

000

72-852

MICROFILMED

OPEN FILE

777001

aac

COMSTAFF PROPRIETARY LIMITED

EXPLORATION LICENCE 5/63

RAMSAY AREA PROJECT

1971/1972 SUMMER FIELD SEASON REPORT

AUSTRALIAN ANGLO AMERICAN LIMITED

Incorporated in the State of Victoria

72-852

COMSTAFF PROPRIETARY LIMITED
1971/1972 SUMMER FIELD SEASON REPORT
RAMSAY AREA PROJECT

Contents

1. INTRODUCTION
 2. TOPOGRAPHY AND ACCESS
 3. PREVIOUS WORK
 4. GEOLOGY
 - 4.1. Economic Potential
 - 4.2. Structural Analysis
 5. GEOCHEMISTRY
 - 5.1. Rock Chip Geochemistry
 - 5.1.1. Theory
 - 5.1.2. Results
 - 5.2. Rock Chip Samples Other Than Black Shales
 - 5.3. Stream Sediment Geochemistry
 - 5.3.1. Statistical elemental summary
 - 5.3.2. Geochemical interpretation
 - 5.3.3. Geochemical results
 - 5.3.4. Heavy mineral concentrate analyses
 6. REFERENCES
-
- | | |
|---------|----------------------|
| TABLE 1 | Black Shale Averages |
| TABLE 2 | Rock Chip Samples |
| TABLE 3 | Anomalies |

COMSTAFF PROPRIETARY LIMITED1971/1972 SUMMER FIELD SEASON REPORTRAMSAY AREA PROJECT1. INTRODUCTION

This report aims to present a resume of the work completed in the Ramsay and North Huskisson river systems during the 1972 Summer Field Season. The four main objectives of the programme were:

1. To do close interval (200') follow up sampling on anomalies delineated in the 1969/70 summer season geochemical programme.
2. To survey and sample streams within the Ramsay and North Huskisson watersheds using a reconnaissance sample interval of 500' along tributaries and 1000' along rivers and to take heavy mineral concentrates every 5000' approximately.
3. To geologically map the area to gain information concerning:
 - i) The major rock groups or sequences present.
 - ii) Rocks such as carbonates or calc-arenites which may be replaced by mineralising hydrothermal solutions possibly emanating from the nearby granite.
 - iii) Sediments which indicate an original reducing environment (i.e. black shales) conducive to syngenetic sulphide formation.
 - iv) The possible explanation for stream sediment geochemical anomalies located during the 1969/70 summer field season.
 - v) The major structural trends with reference to their influence on possible orebody emplacement or control.
4. To use the above knowledge for planning future work in favourable zones.

Throughout the geological programme a comprehensive rock chip geochemical survey was undertaken. The best results from this survey are included in this report.

2. TOPOGRAPHY AND ACCESS

The Ramsay, Coldstream, Hatfield and Que river systems are typical of youthful drainage, in that streams have incised a peneplain of Tertiary basalts and para-conglomerates. These have been eroded to expose Palaeozoic and possibly late Proterozoic rocks. The rivers and major tributaries roughly

define the dominant structures, which are north-south.

The widespread soil and vegetal cover which obscures photo-geological features limits geological mapping to the drainage systems. Even though the streams form loci to the thickest undergrowth, which includes fallen trees and horizontally growing vegetation, adequate geochemical sampling and geological mapping, where necessary, was effected in all tributaries. Pushing through the "horizontal" growth was found to be quicker than actually cutting and clearing with machetes. Where an access track was used regularly it was cut and marked with flagging tape. Plan TAS 2-282 illustrates the approximate position of the major tracks and roads.

The bulldozed road to the Coldstream camp provided access to most of the Ramsay river between 10,000' to 44,000' north of the Huskisson confluence. An extension of this road, 10,000' down the Huskisson river, provided access to this river and its tributaries.

