas.	basaltic	Grant	280-300	266
6	8322-128	Northwestern Carrington Bas.	basaltic	Grant	280-300	191
7	8322-088	Northwestern Carrington Bas.	basaltic	Grant	280-300	212
8	8322-090	Northwestern Carrington Bas.	basaltic	Grant	280-300	333
9	8322-094	Northwestern Carrington Bas.	basaltic	Grant	280-300	291
10	8322-095	Northwestern Carrington Bas.	basaltic	Grant	280-300	260
11	8322-093	Northwestern Carrington Bas.	basaltic	Grant	280-300	281
12	8322-092	Northwestern Carrington Bas.	basaltic	Grant	280-300	198
13	8322-096	Northwestern Carrington Bas.	basaltic	Grant	280-300	218
14	8322-098	Northwestern Carrington Bas.	basaltic	Grant	280-300	48
15	8422-012	Northwestern Carrington Bas.	basaltic	Grant	280-300	151
16	8422-013	Northwestern Carrington Bas.	basaltic	Grant	280-300	113
17	8422-013	Northwestern Carrington Bas.	basaltic	Grant	280-300	124
18	8422-016	Northwestern Carrington Bas.	basaltic	Grant	280-300	403
19	8422-019	Northwestern Carrington Bas.	basaltic	Grant	280-300	314
20	8422-023	Northwestern Carrington Bas.	basaltic	Grant	280-300	214
21	8422-024	Northwestern Carrington Bas.	basaltic	Grant	280-300	132
22	8422-021	Northwestern Carrington Bas.	basaltic	Grant	280-300	263
23	8422-018	Northwestern Carrington Bas.	basaltic	Grant	280-300	333
24	8422-001	Northwestern Carrington Bas.	basaltic	Grant	280-300	233
25	8422-002	Northwestern Carrington Bas.	basaltic	Grant	280-300	213
26	8422-003	Northwestern Carrington Bas.	basaltic	Grant	280-300	110
27	8422-004	Northwestern Carrington Bas.	basaltic	Grant	280-300	26
28	8422-008	Northwestern Carrington Bas.	basaltic	Grant	280-300	35
29	8663-031	Lennard Shelf - Kerriedia-1	basaltic	Grant	280-300	236
30	8663-033	Lennard Shelf - Kerriedia-1	basaltic	Grant	280-300	4
31	8663-034	Lennard Shelf - Kerriedia-1	basaltic	Grant	280-300	283
32	8422-029	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	269
33	8422-035	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	3
34	8522-085	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	284
35	8522-088	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	280
36	8522-090	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	259
37	8522-087	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	360
38	8422-036	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	362
39	8422-033	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	327
40	8422-030	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	284
41	8422-031	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	294
42	8422-033	Lennard Shelf - Vagor Pass	basaltic	Grant	280-300	273
43	8422-047	Lennard Shelf - Marlarie	basaltic	Grant	280-300	301
44	8522-082	Lennard Shelf - Marlarie	basaltic	Grant	280-300	252
45	8522-081	Lennard Shelf - Marlarie	basaltic	Grant	280-300	294
46	8410-042	Lennard Shelf - Korgorow	basaltic	Grant	280-300	313
47	8410-041	Lennard Shelf - B.illyara Dam	basaltic	Grant	280-300	317
48	8410-040	Lennard Shelf - McSherry Cap	basaltic	Grant	280-300	389
49	8410-028	Lennard Shelf - Fitzroy Cross	basaltic	Grant	280-300	432
50	8663-021	Lennard Shelf - Grevillea-1	basaltic	Grant	280-300	256
51	8663-024	Lennard Shelf - Grevillea-1	basaltic	Grant	280-300	147
52	8663-025	Lennard Shelf - Grevillea-1	basaltic	Grant	280-300	45
53	8663-026	Lennard Shelf - Grevillea-1	basaltic	Grant	280-300	296
54	8663-022	Lennard Shelf - Grevillea-1	basaltic	Grant	280-300	38
55	8663-023	Lennard Shelf - Grevillea-1	basaltic	Grant	280-300	319
56	8422-032	Lennard Shelf - P.illyara Range	basaltic	Grant	280-300	333
57	8522-084	Lennard Shelf - B.illyara Range	basaltic	Grant	280-300	336
58	8522-085	Lennard Shelf - B.illyara Range	basaltic	Grant	280-300	301
59	8522-083	Lennard Shelf - B.illyara Range	basaltic	Grant	280-300	301
60	8410-034	Lennard Shelf - Old Teepole Hill	basaltic	Grant	280-300	78
61	8410-039	Lennard Shelf - Old Teepole Hill	basaltic	Grant	280-300	318
62	8410-038	Lennard Shelf - Old Teepole Hill	basaltic	Grant	280-300	211
63	8410-037	Lennard Shelf - Old Teepole Hill	basaltic	Grant	280-300	48
64	8410-030	Lennard Shelf - Old Teepole Hill	basaltic	Grant	280-300	333



