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COMSTAFF PROPRIETARY LIMITED

EXPLORATION LICENCE 1/68

1971/1972 SUMMER FIELD SEASON REPORT

MEREDITH GRANITE PROJECT

MICROFILMED

AUSTRALIAN ANGLO AMERICAN LIMITED

Incorporated in the State of Victoria

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1971/1972 SUMMER FIELD SEASON REPORT

MEREDITH GRANITE PROJECT

1. INTRODUCTION

The Meredith granite batholith is known to be a host for tin mineralisation, due to the countless old alluvial workings scattered throughout the area but especially adjacent to Mt.Ramsay and along Yellow Band river. Records of when the bulk of this previous activity took place are not known, but it probably stemmed from the 1880's when prospectors smothered this part of the Tasmanian west coast in search of another Mt.Bischoff and then again at a later period. It is our intention to locate a source or sources within this batholith that may bear tin concentrations of economic significance and possibly, associations of wolframite, scheelite, tantalite, columbite, pyrochlore, xenotime, and monazite.

1.1. Location (TAS 2-295)

The Meredith granite covers an area of approximately 160 square miles stretching from Mt.Ramsay in the east to the Stanley river in the west. The main area under investigation (see TAS 2-296) is about eight miles due south of the old Mt.Stewart mine.

1.2. Physical Features - Geomorphology

Approximately a third of the granite area investigated comprises rolling open country with rounded ridge crests and intervening wide river valleys, which are generally choked with thick scrub and ti-tree. The balance of the encompassing area to the north, south, east and west is largely myrtle forest with minor button grass plains.

1.3. Access

Access is either by foot and pack-horse across the centre of the thickly forested area by way of Betts track or by helicopter. For this programme the latter was used for a period of 12 days.

1.4. Previous Work

During the 1971 summer season the contact area between the granite and the lower Palaeozoic sediments at the headwaters of the Ramsay river and the Wombat flats area was mapped and geochemically stream sediment and soil sampled. These samples were analysed for Sn, W, Be, Mo, Nb. As a result anomalous values in Sn and W were realised; however these anomalous values are suspect as they were probably enhanced by the presence of numerous workings in alluvium, aplite and pegmatite.

In the Meredith area evidence of old workings are numerous, the most prominent are:-

- (a) An extensive net-work of water races to the SW in the Rocky river area.
- (b) Shaft sinking and trenching on Tadpole Hill located on the southern border of the area over an apparently localised area of intense tourmalinisation and silicification.
- (c) A small shaft on "Bit of a Change Hill", flanking the Yellow river, sunk over a narrow linear N-S trending zone of structurally controlled quartz veins bearing traces of sphalerite, galena, and possible chalcopyrite.
- (d) Throughout the area there are several old camp sites and some more recent ones, probably ex-Aberfoyle.

1.5. Objectives and Exploration Methods

The programme was of an experimental nature, combining the collection of rock specimens and adjacent soil samples to delineate an area or areas of relatively high background. In addition, stream sediment samples and panned concentrates were collected to test the suitability of our techniques in this environment.

Trace element analyses for Be, Li, Nb, Y, Sn, W, Cu, Zn, Mo, were made for rocks and their derived soils. Standard regional sediment samples were analysed for Cu, Ni, Zn, Mo, Ag, Sn, Be, Li, and panned concentrates for Cu, Ni, Zn, Mo, Ag, Sn, W, Nb, Ta, and Au. It was hoped some correlation could be made between the rock, soil, and stream sediment geochemistry and concentrate mineralogy.

1.6. Analytical Methods

Rocks and soils:

- i) Mo by fusion
- ii) Be, Y, by emission spectrometry
- iii) Ni, Cu, Zn, by special HF/HCl O4 attack, AAS finish
- iv) Sn by special emission spectrometry
- v) W, Nb, by special XRF

Stream sediments:

Normal AAS and XRF

Panned concentrates:

- i) Separation of heavy mineral fraction
- ii) Identification and estimation of the relative abundances of the constituents of the heavy mineral fraction

iii) Semi-quantitative

- iii) Semi-quantitative spectrographic analysis of the heavy mineral fraction for Ta, Nb, Mo, W, Ni, V, Co, Cu, Pb, Zn, Sn, Ag, Bi, Cd, Ge, As, Sb, Au.

2. GEOLOGY AND STRUCTURE

2.1. General

The Meredith granite intrudes lower Palaeozoic sediments, shales, siltstones, quartzites, greywacke and ultrabasics.

2.2. Petrology

In a previous publication D.I. Groves (The Geology of Western Tasmania - a symposium, November 1967 - Geochemistry of Granitic rocks), on the basis of information gathered along Betts track and the westerly granite contact along the Stanley river, has stated that the granite is predominantly a fine, even grained adamellite. Textural varieties include a porphyritic grey adamellite of the same composition, viz., quartz, acid andesine, orthoclase, microperthite, subordinate biotite, minor muscovite, hornblende, apatite, zircon, and sphene. Aplites and rare pegmatites were noted.

A number of specimens were taken from the batholith at a frequency of about three to the square mile and submitted to Central Mineralogical Services for classification. Only three specimens were classified as adamellite (oligoclase-plagioclase content greater than 1/3 of total feldspar), as compared with the general granitic composition of the rest of the batholith, viz., biotite granite, biotite microgranite and porphyritic biotite microgranite. Compositionally they contain:-

quartz from 30-50%,
 potassic feldspar from 30-50%,
 plagioclase feldspar Aul0-Au30 10-20%,
 biotite trace to 3%,
 tourmaline trace to 4%.

The biotite is characteristic and uniform being dark red-brown with radio active inclusions (xenotime) surrounded by pleochroic haloes and often inclusions of minute anatase crystals. As a guide to possible anomalous radio activity due to xenotime in the biotite all samples were tested with a rate meter but no anomalous readings were detected.

Tourmaline is fairly ubiquitous, postmagmatic and partially replaces primary minerals in interstices and fractures. In hand specimen it is bluish green, dark green to greenish black.

2.3. Mineralisation

Secondary muscovite, topaz, and cassiterite? sometimes occur and probably belong to the same phase as the tourmal-

4/ inisation. Jarosite in

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inisation. Jarosite in two of these specimens (FR 2186 and FR 2288) suggests the former presence of arsenopyrite and thus a typical and significant mineral assemblage is represented.

The above two specimens (FR 2186 and FR 2288) are not representative as they were collected from areas of localised intense tourmalinisation and therefore too great a significance should not be attached to them as their strike and lateral extent is not known. High concentrations of tourmaline and topaz occur in the roof zones of intruding granites (D.I.Groves op.cit.). It is possible that remnant cupolas may still be found in the area, although not located to date. In the Heemskirk granite tin is particularly abundant in quartz-tourmaline veins and greisenised material. It has been suggested (Groves op.cit.) that the Meredith granite has been more deeply eroded than Heemskirk and therefore one would not expect to find any zones of significant tin concentration.

Widely spaced and infrequent quartz tourmaline veins generally, one to two inches wide occur throughout the area; tourmaline-quartz nodules are more frequent. Obviously, any concentrations of quartz tourmaline veins or pervasive tourmalinisation may have indirect economic significance.

Only two small pegmatites were noted whereas aplite veins are more common.

Statistically, there is insufficient evidence to suggest the batholith can be petrographically zoned, for it would appear to be homogeneous excepting the occurrences of adamellite which seem to be peripheral to the main mass of the biotite granite.

2.4. Structure

The batholith is well and closely jointed. The main joint patterns are N-S and WSW-ENE. Quartz tourmaline veins would appear to follow the N-S trend more closely as well as being more randomly orientated.

3. GEOCHEMISTRY

3.1. Introduction

An area of approximately 40 square miles containing the Steep creek and Rocky river basins to the west and south; the Yellow river basin in the centre, north and east; the Stanley and Harman river basins in the south and the Little Wilson river basin in the south east was regionally geochemically sampled. At selected drainage sample locations the following four types of geochemical samples were collected:-

- 1. Rock outcrop specimen,
- 2. Soil sample, directly related to above outcrop,

- 5/ 3. Stream sediment

3. Stream sediment sample,
4. Panned stream concentrate.

It was not always possible to collect suitable rock specimens due either to the lack of actual outcrop or the outcrop being too weathered, although base of slope soil samples were invariably collected. Unfortunately, there is a paucity of data where rock specimen geochemistry and corresponding derived soil geochemistry can be directly compared.

Altogether approximately 100 rock specimens were collected; 33 of which were submitted for geochemical analysis (see Table A), and only 11 equivalent soil samples for analysis (see Table B corresponding rock and soil geochemistry). In addition, 240 stream sediment samples, 180 base of slope soil samples, and 119 panned concentrates were collected. Overall a coverage of 5-6 stream sediment samples per square mile was achieved. The Yellow river area was the most densely sampled basin.

Results of the rock, soil, sediment and panned concentrate geochemistry have been successful in outlining two possible provinces of predominantly anomalous tin values and a third more nebulous zone. For the purpose of this report these zones will be called A, B, and C, (see TAS 2-297). Zone A encompasses the headwaters of the Stanley and Harman rivers, Zone B, the headwaters of Steep creek, the Meredith range divide and the western headwaters of Yellow river, while Zone C straddles Yellow river.

