MICROFILMED
FICHE No. 013274-

EN FILE

94-3584

A list of transparencies from EL2/78 relinquished by Alcoa Australia and covering the Granite Tor Area.

Topographic Base	E29.79.01	1:40 000
Geology (Published) (x3)	E29.79.03	1:40 000
Proposed Field Work, 1978-79	E29.79.04	1:40 000
Aeromag Contours (x3)	E29.79.05	1:40 000
Areomag Flight Paths (x4)	E29.79.06	1:40 000
Stream Sediment Locations	E29.79.09	1:40 000
Stream Sediment Locations (Pickands-Mather)	E29.80.10	1:40 000
Flight Plans for Colour Photography (x2)	E29.79.11	1:40 000
Tin Anomalies and Proposed Work, 1979-80	E29.79.14	1:40 000
Fluorine in Stream Water	E29.79.15	1:40 000
Stream Sediment Geochem, Tin (Fine)	E29.79.16	1:40 000
" " " Normalised Tin (Fine)	E29.79.17	1:40 000
" " " Tungsten (Fine)	E29.79.18	1:40 000
" " " Normalised Tungsten (Fine)	E29.79.19	1:40 000
" " " Tin (Coarse)	E29.79.20	1:40 000
" " " Normalised Tin (Coarse)	E29.79.21	1:40 000
" " " Tungsten (Coarse)	E29.79.22	1:40 000
" " " Normalised Tungsten (Coarse)	E29.79.23	1:40 000
" " " Equivalent Number of Cassiterite Grains (Fine)		1:40 000 E29.79.24
" " " Copper (Fine)	E29.9.25	1:40 000
" " " Lithium (Fine)	E29.79.26	1:40 000
" " " Lead (Fine)	E29.79.27	1:40 000
" " " Zinc (Fine)	E29.79.28	1:40 000
" " " Calcium (Fine)	E29.79.29	1:40 000
Grid Locations	E29.79.30	1:40 000
Photogeology (x2)	E29.79.32 +.31	1:43 450
Photogeology, Granite Tor Batholith (x2)	E29.79.33	1:22 150
Photogeology (x2)	E29.80.34	1:40 000
Geology, Sophia Sheet	E29.79.35	1:100 000
Aeromag Stacked Profiles, Lines 10-120	E29.80.37	1:40 000
" " " Lines 120-235	E29.80.38	1:40 000
" " " Lines 235-345	E29.80.39	1:40 000
" " " Lines 345-440	E29.80.40	1:40 000
" " " Lines 440-560	E29.80.41	1:40 000
" " " Lines 560-680	E29.80.42	1:40 000

Aeromag Stacked Profiles, Lines 680-800	E29.80.43	1:40 000
" " " Lines 800-980	E29.80.44	1:40 000
" " " Lines 9010-9050	E29.80.45	1:40 000
Aeromag Contours, Sheet 1	E29.80.46	1:20 000
" " Sheet 2	E29.80.47	1:20 000
" " Sheet 3	E29.80.48	1:20 000
" " Sheet 4	E29.80.49	1:20 000
" " Sheet 5	E29.80.50	1:20 000
" " Sheet 6	E29.80.51	1:20 000
" " Sheet 7	E29.80.52	1:20 000
" " Sheet 8	E29.80.53	1:20 000
Aeromag Contours, Sheet 1	E29.80.54	1:10 000
" " Sheet 2	E29.80.55	1:10 000
" " Sheet 3	E29.80.56	1:10 000
" " Sheet 4	E29.80.57	1:10 000
" " Sheet 5	E29.80.58	1:10 000
" " Sheet 6	E29.80.59	1:10 000
" " Sheet 7	E29.80.60	1:10 000
" " Sheet 8	E29.80.61	1:10 000
Tasmania, Mineral Deposits	E29.80.66	1:500 000
Tasmania, General Geology	E29.80.67	1:500 000
Bluff Grid, Soil Sample and Magnetometer Traverses	E29.80.73	1:5 000
Swallow Grid, Soil Sample and Magnetometer Traverses	E29.80.74	1:5 000

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

3

E29.79.01

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN I

TOPOGRAPHIC BASE PLAN

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

Contour interval — 50 feet

5/59 — photo centre, run/frame
[ref. Conical Rocks - Sophia F 423 1974-1975]

— Boundary of E.L. 2/78

5 cm

Compiled dy: HEC, Tasmania
Peter Livings & Assoc.
D. Speijers

145°40'

145°50'

41°30'

41°40'

41°50'

CRADLE MT. LAKE ST. CLAIR NATIONAL PARK

TULLAH

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.79.03

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN II A

PLAN SHOWING PUBLISHED GEOLOGY

5 cm

Scale 1:40 000

0·5 0 0·5 1·0 1·5 2·0 kms

LEGEND

CENOZOIC
- Holocene alluvium, sand, gravel, talus
- Pleistocene glacials
- Tertiary basalts etc

- Triassic, Permian & Upper Carboniferous assorted fresh water, marine & glacial sediments
- Lower Devonian quartzwacke sequence

ORDOVICIAN
- Gordon Limestone
- Owen Conglomerate with marine quartzwacke & siltstone

CAMBRIAN
- Shallow water deposits (Upper Cambrian)
- Greywacke turbidite sequences (Middle to Upper Cambrian)
- Mainly acid & intermediate volcanics (Middle to Upper Cambrian)
- Greywacke turbidites
- Orthoquartzite sequence

PRECAMBRIAN
- Pelitic sequences
- Metaquartzite sequences
- Undifferentiated

INTRUSIVES
- Jurassic dolerite
- Upper Devonian granite & adamellite
- Cambrian granitic rocks

- Geological boundary
- Fault
- Syncline, anticline hinge line with plunge
- General strike & dip of beds, vertical, horizontal, overturned
- General strike & dip of beds, facing unknown
- Strike & dip of igneous banding, vertical
- General strike & dip of cleavage
- General strike & dip of metamorphic foliation
- Minor fold hinge line with plunge
- Site of old mining activities

Compiled by: D. Speijers

145° 40'
145° 50'
41° 30'
41° 40'
41° 50'

CRADLE MT - LAKE ST CLAIR NATIONAL PARK

CRADLE MT - LAKE ST CLAIR NATIONAL PARK

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.79.04

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN III

PROPOSED FIELD WORK FOR 1978-9 SEASON

Scale 1:40 000

0·5 0 0·5 1·0 1·5 2·0 kms

Note: This is an overlay to the topographic base plan.

o Proposed stream sediment sample points

Ⓖ Magnetic anomalies scheduled for ground examination

5 cm

Compiled by: D. Speijers

145° 40'

145° 50'

41° 30'

41° 40'

41° 50'

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E28/78-05

145°40'

145°50'

41°30'

41°40'

41°50'

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN IV

AIRBORNE MAGNETIC SURVEY
TOTAL INTENSITY CONTOUR PLAN

Scale 1 : 40 000

0·5 0 0·5 1·0 1·5 2·0 kms

Note 1. This is an overlay to the topographic base plan.

2. The data has been adjusted for diurnal variation with an adopted value of 62626 gammas at the diurnal base at H.E.C. base camp heliport 41°44'30"S & 145°37'20"E. The sensor height was 3 metres. The datum for the total magnetic intensity contours is the International Grid Reference Field 1978·3

SURVEY SPECIFICATIONS

Aircraft	Bell 206 B Helicopter
Magnetometer	Varian 4937A Proton Precession using towed bird configuration with 30 metre cable
Radiometric System	McPhar AV4 Radiation Spectrometer with 3·7 litres NaI crystal & Cs 137 reference.
Diurnal Recorder	Geometrics G826 Recording Base Station.
Altimeter	Bonzer Mk 10
Ancilliary Equipment	Geoex Intervalometer Geoex Film Digital Recorder Century 444 6 channel analogue light beam recorder Vinten 16mm ground tracking camera
Reading Interval	1·0 seconds
Nominal Aircraft Speed	65 knots
Nominal Aircraft Survey Altitude	150 metres ie 135m sensor clearance
Nominal Flight Line Spacings	400metres & 200 metres
Time of Survey	March 1978
Contractor	Geoex Pty Ltd
Navigator	J. McDougall
Project Geologist	D. Speijers

5 cm

E29-79-08

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN V

AIRBORNE MAGNETIC SURVEY
FLIGHT LINE PLOT

Scale 1 : 40 000

0·5 0 0·5 1·0 1·5 2·0kms

Recovered fiducial point

5 cm

Compiled by D Speijers

145°30'
41°30'
41°40'
41°50'
145°40'
145°50'

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.79.09

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN VIII

PICKANDS-MATHER
STREAM SEDIMENT SAMPLE POINTS

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L. 2/78

671512 Stream sediment sample point

NOTE
No analyses for sample numbers
671527
683008
683022 to 683040
778439 to 778449
785151

145°07'
145°30'
41°30'
41°40'
41°50'

E29.79.10

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

TASMANIA

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN IX

PICKANDS-MATHER
STREAM SEDIMENT VALUES

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L. 2/78

Stream sediment sample point

41°30'

41°40'

41°50'

145°40'

145°50'

+ 346·3 + 461·9
+ 462·2
+ 345·9

E29.79.11

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN X

FLIGHT LINE PLAN FOR
1979 COLOUR PHOTOGRAPHY

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0kms

LEGEND

Boundary of E.L. 2/78

o063 Photo centre

145°40'
145°50'
41°30'
41°40'
41°50'

Run 1A 002 003 004 005 006 007 008 009 010 011 012 013 014 015
Run 1 007 008 009 010 011 012 013 014 015
Run 2 032 031 030 029 028 027 026 025 024 023 022 021 020 019 018 017
Run 3 034 035 036 037 038 039 040 041 042 043 044 045 046 047
Run 4 099 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114
Run 4A 1299 128 127 126 125 124 123 122 121 120 119 118 117 116
Run 5 071 073 072 074 075 076 077 078 079 080 081 082 083 084 085 086
Run 6 098 097 096 095 094 093 092 091 090 089 088 087
Run 7 989 990 991 992 993 994 995 996 997 998 999 000 001
Run 8 070 069 068 067 066 065 064 063 062 061 060 059 058

E29.79.14

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XIII

TIN ANOMALIES AND AREAS PROPOSED FOR GRIDDING IN 1979-80 SEASON

5 cm

Scale 1:40 000

0 0.5 1.0 1.5 2.0 kms

- Boundary of E.L. 2/78
- Area in which gridding may be required
- Forested areas where minimal line clearing may be required for gridding
- Sn/Cu — Catchment area anomalous in tin with associated anomalous elements

145°40'
145°50'
41°30'
41°40'
41°50'

5 400 050mN 401 000mE
5 400 050mN 407 400mE
5 394 500mN 401 000mE
5 385 190mN 390 195mE
392 940mE
405 000mE
5 377 845mN 387 310mE
390 195mE
5 376 050mN 390 365mE
5 370 450mN 388 080mE
390 365mE
5 368 710mN 387 870mE
390 800mE
5 364 700mN 389 635mE
5 364 700mN

CRADLE MT - LAKE ST CLAIR NATIONAL PARK

(SWALLOW GRID) Area B

(ALEXANDER AREA) Area C

(BLUFF GRID) Area A

Sn/W/Cu
Sn/W/Cu/Zn
Sn
Sn/W/Pb/Zn
Sn/Cu
Sn/Zn
Sn/Cu
Sn/Cu
Sn
Sn
Sn/W
Sn/Pb
Sn/Cu/Zn
Sn/W
Sn/W
Sn/W
Sn/W/Li
W/Li
Sn
Sn/W/Cu
Sn/W
Sn
Sn/W
Sn/W
Sn/W
Sn/W
Sn/Cu
Sn/Cu
Sn/W
Sn/W
Sn/W
Sn/W
Sn/Cu
Sn/Cu

E29.79.15

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

12

TASMANIA

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XIV

FLOURINE IN STREAM WATERS

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0kms

LEGEND

Boundary of E.L 2/78

o41 Fluorine in parts per billion

Note: Analysis was by specific ion electrode

145°40'

145°50'

41°30'

41°40'

41°50'

E29-TM-15

E29.79.16

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

13

E29.79.16

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XV

STREAM SEDIMENT VALUES
TIN (FINE)

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note: Tin Content of Heavy Minerals in -355 µm Fraction

145°40'

145°50'

41°30'

41°40'

41°50'

E29.79.17

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29-79-17

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XVI

STREAM SEDIMENT VALUES
NORMALISED TIN (FINE)

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note Tin Content of Heavy Minerals in -355 µm Fraction Normalised for Whole Sample

145°40'

145°50'

41°30'

41°40'

41°50'

E29.79.18

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XVII

STREAM SEDIMENT VALUES
TUNGSTEN (FINE)

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note: Tungsten Content of Heavy Minerals in -355 µm Fraction

145°07'

145°50'

41°30'

41°40'

41°50'

E29.79.19

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XVIII

STREAM SEDIMENT VALUES
NORMALISED TUNGSTEN (FINE)

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note : Tungsten Content of Heavy Minerals in -355µm Fraction Normalised for Whole Sample

145°30'

41°30'

41°40'

41°50'

E29.79.20

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29-79-20

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XIX

STREAM SEDIMENT VALUES
TIN (COARSE)

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note Tin Content of Heavy Minerals in -1000 + 355 µm Fraction

145°40'

145°50'

41°30'

41°40'

41°50'

E29.79.21

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29-79-21

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XX

STREAM SEDIMENT VALUES
NORMALISED TIN (COARSE)

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note: Tin Content of Heavy Minerals in -1000 + 355 µm Fraction Normalised for Whole Sample

145°40'

145°50'

41°30'

41°40'

41°50'

E29.79.22

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29-79-22

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XXI

STREAM SEDIMENT VALUES
TUNGSTEN (COARSE)

5 cm

Scale 1 : 40 000

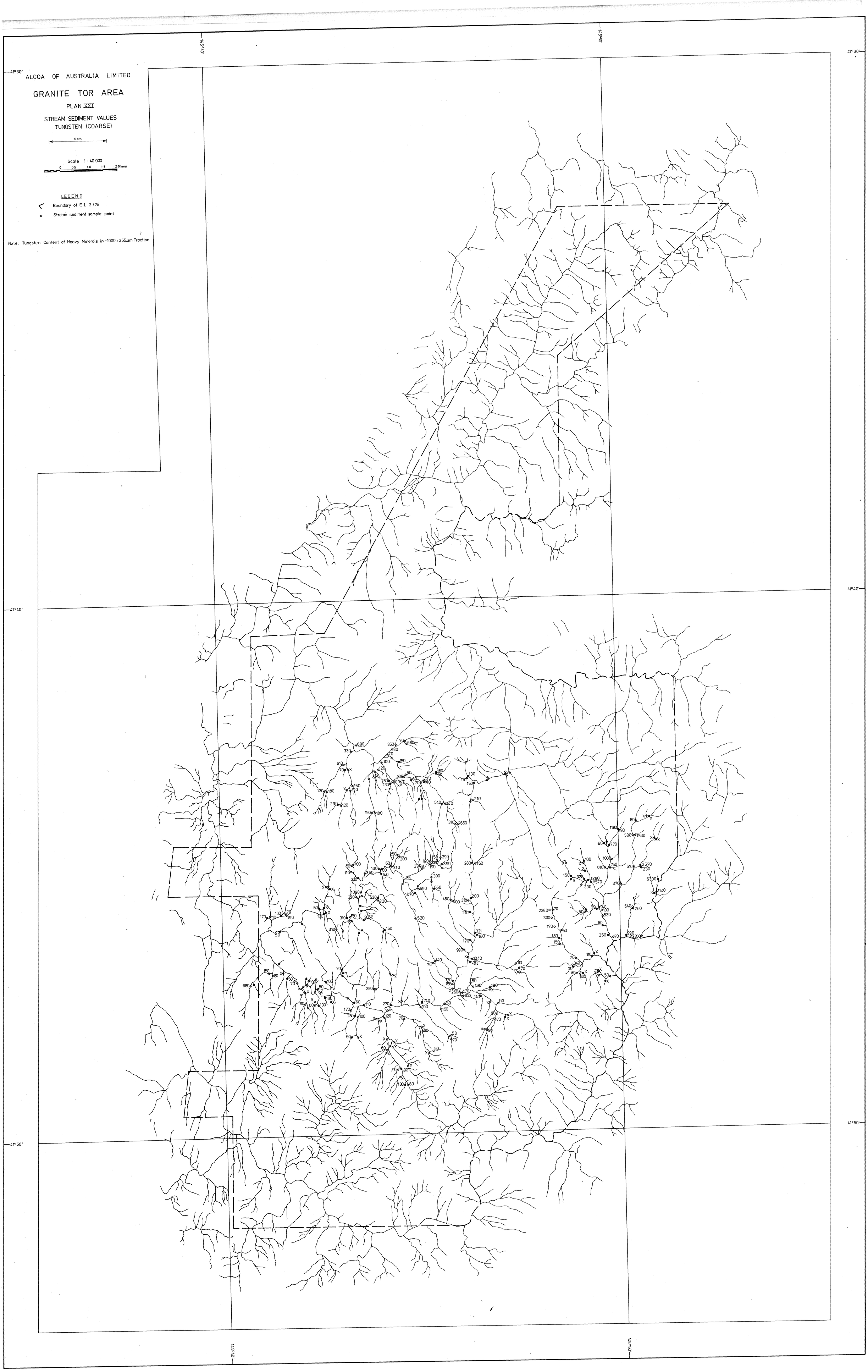
0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note: Tungsten Content of Heavy Minerals in -1000 + 355µm Fraction



E29.79.23

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XXII

STREAM SEDIMENT VALUES
NORMALISED TUNGSTEN (COARSE)

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note: Tungsten Content of Heavy Minerals in -1000 + 355µm Fraction Normalised for Whole Sample

145°40'
145°50'
41°30'
41°40'
41°50'

E29.79.24

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

21

E29-79-24

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XXIII

STREAM SEDIMENT VALUES
EQUIVALENT NUMBER OF
CASSITERITE GRAINS (FINE)

5 cm

Scale 1 : 40 000

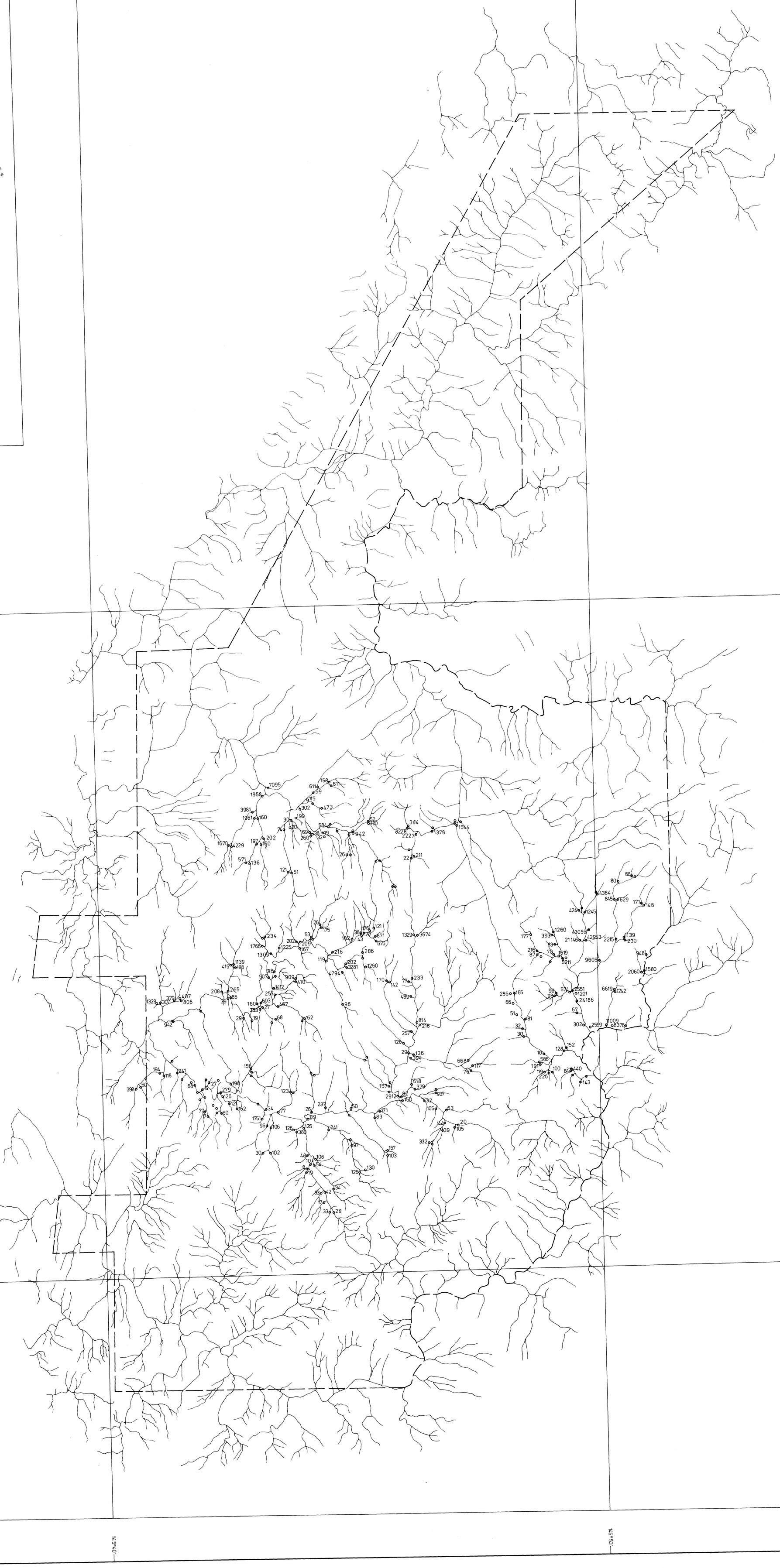
0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note: The number of cassiterite grains equivalent to the tin analysis assuming that all tin occurs as cassiterite. An average particle diameter of 150 µm is assumed from microscopic examination of heavy mineral separates in the -355 µm fraction of stream sediment.