R9100208

McARTHUR FISSION AGE DATES

No	SAMPLE NMBFR	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	8322-080 R135-33/34	Mc Arthur Basin	sandstone	Kombolgie Formation	-	39
2	8422-027 BMR 83431068	Mc Arthur Basin	sandstone	"Roper Group, Corcoran Formation"	-	282
3	8322-082 BMR R12042	Mc Arthur Basin	sandstone	Gundl Graywacke	-	296
4	8422-026 BMR 83430145	Mc Arthur Basin	graywacke	"Roper Group, Limmen Sandstone"	-	302
5	8322-078 R98-81/87/89	Mc Arthur Basin	sandstone	Yiyiriji Sandstone	-	169
6	8422-025 BMR 83430133	Mc Arthur Basin	sandstone	"Roper Group, Bessie Creek Sandstone"	-	340
7	8322-078 R134-49/50/51	Mc Arthur Basin	sandstone	Sheridan Formation	-	233
8	8322-075 R126-37/R13442	Mc Arthur Basin	sandstone	Fagan Volcanics	-	284
9	8422-028 BMR 83430180	Mc Arthur Basin	tuff?	Yiyiriji Sandstone	-	307
10	8422-021 BMR 83430026	Mc Arthur Basin	sandstone	Bukalara Sandstone	-	272
11	8422-022 BMR 83430014	Mc Arthur Basin	sandstone	"Roper Group, base Abrer Sandstone"	-	320
12	8422-024 BMR 83430117	Mc Arthur Basin	sandstone	"Roper Group, Bessie Creek Sandstone"	-	341



Simple Conic Projection + 12pts FISSION DATA
Standard parallels
18° 00' S and 36° 00' S