3.2. Rock trace element chemistry (TAS 2-299 to 2-304)

In the publication by D.I. Groves (mentioned earlier in this report) he gives the following rock trace element results obtained from the Meredith granite and other west coast granite batholiths.

<u>Element</u>	<u>Background or range</u>	<u>Granite type</u>
Li	30 ppm	Adamellite
Li	48 ppm	Microgranite
Li	225 ppm	Aplites
Cu	4-6 ppm	Constant for various granites
Zn	47 ppm	Adamellites
Sn	3 ppm (1-4 ppm)	Meredith granite
Sn	15-30 ppm	Unaltered biotite granites
Sn	16-32 ppm	Tin mineralised biotite granites
Sn	60-110 ppm	Late stage or post magmatically altered granites
Sn	up to 800 ppm	Greisens

The majority of rock specimens submitted for trace element analysis are petrographically biotite granites or biotite microgranites showing no or varying degrees of postmagmatic alteration, i.e., tourmalinisation, development of secondary muscovite, and sericitisation of the plagioclase feldspars and this is reflected to some degree in chemical rock analysis. From the limited rock result data available the following probable backgrounds and values of significance for the various elements have been established:- (see Table A)

Elements	Sn	W	Li	Be	Y	Nb	Cu	Zn	Mo
Probable background	1	10	35-45	2	50	18-20	4	10	5
Significant values	≥ 3	≥ 20	≥ 65	≥ 5	≥ 100	≥ 40	≥ 10	≥ 30	≥ 8
Peak values	3000	80	99	5	100	23	120	60	10

It is clearly apparent that anomalous values for Sn, W, Cu and significant values for Be, Zn, and Mo are given by the two most altered rock specimens F2186 (quartz-tourmaline-cassiterite rock) and F2288 (quartz-topaz-tourmaline rock) which also contain jarosite after arsenopyrite. Specimen F2186 is located in anomalous zone A while F2288 is located along the Meredith range in anomalous zone B. Also associated with specimen F2288 in anomalous zone B are specimens 2285-2287 containing significant amounts of Sn, W, Zn and Mo, as is clearly seen from the rock element contour maps. Yttrium molybdenum and lithium contours and to a lesser extent tin and beryllium show an association in anomalous zone C. Niobium does not record any significant values.

Table A - see next page

Table A - Results of rock trace element analysis (for contour overlays)

Limits of detection 1 1 10

Sample No.	Sn	W	Li	Be	Y	Nb	Cu	Zn	Mo
F2005	1	10	37	2	50	18	4	15	8*
F2043	1	5	76*	3	100*	23	4	13	5
F2055	3*	10	53	2	50	18	7	10	8*
F2068	1	10	65*	2	100*	20	3	19	3
F2075	5*	10	49	2	50	20	7	19	5
F2088	1	10	58	2	50	19	3	10	5
F2112	3*	10	69*	2	100*	18	6	14	8*
F2114	1	5	55	2	100*	15	6	17	8*
F2116	1	10	69*	2	50	19	12*	20	8*
F2120	1	5	42	2	100*	18	5	19	5
F2132	1	5	92*	2	30	21	4	25	5
F2137	5*	15	25	5*	50	7	7	16	3
F2186	3000φ	30*	21	5*	30	17	40*	34*	8*
F2188	10φ	15	69*	2	50	20	4	18	8*
F2228	1	15	99*	3	30	20	4	15	8*
F2233	1	15	51	2	50	17	4	16	5
F2236	1	10	48	1	50	18	7	17	3
F2237	1	15	60*	2	50	20	5	20	5
F2240	3*	10	30	2	50	11	6	17	10*
F2262	1	10	63*	2	50	17	6	10	5
F2278	1	15	63*	2	30	20	6	27	8*
F2279	1	15	57	2	30	19	5	20	5
F2281	1	10	71*	2	30	19	8	20	5
F2283	1	10	39	3	50	17	4	21	3
F2285	3*	10	41	2	30	18	3	17	5
F2286	3*	25*	76*	5*	50	19	8	43*	8*
F2287	3*	20*	49	2	50	18	7	60*	8*
F2288	30φ	80φ	68*	2	30	19	120*	9	8*
F2289	1	15	51	3	50	21	21*	8	5
F2302	1	15	65*	2	50	18	4	17	3
F2305	1	5	29	2	50	18	10*	13	8*
F2306	1	10	24	3	50	17	9	9	5
F2308	1	15	85*	2	100*	22	3	32*	7

Mt. Stewart

* regarded as significant value for contouring
φ regarded as very significant value for contouring.

3.3. Soil geochemistry related to rock trace element chemistry (see TAS 2-305)

With the limited information available it is hard to make any direct correlation between the rock trace element values and the values obtained from the soils derived from these rocks. In most cases the rocks giving rise to these soils do not contain significant values for trace elements. In the same manner for the rock specimens, listed below are probable background, significant and peak values obtained from the set of eleven soil samples:-

(see next page)

Elements	Sn	W	Li	Be	Y	Nb	Cu	Zn	Mo
Probable background	1	30-35	20-25	2	100-300	23-30	6	10-13	5
Significant values	>3	(50) ≈40?	≈40	≈5	≈500	≈50	≈10	≈20	≈8
Peak values	5	65	61	5	2000	75	15	98	10

See also table A trace element geochemical results of rocks and their derived soils.

Although it is not possible in most cases to correlate background and anomalous concentrations of trace elements in the rocks with their derived soil values the following facts emerge that may be useful in future work, but there are of course exceptions. Wolfram and yttrium soil values show a very marked increase over the rock value while tin and niobium show a two to three times increase over rock background. Copper and molybdenum show minor increases, beryllium remains relatively constant, lithium shows a marked decrease relative to rock background value while zinc is erratic.

The majority of these soil values are restricted to anomalous zone C and element contours for yttrium and wolfram show up while molybdenum is less pronounced.

Specimen F2137 from "Bit of a Change Hill" (zone C) shows a marked zinc and lesser copper concentration in the soil which is not apparent in the rock. This Zn, Cu soil anomaly is probably due to visible sphalerite and chalcopyrite in an old shaft and surface outcrop close by.

Table B - see next page.

Table B - Results of soil trace element analysis
(soils derived from rock specimen on Table A)

Sample No.	Type	Sn	W	Li	Be	Y	Nb	Cu	Zn	Mo
FR2112	Rock	3*	10	69*	2	100*	18	6	14	8*
FM2112R	Soil	1	25	12	1	100	29	8	10	5
FM2114L	Soil	3*	55*	25	2	2000*	27	5	6	5
FR2114	Rock	1	5	55	2	100*	15	6	17	8*
FM2114R	Soil	1	45*	14	1	300*	43	9	14	3
FM2116L	Soil	3*	45*	31	3	500*	30	6	7	5
FR2116	Rock	1	10	69*	2	50	19	12*	20	8*
FM2120L	Soil	2	60*	31	2	2000*	28	9	18	10*
FR2120	Rock	1	5	42	2	100*	18	5	19	5
FM2120R	Soil	1	35*	25	1	300*	43	6	10	5
FM2131L	Soil	5*	40*	29	2	300*	50*	6	10	8*
FR2132	Rock	1	5	92*	2	30	21	4	25	5
FM2132L	Soil	2	30	23	2	300*	36	6	13	8*
FM2137	Soil	5*	20	49	1	100	23	15*	98*	8*
FR2137	Rock	5*	15	25	5*	50	7	7	16	3
FR2043	Rock	1	5	76*	3	100*	23	4	13	5
FM2043R	Soil	1	25	54	2	100	41	10*	10	5
FM2055L	Soil	1	65*	29	3	500*	34	5	12	8*
FR2055	Rock	3*	10	53	2	50	18	7	10	8*
FM2055R	Soil	1	35	21	3	100	50*	3	13	8*
FM2068L	Soil	15*	55*	30	5*	500*	33	9	13	3
FR2068	Rock	1	10	65*	2	100*	20	3	19	3
FM2068R	Soil	5*	30	22	1	100	23	8	9	3
FM2075L	Soil	10*	45*	25	3	200	75*	6	13	9*
FR2075	Rock	5*	10	49	2	50	20	7	19	5
FM2075R	Soil	5*	45*	15	5*	500*	75*	8	13	5
FM2088L	Soil	1	50*	61*	3	100	52*	9	10	8*
FR2088	Rock	1	10	58	2	50	19	3	10	5
FM2088R	Soil	1	50*	24	5*	150	41	6	8	8*

L = Left break of slope

R = Right break of slope

Samples Nos. FM2137 and FR2137 "Bit of a Change Hill" showing of sulphides, sphalerite, chalcopyrite, galena.

* The following values are regarded as significant for contouring purposes for both rocks and related soils:

<u>Element</u>	<u>Rock</u>	<u>Soil</u>
Sn	> 3	≥ 3
W	≥ 20	≥ 40
Li	≥ 60	≥ 60
Be	≥ 5	≥ 5
Y	≥ 100	≥ 500
Nb	≥ 40	≥ 50
Cu	≥ 10	≥ 10
Zn	≥ 30	≥ 20
Mo	≥ 8	≥ 8

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3.4. Stream Sediment Geochemistry

240 stream sediment samples were collected, dried and sieved. The -80 mesh fraction was analysed for Sn, Li, Be, Cu, Zn, Ni, Mo, Ag.