3. PREVIOUS WORK

The 1969/70 summer field season programme incorporated a helicopter-reliant mapping and sampling project in the Coldstream area. The Ramsay river and its major tributaries were sampled at 1,000' and 500' intervals respectively. Geological mapping was completed to 10,000' up the Ramsay river including one major tributary draining Mt. Ramsay.

The 1969/70 Field Season Report suggests that the Ramsay rock group comprises mudstones, shales, sandstones and minor limestones, with tuffaceous sediments on the west. The Ordovician-Silurian age credited to these sediments seems inconsistent both with their unconformable position in relation to probable Cambrian greywackes and greywacke conglomerates (see Plan TAS 2-279) immediately to the east, and the degree of tectonic contortion evident in them. The nature of this distortion suggests that at least two periods of deformation were involved whereas the greywacke formation to the east is folded in a single phase, NE-SW anticlinal. The almost ubiquitous basal Ordovician Owen Conglomerate is absent from the Ramsay Sequence; erratics from this unit alone were observed near the source of the Ramsay river.

The tuffaceous sediments described in the 1969/70 Field Season Report (verified by the Australian Mineral Development Laboratories) were resampled and were described by Central Mineralogical Services as fine greywackes.

4. GEOLOGY

The Ramsay river group of rocks can be divided into two distinct sequences. This is based on:

- i) differing types of rock representing entirely different environments of deposition,
- ii) differing stages of metamorphism,

3/ iii) the intensity

iii) the intensity of tectonic activity.

The following discussion is based on field lithological relationships, minimal petrographic work and structural statistical analysis. Obviously, a more detailed petrographic study and "fossil hunt" would formulate a clearer picture.

The two sequences are separated by an angular unconformity which is defined by the sudden dip reversals at the boundary.

The older(?) sequence consists of possible pre-Cambrian metaquartzites, metasiltsstones and foliated dark grey to black shales comparable to the shale/quartzite sequence at Mt. Bischoff. These sediments were deposited in a fairly quiet environment with the widespread generation of shales and interbedded siltstone lenses (1cm thick). This environment was irregularly disturbed by the influx of coarser massively bedded sandstones and siltstones forming 20' thick layers. The strata were influenced by the late pre-Cambrian Penguin orogeny which folded the beds on a general N-S axis. The structural stereograms (TAS 2-281, plot A, B, C) illustrate that this original trend is still present within the older sequence and yet absent in the overlying younger sediments (plot D).

This ancient geanticline became the locus for further sedimentation during the lower Cambrian marine shoreline facies, now represented in the younger sequence by quartzites, shales, mudstones, dolomites and dolomitic conglomerates, deposited along the margins of the geanticline. The dolomitic conglomerate is possibly a reliable marker bed because of its original restrictive deposition. It would have formed in optimum conditions in which the availability of cations and anions, the temperature and pH of the water, all had to be satisfied.

The changeable nature of these younger sediments from sandstones to shales to dolomitic horizons indicate deposition in a more active environment (tectonically or depositionally) than the older quartzite and shale sequence. The basal unit of the observable strata is possibly a black shale which is overlain by yellow siltstones, shales, conglomerates, dolomite and dolomitic conglomerate. The youngest rocks include interbedded yellow to fawn mudstones, shales and fine grey-wackes indicating a different source of detritus.

To the east of the older(?) shale/quartzite core the lower(?) Cambrian (shallow water facies) have been folded in

4/ a slightly west of north

005

a slightly west of north trending anticlinorium, possibly during the upper Cambrian Jukesian orogeny. This may have also produced the drag folding which is apparent on the limbs of the anticline. During this period of folding the older core may have acted as a stable unmovable block while the younger sediments immediately to the east and west were folded (see TAS 2-280).