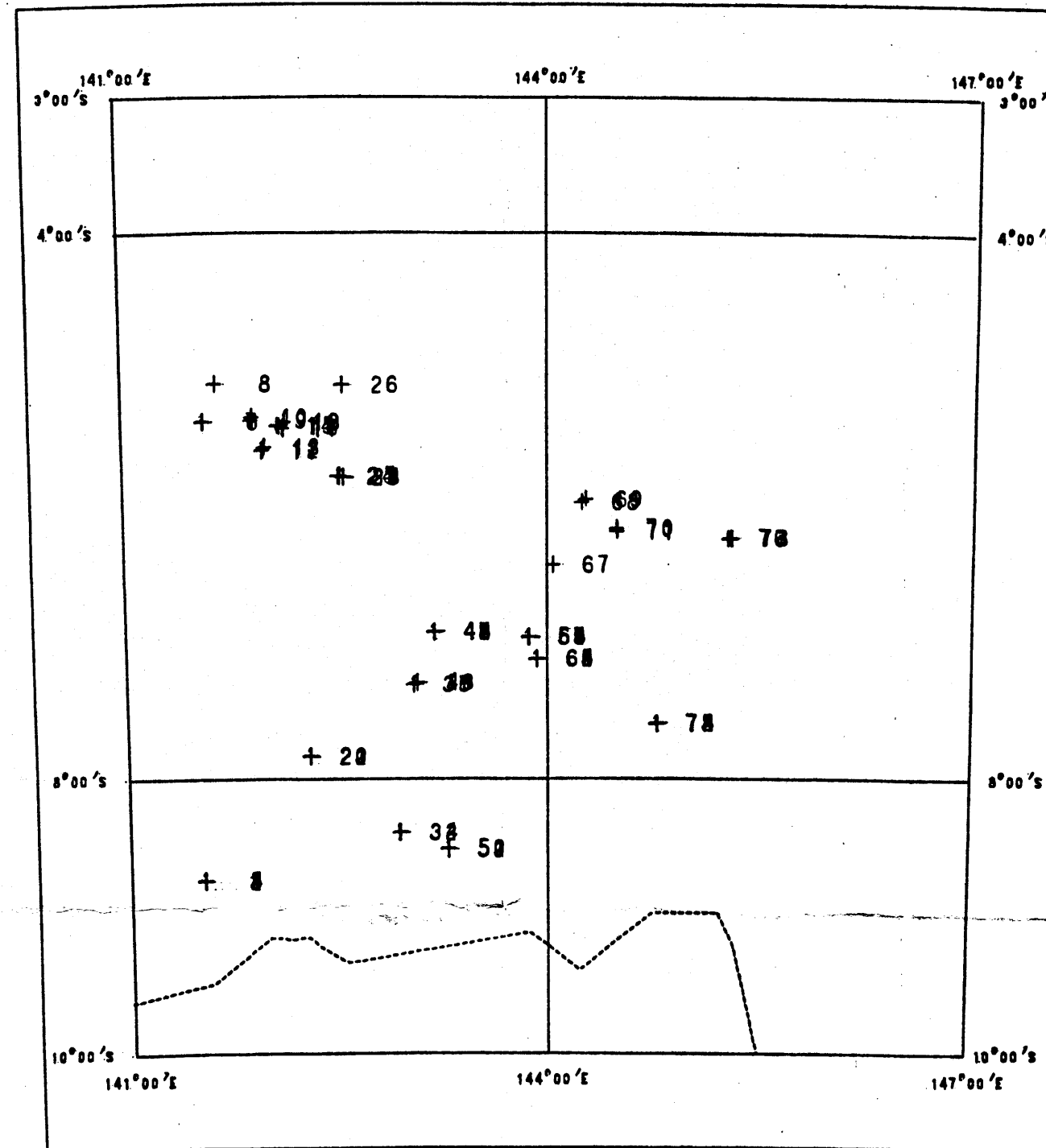
Enclosure 17

FissionTrack
Enclosure 17
McArthur
Sepia



P. N. G. FISSION AGE DATES

Fission Track
Enclosure 18
Papua New Guinea
Sepia.