3.4.1. Results (see TAS 2-297)

Background values, range of value, and anomalous values for the various elements are listed in Table C (Stream sediment statistical geochemical data). The distribution of anomalous values is plotted on plan TAS 2-297.

3.4.2. Tin

Two background values emerge; a regional value of 10-20 ppm and a local background of 50 ppm. The latter cannot be related to a particular granite type but is probably due to a pervasively higher tin content in a particular zone or zones within the batholith (anomalous zones A and B). A value of ≥ 200 ppm has been regarded as anomalous, and the two highest values obtained are 2480 ppm and 3680 ppm tin, but generally anomalous values range from 200-1500 ppm tin. A broad pattern of anomalous values has been successful in outlining two and possibly three tin bearing provinces within the batholith. These zones have been previously referred to in the Geochemistry Introduction (page 4). There is good correlation between these values and anomalous rock geochemistry previously reported.

3.4.3. Lithium

Background and possibly anomalous values are regarded as 10 ppm and ≥ 30 ppm respectively. The few anomalous values obtained are predominantly found in anomalous zone B corresponding with high tin values. Highest value obtained was 47 ppm lithium.

3.4.4. Silver

Only two values of 0.2 ppm may be regarded as possibly anomalous. All other values remained below the limit of detection so little significance is placed on these samples although they do occur in anomalous zone B associated with anomalous tin values.

3.4.5. Zinc and Nickel

The few anomalous values obtained for these two elements are restricted to the Little Castray basin at the granite, ultrabasic contact in the Mt. Stewart area. They will not be discussed any further in this report.

3.4.6. Beryllium, Copper, Molybdenum

No significantly anomalous values were recorded for these three elements.

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Table C - Stream sediment statistical geochemical data

Element	Population	Mean Background	Range	Isolated Highs	Regarded anomalous
		ppm			
Tin	240	10-20 (reg.) 50 (loc.)	0-1500	2480 3680	≥ 200
Lithium	240	10	5-36	47x1	≥ 30
Beryllium	240	2.5-3.0	0.5-5.2	5.2x1	≥ 5
Copper	240	x-2	x-4	4x5	≥ 6
Zinc	240	4-6	2-26	Mt.Stewart 100x1, 140x1, 150x1, 44x2	≥ 18
Nickel	240	2-4	x-26	Mt.Stewart 44x1, 110x1, 120x1, 150x1	≥ 12
Molybdenum	240	0.25-0.5	x-1.0		≥ 1.5
Silver	240	x	x-0.2		≥ 0.2

Table D - Base of slope soil statistical geochemical data
(not to be related with rock/soil geochemistry)

Tin	180	8-12 (reg.) 20-30 (loc.)	x-250	600x1	≥ 100
Lithium	180	5-10	x-35	50x1	≥ 30
Beryllium	180	2.5-3.5	0.5-6	8.4x1	≥ 5
Copper	180	x-2	x-4	24x1 18x1	≥ 6
Zinc	180	6-8	2-36	220x1 270x2	≥ 24
Nickel	180	4	x-20	130x1 180x1 310x1	≥ 12
Molybdenum	180	0.75-1	0.5-4	-	≥ 3
Silver	180	x-0.2	x-0.6	-	≥ 0.5

x = below limit of detection.

3.5. Panned concentrates

A total of 119 heavy concentrate samples were collected, giving a sample density of two to the square mile. Approximately 60-70 lbs of wet unscreened river or creek gravel was collected from the best trap site available and then sieved and panned at a later stage. The resultant concentrates were then submitted to AMDEL for heavy mineral separation, microscopic examination and spectrographic analysis.

Microscopic examination showed that:

- i) Monazite is a persistent and plentiful mineral in almost all of the concentrates, as yellowish subhedral crystals and sub-rounded grains. Grain size ranges from 0.02 mm to 0.5 mm.
- ii) Topaz is present in widely varying quantities in all samples as fairly coarse sub-angular colourless to white grains. Commonest grain size is from 0.5 mm to 1.0 mm.
- iii) Tourmaline is the most abundant constituent present, as stumpy, striated, prismatic crystals, and crystal aggregates, and it occurs in all samples. Two distinct types are present; a dark brown almost black variety and a less common blue to greenish variety. Grain size varies from 0.20 mm to 2.0 mm, (the latter variety appears to be more commonly associated with tin mineralisation in the field). L1?
- iv) Cassiterite occurs in most samples but is less abundant than tourmaline, topaz and monazites, as sub-angular grains and crystal fragments. Colour varies from very dark brown, through shades of orange to red. Grain size ranges from 0.20 mm to 0.40 mm.

Generally, samples with a higher tin content have a correspondingly higher content of topaz and to a lesser extent monazite.

Spectrographic scans of the heavy concentrates reveal that:

- i) 59% of the samples give tin values ranging from 100-8000 ppm; 40% values of $\geq 10,000$ ppm, while only 1% are negative.
- ii) 55% of the samples give ^{wolfram?} wolfram values ranging from 50-800 ppm; 40% values of $\geq 1,000$ coincident with the high tin values, and niobium values up to 200 ppm, while 5% of the results are negative.
- iii) Other trace elements were not recorded in significant amounts.

It is clearly evident from the distribution of high tin and wolfram spectrographic results that they predominantly coincide with the anomalous stream sediment geochemical results.

3.6. Conclusions derived from rock chemistry, soil geochemistry, stream sediment anomalies and panned concentrate results

It is now abundantly clear that there is a most

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distinct relationship between:

- (a) the significantly high but restricted rock chemistry of tin, wolfram, etc. contours, and
- (b) the more widespread encompassing anomalous tin stream sediment samples and the high tin and wolfram panned concentrate results.

Derived rock soil contour information is inadequate for this area, since the necessary samples were not available but even here there is some correlation. As a result of the above information two distinctly anomalous tin and wolfram zones emerge; zone A centred on Tadpole Hill, and zone B centred along the Meredith range. A third, but less well defined zone C straddles the Yellow Band river. Zones A and B should now be regarded as potential targets for exploration. It is also encouraging to know that our experimental sampling techniques employed were successful in achieving their objective.

4. PLANS

TAS	2-295	Meredith Granite Project	Location Plan	
	2-296	" "	Sample Coverage	
	2-297	" "	Stream Sediment Anomalies	
	2-298	" "	Heavy Mineral Concentrate Anomalies	
	2-299	" "	Rock Geochemistry - Cu	
	2-300	" "	" " - Sn	
	2-301	" "	" " - Zn	
	2-302	" "	" " - W	
	2-303	" "	" " - Y	
	2-304	" "	" " - Li	
	2-305	" "	Soil Sample Anomalies	

S.R. YARDLEY

March 1972.



TYPICAL GRANITE COUNTRY
Yellow Band basin



PEGMATITE VEIN
Mt. Ramsay



INTENSELY TOURMALINISHED GRANITE
Tadpole Hill
(see cig. packet for scale)