E29. 9.25

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XXIV

STREAM SEDIMENT VALUES
COPPER (FINE)

5 cm

Scale 1 : 40 000

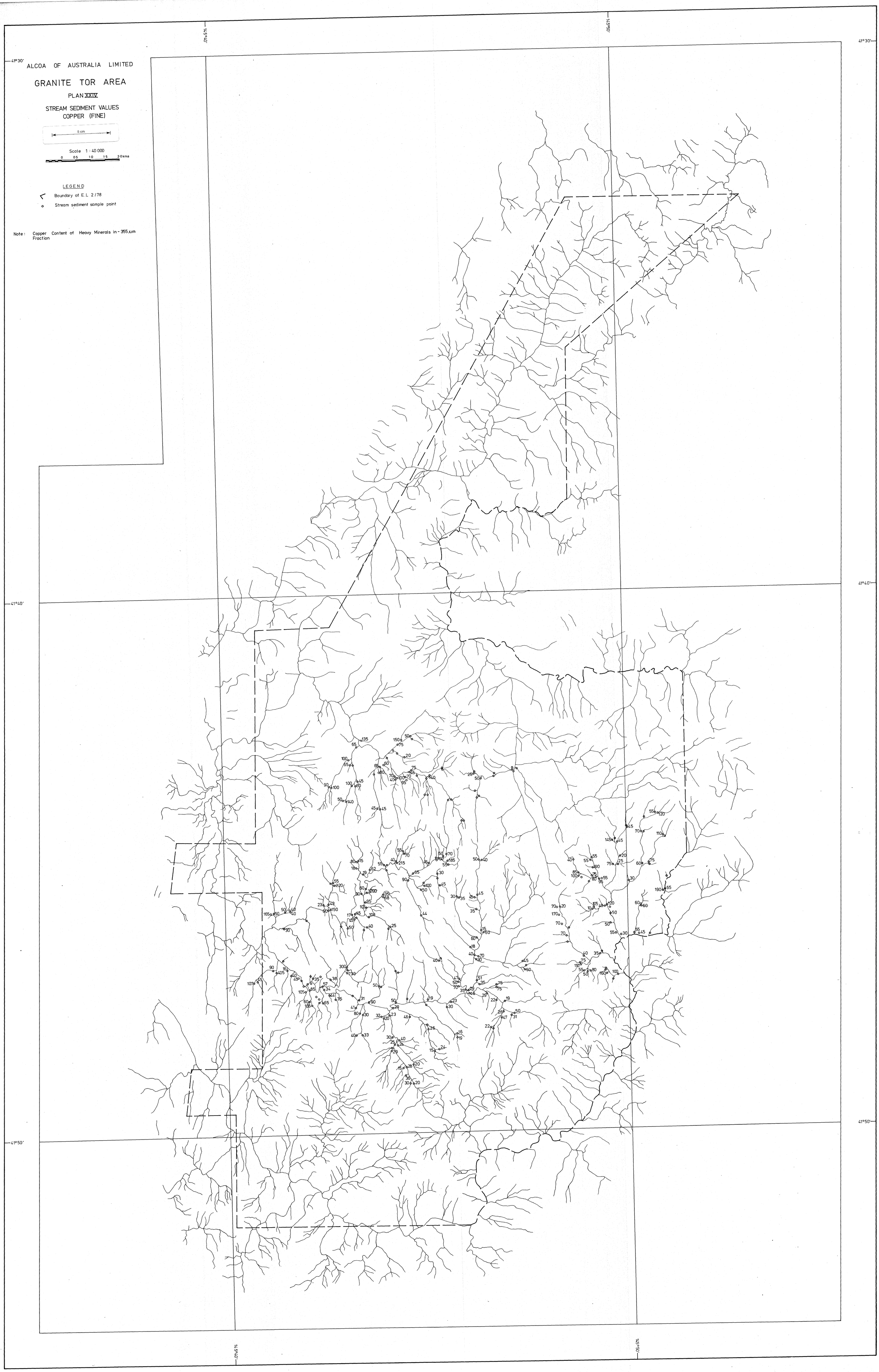
0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note: Copper Content of Heavy Minerals in - 355 µm Fraction



E29.79.26

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29-79-26

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XXV

STREAM SEDIMENT VALUES
LITHIUM (FINE)

5 cm

Scale 1 : 40 000

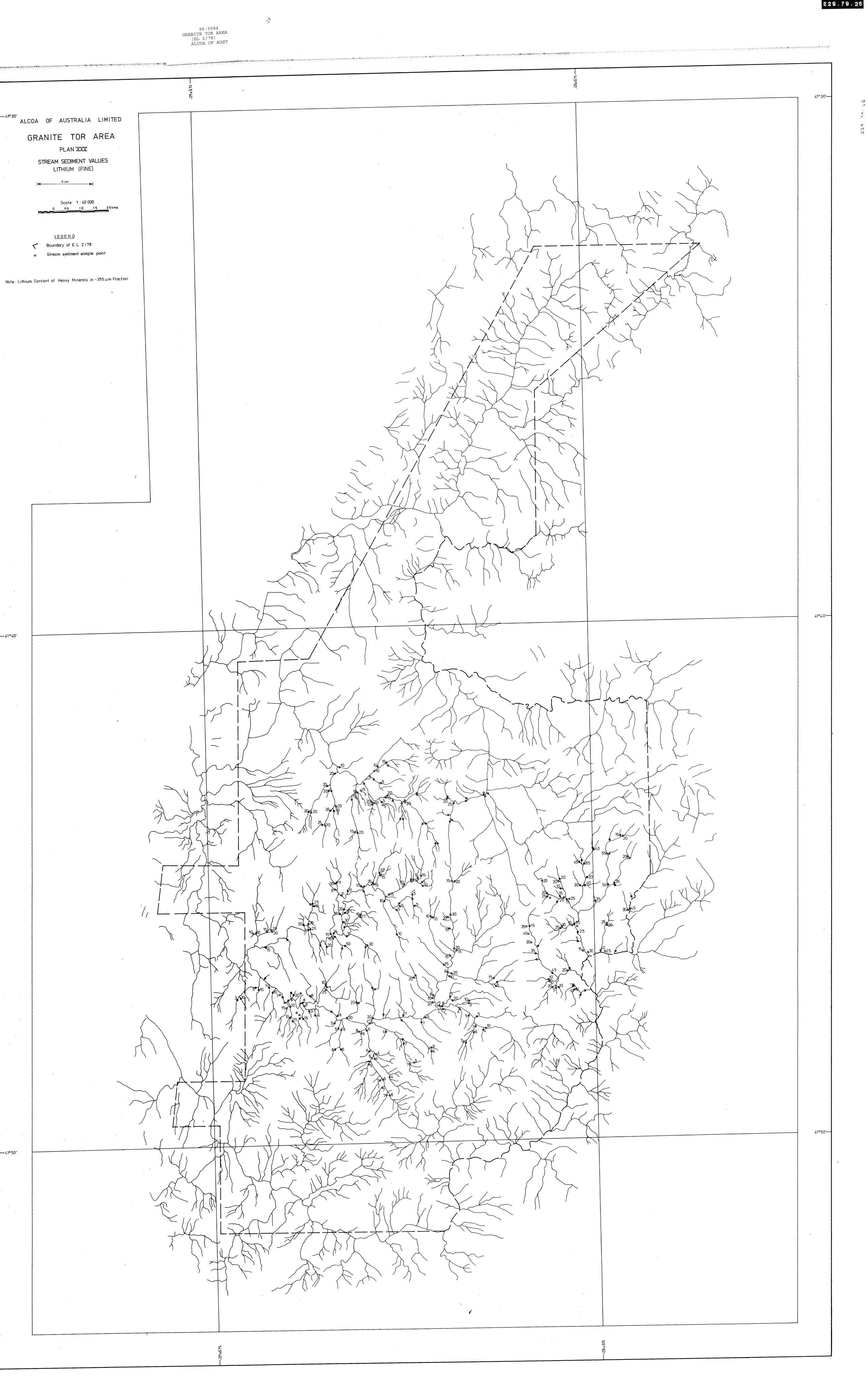
0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note : Lithium Content of Heavy Minerals in -355 µm Fraction



E29.79.27

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XXVI

STREAM SEDIMENT VALUES
LEAD (FINE)

5 cm

Scale 1 : 40 000

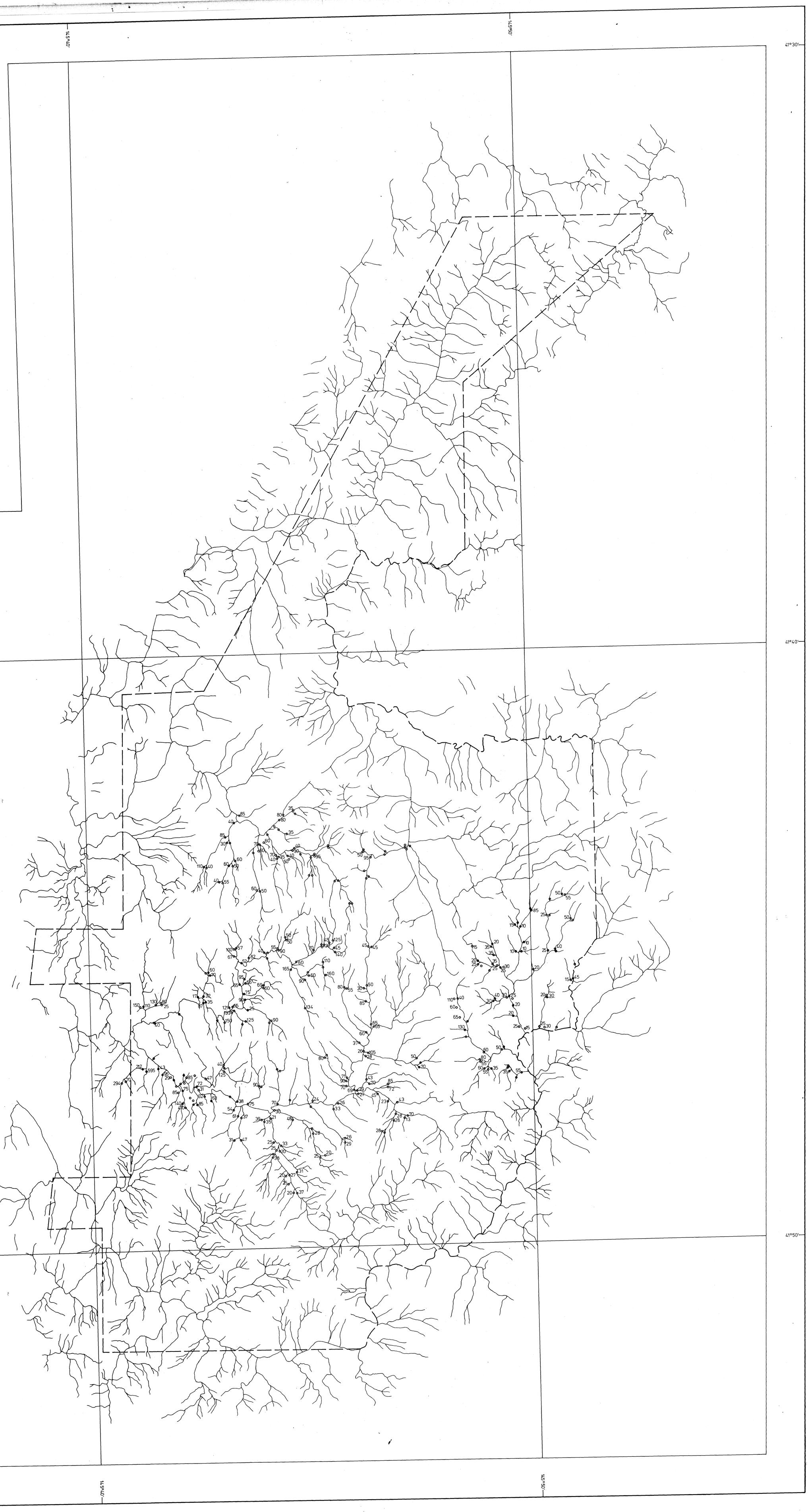
0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note Lead Content of Heavy Minerals in -355 um Fraction



E29.79.28

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

35

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XXVII

STREAM SEDIMENT VALUES
ZINC (FINE)

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note: Zinc Content of Heavy Minerals in -355 µm Fraction

E29-79-28

145°40'
145°50'
41°30'
41°40'
41°50'

E29.79.29

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XXVIII

STREAM SEDIMENT VALUES
CALCIUM (FINE)

5 cm

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

LEGEND

Boundary of E.L 2/78

Stream sediment sample point

Note: Calcium Content of Heavy Minerals in -355 µm Fraction

145°40'

145°50'

41°30'

41°40'

41°50'

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

27

E29.79.30

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

PLAN XXIX

TOPOGRAPHIC BASE PLAN

SHOWING LOCATION OF GRIDS

Scale 1 : 40 000

0 0·5 1·0 1·5 2·0 kms

Contour interval — 50 feet

5/59 — photo centre, run/frame
[ref. Conical Rocks - Sophia F423 1974-1975]

— Boundary of E.L. 2/78

5 cm

AMG REFERENCE POINTS ADDED

Compiled dy: HEC, Tasmania
Peter Livings & Assoc.
D. Speijers

SWALLOW GRID

BLUFF GRID

TULLAH

AMG 402600E, 5405000N

AMG 389300E, 5367000N

145°40'

145°50'

41°30'

41°40'

41°50'

GA 55/79
Granite Tor,
(Alcoa) Worksheet

Photoscale
Final Worksheet
Geology

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.79.31

GRANITE TOR AREA
WESTERN TASMANIA

Undertaken on behalf of Alcoa of Australia Limited
by Hunting Geology and Geophysics Australia Pty. Limited
Canberra, October 1979
Job No. GA 55/79

This photogeological map was compiled from a study of 40 black and white aerial photographs at the nominal scale of 1:36 520. The annotation took approximately 17 days. One day was spent in the field during September 1979. The drainage base was photographically reduced to photoscale from a base map supplied by Alcoa.

145°40' 145°50' 41°40' 41°50'

SEDIMENTARY ROCKS

QUATERNARY
- Qra — alluvium
- Qs — old alluvium, soil, gravels
- Qg — Qf — fluvioglacials; Qm — moraine
- Qt — talus, scree

TERTIARY
- Ts — soil and gravel

PERMIAN
- P — Pmi — Mt. Inglis Sandstone
- P — Pwv — Waterfall Valley Siltstone
- P — Pbp — Benson Peak Sandstone
- P — Pcc — Cradle Cirque Siltstone
- P — Plh — Lake Holmes Coal Measures
- P — Plw — Lake Will Pebbly Siltstone
- Pb — Pbb — Barn Bluff Conglomerate
- Pb — Pbr — Bluff River Pebbly Siltstone

SILURIAN
- Soc — siltstone (≡ Austral Creek Siltstone)
- Sk — quartzite (≡ Keel Quartzite)
- Sa — fossiliferous shale (≈ Amber Slate)
- Sc — quartzite (≡ Crotty Quartzite)

ORDOVICIAN
- Og — Gordon Limestone
- Oo — Owen Conglomerate (undifferentiated)

CAMBRIAN
- €mr-s — sedimentary horizons within Mt. Read Volcanics. (probable basal and peripheral unit)

PRE-CAMBRIAN
- pE — -q — quartzite and platy quartzite (and minor pelites)
- pE — -pe — pelitic phyllite and mica schist (and minor quartzite)
- pE — -q/pe — interbedded pelitic phyllite, mica schist and quartzite, (pE = undifferentiated)

IGNEOUS ROCKS

TERTIARY
- Tb — basalt

UPPER DEVONIAN — GRANITE TOR
- Dg-gr — possible greisen or altered granite
- Dg-gc — "contaminated" granite
- Dg-gm — moderately altered granite
- Dg-g — porphyritic muscovite (biotite) granite
- Dg-ag — transitional granite/adamellite — GRANITE
- Dg-a — porphyritic muscovite (biotite) adamellite
- Dg — undifferentiated granitoid rocks

CAMBRIAN — MURCHISON VOLCANICS
- Ep — quartz porphyry, quartz feldspar porphyry extrusives
- Ep-d — "darwin-type" rhyolite — MURCHISON VOLCANICS
- Egm — intrusive quartz and quartz-feldspar porphyry (intrusive phase of Ep) — MURCHISON GRANITE

MT. READ VOLCANICS
- €mr — undifferentiated (sediments)
- €mr-p — quartz and quartz-feldspar porphyry
- €g — granite (intrusive phase of €mr-p) — probably contemporaneous and equivalent to Murchison Volcanics and Granite.

vegetation anomaly

LINEWORK SYMBOLS

- geological boundary - definite
- geological boundary - probable
- geological boundary - superficial
- bedding trend
- fault showing movement
- probable fault
- fracture
- joint
- shear
- anticline with plunge
- syncline with plunge
- overturned anticline
- bedding - horizontal
- bedding - dip < 5°
- bedding - dip 5-15°
- bedding - dip 15-30°
- bedding - dip 30-60°
- bedding - dip >60°
- bedding - vertical
- bedding - overturned
- slope of moraine - gentle
- slope of moraine - steep
- dyke
- river and creek
- sealed road
- vehicle track
- foot track
- △ 906 m — trig. point plus height in metres
- 5|58 — photo centre, run and number (CONICAL ROCKS Series)
- mine or prospect

National Park boundary

CRADLE MT. - LAKE ST. CLAIR NATIONAL PARK

calc-silicates reported from these areas.

Note: this fold may be an anticline. Photo evidence inconclusive

CRADLE MT. - LAKE ST. CLAIR NATIONAL PARK

E29.79.32

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

GRANITE TOR AREA
WESTERN TASMANIA

Undertaken on behalf of Alcoa of Australia Limited
by Hunting Geology and Geophysics Australia Pty. Limited
Canberra, October 1979
Job No. GA 55/79

This photogeological map was compiled from a study of 40 black and white aerial photographs at the nominal scale of 1:43 450. The annotation took approximately 17 days. One day was spent in the field during September 1979. The drainage base was photographically reduced to photoscale from a base map supplied by Alcoa.

5 cm

145°40' 145°50' 41°40' 41°50'

SEDIMENTARY ROCKS

QUATERNARY
- Qra — alluvium
- Qs — old alluvium, soil, gravels
- Qg — Qf — fluvioglacials; Qm — moraine
- Qt — talus, scree

TERTIARY
- Ts — soil and gravel

PERMIAN
- P — Pmi — Mt. Inglis Sandstone
- P — Pwv — Waterfall Valley Siltstone
- P — Pbp — Benson Peak Sandstone
- P — Pcc — Cradle Cirque Siltstone
- P — Plh — Lake Holmes Coal Measures
- P — Plw — Lake Will Pebbly Siltstone
- Pb — Pbb — Barn Bluff Conglomerate
- Pb — Pbr — Bluff River Pebbly Siltstone

SILURIAN
- Sac — siltstone (≡ Austral Creek Siltstone)
- Sk — quartzite (≡ Keel Quartzite)
- Sa — fossiliferous shale (≡ Amber Slate)
- Sc — quartzite (≡ Crotty Quartzite)

ORDOVICIAN
- Og — Gordon Limestone
- Oo — Owen Conglomerate (undifferentiated)

CAMBRIAN
- Emr-s — sedimentary horizons within Mt. Read Volcanics. (probable basal and peripheral unit)

PRE – CAMBRIAN
- pЄ — -q — quartzite and platy quartzite (and minor pelites)
- pЄ — -ps — pelitic phyllite and mica schist (and minor quartzite)
- pЄ — -q/ps — interbedded pelitic phyllite, mica schist and quartzite, (pЄ = undifferentiated)

IGNEOUS ROCKS

TERTIARY
- Tb — basalt

UPPER DEVONIAN — GRANITE TOR GRANITE
- Dg-gr — possible greisen or altered granite
- Dg-gc — "contaminated" granite
- Dg-gm — moderately altered granite
- Dg-g — porphyritic muscovite (biotite) granite
- Dg-ag — transitional granite / adamellite
- Dg-a — porphyritic muscovite (biotite) adamellite
- Dg — undifferentiated granitoid rocks

CAMBRIAN — MT. READ VOLCANICS
- Єp — quartz porphyry, quartz feldspar porphyry extrusives — MURCHISON VOLCANICS
- Єp-d — "darwin-type" rhyolite — MURCHISON VOLCANICS
- Єgm — intrusive quartz and quartz-feldspar porphyry (intrusive phase of Єp) — MURCHISON GRANITE
- Emr-s — undifferentiated (sediments) — probably contemporaneous and equivalent to Murchison Volcanics and Granite.
- Emr-p — quartz and quartz-feldspar porphyry
- Єg — granite (intrusive phase of Emr-p)

vegetation anomaly

LINEWORK SYMBOLS

- geological boundary – definite
- geological boundary – probable
- geological boundary – superficial
- bedding trend
- fault showing movement (u / p)
- probable fault
- fracture
- joint
- shear
- anticline with plunge
- syncline with plunge
- overturned anticline
- bedding – horizontal
- bedding – dip < 5°
- bedding – dip 5–15°
- bedding – dip 15–30°
- bedding – dip 30–60°
- bedding – dip >60°
- bedding – vertical
- bedding – overturned
- slope of moraine – gentle
- slope of moraine – steep
- dyke
- river and creek
- sealed road
- vehicle track
- foot track
- △ 406 m — trig. point plus height in metres
- 5 | 58 — photo centre, run and number (CONICAL ROCKS Series)
- mine or prospect

National Park boundary

CRADLE MT. – LAKE ST. CLAIR NATIONAL PARK

calc-silicates reported from these areas.