The position of the foliated shale/quartzite sequence on the limb of the Just-in-Time anticline does not substantiate the hypothesis that the sequence is older than the sediments immediately to the east. This, in fact, would make them a younger sequence which has been intensely crumpled. If this is the case the contour diagrams should illustrate equivalent concentrations of poles to bedding of the two sequences (TAS 2-281, plot C and D). The quartzite/shale horizons have definitely undergone an earlier period of folding which have a well defined N-S axis.

The cross-section on TAS 2-280 gives a possible explanation. The older quartz/shale core has remained relatively unaffected while the younger sediments have been folded on a NW/SE axis. Subsequent erosion has exposed the older sequence which appears only in the major rivers which have deeply incised into the strata.

To the west of the quartzite/shale core a sequence of interbedded mudstones, yellow shales and fine greywackes crop out. The fine greywackes and yellow shales to siltstones are lithologically equivalent to those in the upper eastern sequence and the Webb's creek yellow shale, sandstone and tuff/greywacke sequence (1969/70 Field Season Report).

4.1. Economic Potential

The Meredith Granite has thermally metamorphosed the western greywacke/mudstone sequence producing quartz biotite feldspar hornfels and metasediments. The aureole extends approximately 5,000' from the granite.

The most important effect of the granite intrusive on the Ramsay rock group is the blanket metasomatism. This is evident in the eastern group of rocks which consist of metasomatised (sphene diopside rock - Central Mineralogical Services' description) dolomitic conglomerates and silicified tourmalinised quartzites. Pyritic quartz veining is common throughout this area. Hopefully, economic mineralisation has accompanied the hydrothermal solutions which have caused the widespread alteration. Both tin and zinc anomalies can be directly linked with the above phenomena. This is discussed more fully in the geochemical section of this report.

5/ The black shales

The black shales in the core of the Just-in-Time anticline have a high trace element background. The nature of the sediment indicates reducing conditions during formation conducive to base metal deposition.

4.2. Structural Analysis

The structural picture, as outlined by myself and specifically not agreed to by my colleagues, is dominated by the Just-in-Time anticline which plunges at a shallow angle to the south. The contour diagram (TAS 2-281, plot D) indicates that the structure has a just west of north/east of south axis. The occasional EW strike of beds within the anticline can be attributed to drag folding on the limbs of the fold (see TAS 2-280). This does not necessarily represent a separate phase of folding. It may actually be caused by friction against the relatively unmovable foliated shale/quartzite block.

The cross-section in TAS 2-280 theorises that immediately to the west of the older core the sequence of greywacke/mudstones has been folded in another south plunging, possibly asymmetric, anticline. Drag folding becomes more evident and complicated adjacent to the older block.

The foliated shales/quartzite core itself has been folded on a north(?) south axis in a series of small wavelength folds (100'). The interbedded shales have been highly contorted or intraformationally folded. The main types of fold represented are similar, kink and isoclinal folds in which the axial plane (foliation in the shales) dips 65° to the east. This is equivalent to the orientation of the minor folds at Rosebery (Braithwaite, 1972).

The younger Cambrian greywacke/greywacke conglomerate succession to the east of the Ramsay rock group has been folded into an anticline with a NE/SW axis. This axis has been deflected by the competent Ramsay block so that it conforms with the general N-S trend in the Silver Falls area.

5. GEOCHEMISTRY

5.1. Rock Chip Geochemistry

5.1.1. Theory

A rock chip programme was conducted simultaneously with geological mapping. Black shale horizons were the prime target for investigation. This is because these rocks have proved to be hosts for base metal mineralisation throughout the world, including the Kupferschiefer in Germany and Mt. Isa in NW Queensland.

Braithwaite, Gee and Solomon believe that they have produced logical evidence that the Rosebery orebody has

syngenetic origin. They suggest that volcanic exhalations or fumarolic activity during the emplacement of the Mt. Reid volcanics took place within isolated stagnant marine lagoons within the volcanic sequence. The lagoons certainly provided reducing conditions (conducive to the formation of black shale) necessary for sulphide precipitation; the volcanic exhalations provided the metal saturation needed for ultimate precipitation.