OLD SHAFT
Bit of a Change Hill



HELICOPTER OPERATIONS



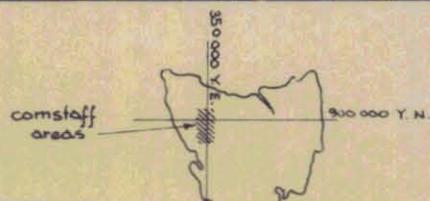
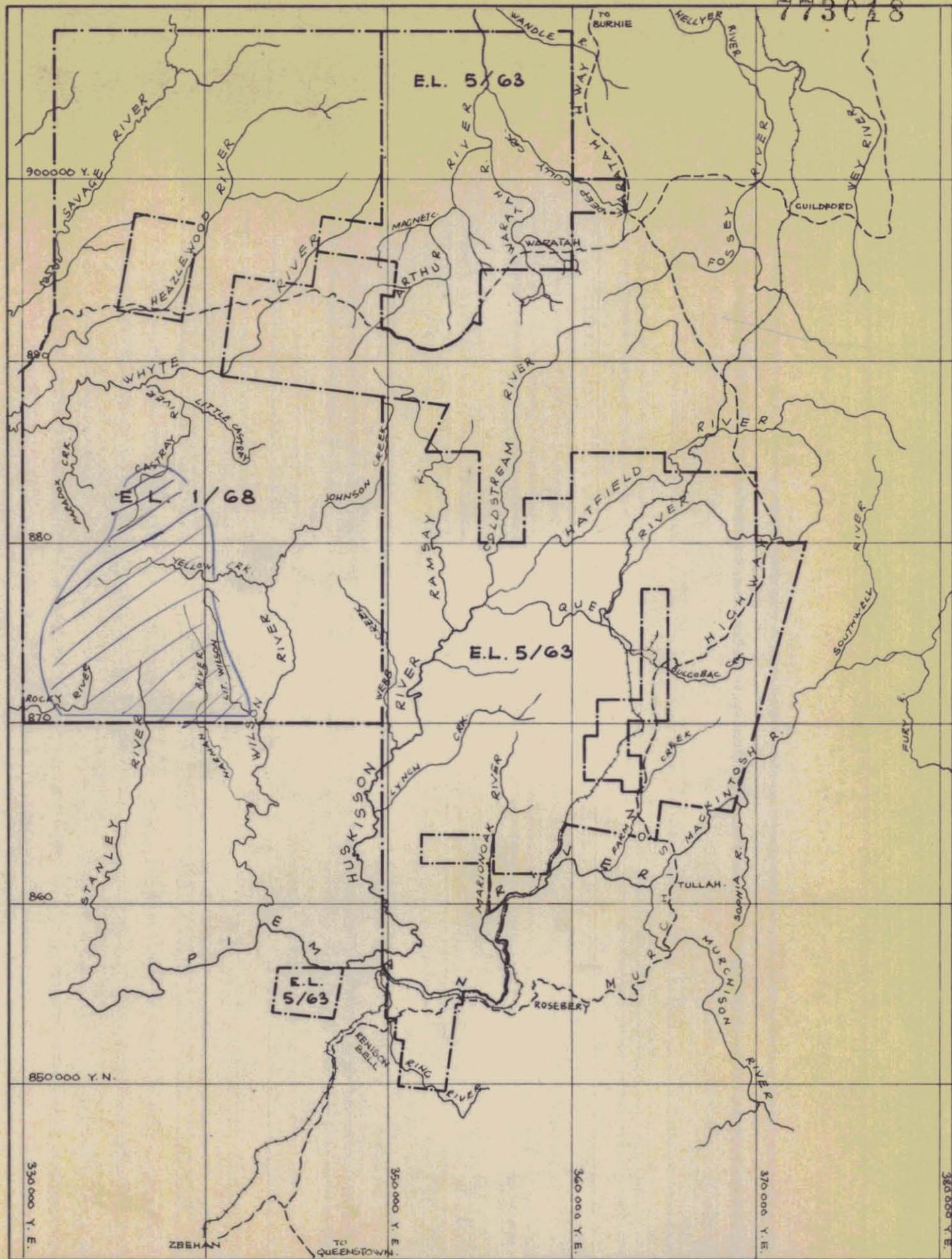
TYPICAL UNDULATING COUNTRY
Rocky river basin



TYPICAL FOREST & BUTTON GRASS
Yellow river - eastern

017

773048

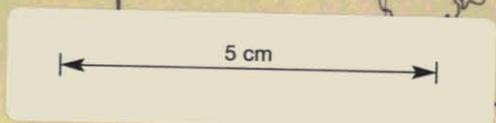


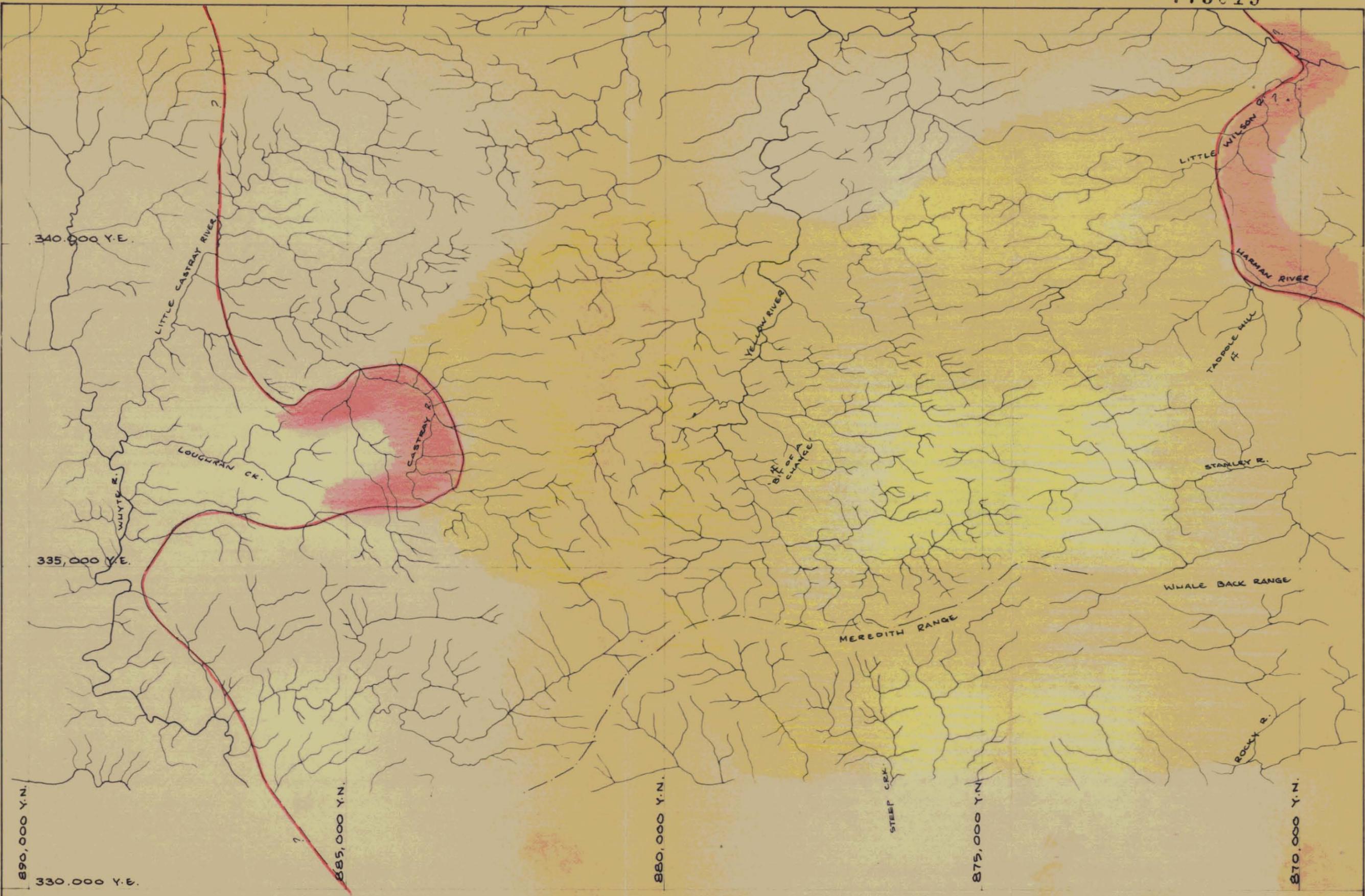
COMSTAFF PROPRIETARY LIMITED

MEREDITH GRANITE PROJECT

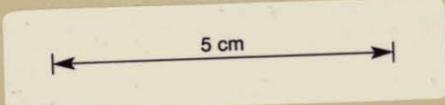
LOCATION PLAN - SUMMER 1972

DRAWN GC.	COMPILED	SCALE 1:250,000	TAS-2-295
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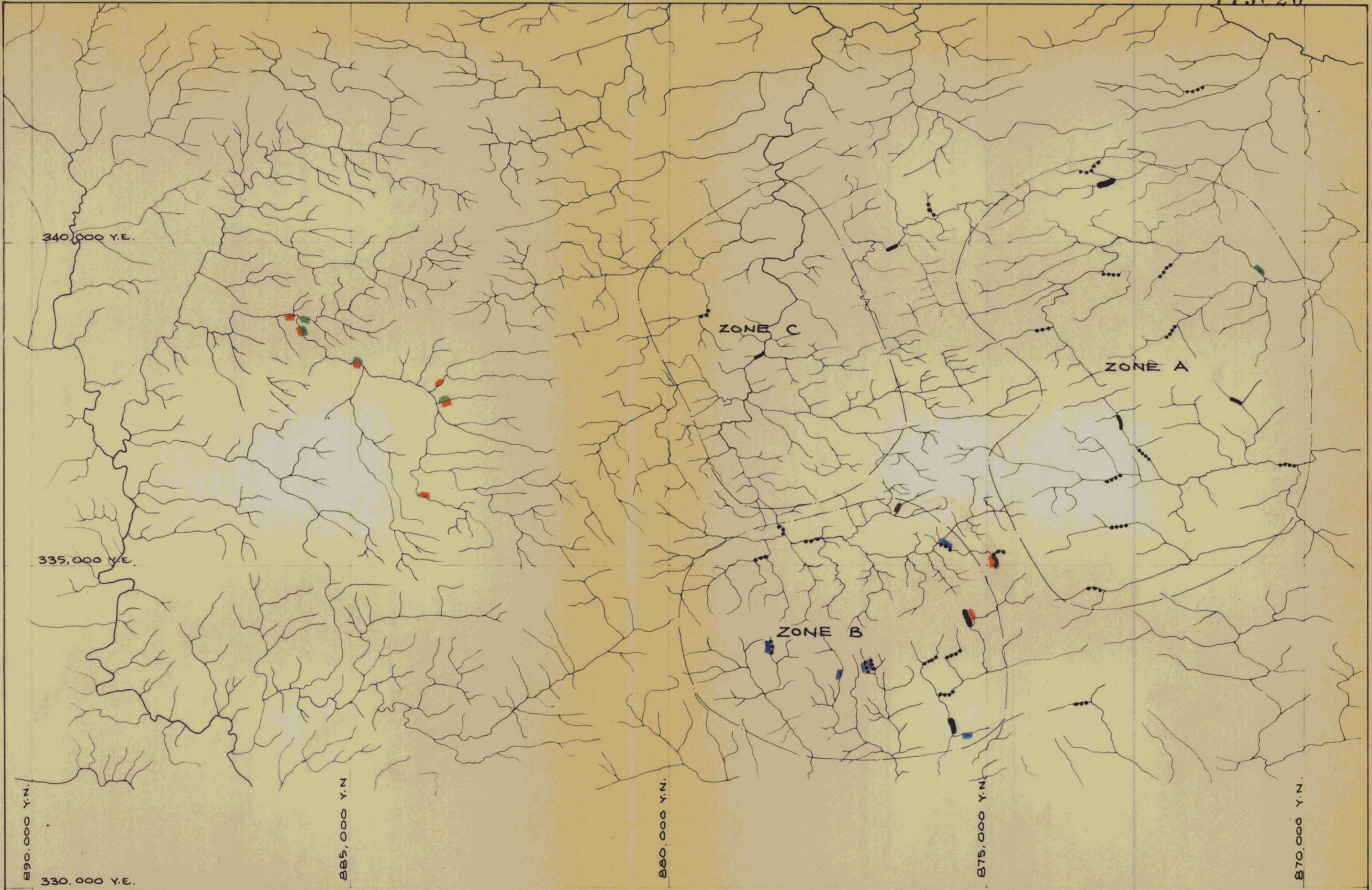