Simple Conic Projection
Standard parallels
10°00'S and 36°00'S

+ 78pts. FISSION DATA

Enclosure 18

No.	SAMPLE NUMBER	LOCATION	ROCK TYPE	FORMATION	STRATIGRAPHIC AGE	APATITE AGE
1	R34874	"112m below base Darai, Morehead-1"	sandstone	Mendi Group	Middle to Late Eocene	115.4
2	R34876	"634m below base Darai, Morehead-1"	sandstone	Teru	Early to Late Cretaceous	88.2
3	R34875	"238m below base Darai, Morehead-1"	sandstone	Teru	Early to Late Cretaceous	138.2
4	R34878	"1391m below base Darai, Morehead-1"	arkosic sandstone	Koi-Iange	Middle to Late Jurassic	20.4
5	R34877	"899m below base Darai, Morehead-1"	sandstone	Teru	Early to Late Cretaceous	103.4
6	R34814	"Top of creek section, 450m above basement"	sandstone interbed in shale	Bol Arkose	Late Triassic? to Middle Jurassic	4
7	R34837	Est. 170m above granite bsmt	granite wash	Bol Arkose	Late Triassic? to Middle Jurassic	13.2
8	R34856	on Ok To. between Telefemil & Ellibiamin	granite wash	Top Toro	Late Jurassic to Early Cretaceous	11.1
9	R34831	718 30m below top Teru	sandstone	Teru Glera lbr	Early to Late Cretaceous	66.7
10	R34832	120 18m below top Teru	sandstone	Teru Halia lbr	Early to Late Cretaceous	81.4
11	R34835	690m from top Teru	sandstone	Teru Glera lbr	Early to Late Cretaceous	76.1
12	R34836	1235 20m from top Teru	sandstone	Base Toro	Late Jurassic to Early Cretaceous	78.7
13	R34833	1830 5m below top Teru	sandstone	Koi-Iange	Middle to Late Jurassic	10.8
14	R34808	"Base of Strickland Gorge section, 2300m below base Darai, AND 3'A, 3"	granite basement	Trilassic		3.8
15	R34812	1958m below base Darai	sandstone	Koi-Iange	Middle to Late Jurassic	2
16	R34813	1554m below base Darai	sandstone	Imburu	Late Jurassic	23.1
17	R34811	1078m below base Darai	sandstone	Teru	Late Jurassic to Early Cretaceous	9.9
18	R34809	424m below base Darai	sandstone	Teru	Early to Late Cretaceous	29.6
19	R34870	121m below base Darai	sandstone	Teru	Early to Late Cretaceous	54.3
20	R34871	"66m below base Darai, Aramic-1"	muddy sandstone	Base Toro	Early to Late Cretaceous	10.7
21	R34872	"632m below base Darai, Aramic-1"	sandstone	Granite basement	Late Jurassic to Early Cretaceous	147.4
22	R34873	"651m below base Darai, Aramic-1"	deeply weathered granite	Trilassic		29.4
23	R34872	"713m below base Darai, Aramic-1"	siltstone, sandstone & mudstone	Koi-Iange	Middle to Late Jurassic	184.8
24	R34854	120m below base Darai	sandstone	Teru Halia lbr	Early to Late Cretaceous	57
25	R34853	550m below base Darai	sandstone	Teru Glera lbr	Early to Late Cretaceous	5.5
26	R34855	850m below base Darai	sandstone	Toro	Late Jurassic to Early Cretaceous	2.5
27	R34898	Lavan-1	sandstone	Toro	Late Jurassic to Early Cretaceous	6.3
28	R34899	Lavan-1	sandstone	Toro	Late Jurassic to Early Cretaceous	14.2
29	R34900	Lavan-1	sandstone	Toro repeat?	Middle to Late Jurassic	18
30	R34902	Lavan-1	sandstone	Top Koi-Iange?	Late Triassic? to Middle Jurassic	7.7
31	R34901	Lavan-1	sandstone	Bol equi. silt ss	Middle to Late Jurassic	13.9
32	R34885	"364m below base Darai, Lamara-1"	sandstone	Koi-Iange (Magobu?)	Middle to Late Jurassic	128.8
33	R34886	"641m below base Darai, Lamara-1"	sandstone	Berikewa	Middle Jurassic	178
34	R34888	"896m below base Darai, Lamara-1"	sandstone	Magobu tuff	Late Triassic? to Middle Jurassic	110
35	R34862	"302m above base Darai, Kamewa-1"	pyroclastic tuff	Darai	Late Oligocene to Middle Miocene	102.4
36	R34863	"47m below base Darai, Kamewa-1"	volcanic tuff	Koi-Iange?	Middle to Late Jurassic	100.7
37	R34864	"353m below base Darai, Kamewa-1"	sandstone	Dacite lava basement	Trilassic	172.8
38	R34865	"30m below base Darai, Kamewa-2"	basalt lava flow	Top Teru	Early to Late Cretaceous	85
39	R34869	"1525m below base Darai, Kamewa-2"	sandstone & siltstone	Trilassic		117.6
40	R34867	"124m below base Darai, Kamewa-2"	pink granite basement	Top Toro	Middle to Late Jurassic	131.5