5.1.2. Results

Two independent black shale horizons are present in the Ramsay group (TAS 2-279). They are structurally and geochemically different. The previous geological discussion has pointed out that the older foliated black to grey shales/metaquartzite sequence has been contorted by several phases of deformation whereas the other overlying(?) sequence is less affected.

Table 1 compares the average trace element content of some west coast (Tasmania) black shales, actually associated with known lead-zinc orebodies, with those in the Ramsay group. Large samples (250) from both the north Ramsay and north Huskisson outcrops of the foliated shale/metaquartzite sequence proved to have equally low average values of economic trace elements. A black shale lens within the overlying(?) sediments had high lead (700-1000 ppm) and zinc (5-700 ppm) values.

The higher background values in the younger shales reflect a higher and more constant availability of these ions at the time of deposition. Secondary adsorption of ions onto the carbon rich sediments may also explain the high values but this seems unlikely because the same process has not affected the older foliated black shales. The older shales seem to have been deposited at a time when the availability of the economic trace elements was low. This seems ubiquitous because of the low values recorded throughout the sequence.

Obviously, the above reasoning cannot explain the relative ages of the two sequences within the Ramsay group although it substantiates the thought that there are two distinct sequences within the Ramsay group which seem to be separated structurally.

The higher background within the younger black shales compares favourably with the averages from Rosebery, Hercules, etc., and the Queen Hill silver-lead mine at Zeehan (Table 1). The average lead value for the Ramsay shales (753 ppm) is much higher than that from Rosebery or Queen Hill. This may be an indication of lead mineralisation within them.

The results from stream sediment sampling have indicated Pb-Zn anomalies approximating the position of the shales. Geochemical soil sampling on a grid covering the extrapolated boundary of the shales would be the next obvious step.

5.2. Rock chip samples other than black shales

Rock chip samples taken from promising outcrops have been analysed. These results and locations are indicated in Table 2.

Two goethite gossan samples (F6021 and F6022) located in a strongly metasomatised region of the middle Ramsay river gave encouraging values. Although scavenging is expected, a polished section analysis by Central Mineralogical Services has suggested the possibility of sphalerite boxworks. This indicates that the high zinc content may reflect the original metal content of the gossan. A pyritic rich grey shale, approximately 1,000' south from the gossan has remained relatively unoxidised, suggesting a non-pyritic origin for the exotic goethite concretionary.

The high tungsten value in sample AR0139 can be explained as probable wolframite mineralisation with a small quartz-tourmaline vein in the granite.

5.3. Stream sediment geochemistry

Resampling was concentrated on anomalies located in the 1969/70 field season (TAS 2-283). Sampling on a 200' interval and subsequent geological examination has delineated and located the source of all the anomalies except the high values in silver recorded in the creek draining Mt. Ramsay and the high zinc values recorded in the middle Ramsay (anomaly R3). Table 3 is a list of the anomalies and their possible explanation.

Regional stream sediment sampling covered the areas not prospected in the 1969/70 field season. Sample intervals were 200', 500' and 1,000' depending on the stage reached in prospecting.

<u>Interval</u>	<u>Stage</u>
200'	follow-up sampling
500'	all tributaries
1,000'	major streams or rivers

All samples were subsequently despatched to Waratah for preparation and forwarded to either ANDEL or GEOMIN. The results from the batches of samples sent to the two laboratories agreed well for all elements (Cu, Pb, Zn, Mo, Sb, Sn, W, Mn) other than Ag and Bi in which all ANDEL's results were below 1 ppm and 10 ppm respectively and GEOMIN's results varied from 0.1 - 1.6 ppm and 5 ppm to 30 ppm respectively. This was no problem as no anomalies in these elements were realised.

5.3.1. Statistical Elemental summary

Histograms representing each element have adequately delineated populations. This has been shown more clearly

009

by smoothing the histogram with an arithmetical frequency curve. The disadvantage of this method is that subtle inflexions cannot be seen. No statistical distinction was made between different groups or successions.