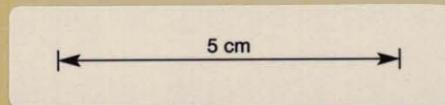
-  PROBABLE GRANITE BOUNDARY
-  ULTRABASICS
-  AREA COVERED BY SED. SOIL, ROCK, GEOCHEMICAL AND HEAVY MINERAL SAMPLING.



COMSTAFF PROPRIETARY LIMITED		
MEREDITH GRANITE PROJECT		
SAMPLE COVERAGE		
SCALE 1:50000	DWN. A.C.	TAS. 2-296



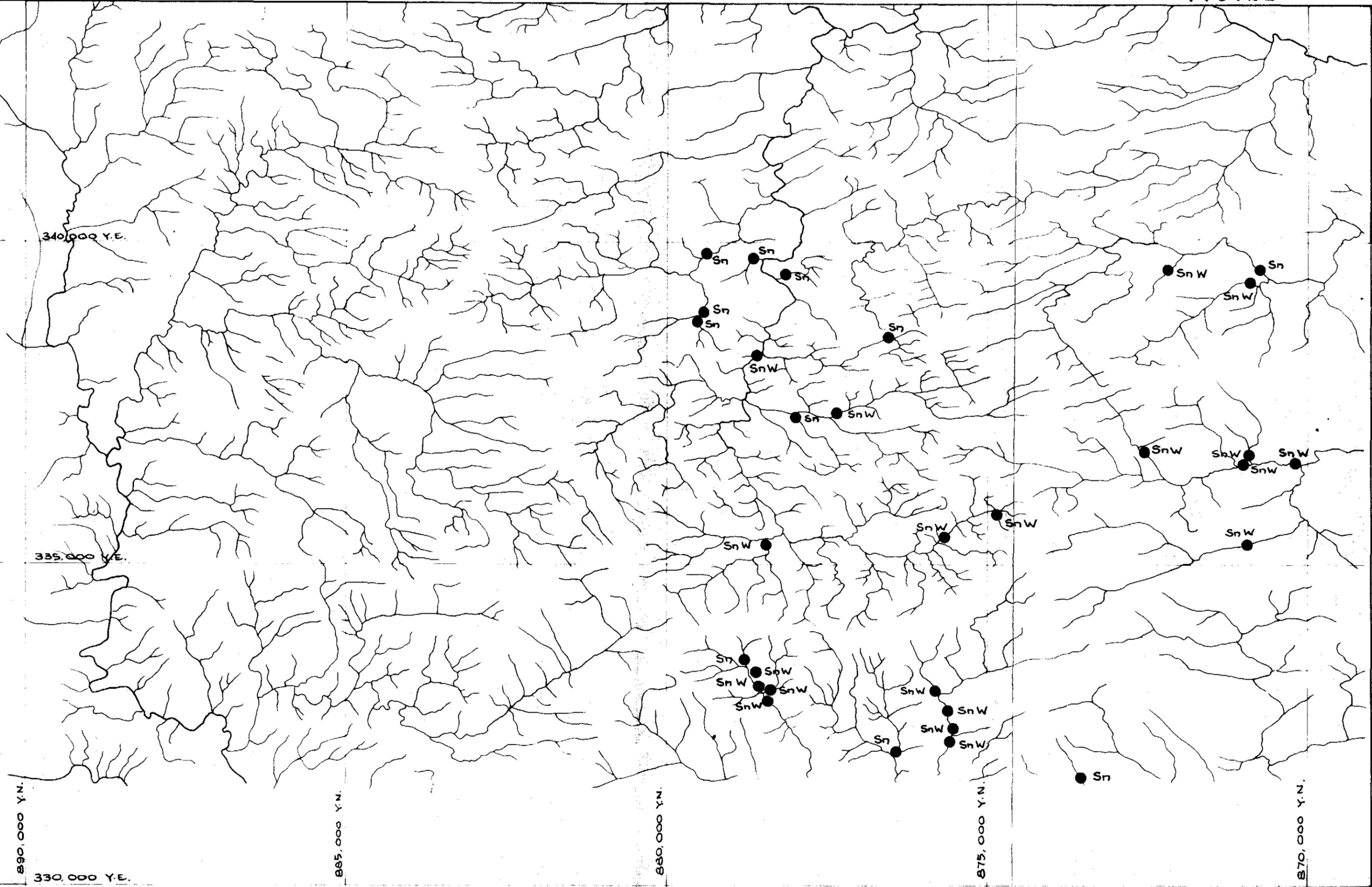
Sn >200
 ————— >1000
 ————— >2000
 Li ■ >30
 Ni ■ >10
 Zn ■ >20
 Ag ■ >0.2