41	R34868	"255m below base Darai, Kamewa-2"	sandstone	Top Toro	Late Jurassic to Early Cretaceous	55.2
42	R34865	Olway Bas. "	sandstone	Lower Cretaceous		121
43	R34897	"3877m below base Darai, Kamewa-1"	sandstone	Kand volcanics	Late? Triassic	34.5
44	R349124	Olway Bas. "	sandstone	Olway Group	Upper Cretaceous	20
45	R349125	"Cape Portland, NE Tasmania"	trachyandesite	Olway Group	Upper Cretaceous	88
46	R34894	"833m below base Darai, Kamewa-1"	sandstone	Top Toro	Late Jurassic to Early Cretaceous	88.9
47	R34896	"2500m below base Darai, Kamewa-1"	sandstone	Bol Arkose	Late Triassic? to Middle Jurassic	78.9
48	R34895	"473m below base Darai, Kamewa-1"	sandstone	Koi-Iange	Middle to Late Jurassic	113.8
49	R34879	Olway Bas. "	sandstone	Olway Group	Upper Cretaceous	20
50	R34879	"15m above base Darai, Magobu Island-1"	limestone	Base Darai	Late Oligocene to Middle Miocene	65
51	R34883	"1635m below base Darai, Magobu Island-1"	dacite basement	Dacite basement	Trilassic	98
52	R34881	"823m below base Darai, Magobu Island-1"	sandstone	Koi-Iange	Middle to Late Jurassic	153.1
53	R34882	"1409m below base Darai, Magobu Island-1"	sandstone	Berikewa	Middle Jurassic	134.6
54	R34801	"264m below base Darai, Leki-1, core 18"	sandstone	Teru	Early to Late Cretaceous	104.1
55	R34807	"1300m below base Darai, Leki-1, core 48"	mudstone	Imburu?	Late Jurassic	142.1
56	R34808	"1000m below base Darai, Leki-1, core 41"	sandstone	Toro (repeat)	Late Jurassic to Early Cretaceous	71.7
57	R34803	"1020m below base Darai, Leki-1, core 34"	sandstone	Toro	Late Jurassic to Early Cretaceous	70.2
58	R34805	"811m below base Darai, Leki-1, core 42"	sandstone	Koi-Iange	Middle to Late Jurassic	59.1
59	R34804	"1316m below base Darai, Leki-1, core 37"	mudstone	Imburu?	Late Jurassic	115.6
60	R34802	"770m below base Darai, Leki-1, core 26"	sandstone	Toro	Late Jurassic to Early Cretaceous	59.1
61	R34816	"325m below base Darai, Berikewa-1, core 15"	sandstone	Teru	Early to Late Cretaceous	119.9
62	R34818	"874m below base Darai, Berikewa-1"	sandstone	Toro	Late Jurassic to Early Cretaceous	34.9
63	R34819	"1878m below base Darai, Berikewa-1"	sandstone	Koi-Iange	Middle to Late Jurassic	84.7
64	R34821	"3247m below base Darai, Berikewa-1"	arkose congl.	Bol Arkose	Late Triassic? to Middle Jurassic	1.5
65	R34820	"3246m below base Darai, Berikewa-1"	sandstone	Bol Arkose?	Late Triassic? to Middle Jurassic	44.1
66	R34817	"700m below base Darai, Berikewa-1"	sandstone	Top Toro	Late Jurassic to Early Cretaceous	63.6
67	R34852		sandstone	Chim (Pangia ss M32)	Late Cretaceous to Paleocene	37.2
68	R34826	300m above top basement	volcanic sandstone	Maril	Middle to Late Jurassic	18.1
69	R34824	"Near top basement, Wand Kuber anticline"	granite basement		Trilassic	3.9
70	R34827	3340m below top of section through Panduku Tuff and Maril Shale	gabbro			5.3
71	R34830	1500m below top of section through Panduku Tuff and Maril Shale	sandstone	Panduku Tuff	Early Cretaceous Aptian-Albian	87
72	R34889	"2403m above base limestone (Darai/Eocene), Iviri-1"	sandstone	Era Beds	Pliocene to Pleistocene	55.6
73	R34892	"314m above base limestone (Darai/Eocene), Iviri-1"	calcareous sandstone	Mendi Group	Middle to Late Eocene	84.1
74	R34893	"288m below base limestone (Darai/Eocene), Iviri-1"	interbedded sandstone & mudstone	Maril Shale	Middle to Late Jurassic	67.3
75	R34891	"1024m above base limestone (Darai/Eocene), Iviri-1"	mudstone	Orubadi Fm	Late Miocene to Pliocene	20.7
76	R34815	Base of 8000m Miocene sequence	tuffaceous sandstone	Yaveufa Fm (Auro Beds)	Late Oligocene to Late Miocene	33.2
77	R34823	5180m below top of Miocene tuff section	tuffs and lavas	Yaveufa Fm. (Auro Beds)	Late Oligocene to Late Miocene	13.9
78	R34822	4850m below top of Miocene tuff section	tuffs and lavas	Yaveufa Fm. (Auro Beds)	Late Oligocene to Late Miocene	15.2