Note: this fold may be an anticline. Photo evidence inconclusive

CRADLE MT. – LAKE ST. CLAIR NATIONAL PARK

PHOTOGEOLOGICAL WORKSHEET OF THE

GRANITE TOR BATHOLITH

WESTERN TASMANIA

Scale (approx) 1 : 22 150

0 0·5 1·0 1·5 2·0 kms

145°40' 145°50' 41°40' 41°50'

LEGEND

SEDIMENTARY ROCKS

QUATERNARY
- Qra — alluvium
- Qs — old alluvium, soil, gravels
- Qg | Qf — fluvioglacials
- Qg | Qm — moraine
- Qt — talus, scree

TERTIARY
- Ts — soil and gravel

PERMIAN
- P | Pmi — Mt Inglis Sandstone
- P | Pwv — Waterfall Valley Siltstone
- P | Pbp — Benson Peak Sandstone
- P | Pcc — Cradle Cirque Siltstone
- P | Plh — Lake Holmes Coal Measures
- P | Plw — Lake Will Pebbly Siltstone
- Pb | Pbb — Barn Bluff Conglomerate
- Pb | Pbr — Bluff River Pebbly Siltstone

SILURIAN
- Sac — siltstone (Austral Creek Siltstone)
- Sk — quartzite (Keel Quartzite)
- Sa — fossiferous shale (Amber Slate)
- Sc — quartzite (Crotty Quartzite)

ORDOVICIAN
- Og — Gordon Limestone
- Oa — Owen Conglomerate (undifferentiated)

CAMBRIAN
- Emr-s — sedimentary horizons within Mt Read Volcanics (probable basal and peripheral unit)

PRE – CAMBRIAN
- pE | -q — quartzite and platy quartzite (and minor pelites)
- pE | -pe — pelitic phyllite and mica schist (and minor quartzite)
- pE | -qpe — interbedded pelitic phyllite, mica schist and quartzite (pE = undifferentiated)

IGNEOUS ROCKS

TERTIARY
- Tb — basalt

UPPER DEVONIAN — GRANITE TOR GRANITE
- Dg-g — possible greisen or altered granite
- Dg-gc — "contaminated" granite
- Dg-gm — moderately altered granite
- Dg-g — porphyritic muscovite (biotite) granite
- Dg-ag — transitional granite/adamellite
- Dg-a — porphyritic muscovite (biotite) adamellite
- Dg — undifferentiated granitoid rocks

CAMBRIAN — MURCHISON VOLCANICS
- Cp — quartz porphyry, quartz feldspar porphyry extrusives
- Kp-d — "darwin-type" rhyolite

MURCHISON GRANITE
- Egm — intrusive quartz and quartz-feldspar porphyry (intrusive phase of Cp)

MT READ VOLCANICS — probably contemporaneous and equivalent to Murchison Volcanics and Granite.
- Cmr — undifferentiated (sediments)
- Cmr-p — quartz and quartz-feldspar porphyry
- Cg — granite (intrusive phase of Emr-p)

- vegetation anomaly

12220 [9] Petrological description available a=adamellite g=granite ag=transitional rock type.

LINEWORK SYMBOLS

- geological boundary – definite
- geological boundary – probable
- geological boundary – superficial
- bedding trend
- fault showing movement
- probable fault
- fracture
- joint
- shear
- anticline with plunge
- syncline with plunge
- overturned anticline
- bedding – horizontal
- bedding – dip 5°
- bedding – dip 5–15°
- bedding – dip 15–30°
- bedding – dip 30–60°
- bedding – dip 60°
- bedding – vertical
- bedding – overturned
- slope of moraine – gentle
- slope of moraine – steep
- dyke
- river and creek
- sealed road
- vehicle track
- foot track
- △ 604m — trig. point plus height in metres
- 5/15a — photo centre, run and number (CONICAL ROCKS Series)
- mine or prospect

Cradle Mountain – Lake St. Clair National Park

△ Mt. Romulus 955 m

△ Mt Swallow

△ Victoria Peak 949 m

△ Sophia Peak 960 m

EL 2/78

aeromagnetic data suggests that a probable major fault zone or shear apparent on the aerial photos in the west Alexandra Hills Area) continues east within this pelitic zone. Movement appears to be taken up along the cleavage planes.

Intense photographic distortion in this area (Geological contacts generalised partially)

EL Boundary

Park Boundary

GRANITE TOR

Cradle Mountain – Lake St Clair National Park.

calc-silicates reported from these areas

This photogeological map was compiled from a study of 40 colour aerial photographs at the nominal scale of 1:22 150. The annotation took approximately 13 days. One day was spent in the field during September 1979. The drainage base was photographically enlarged to photoscale from a base map supplied by Alcoa.

Undertaken on behalf of Alcoa of Australia Limited by Hunting Geology and Geophysics (Australia) Pty Limited Canberra. February 1980. Job No. GA 55/79.

5 cm

E 29-74-33

PLATE II

BMR 1534A GRANITE TOR AREA (EL 2/78) ALCOA OF AUST

PHOTOGEOLOGICAL WORKSHEET OF THE

GRANITE TOR BATHOLITH

WESTERN TASMANIA

Scale (approx) 1:22 150

0 0·5 1·0 1·5 2·0 kms

145°40'

145°50'

41°40'

41°50'

LEGEND

SEDIMENTARY ROCKS

QUATERNARY	Qra		alluvium
	Qs		old alluvium, soil, gravels
	Qg	Qf	fluvioglacials
		Qm	moraine
	Qt		talus, scree
TERTIARY	Ts		soil and gravel
PERMIAN	P	Pmi	Mt. Inglis Sandstone
		Pwv	Waterfall Valley Siltstone
		Pbp	Benson Peak Sandstone
		Pcc	Cradle Cirque Siltstone
		Plh	Lake Holmes Coal Measures
		Plw	Lake Will Pebbly Siltstone
	Pb	Pbb	Barn Bluff Conglomerate
		Pbr	Bluff River Pebbly Siltstone
SILURIAN	Sac		siltstone (Austral Creek Siltstone)
	Sk		quartzite (Keel Quartzite)
	Sa		fossiliferous shale (Amber Slate)
	Sc		quartzite (Crotty Quartzite)
ORDOVICIAN	Og		Gordon Limestone
	Oo		Owen Conglomerate (undifferentiated)
CAMBRIAN	Emr-s		sedimentary horizons within Mt. Read Volcanics (probable basal and peripheral unit)
PRE-CAMBRIAN	pC	-q	quartzite and platy quartzite (and minor pelites)
		-pe	pelitic phyllite and mica schist (and minor quartzite)
		-qpe	interbedded pelitic phyllite, mica schist and quartzite (pC = undifferentiated)

IGNEOUS ROCKS

TERTIARY	Tb		basalt
UPPER DEVONIAN	Dg-gr		possible greisen or altered granite
	Dg-gc		"contaminated" granite
	Dg-gm		moderately altered granite
	Dg-g		porphyritic muscovite (biotite) granite
	Dg-ag		transitional granite/adamellite
	Dg-a		porphyritic muscovite (biotite) adamellite
	Dg		undifferentiated granitoid rocks
			GRANITE TOR GRANITE
CAMBRIAN	MT. READ VOLCANICS	Ep	quartz porphyry, quartz feldspar porphyry extrusives
		Ep-d	"darwin-type" rhyolite
			MURCHISON VOLCANICS
		Egm	intrusive quartz and quartz-feldspar porphyry (intrusive phase of Ep)
			MURCHISON GRANITE
		Emr	undifferentiated (sediments)
		Emr-g	quartz and quartz-feldspar porphyry
		Eg	granite (intrusive phase of Emr-p)
			probably contemporaneous and equivalent to Murchison Volcanics and Granite.

vegetation anomaly

12220 — Petrological description available
a = adamellite g = granite ag = transitional rock type.

LINEWORK SYMBOLS

- geological boundary - definite
- geological boundary - probable
- geological boundary - superficial
- bedding trend
- fault showing movement
- probable fault
- fracture
- joint
- shear
- anticline with plunge
- syncline with plunge
- overturned anticline
- bedding - horizontal
- bedding - dip 5°
- bedding - dip 5-15°
- bedding - dip 15-30°
- bedding - dip 30-60°
- bedding - dip 60°
- bedding - vertical
- bedding - overturned
- slope of moraine - gentle
- slope of moraine - steep
- dyke
- river and creek
- sealed road
- vehicle track
- foot track
- △ 604m trig. point plus height in metres
- 5 | 5a photo centre, run and number (CONICAL ROCKS Series)
- mine or prospect

5 cm

EL 2/78

Cradle Mountain - Lake St. Clair National Park

Mt. Romulus 955 m

Mt. Swallow

Victoria Peak 949 m

Sophia Peak 960 m

GRANITE TOR

aeromagnetic data suggests that a probable major fault zone or shear apparent on the aerial photos in the west (Alexandra Hills area) continues east within this pelitic zone. Movement appears to be taken up along the cleavage planes.

Intense photographic distortion in this area. Geological contacts partially generalised.

very dense vegetation

probable thin glacial cover obscuring granite

very dense vegetation

thin Qg cover

thin Qg cover

massive quartzite

calc-silicates reported from these areas

Cradle Mountain — Lake St. Clair National Park.

E.L. Boundary

Park Boundary

E.L. and Park Boundary

This photogeological map was compiled from a study of 40 colour aerial photographs at the nominal scale of 1:22 150. The annotation took approximately 13 days. One day was spent in the field during September 1979. The drainage base was photographically enlarged to photoscale from a base map supplied by Alcoa.

Undertaken on behalf of Alcoa of Australia Limited by Hunting Geology and Geophysics (Australia) Pty Limited Canberra. February 1980. Job No. GA 55/79.

94-3584 GRANITE TOR AREA ALCOA OF AUST

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.80.34

GRANITE TOR AREA
WESTERN TASMANIA

Undertaken on behalf of Alcoa of Australia Limited
by Hunting Geology and Geophysics Australia Pty. Limited
Canberra, October 1979
Job No. GA 55/79

This photogeological map was compiled from a study of 40 black and white aerial photographs at the nominal scale of 1:40 000. The annotation took approximately 17 days. One day was spent in the field during September 1979. The drainage base was photographically reduced to photoscale from a base map supplied by Alcoa.

5 cm

145°40' 145°50' 41°40' 41°50'

SEDIMENTARY ROCKS

QUATERNARY
- Qra — alluvium
- Qs — old alluvium, soil, gravels
- Qg / Qf — fluvioglacials
- Qg / Qm — moraine
- Qt — talus, scree

TERTIARY
- Ts — soil and gravel

PERMIAN
- P — Pmi — Mt. Inglis Sandstone
- P — Pwv — Waterfall Valley Siltstone
- P — Pbp — Benson Peak Sandstone
- P — Pcc — Cradle Cirque Siltstone
- P — Plh — Lake Holmes Coal Measures
- P — Plw — Lake Will Pebbly Siltstone
- Pb — Pbb — Barn Bluff Conglomerate
- Pb — Pbr — Bluff River Pebbly Siltstone

SILURIAN
- Sac — siltstone (≡ Austral Creek Siltstone)
- Sk — quartzite (≡ Keel Quartzite)
- Sa — fossiliferous shale (≡ Amber Slate)
- Sc — quartzite (≡ Crotty Quartzite)

ORDOVICIAN
- Θg — Gordon Limestone
- Θo — Owen Conglomerate (undifferentiated)

CAMBRIAN
- Emr-s — sedimentary horizons within Mt. Read Volcanics. (probable basal and peripheral unit)

PRE – CAMBRIAN
- pЄ -q — quartzite and platy quartzite (and minor pelites)
- pЄ -pe — pelitic phyllite and mica schist (and minor quartzite)
- pЄ -q/pe — interbedded pelitic phyllite, mica schist and quartzite, (pЄ = undifferentiated)

IGNEOUS ROCKS

TERTIARY
- Tb — basalt

UPPER DEVONIAN — GRANITE TOR GRANITE
- Dg-gr — possible greisen or altered granite
- Dg-gc — "contaminated" granite
- Dg-gm — moderately altered granite
- Dg-g — porphyritic muscovite (biotite) granite
- Dg-ag — transitional granite / adamellite
- Dg-a — porphyritic muscovite (biotite) adamellite
- Dg — undifferentiated granitoid rocks

CAMBRIAN — MURCHISON VOLCANICS
- Θp — quartz porphyry, quartz feldspar porphyry extrusives
- Θp-d — "darwin-type" rhyolite
- Θgm — intrusive quartz and quartz-feldspar porphyry (intrusive phase of Θp) — MURCHISON GRANITE

CAMBRIAN — MT. READ VOLCANICS
- Emr — undifferentiated (sediments)
- Emr-p — quartz and quartz-feldspar porphyry
- Θg — granite (intrusive phase of Emr-p)

probably contemporaneous and equivalent to Murchison Volcanics and Granite.

vegetation anomaly

LINEWORK SYMBOLS

- geological boundary - definite
- geological boundary - probable
- geological boundary - superficial
- bedding trend
- fault showing movement
- probable fault
- fracture
- joint
- shear
- anticline with plunge
- syncline with plunge
- overturned anticline
- bedding - horizontal
- bedding - dip < 5°
- bedding - dip 5-15°
- bedding - dip 15-30°
- bedding - dip 30-60°
- bedding - dip >60°
- bedding - vertical
- bedding - overturned
- slope of moraine - gentle
- slope of moraine - steep
- dyke
- river and creek
- sealed road
- vehicle track
- foot track
- △ 904 m — trig. point plus height in metres
- 5|58 — photo centre, run and number (CONICAL ROCKS Series)
- mine or prospect

CRADLE MT. – LAKE ST. CLAIR NATIONAL PARK

National Park boundary

calc-silicates reported from these areas.

Note this fold may be an anticline. Photo evidence inconclusive

CRADLE MT. – LAKE ST. CLAIR NATIONAL PARK

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

GRANITE TOR AREA
WESTERN TASMANIA

Undertaken on behalf of Alcoa of Australia Limited
by Hunting Geology and Geophysics Australia Pty. Limited
Canberra, October 1979
Job No. GA 55/79

This photogeological map was compiled from a study of 40 black and white aerial photographs at the nominal scale of 1:36 520. The annotation took approximately 17 days. One day was spent in the field during September 1979. The drainage base was photographically reduced to photoscale from a base map supplied by Alcoa.

145°40' 145°50' 41°40' 41°50'

SEDIMENTARY ROCKS

QUATERNARY
- Qra — alluvium
- Qs — old alluvium, soil, gravels
- Qg / Qf — fluvioglacials
- Qg / Qm — moraine
- Qt — talus, scree

TERTIARY
- Ts — soil and gravel

PERMIAN
- P / Pmi — Mt. Inglis Sandstone
- P / Pwv — Waterfall Valley Siltstone
- P / Pbp — Benson Peak Sandstone
- P / Pcc — Cradle Cirque Siltstone
- P / Plh — Lake Holmes Coal Measures
- P / Plw — Lake Will Pebbly Siltstone
- Pb / Pbb — Barn Bluff Conglomerate
- Pb / Pbr — Bluff River Pebbly Siltstone

SILURIAN
- Sac — siltstone (≡ Austral Creek Siltstone)
- Sk — quartzite (≡ Keel Quartzite)
- Sa — fossiliferous shale (≡ Amber Slate)
- Sc — quartzite (≡ Crotty Quartzite)

ORDOVICIAN
- Og — Gordon Limestone
- Oo — Owen Conglomerate (undifferentiated)

CAMBRIAN
- Emr-s — sedimentary horizons within Mt. Read Volcanics. (probable basal and peripheral unit)

PRE-CAMBRIAN
- pЄ / -q — quartzite and platy quartzite (and minor pelites)
- pЄ / -pe — pelitic phyllite and mica schist (and minor quartzite)
- pЄ / -q/pe — interbedded pelitic phyllite, mica schist and quartzite, (pЄ = undifferentiated)

IGNEOUS ROCKS

TERTIARY
- Tb — basalt

UPPER DEVONIAN — GRANITE TOR GRANITE
- Dg-gr — possible greisen or altered granite
- Dg-gc — "contaminated" granite
- Dg-gm — moderately altered granite
- Dg-g — porphyritic muscovite (biotite) granite
- Dg-ag — transitional granite/adamellite
- Dg-a — porphyritic muscovite (biotite) adamellite
- Dg — undifferentiated granitoid rocks

CAMBRIAN — MURCHISON VOLCANICS
- Ep — quartz porphyry, quartz feldspar porphyry extrusives
- Ep-d — "darwin-type" rhyolite

CAMBRIAN — MURCHISON GRANITE
- Egm — Intrusive quartz and quartz-feldspar porphyry (intrusive phase of Ep)

CAMBRIAN — MT. READ VOLCANICS — probably contemporaneous and equivalent to Murchison Volcanics and Granite.
- Emr / -s — undifferentiated (sediments)
- Emr-p — quartz and quartz-feldspar porphyry
- Eg — granite (intrusive phase of Emr-p)

vegetation anomaly

LINEWORK SYMBOLS

- geological boundary - definite
- geological boundary - probable
- geological boundary - superficial
- bedding trend
- fault showing movement
- probable fault
- fracture
- joint
- shear
- anticline with plunge
- syncline with plunge
- overturned anticline
- bedding - horizontal
- bedding - dip < 5°
- bedding - dip 5-15°
- bedding - dip 15-30°
- bedding - dip 30-60°
- bedding - dip >60°
- bedding - vertical
- bedding - overturned
- slope of moraine - gentle
- slope of moraine - steep
- dyke
- river and creek
- sealed road
- vehicle track
- foot track
- △ 106m — trig. point plus height in metres
- 5/58 — photo centre, run and number (CONICAL ROCKS Series)
- mine or prospect

National Park boundary

CRADLE MT. - LAKE ST. CLAIR NATIONAL PARK

5 cm

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

34

GRANITE TOR
Alcoa GA.55/79
Sophia 1:100,000 GEOL

E29.79.35

AMG 416550E
5405200N

E29-80-35

41° 30'

N

Holocene alluvium, sand, gravel talus.

Pleistocene glacials

Tertiary basalts, etc

Jurassic dolerite etc

Triassic, Permian & U. Carboniferous Assorted fresh-water marine & glacial sediments.

U. Devonian granite & adamellite.

L. Devonian quartzwacke sequence.

Ordovician Gordon Lst

Ordovician Owen Conglom. + marine qtzwacke & siltstone.

Cambrian granitic rocks.

Cambrian serpentinite, etc

M. to U. Cambrian grey-wacke turbidite sequences

M. to U. Cambrian, mainly acid & intermed. volcanics

U. Cambrian shallow water deposits.

Cambrian greywacke turbidites

Cambrian orthoquartzite sequence.