COMSTAFF PROPRIETARY LIMITED		
MEREDITH GRANITE PROJECT STREAM SEDIMENT ANOMALIES		
SCALE 1:50000	DWN. A.C.	TAS 2-297

020

115061



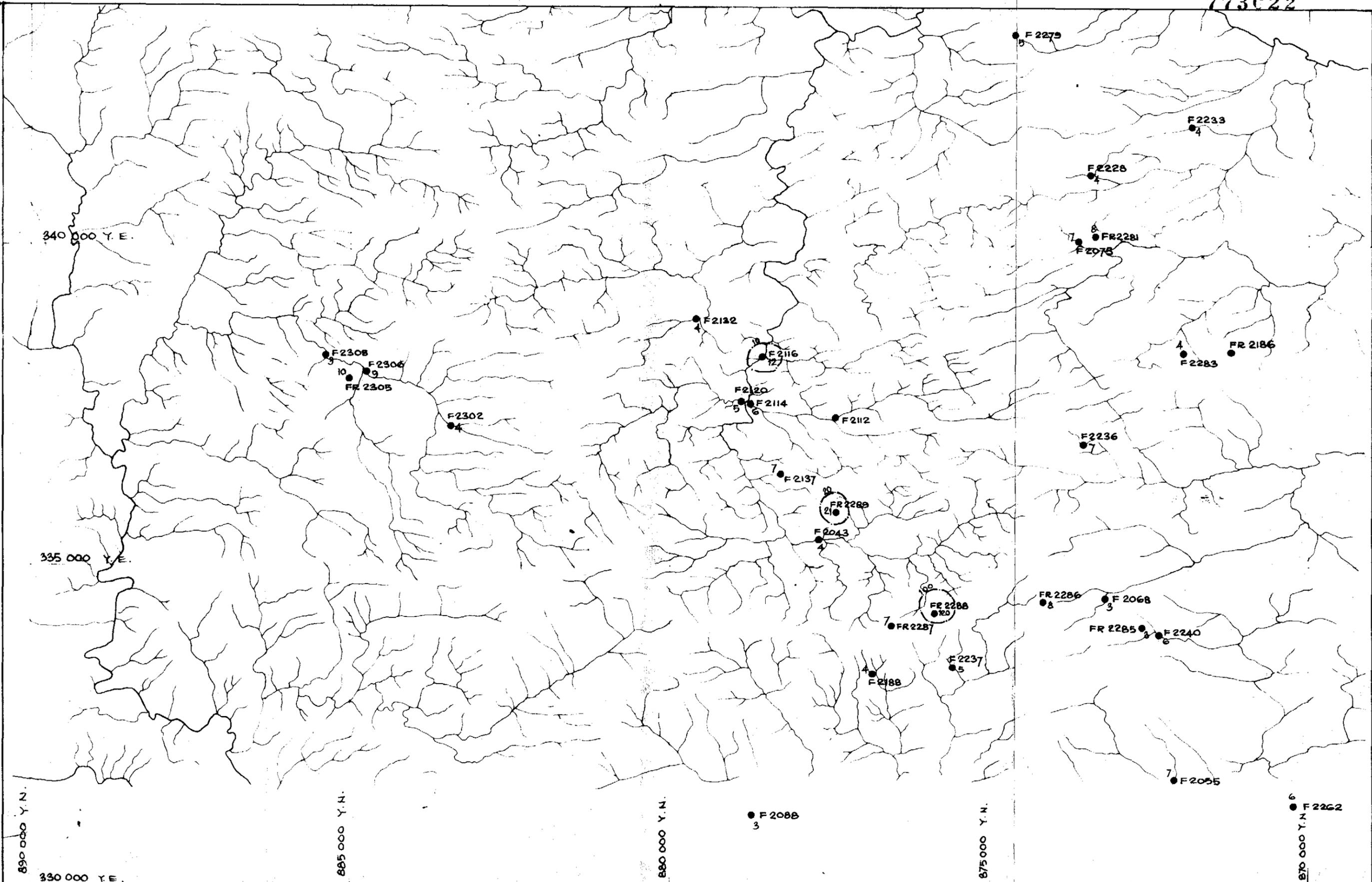
● ANOMALOUS SAMPLE

5 cm

COMSTAFF PROPRIETARY LIMITED		
MEREDITH GRANITE PROJECT		
H.M.C. ANOMALIES		
SCALE 1:50000	DWN. A.C.	TAB. 2-298

021

773022



● FR 2222
7

○
10

SAMPLE SITE WITH
VALUE IN. P.P.M.

CONTOUR WITH VALUE

5 cm

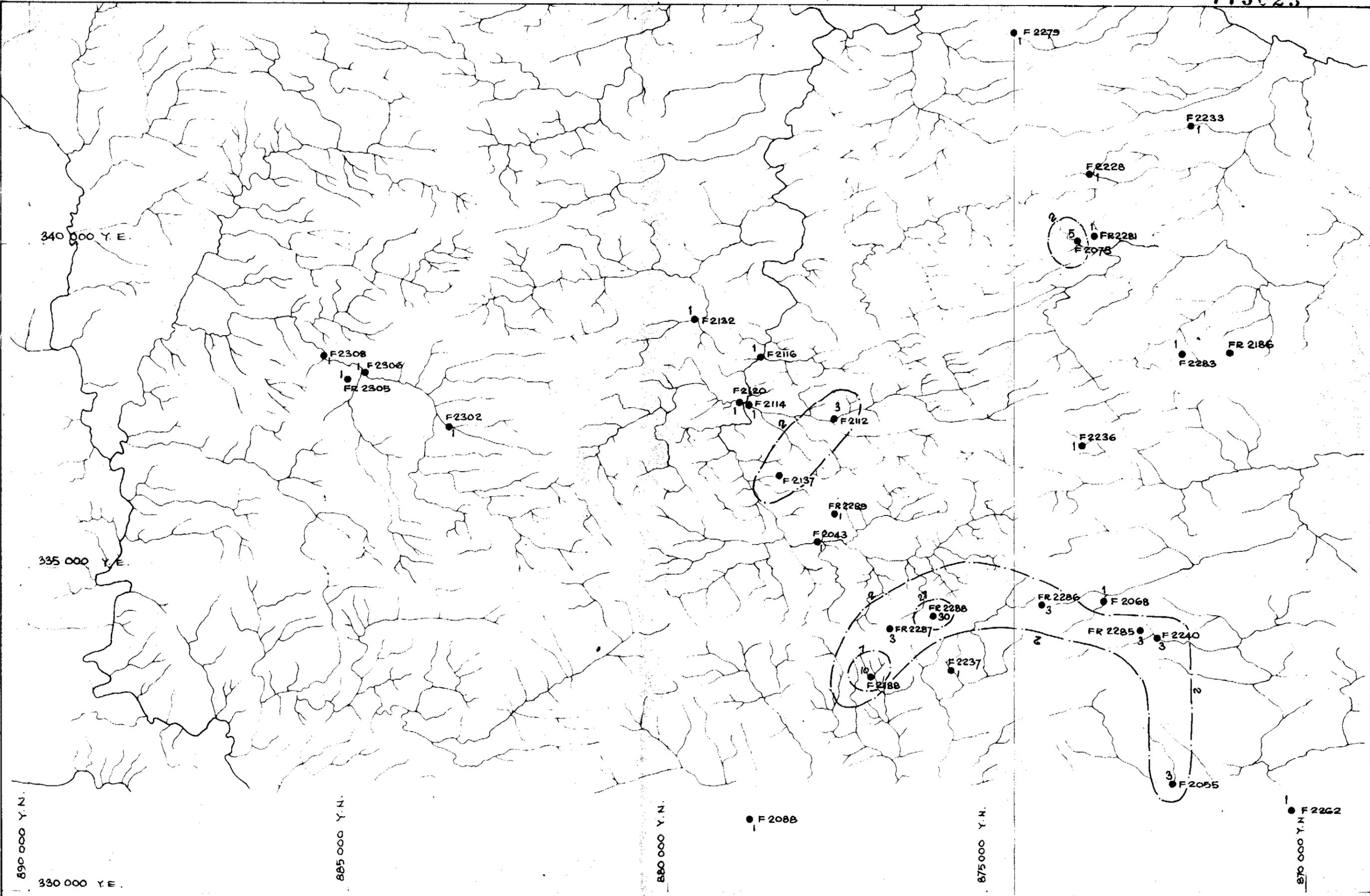
COMSTAFF PROPRIETARY LIMITED

MEREDITH GRANITE PROJECT
ROCK GEOCHEMISTRY - Cu.

SCALE 1:50000 | DWN. C.E.C. | TAS 2-299

022

113023



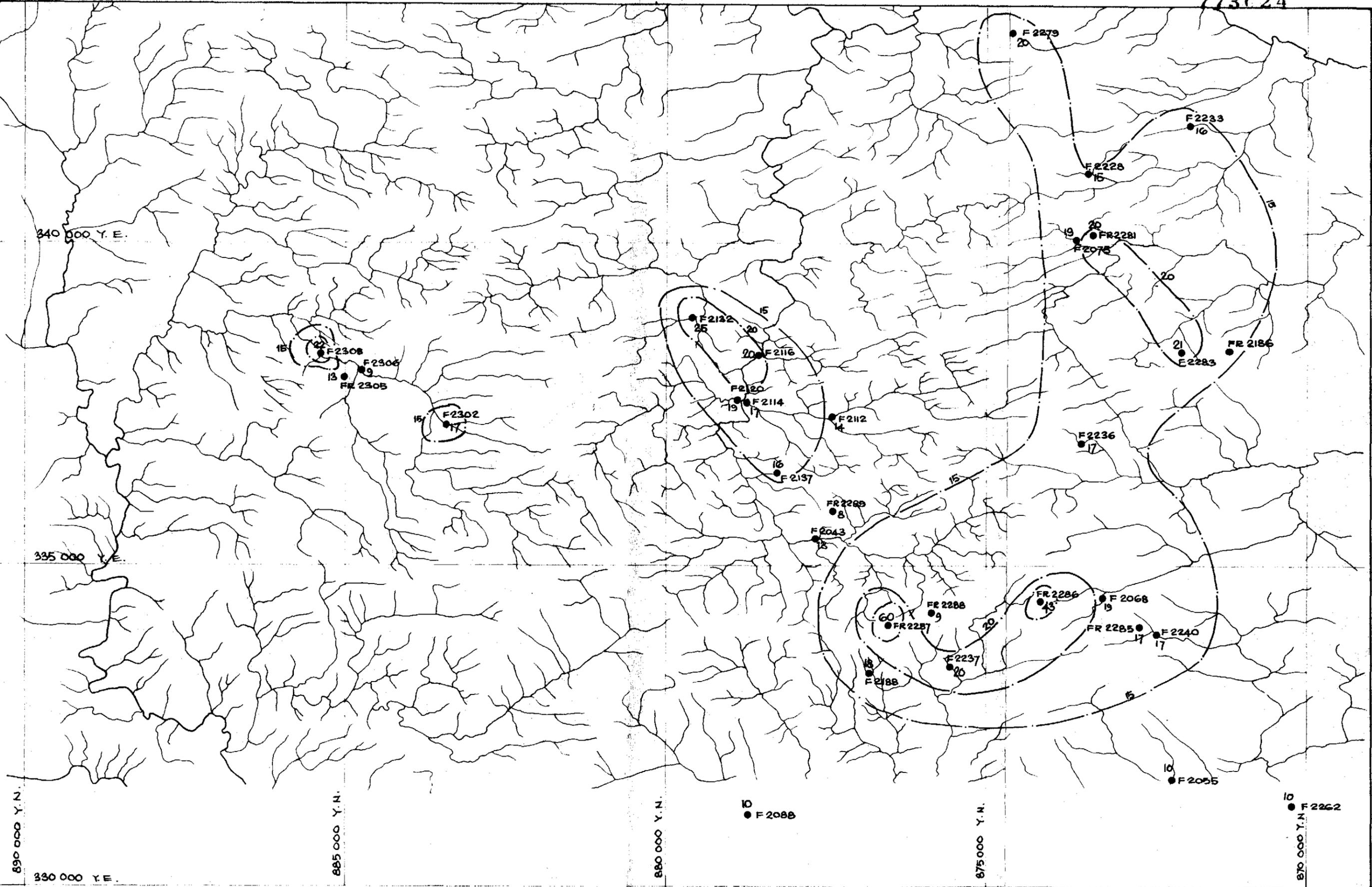
● SAMPLE SITE WITH VALUE IN P.P.M.
 ——— CONTOUR W. VALUE

5 cm

COMSTAFF PROPRIETARY LIMITED		
MEREDITH GRANITE PROJECT ROCK GEOCHEMISTRY - Sn.		
SCALE 1 50 000	DVN. C.E.C.	TAS 2- 300

023

773024



● SAMPLE SITE WITH
VALUE IN. P.P.M.