The following elements have been analysed:

Copper

Two background populations are present intersecting at a threshold of 40 ppm.

Zinc

A background population has a threshold value of 260 ppm. Values above this have been regarded as anomalous.

Lead

A background population has a threshold of 100 ppm. Values above this have been regarded as anomalous.

Tin

Two background populations appear separated at 40 ppm. The two background populations are not caused by any particular geological factor. Values greater than 100 ppm may be anomalous.

Silver

No anomalies were recorded.

Bismuth

Only one background population is represented. No values can be regarded as anomalous.

Antimony

One background population indicates no anomalous values.

Nickel

Values of 120 ppm or more are regarded as anomalous.

Cobalt

Insufficient samples were analysed for this element to be realistically appraised statistically. Values range from 5 ppm to 80 ppm.

Tungsten

All results were below the detection limit of 50 ppm.

Molybdenum

The values ranged from 0.5 ppm to 3 ppm within the one background population. There were no anomalous values.

5.3.2. Geochemical Interpretation

Former study (1969/70 Field Season Report) has indicated that the pH values in these creeks range from 5.5 to 6.5. These slightly acid conditions theoretically favour high Zn, Cu, and Ag mobility while Mo and Pb remain relatively immobile. For Zn, Cu, and Ag values to be recorded in a stream they would have to be essentially adsorbed into manganese or ferric oxide.

However, studies of the relationships between Zn and Mn suggest that the two elements are closely associated.

It has previously been thought that scavenging is not a prevalent feature in this area.

5.3.3. Geochemical Results

Analysis of the closely sampled 1969/70 anomalous areas has reaffirmed the presence of elemental highs. The re-sampling of the former anomalies R1 and R3 which were high in Ag and Zn respectively has also shown the areas as being anomalous in Cu and Sn respectively.

Reanalysis of stream sediment results, originally sent to the Australian Mineral Development Laboratories, by Geochemical and Mineralogical Laboratories has verified the original low values. The inconsistency in sampling is further substantiated by the presence of two high zinc value goethite gossans (0.32% Zn and 0.25% Zn) within the resampled area (R3). The original sampling (1969/70) on a 1,000' interval indicated a high zinc anomaly. Subsequent resampling returned very low Zn values.

Anomaly R5 was positioned more accurately after resampling. The analyses reaffirmed highs in Pb and Zn in this area (see Table 3).

Reconnaissance sampling at a 500' interval has delineated hitherto unknown anomalous areas (R6, R7, R10). The anomalous creeks drain into the north Huskisson river (see TAS 2-283). Zn values blanket the three main tributaries with values ranging from 240-420 ppm. Occasional associated anomalous Cu and Ni values cannot be attributed to any obvious outcrop of basic or ultrabasic rocks. The anomalies coincide with an interbedded succession of fine greywackes (tuff?) siltstones and mudstones which contain no obvious mineralisation. It is important to note that anomaly R7 covers similar rocks (see TAS 2-283).

All anomalous samples have been sent to the Australian Mineral Development Laboratories for comprehensive spectrographic scan for elements including Co, Cd, V, Os, Ir, As, Ge, Li, Sr, Y, Ti, and Hg.

5.3.4. Heavy Mineral Concentrate Analyses

The data were not available at the time of writing.

6. REFERENCES

R.L.Braithwaite, (1972), "The Structure of the Rosebery Ore Deposit, Tasmania"; A.I.M.M. Proceedings, March 1972.

M.P.Everett, (1969/70), "The Coldstream-Ramsay River Systems", 1969/70 Field Season Report, Comstaff Pty.Ltd.

C.E.Gee, (1971), "The Geochemistry of Some Black Shales in Relation to the Origin of Certain Stratiform Orebodies in Tasmania", unpublished Ph.D. Thesis by C.E.Gee, University of Tasmania.