Pelitic sequences

Metaquartzite sequences

Undifferentiated

SOPHIA SHEET Sheet
GEOLOGY

1:100,000 approx

AMG 375750E
5349100N

145° 30'

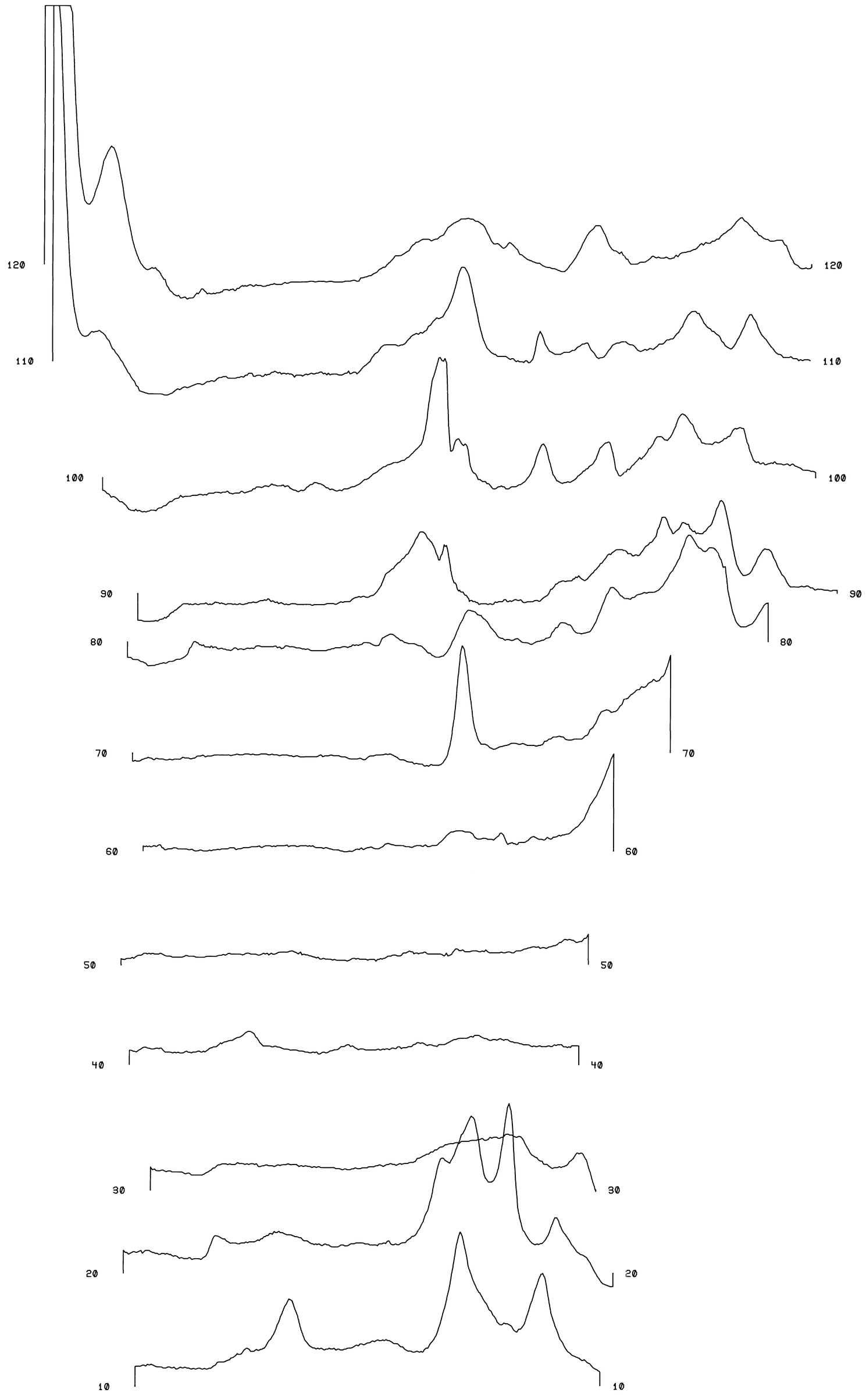
146° 30'