15 --- CONTOUR W. VALUE

5 cm

COMSTAFF PROPRIETARY LIMITED

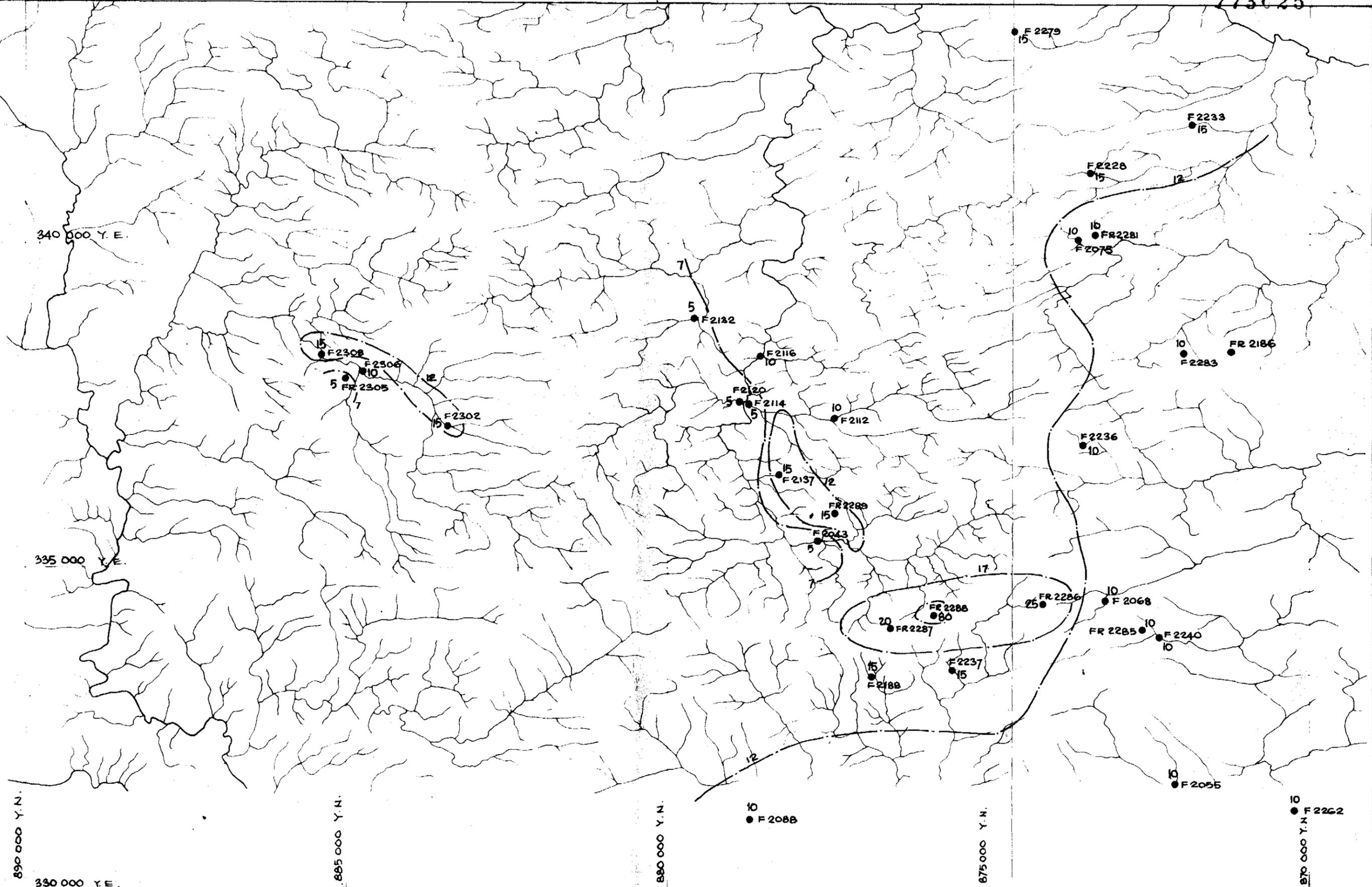
MEREDITH GRANITE PROJECT

ROCK GEOCHEMISTRY - Zn.

SCALE 1:50000 | DWN. G.E.C. | TAB 2-301

024

773025



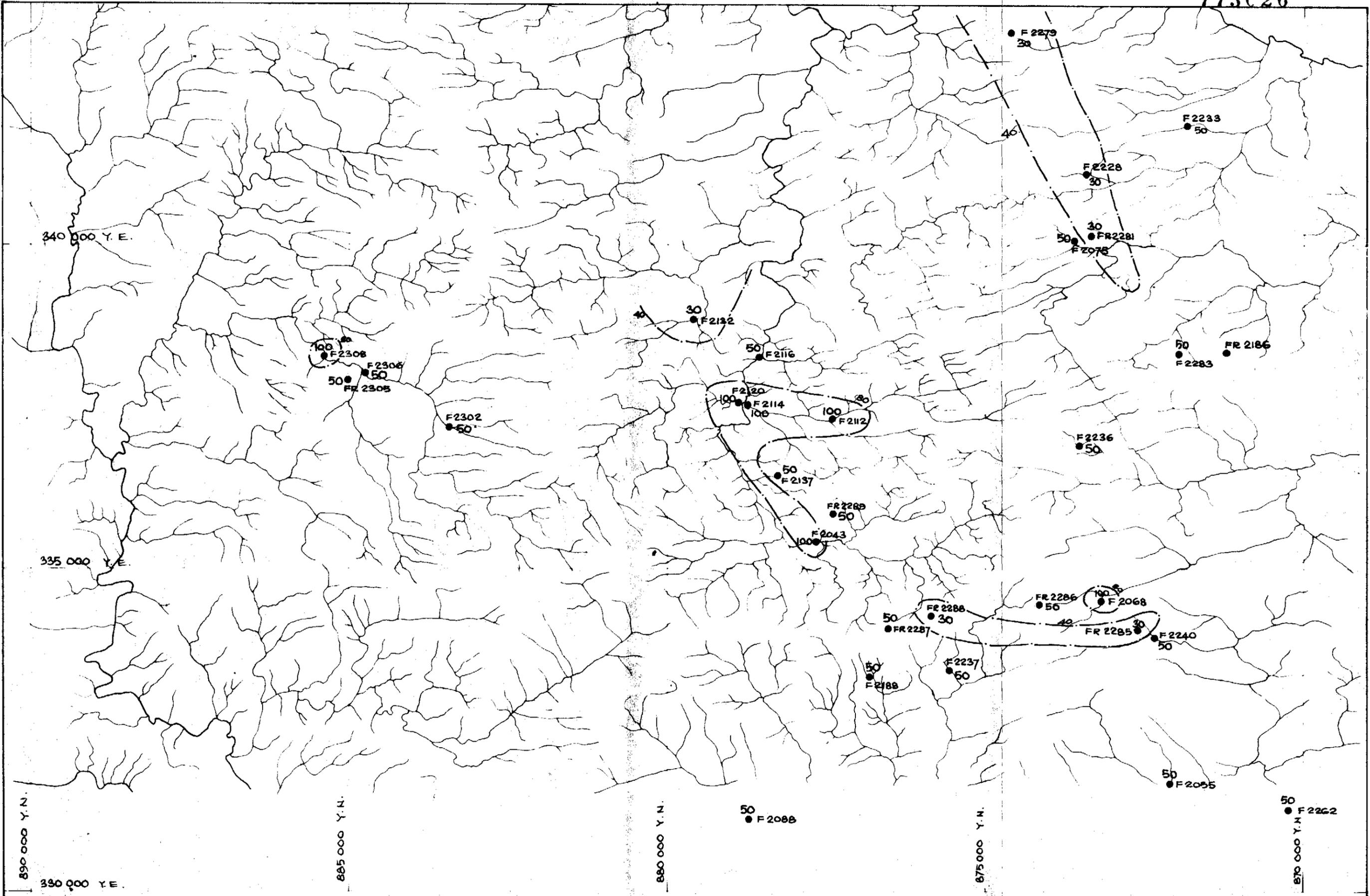
● SAMPLE SITE WITH VALUE IN P.P.M.
 --- CONTOUR WITH VALUE

5 cm

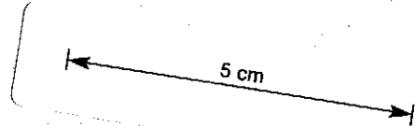
COMSTAFF PROPRIETARY LIMITED
 MEREDITH GRANITE PROJECT
 ROCK GEOCHEMISTRY - W.
 SCALE 1:50,000 | DWN: G.E.C. | TAS 2-302

023

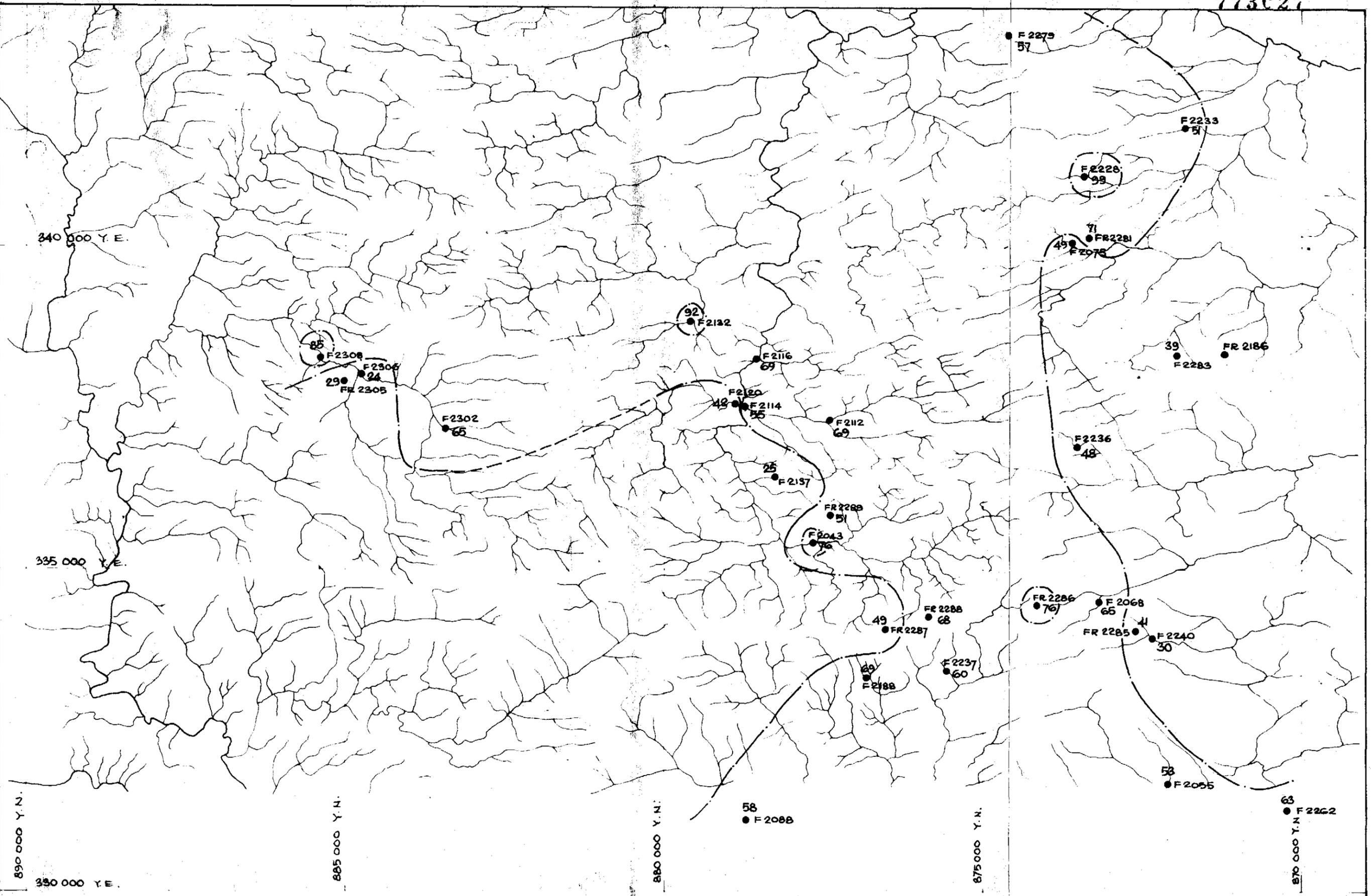
773026



● SAMPLE SITE WITH VALUE IN P.P.M.
 --- CONTOUR WITH VALUE



COMSTAFF PROPRIETARY LIMITED
 MEREDITH GRANITE PROJECT
 ROCK GEOCHEMISTRY - Y.
 SCALE 1:50000 | DWN. C.E.C. | TAB 2-303



65

SAMPLE SITE WITH VALUE IN PPM.

50

CONTOUR WITH VALUE

5 cm

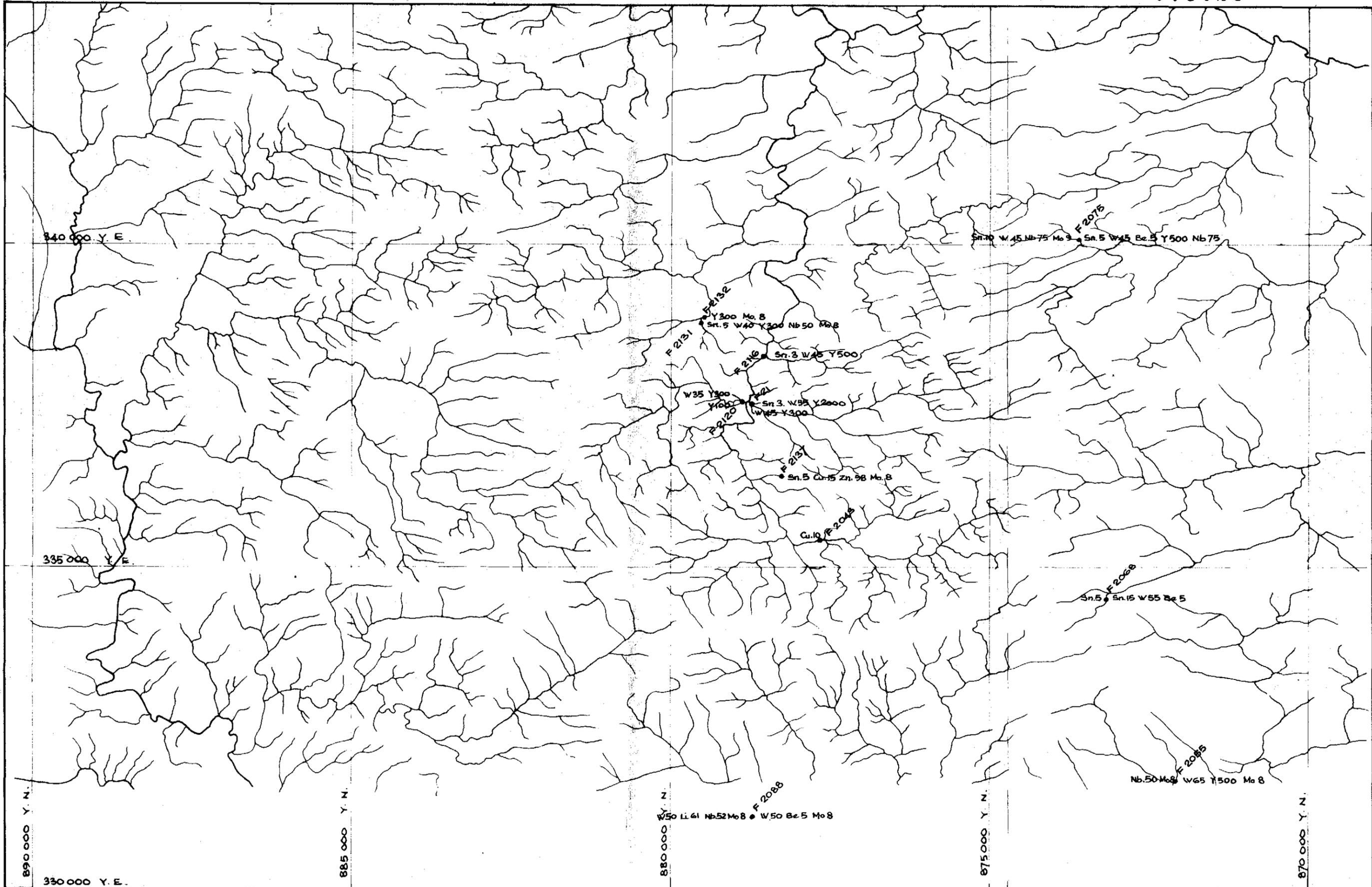
COMSTAFF PROPRIETARY LIMITED

MEREDITH GRANITE PROJECT

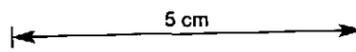
ROCK GEOCHEMISTRY - Li.

021

113020



SIGNIFICANT SOIL ANOMALIES RELATED TO ROCK GEOCHEMISTRY (REFER TABLE B-REPORT)



COMSTAFF PROPRIETARY LIMITED		
MEREDITH GRANITE PROJECT		
SOIL SAMPLE ANOMALIES		
SCALE 1:50000	DWN. G.E.C.	TAS. 2 - 305