AMG REFERENCE POINTS ADDED

5 cm

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.80.37



GEOEX PTY LTD

5 cm

ALCOA OF AUSTRALIA
(W.A.) LIMITED

ROSEBERY AREA TASMANIA

STACKED PROFILES OF TOTAL MAGNETIC INTENSITY

VERTICAL SCALE 50 GAMMA PER INCH
PROFILE BASE VALUE 62600
HORIZONTAL SCALE 1: 40000

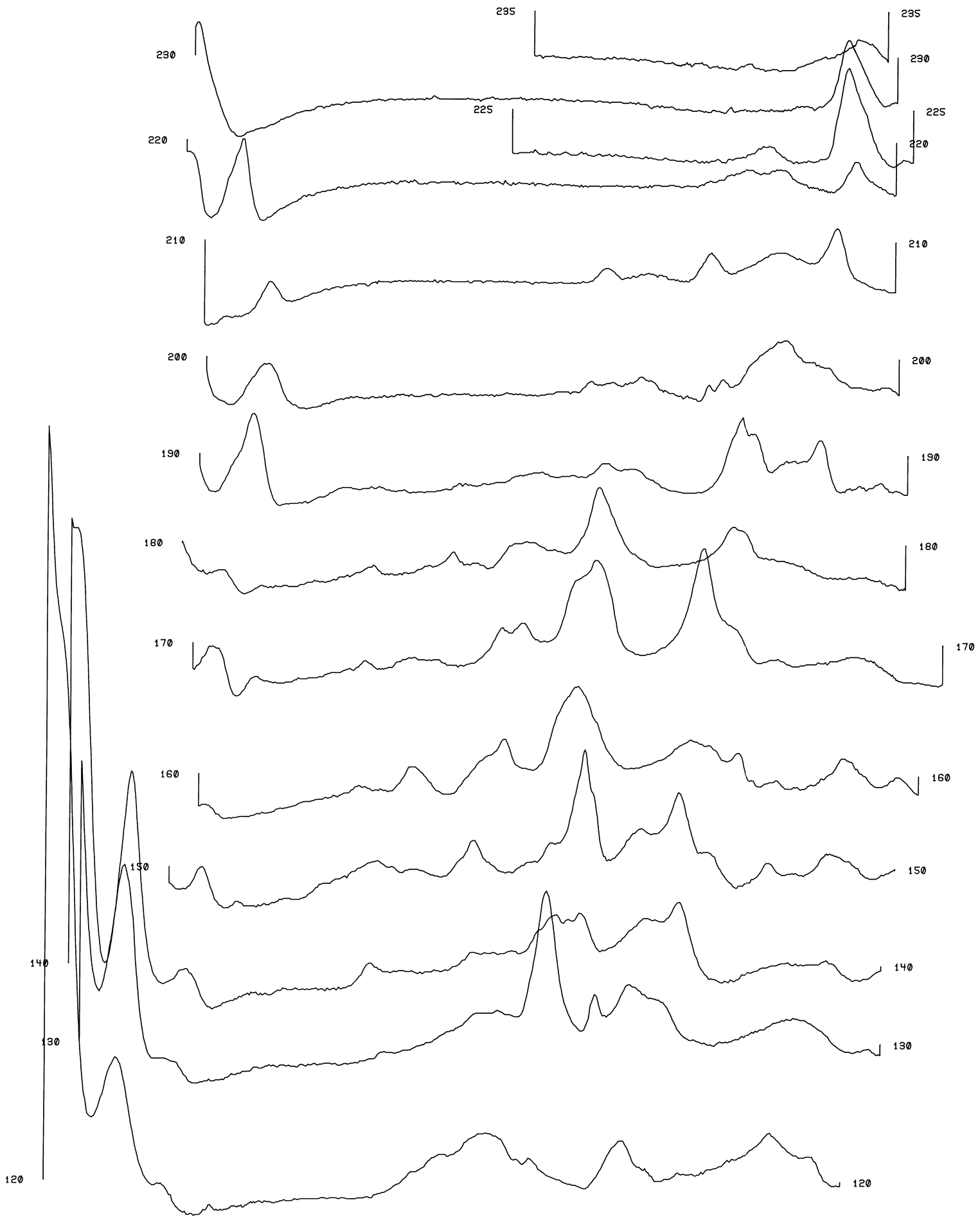
LINES 10 TO 120

SURVEYED MARCH 1978

PROJECT NUMBER 78123

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.80.38



GEOEX PTY LTD

5 cm

ALCOA OF AUSTRALIA
(W.A.) LIMITED

ROSEBERY AREA TASMANIA

STACKED PROFILES OF TOTAL MAGNETIC INTENSITY

VERTICAL SCALE 50 GAMMA PER INCH
PROFILE BASE VALUE 62600
HORIZONTAL SCALE 1: 40000

LINES 120 TO 235

SURVEYED MARCH 1978

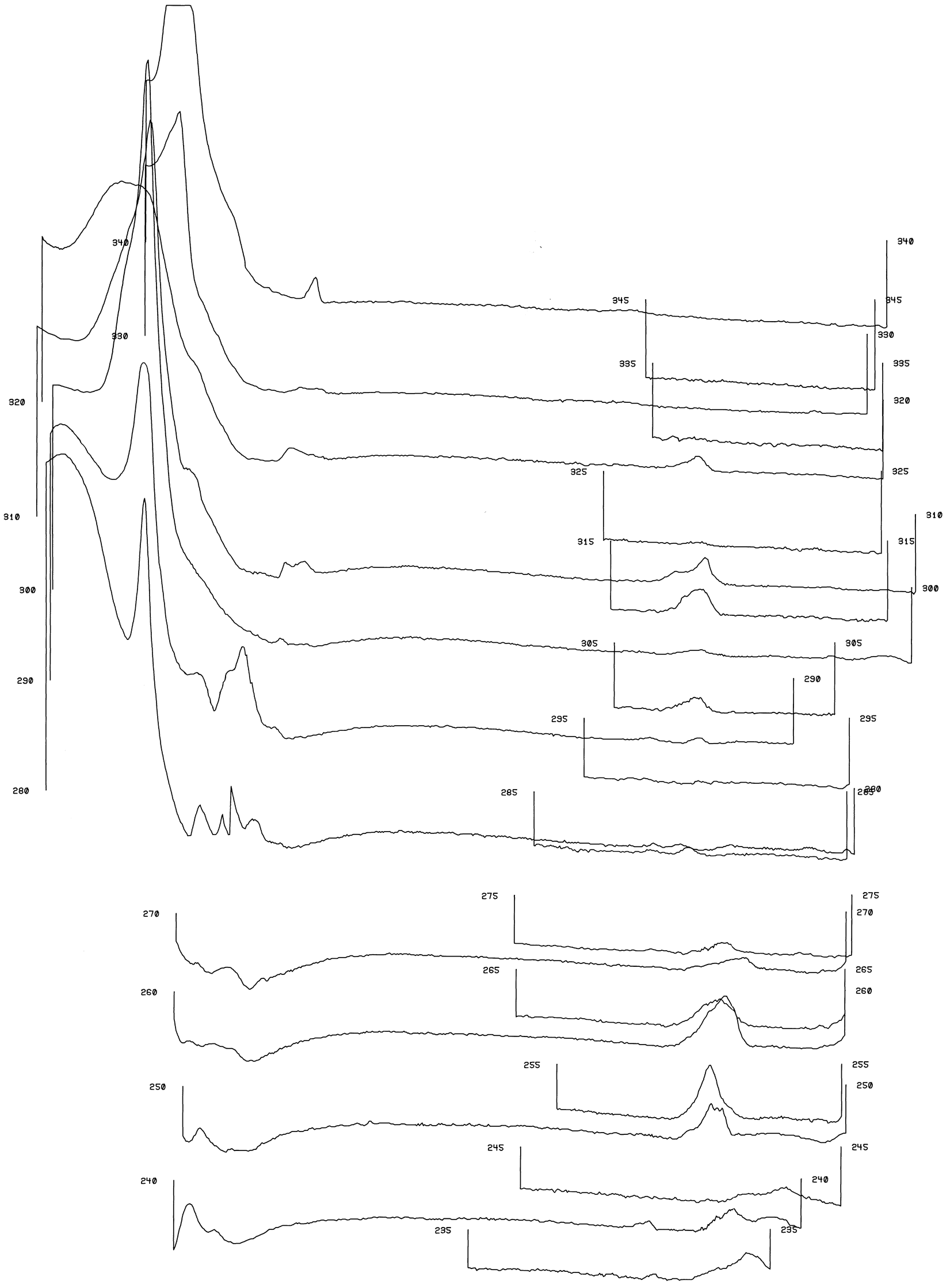
PROJECT NUMBER 78123

E29.80.39

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

37

TASMANIA



GEOEX PTY LTD

5 cm

ALCOA OF AUSTRALIA
(W.A.) LIMITED

ROSEBERY AREA TASMANIA

STACKED PROFILES OF TOTAL MAGNETIC INTENSITY

VERTICAL SCALE 50 GAMMA PER INCH
PROFILE BASE VALUE 62600
HORIZONTAL SCALE 1: 40000

LINES 235 TO 345

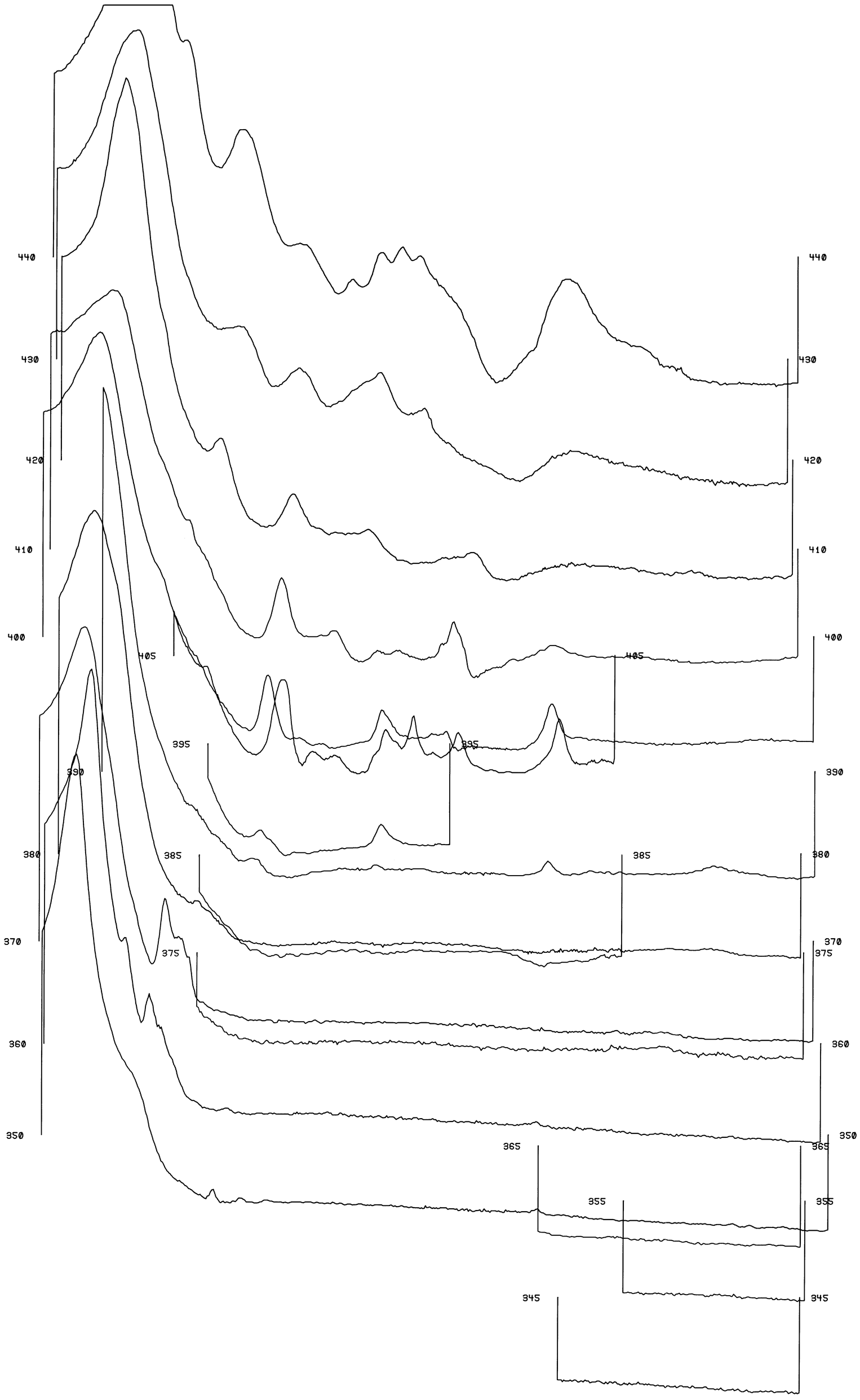
SURVEYED MARCH 1978

PROJECT NUMBER 78123

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.80.40



GEOEX PTY LTD

5 cm

ALCOA OF AUSTRALIA (W.A.) LIMITED

ROSEBERY AREA TASMANIA

STACKED PROFILES OF TOTAL MAGNETIC INTENSITY

VERTICAL SCALE 50 GAMMA PER INCH
PROFILE BASE VALUE 62600
HORIZONTAL SCALE 1: 40000

LINES 345 TO 440

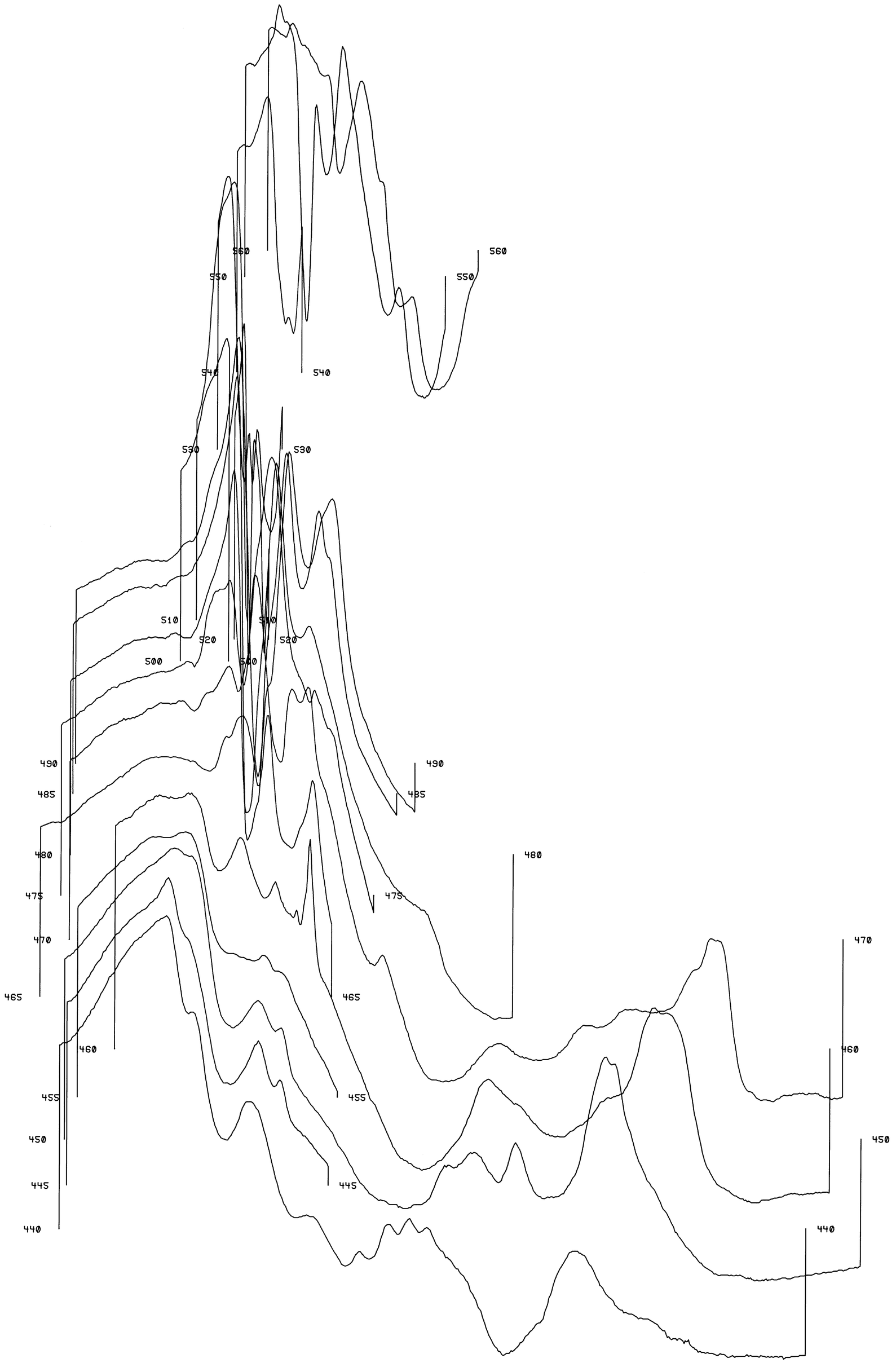
SURVEYED MARCH 1978

PROJECT NUMBER 78123

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

TASMANIA

E29.80.41



GEOEX PTY LTD

5 cm

ALCOA OF AUSTRALIA
(W.A.) LIMITED

ROSEBERY AREA TASMANIA

STACKED PROFILES OF TOTAL MAGNETIC INTENSITY

VERTICAL SCALE 50 GAMMA PER INCH
PROFILE BASE VALUE 62600
HORIZONTAL SCALE 1: 40000

LINES 440 TO 560

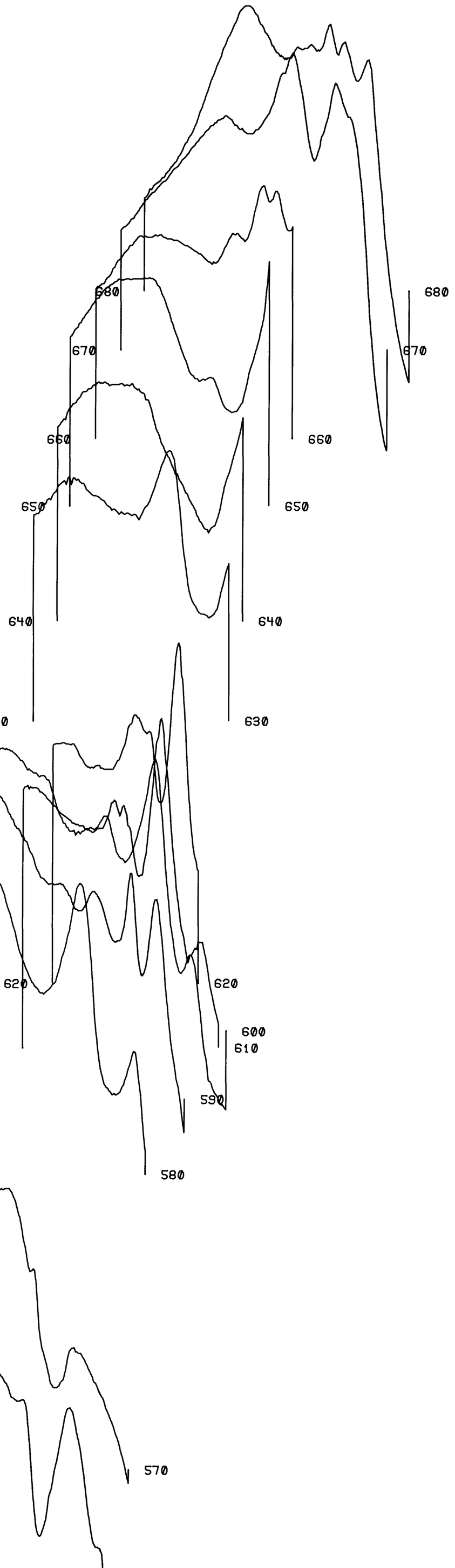
SURVEYED MARCH 1978

PROJECT NUMBER 78123

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.80.42



GEOEX PTY LTD

5 cm

ALCOA OF AUSTRALIA
(W.A.) LIMITED

ROSEBERY AREA TASMANIA

STACKED PROFILES OF TOTAL MAGNETIC INTENSITY

VERTICAL SCALE 50 GAMMA PER INCH
PROFILE BASE VALUE 62600
HORIZONTAL SCALE 1: 40000

LINES 560 TO 680

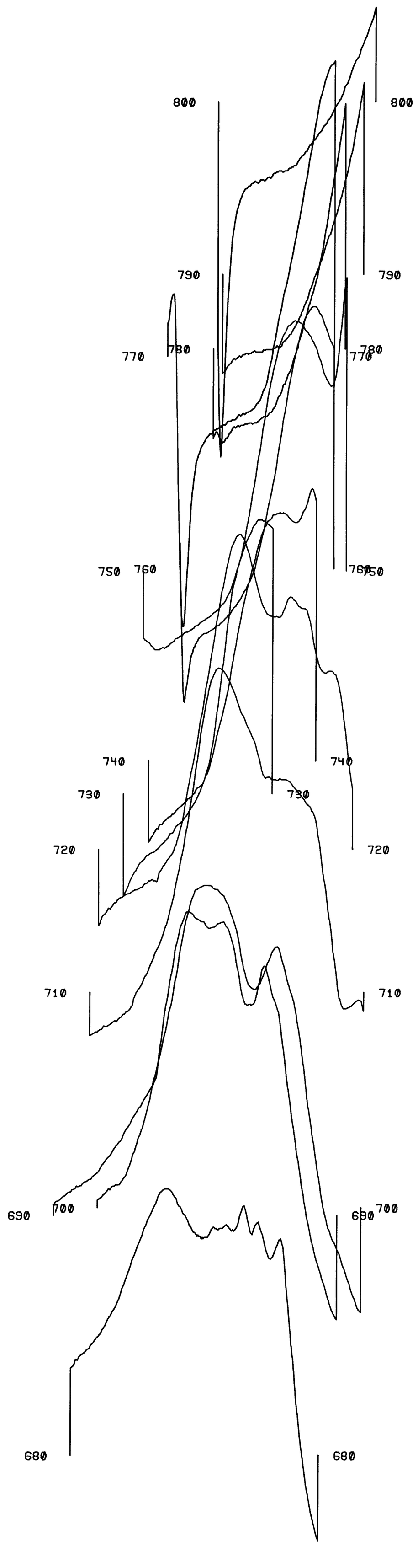
SURVEYED MARCH 1978

PROJECT NUMBER 78123

E29.80.43

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST



GEOEX PTY LTD

5 cm

ALCOA OF AUSTRALIA (W.A.) LIMITED

ROSEBERY AREA TASMANIA

STACKED PROFILES OF TOTAL MAGNETIC INTENSITY

VERTICAL SCALE 50 GAMMA PER INCH
PROFILE BASE VALUE 62600
HORIZONTAL SCALE 1: 40000

LINES 680 TO 800

SURVEYED MARCH 1978

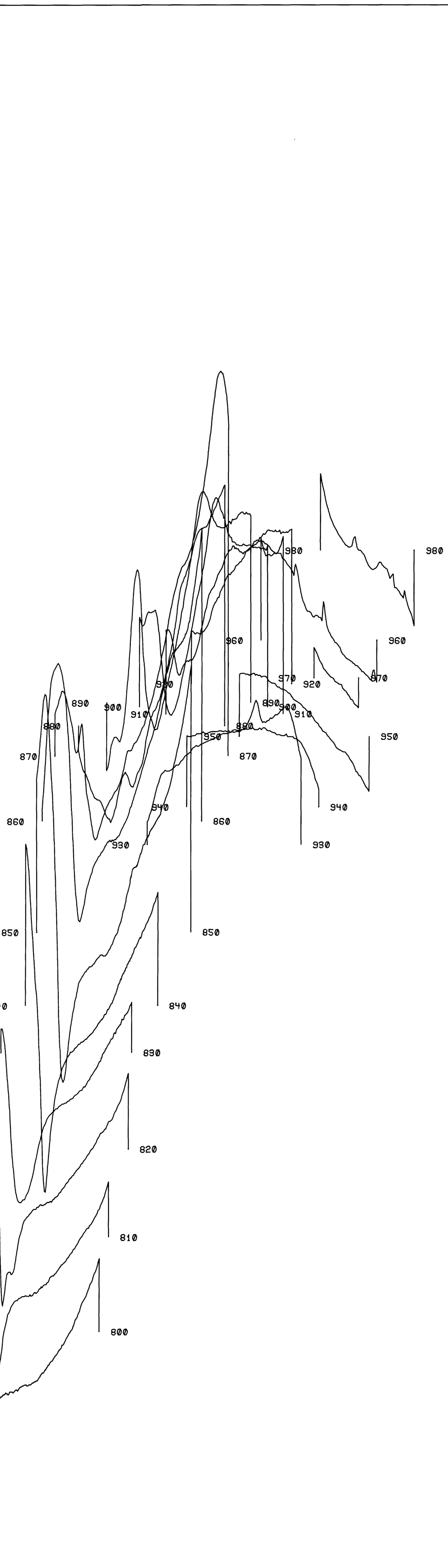
PROJECT NUMBER 78123

E29.80.44

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

43

TASMANIA



GEOEX PTY LTD

5 cm

ALCOA OF AUSTRALIA
(W.A.) LIMITED

ROSEBERY AREA TASMANIA

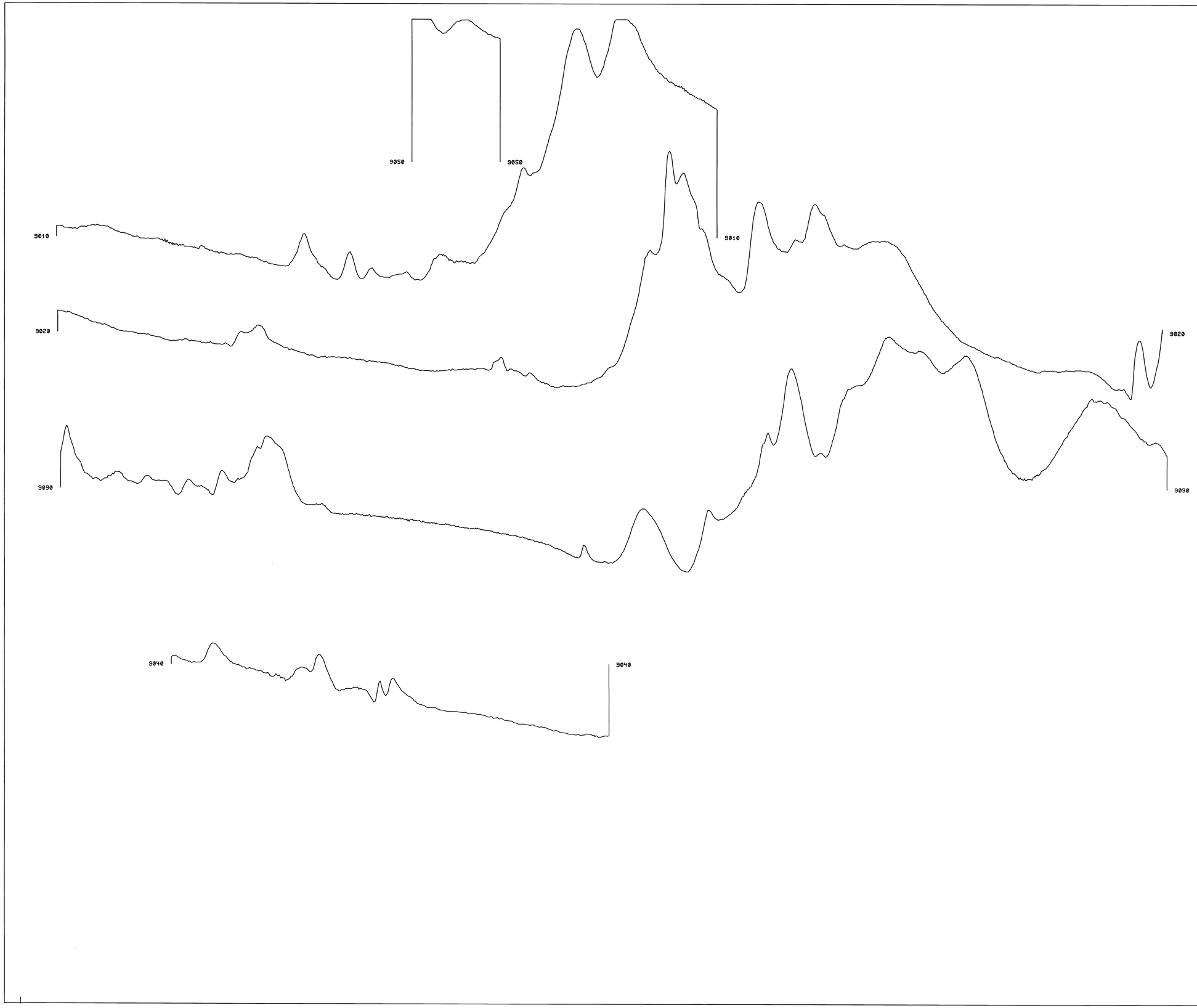
STACKED PROFILES OF TOTAL MAGNETIC INTENSITY

VERTICAL SCALE 50 GAMMA PER INCH
PROFILE BASE VALUE 62600
HORIZONTAL SCALE 1: 40000

LINES 800 TO 980

SURVEYED MARCH 1978

PROJECT NUMBER 78123



GEOEX PTY LTD

ALCOA OF AUSTRALIA
(W.A.) LIMITED

ROSEBERY AREA TASMANIA

STACKED PROFILES OF TOTAL MAGNETIC INTENSITY

VERTICAL SCALE 50 GAMMA PER INCH
PROFILE BASE VALUE 62600
HORIZONTAL SCALE 1: 40000

LINES 9010 TO 9050

SURVEYED MARCH 1978

PROJECT NUMBER 78123

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.80.45

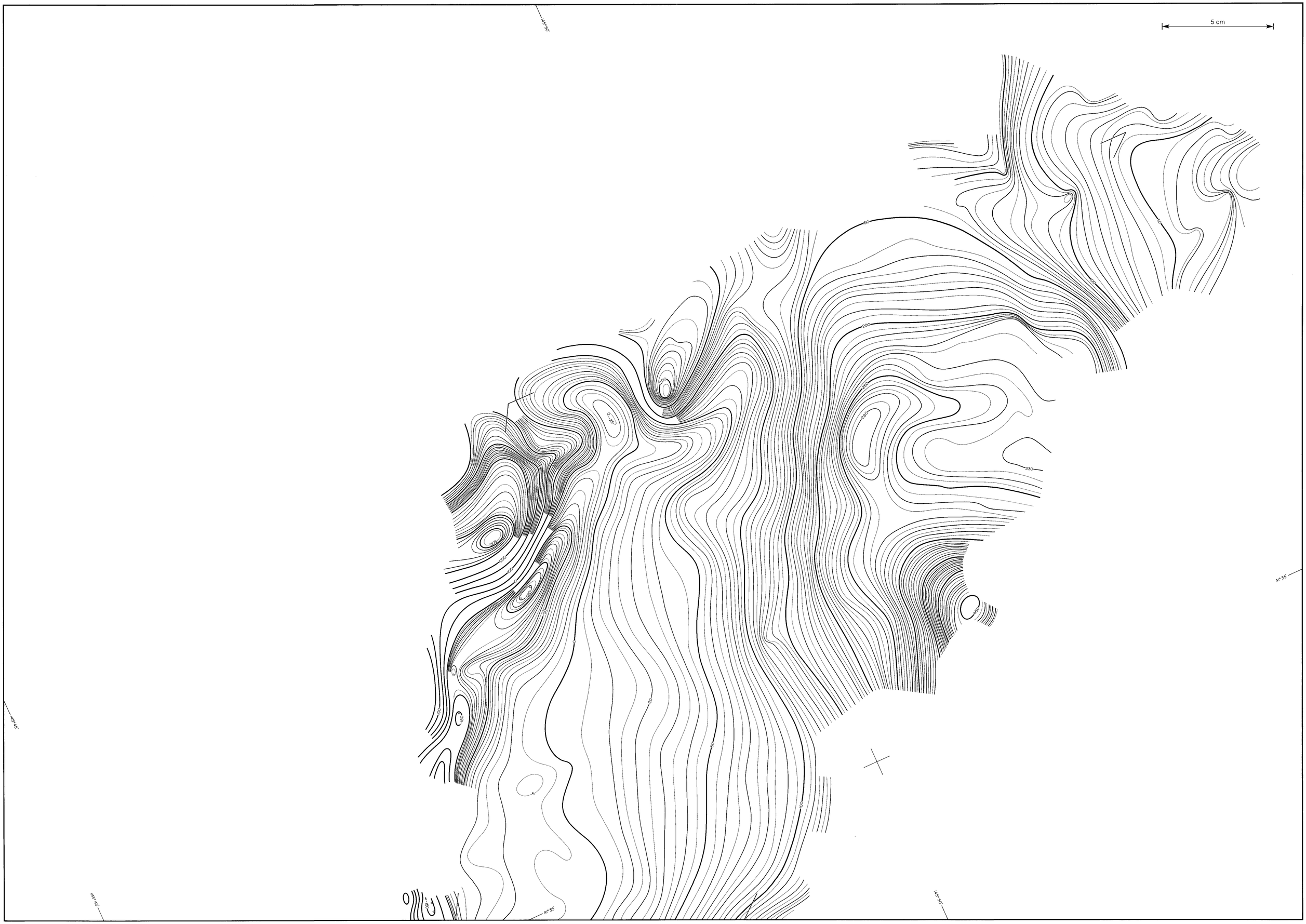
E29.80.46

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ROSEBERY SHEET 1

5 cm



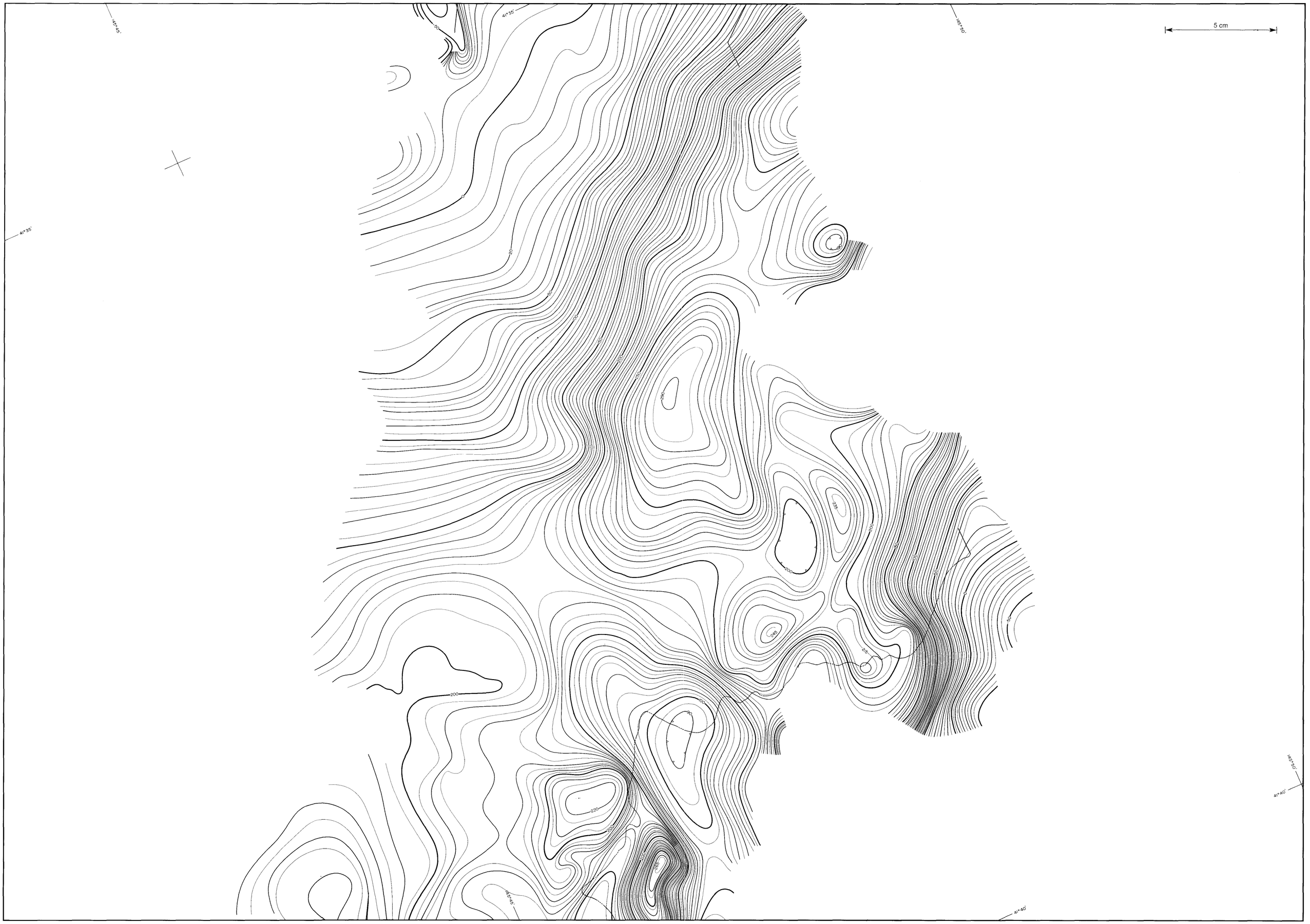
E29.80.47

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

TASMANIA

ROSEBERY SHEET 2

5 cm



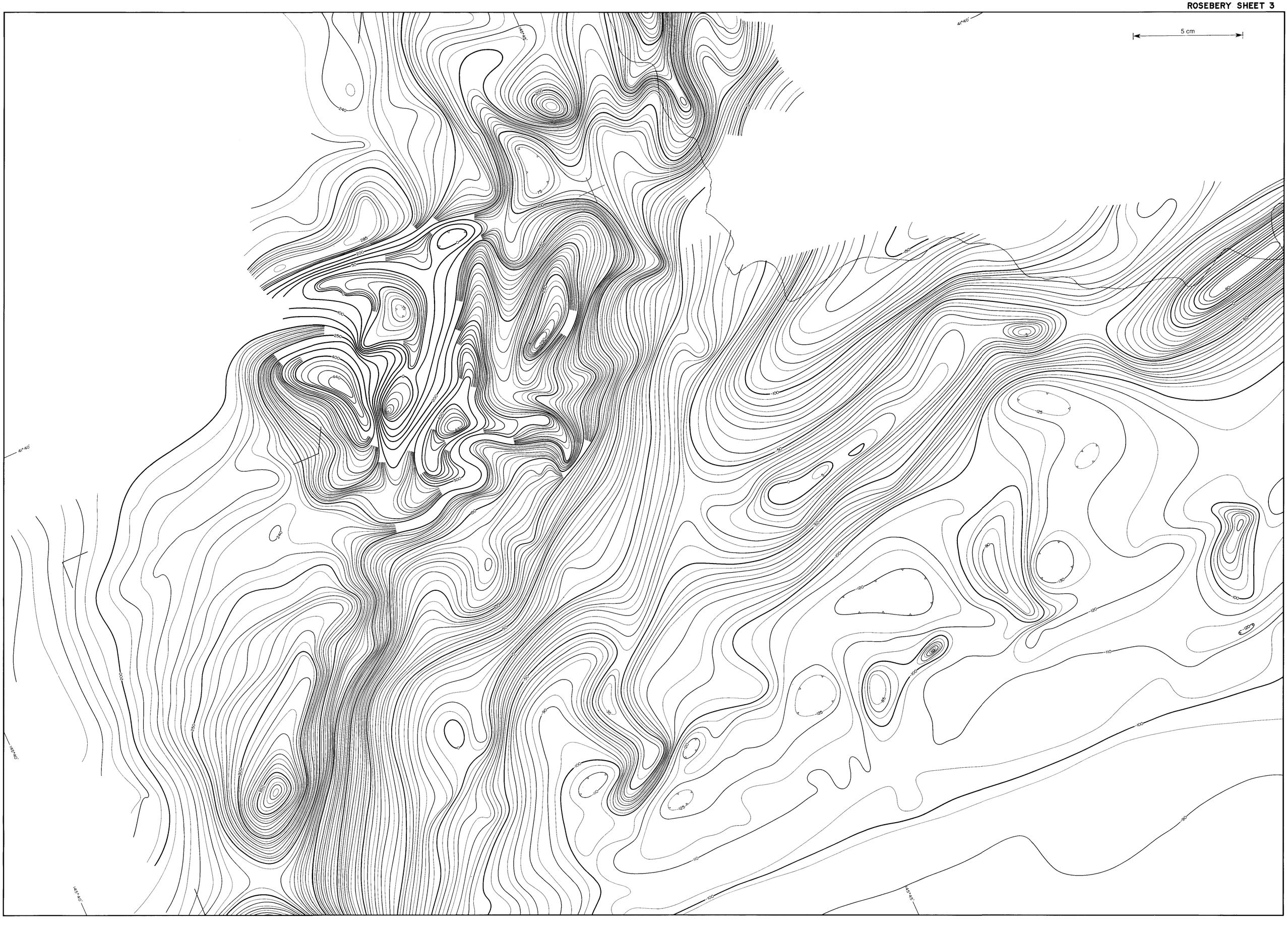
94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

50

TASMANIA

E29.80.48

ROSEBERY SHEET 3



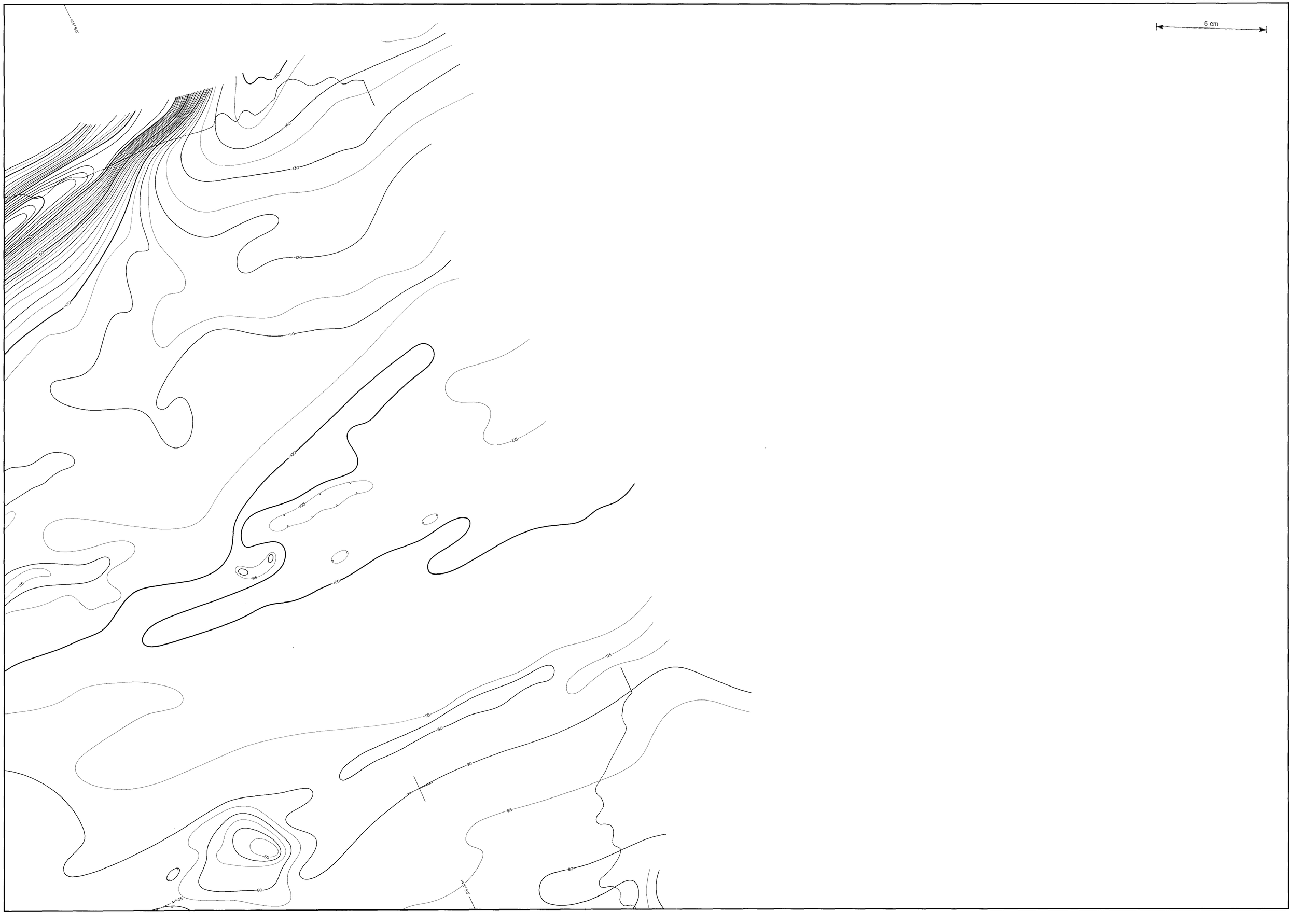
94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

TASMANIA

E29.80.49

ROSEBERY SHEET 4

5 cm



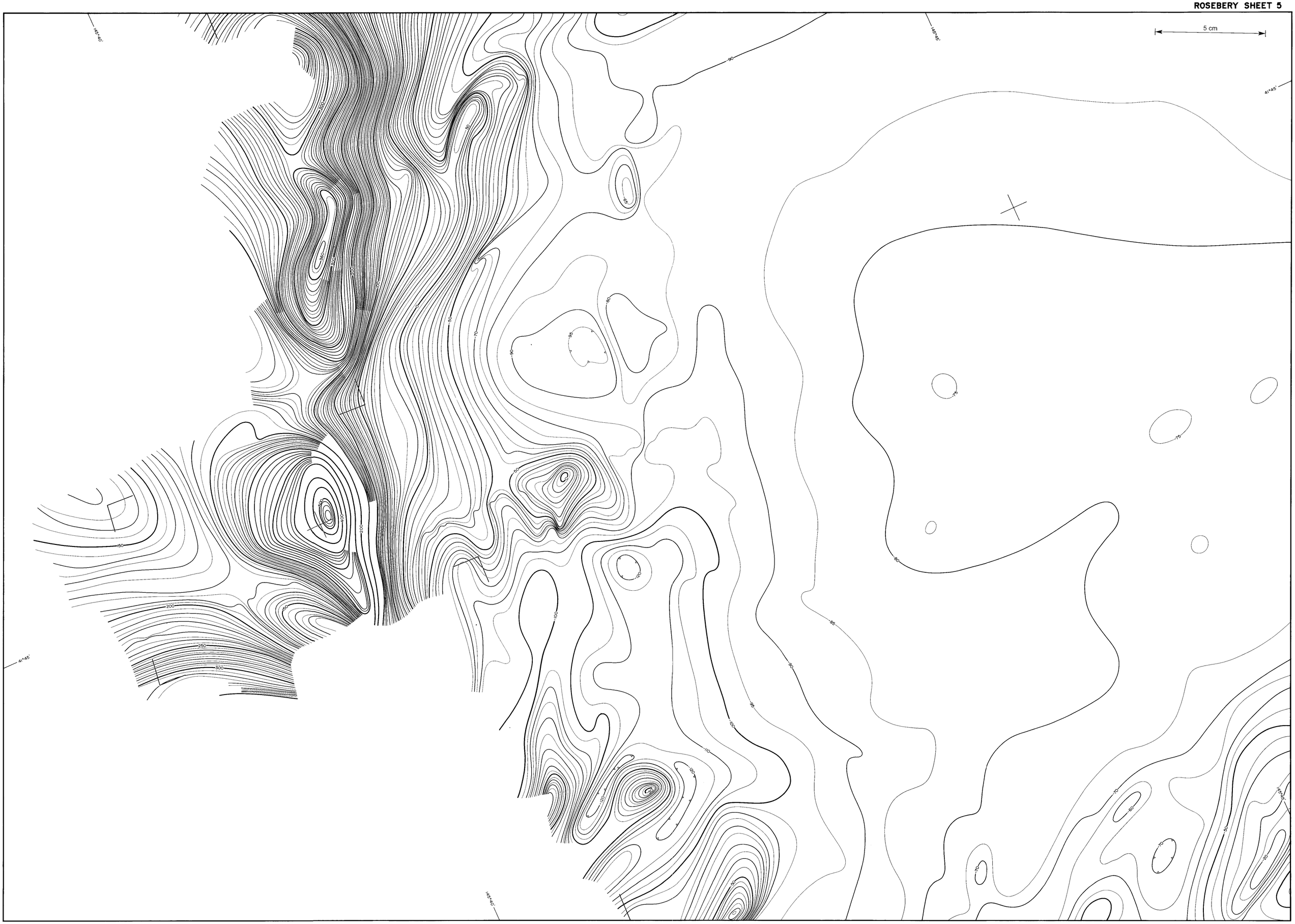
E29.8050

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

5

ROSEBERY SHEET 5

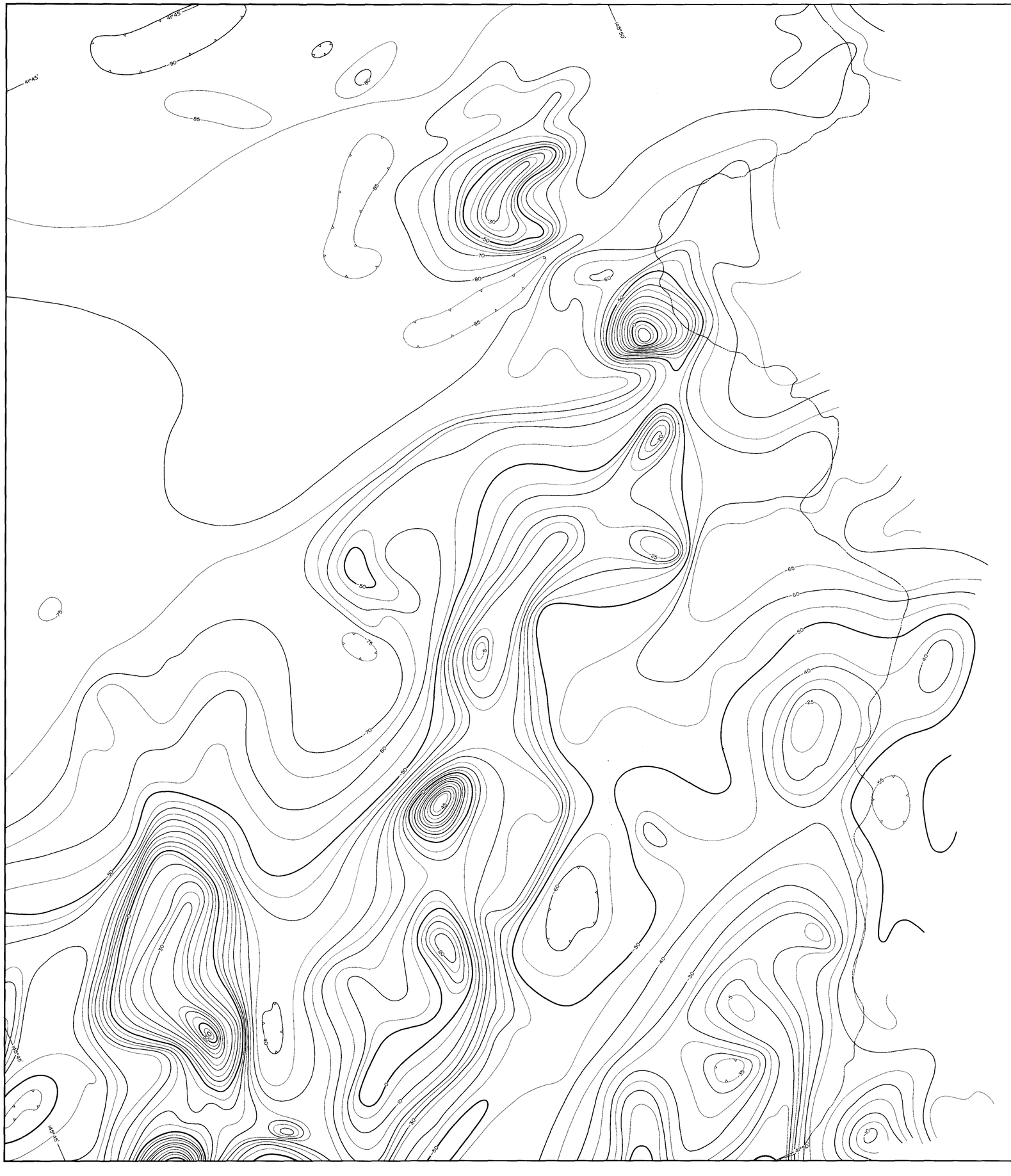


94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

TASMANIA

E29.80.51

ROSEBERY SHEET 6

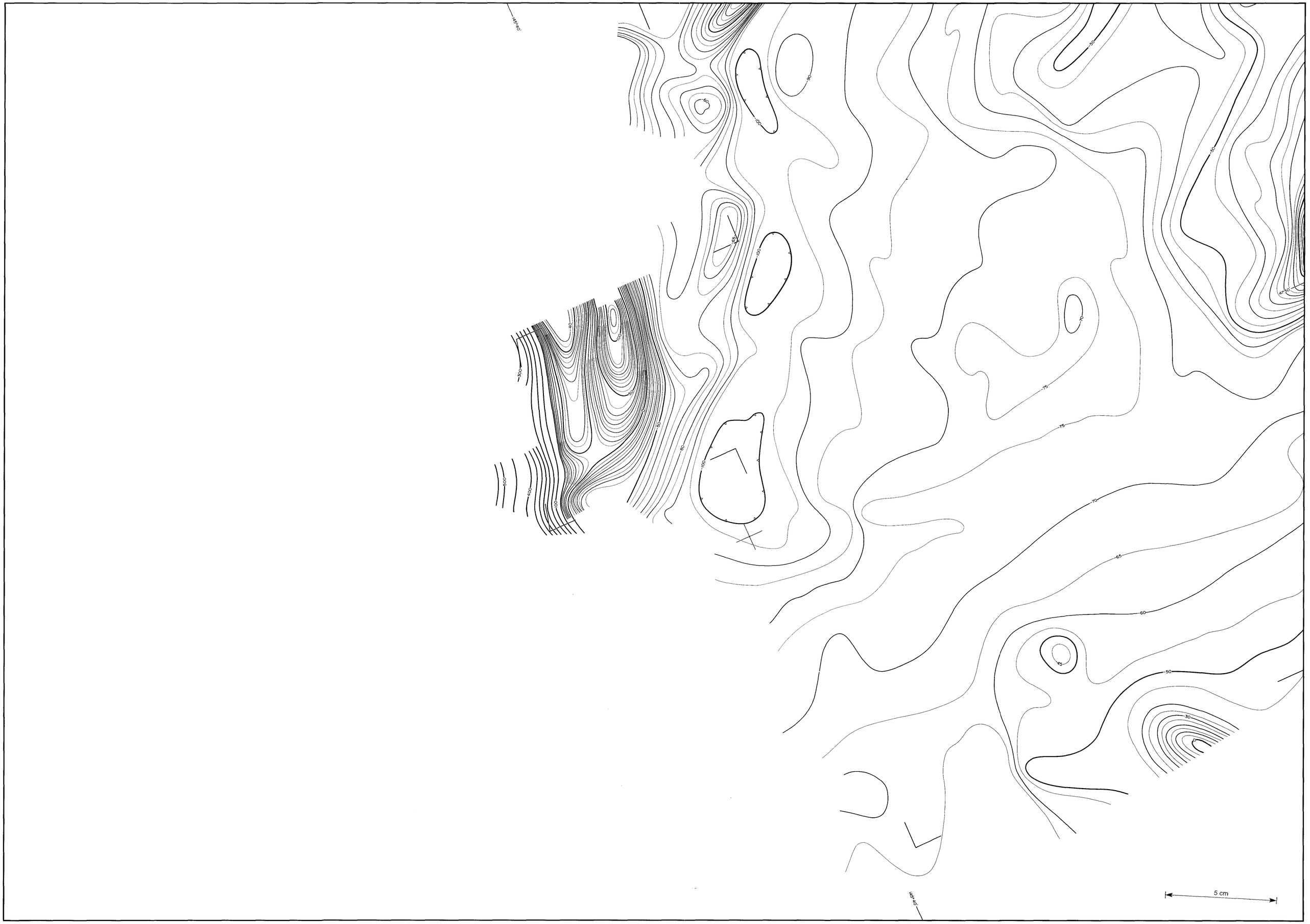


TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

53

ROSEBERY SHEET 7

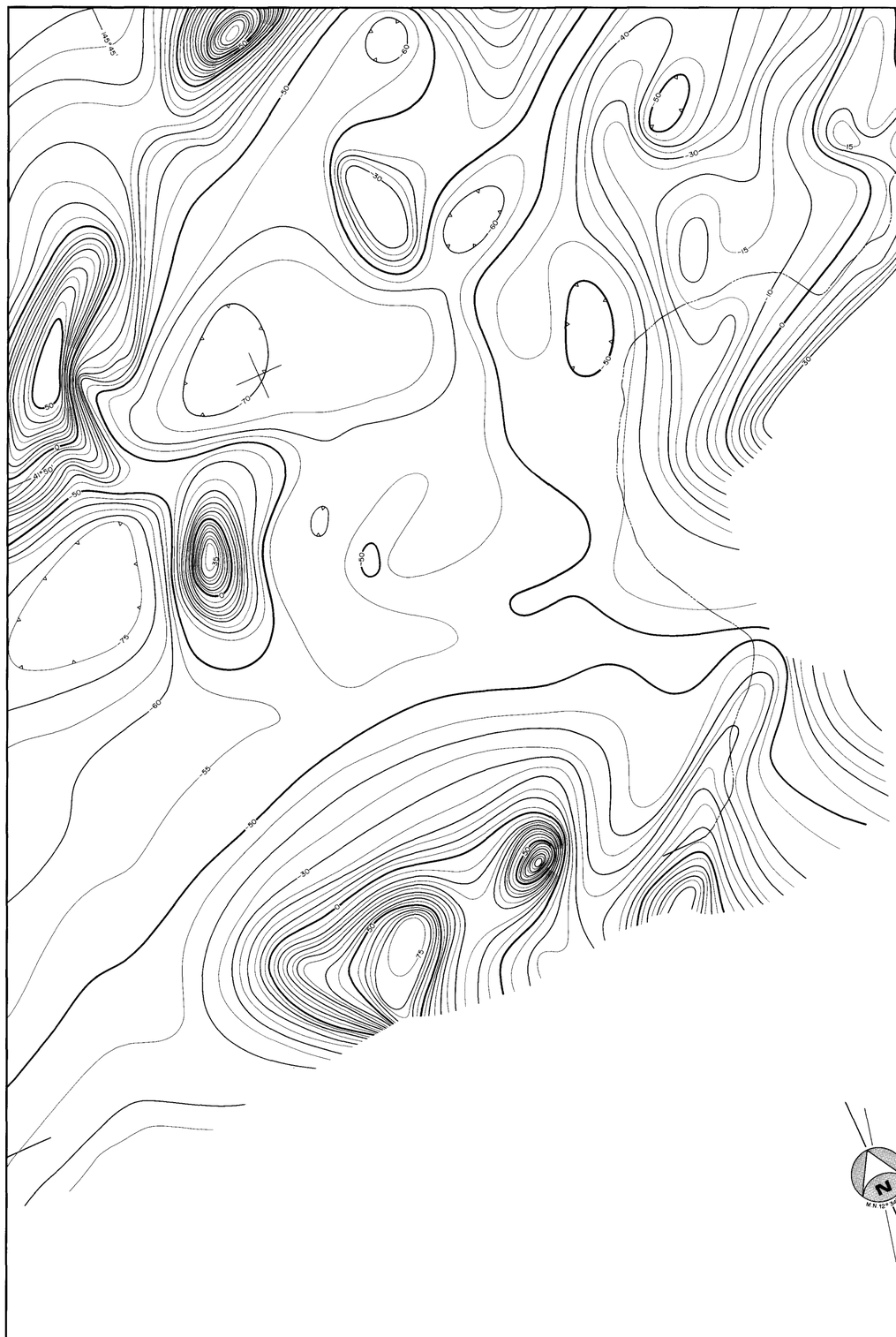


E29.80.53

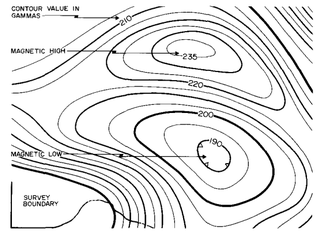
TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

ROSEBERY SHEET 8



REFERENCE

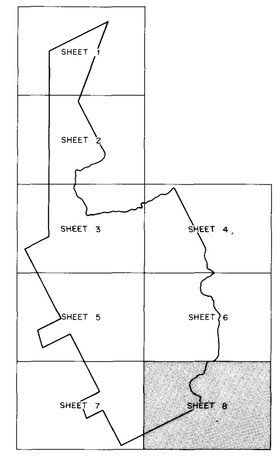


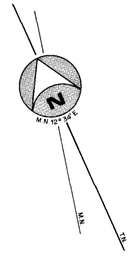
CONTOUR INTERVAL : 5 GAMMAS

THE DATA HAS BEEN ADJUSTED FOR DIURNAL VARIATION WITH AN ADOPTED VALUE OF 62626 GAMMAS AT THE DIURNAL BASE AT H.E.C. BASE CAMP HELIPORT 41°44'30"S & 145°37'20"E. THE SENSOR HEIGHT WAS 5 METRES.
THE DATUM FOR THE TOTAL MAGNETIC INTENSITY CONTOURS IS THE INTERNATIONAL GRID REFERENCE FIELD 1978.3.

THE COORDINATES OF LATITUDE AND LONGITUDE FOR THIS MAP HAVE BEEN TRANSFERRED FROM A 1:100000 BASE MAP AND THE POSITIONS ARE THEREFORE APPROXIMATE

SHEET INDEX

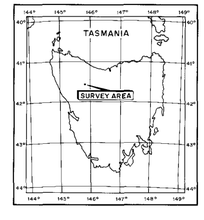




SURVEY SPECIFICATIONS

AIRCRAFT	BELL 206B HELICOPTER
MAGNETOMETER	VARIAN 4937A PROTON PRECESSION USING TOWED BIRD CONFIGURATION WITH 30m CABLE
RADIOMETRIC SYSTEM	MEPHAR AV-4 RADIATION SPECTROMETER WITH 3.7 LITRES NaI CRYSTAL AND Cs 137 REFERENCE
DIURNAL RECORDER	GEOMETRICS G826 RECORDING BASE STATION
ALTIMETER	BONZER Mk 10
ANCILLIARY EQUIPMENT	GEOEX INTERVALOMETER GEOEX FILM DIGITAL RECORDER
	CENTURY 444 6 CHANNEL ANALOGUE LIGHT BEAM RECORDER
	VINTEN 16mm GROUND TRACKING CAMERA
READING INTERVAL	1·0 SECONDS
NOMINAL AIRCRAFT SPEED	65 KNOTS
NOMINAL AIRCRAFT SURVEY ALTITUDE	150 metres SENSOR CLEARANCE 135 metres

LOCATION



5 cm

GEOEX
PTY. LTD.

ALCOA OF AUSTRALIA (W.A.) LTD.

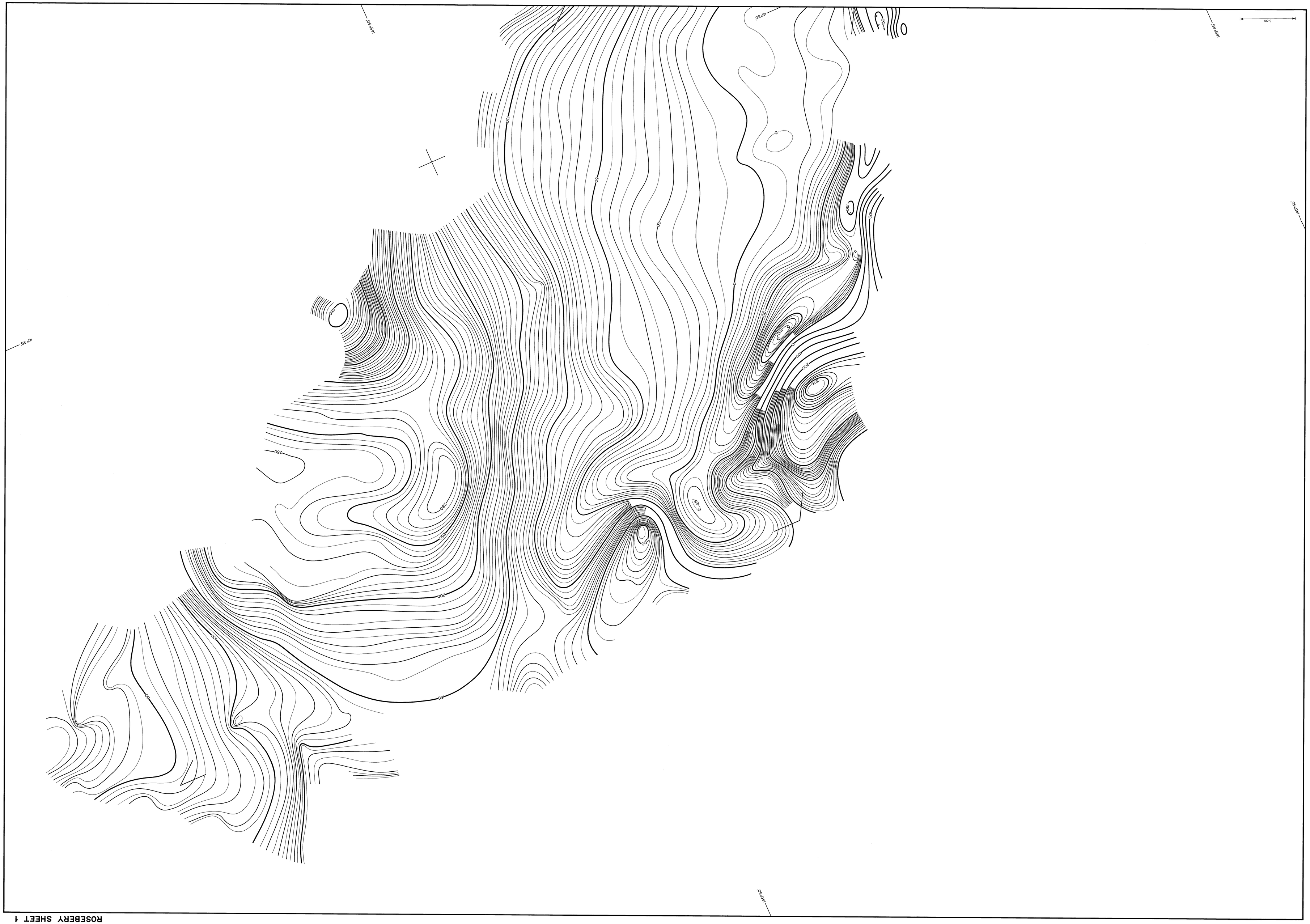
ROSEBERY AREA – TAS.

AERO MAGNETIC
TOTAL INTENSITY CONTOURS

SCALE 1:10000

SURVEYED: MARCH '78		APPROVED: J.E. HAIGH
DRAWN: R.G., J.P.	PROJECT Nº: 78123	DRAWING Nº: 8

E29-8-53

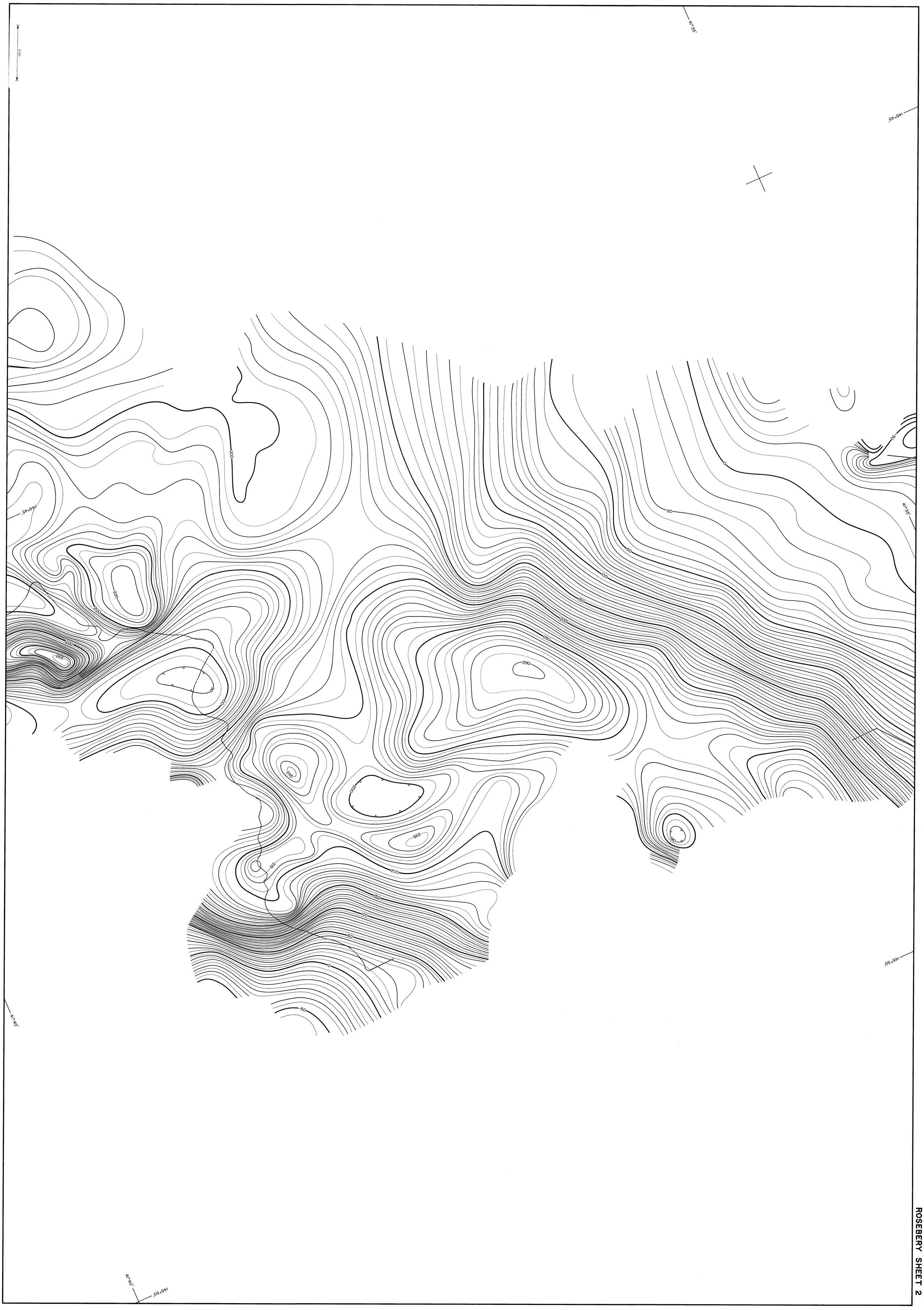


TASMANIA
94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST
55
E29.80.54
ROSEBERY SHEET 1

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.80.55

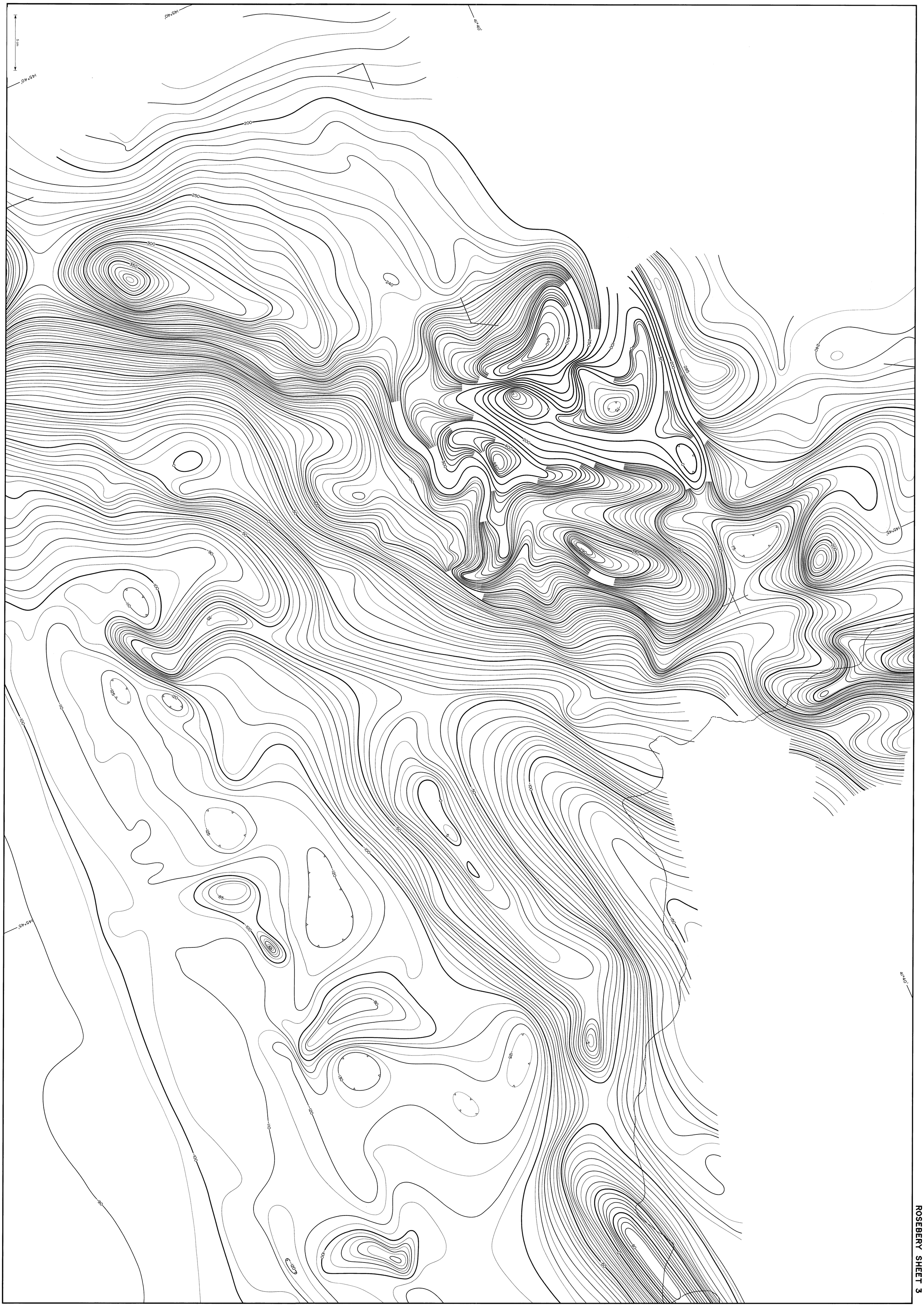


ROSEBERY SHEET 2

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

TASMANIA

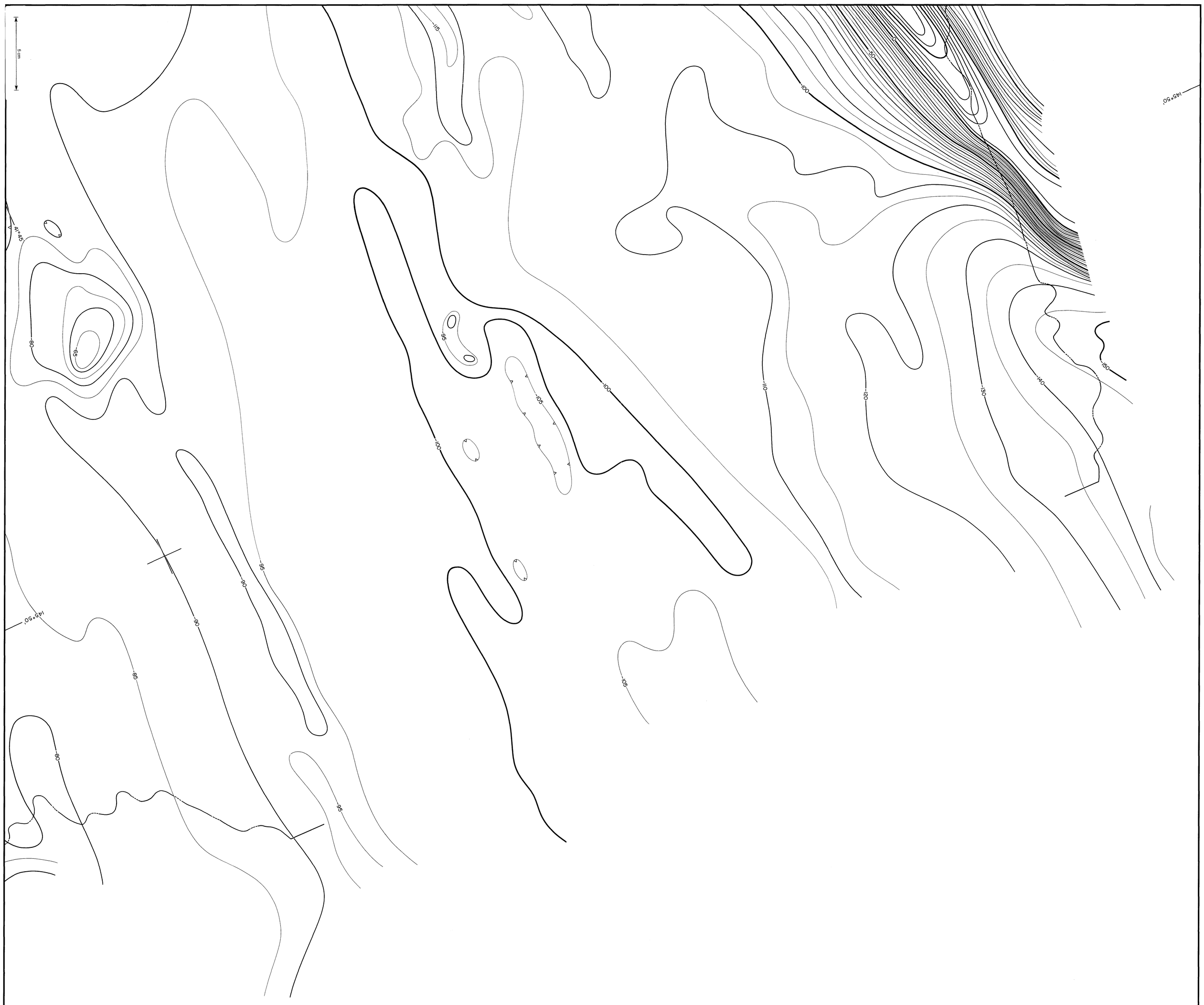
E29.80.56



ROSEBERY SHEET 3

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

TASMANIA

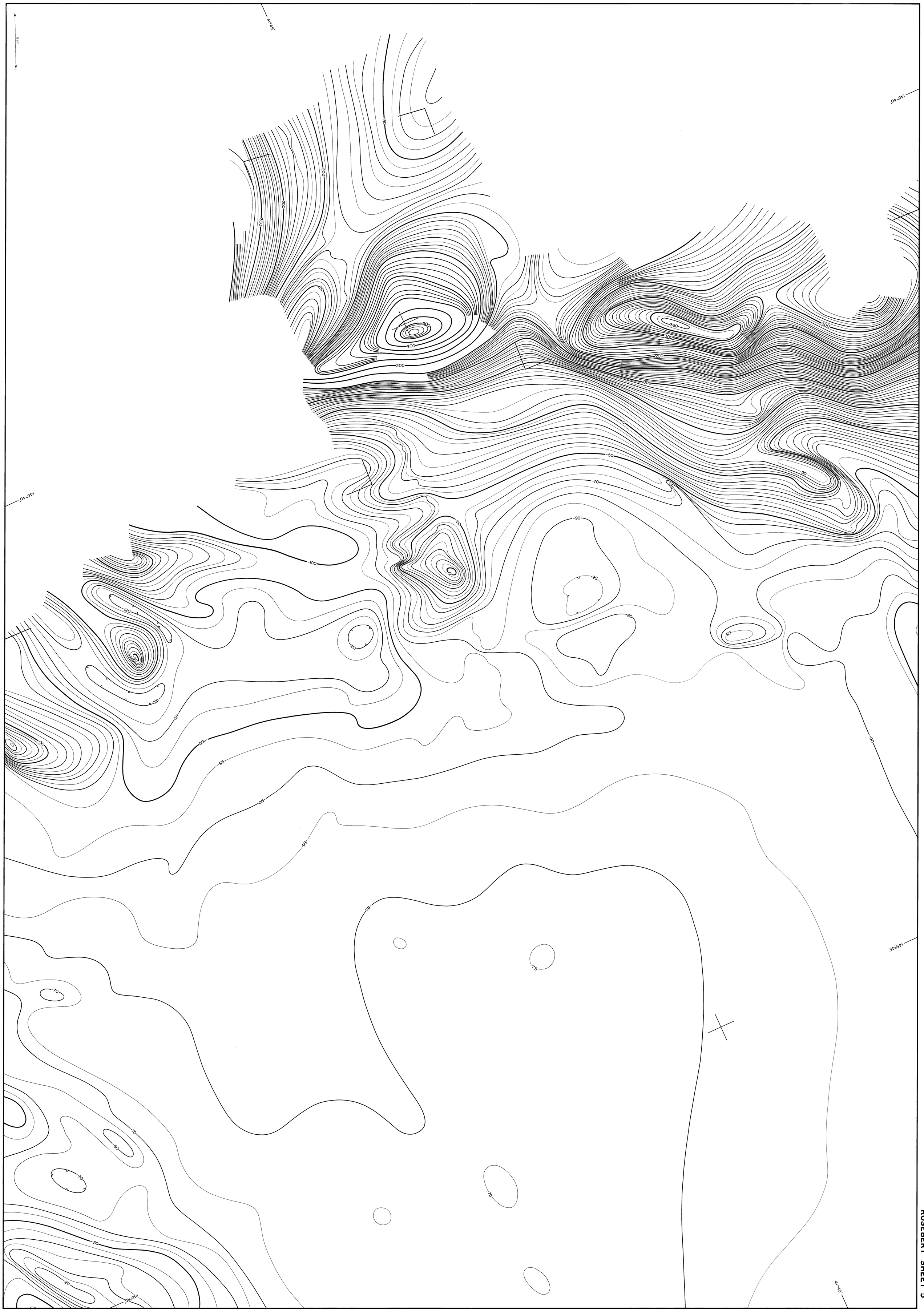


ROSEBERY SHEET 4

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

TASMANIA

E29.80.58

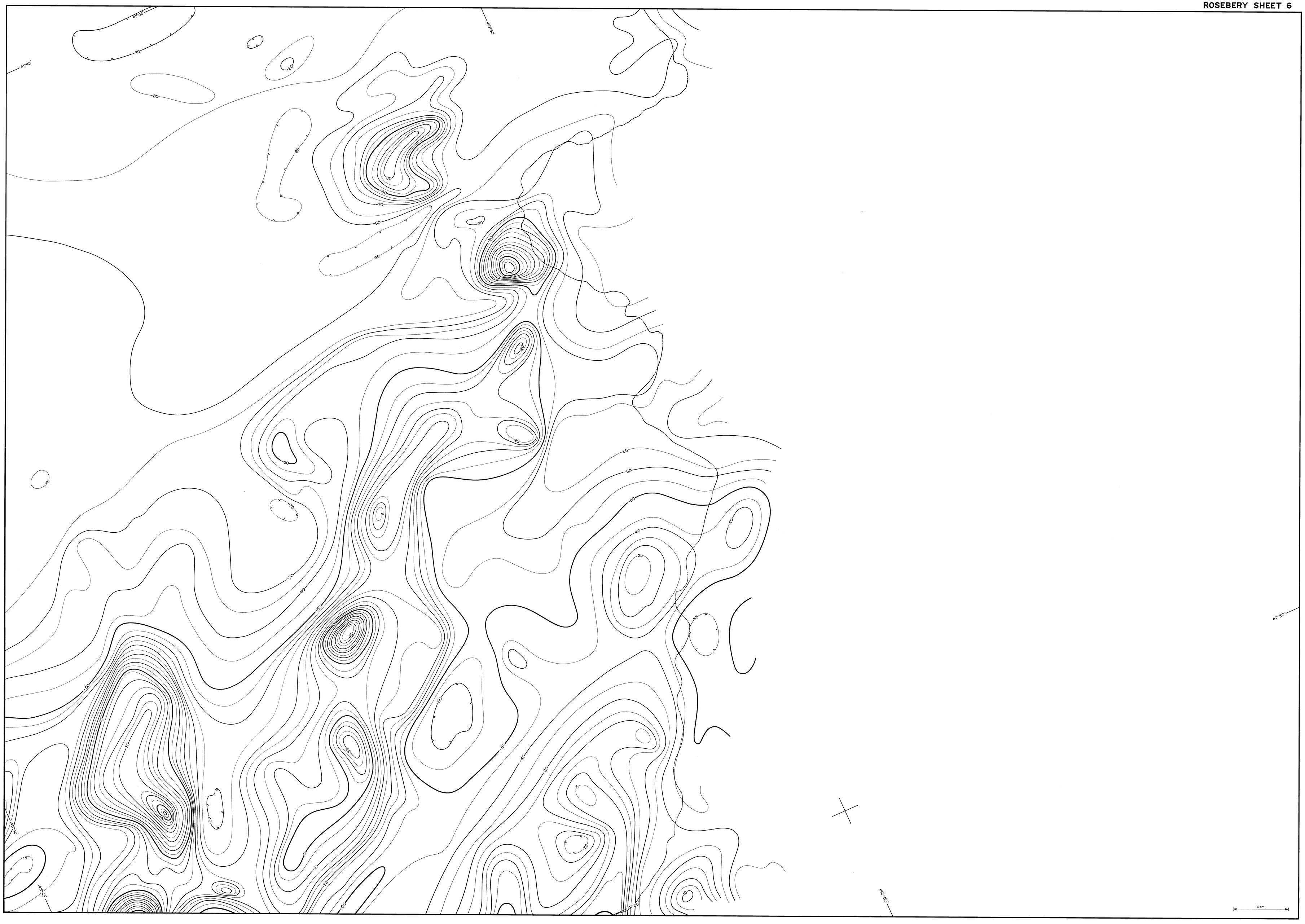


ROSEBERY SHEET 5

E25:Q.59

TASMANIA

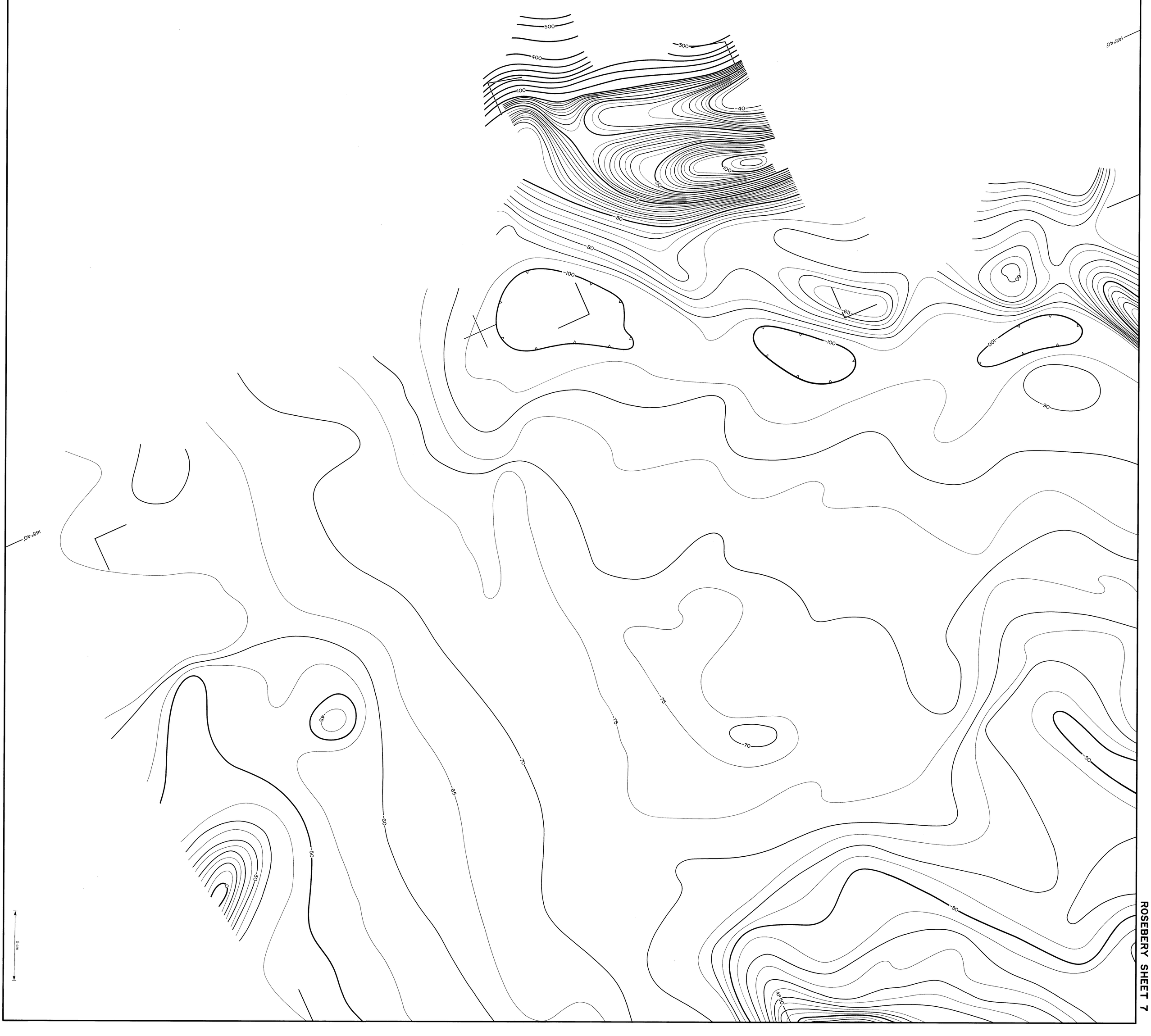
94-1564
GRANITE TOR AREA
SEL. 2/71
ALCOA OF AUST



TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

5 cm

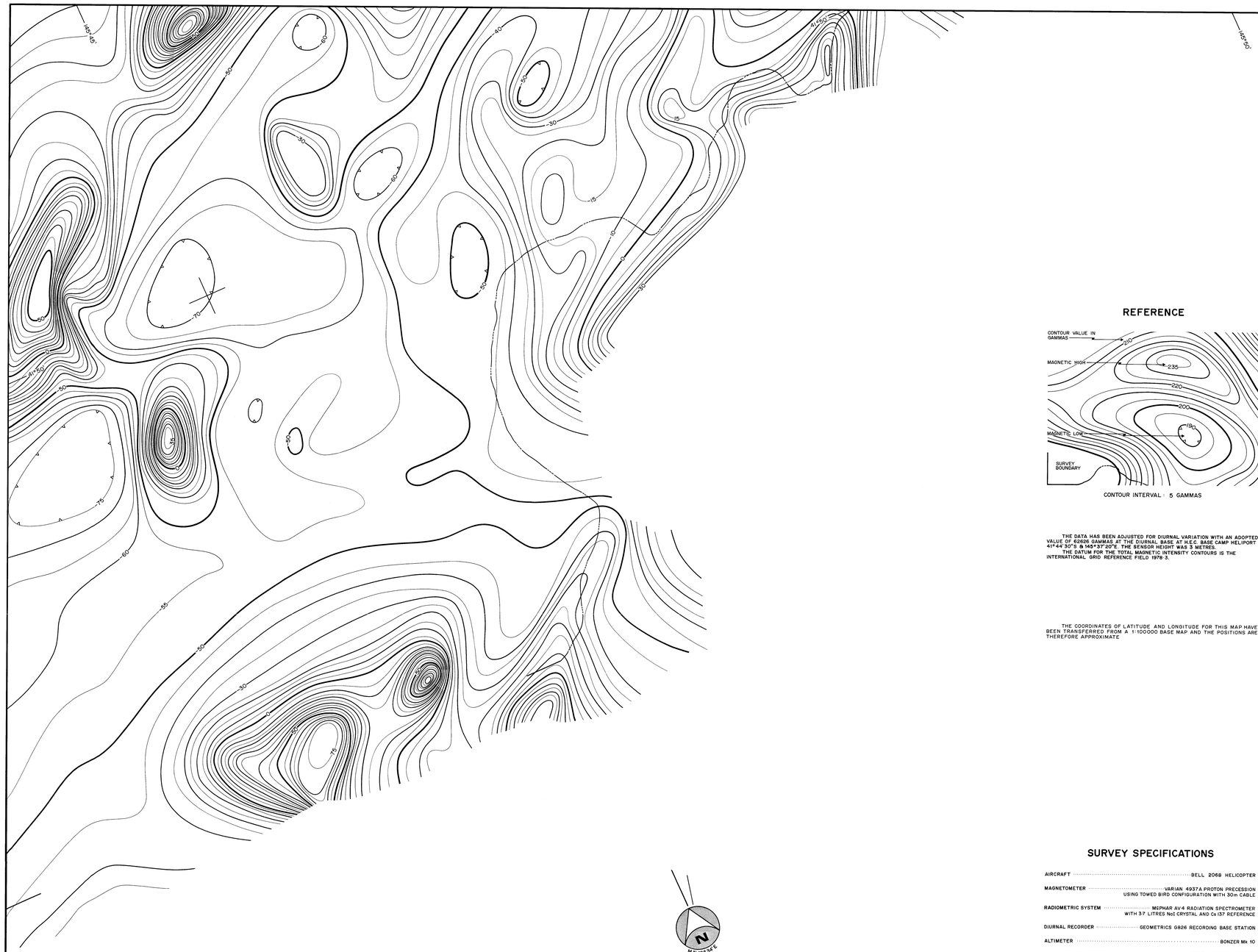


ROSEBERY SHEET 7

E29.80.61

94-3584
GRANITE TOR AREA
TAS. 1978
ALCOA OF AUST

TASMANIA



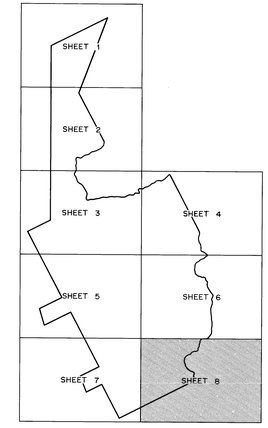
REFERENCE

CONTOUR INTERVAL : 5 GAMMAS

THE DATA HAS BEEN ADJUSTED FOR DIURNAL VARIATION WITH AN ADOPTED VALUE OF 62626 GAMMAS AT THE DIURNAL BASE AT M.E.C. BASE CAMP HELIPORT 41°44'30"S & 145°37'20"E. THE SENSOR HEIGHT WAS 3 METRES.
THE DATUM FOR THE TOTAL MAGNETIC INTENSITY CONTOURS IS THE INTERNATIONAL GRID REFERENCE FIELD 1978.3.

THE COORDINATES OF LATITUDE AND LONGITUDE FOR THIS MAP HAVE BEEN TRANSFERRED FROM A 1:100000 BASE MAP AND THE POSITIONS ARE THEREFORE APPROXIMATE

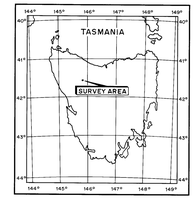
SHEET INDEX



SURVEY SPECIFICATIONS

AIRCRAFT	BELL 206B HELICOPTER
MAGNETOMETER	VARIAN 4937A PROTON PRECESSION USING TOWED BIRD CONFIGURATION WITH 30m CABLE
RADIOMETRIC SYSTEM	MOPHAR AV-4 RADIATION SPECTROMETER WITH 3·7 LITRES NaI CRYSTAL AND Cs 137 REFERENCE
DIURNAL RECORDER	GEOMETRICS G826 RECORDING BASE STATION
ALTIMETER	BONZER Mk 10
ANCILLIARY EQUIPMENT	GEOEX INTERVALOMETER GEOEX FILM DIGITAL RECORDER
	CENTURY 444 6 CHANNEL ANALOGUE LIGHT BEAM RECORDER
	VINTEN 16mm GROUND TRACKING CAMERA
READING INTERVAL	1·0 SECONDS
NOMINAL AIRCRAFT SPEED	65 KNOTS
NOMINAL AIRCRAFT SURVEY ALTITUDE	150 metres
	SENSOR CLEARANCE 135 metres

LOCATION



5 cm

GEOEX PTY. LTD.

ALCOA OF AUSTRALIA (W.A.) LTD.

ROSEBERY AREA – TAS.

AEROMAGNETIC TOTAL INTENSITY CONTOURS

SCALE 1:10000

SURVEYED: MARCH '78			APPROVED: J.E.HAIGH
DRAWN: R.G., J.P.		PROJECT Nº: 78123	DRAWING Nº: 8

TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

E29.8C.66

King Island

Flinders Island

Cape Barren Island

Burnie

Devonport

Launceston

Queenstown

HOBART

Macquarie Island

- Tin/W
- Gold
- Pb/Zn/Ag
- Copper
- other metals

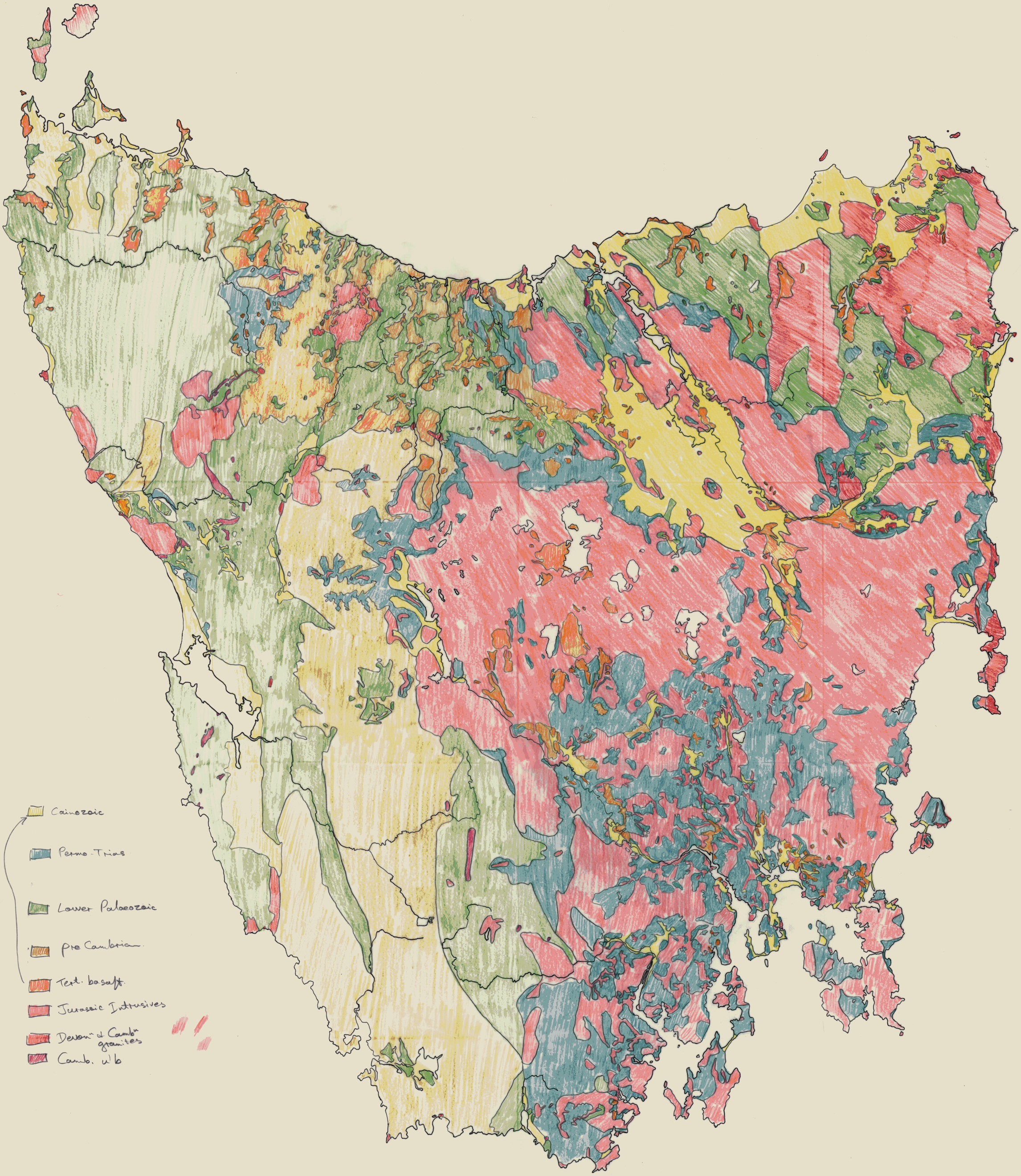
TASMANIA

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

39

E29.80.67

E29-80-67



7500N 7000N 6500N 6000N 5500N 5000N 4500N 4000N 3500N 3000N

5500E 5000E 4500E 4000E 3500E 3000E 2500E

Magnetic North

Grid North

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

BLUFF GRID

SHOWING

SOIL SAMPLE LOCATIONS &
MAGNETOMETER TRAVERSES

SCALE—1:5000

100 50 0 100 200 300
METRES

Geology by: D. Speijers, J. Schaeffer, R. Poltock
Compiled by: J. Schaeffer, D. Speijers, L. Holobradek, J. Mason.
Drawn by: A. Ross, R. Penny
Date: Nov. 1979 to May 1980

REFERENCE

- Line Cut
- 18522 Soil Sample Location with number
- Magnetometer Traverse

5 cm

GRANITE TOR AREA
BLUFF GRID
ALCOA OF AUST

E29.80.73

PLATE VI

94-3584
GRANITE TOR AREA
(EL 2/78)
ALCOA OF AUST

3500E 4000E 4500E 5000E 5500E 6000E 6500E

6000N 5500N 5000N 4500N 4000N

REFERENCE

Line Cut

18522 Soil Sample Location with number

Magnetometer Traverse

BASELINE

5 cm

ALCOA OF AUSTRALIA LIMITED

GRANITE TOR AREA

SWALLOW GRID

SHOWING

SOIL SAMPLE LOCATIONS &
MAGNETOMETER TRAVERSES

SCALE – 1:5000

100 50 0 100 200 300
METRES

Geology by: D. Speijers, J. Schaeffer, R. Poltock
Compiled by: J Schaeffer, D. Speijers, L. Holobradek, J. Mason.
Drawn by: A. Ross
Date: Nov. 1979 to May 1980

PLATE VII

E26.80.74