J.A.Hansuld, (1965), "Eh and pH in Geochemical Exploration", Canadian Mining and Metallurgical Bulletin, Vol.59, No.647, March 1966.

7. PLANS

TAS	2-278	Ramsay Area Project	-	Location Plan
	2-279	"	"	- Geology
	2-280	"	"	- Geological Interpretation
	2-281	"	"	- Structural Histograms
	2-282	"	"	- Geochemical Coverage
	2-283	"	"	- Geochemical Anomalies.

C.S.RUGLESS

March 1972

BLACK SHALE AVERAGES

	Black shales from Rosebery (C.E.Gee)	Rosebery Host Ore shales (C.E.Gee)	Que river Black shales (C.E.Gee)	Black shales from * (C.E.Gee)	Average black shale (Kranskopf)	Average data for the Kupfersch- iefer (Wedepohl)	North Ramsay Huskisson black shales	West Ramsay tributaries black shales	Queen Hill Mine, Zeehan black shales
Cu	55	54	54	49	20-300	2,360	12	36.4	9.4
Mo	-	-			10-300	297	2.4	6.3	4.1
Ni	212	212	113	204	20-300	305	25	38	47
Pb	444	427	280	88	20-400?	5,430	22	753	247
Rb	92	170	106	137	450?	32	111	.1	
Sr	66	163	14	71	25-400	195	26	43	± 5
V	175	151	143	151	20-3000	1,580	115	2.43	139
Zn	590	390	69	77	10-1000	5,880	21	97	24.4
Ba	1,020	1%	995	1,870	450-700?	333	425	2.58	200

* Hercules Mine, White Spur Prospect, Red Hills Prospect, and Farrell "Slates".

ROCK CHIP SAMPLES

<u>Sample No.</u>	<u>E l e m e n t s</u>												<u>Rock type</u>
	<u>Co</u>	<u>Ni</u>	<u>V</u>	<u>Mo</u>	<u>Mn</u>	<u>Cu</u>	<u>Pb</u>	<u>Zn</u>	<u>Sn</u>	<u>Bi</u>	<u>As</u>	<u>Sb</u>	
F 6008	100	80	x	x	>1%	200	300	700	x	x	-	-	Manganiferous ferruginous concretion gossan?
F 6019	5	30	150	10		25	25	20			8	15	Pyritic grey siltstone.
F 6021	60	30	50	4		70	65	.25%			30	100	Exotic goethite gossan.
F 6022	120	100	10	6		15	50	.32%			35	20	Exotic goethite gossan.
F 6026	<5	20	100	<3		5	15	55			5	<10	Fine grey brecciated argillite.
AR 0175	<5			<3	110	10	<5	25	<10	<10		10	Grey quartzite with pyritic quartz veining.
AR 0177	<5			<3	330	65	5	30	<10	<10		<10	Quartz veining in metasiltstone.
AR 0180	<5			<3	150	10	5	25	<10	<10		20	Quartz pyritic veining in metaquartzite.
AR 0194	5			<3	680	15	15	70	20	<10		100	Quartz veining in black shale.
AR 0196	<5			<3	40	40	<5	20	<10	<10		10	Quartz veining in grey quartzite.
AR 0139			0.28%			35		25	10	<10		<10	Quartz tourmaline veining in granite.

Elements W, Ag, Rb, Cs, Ba, Sr, Y, Ti were included in F6008 analysis and W and Ag in the AR series analysis - significant results are:

F6008 Ag 1 ppm
 Ba 700 ppm
 Ti 100 ppm

777014

TABLE 24

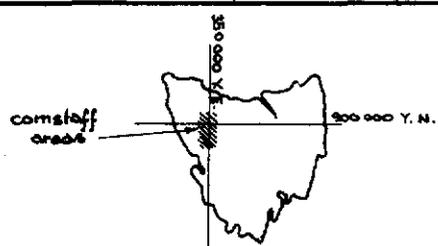
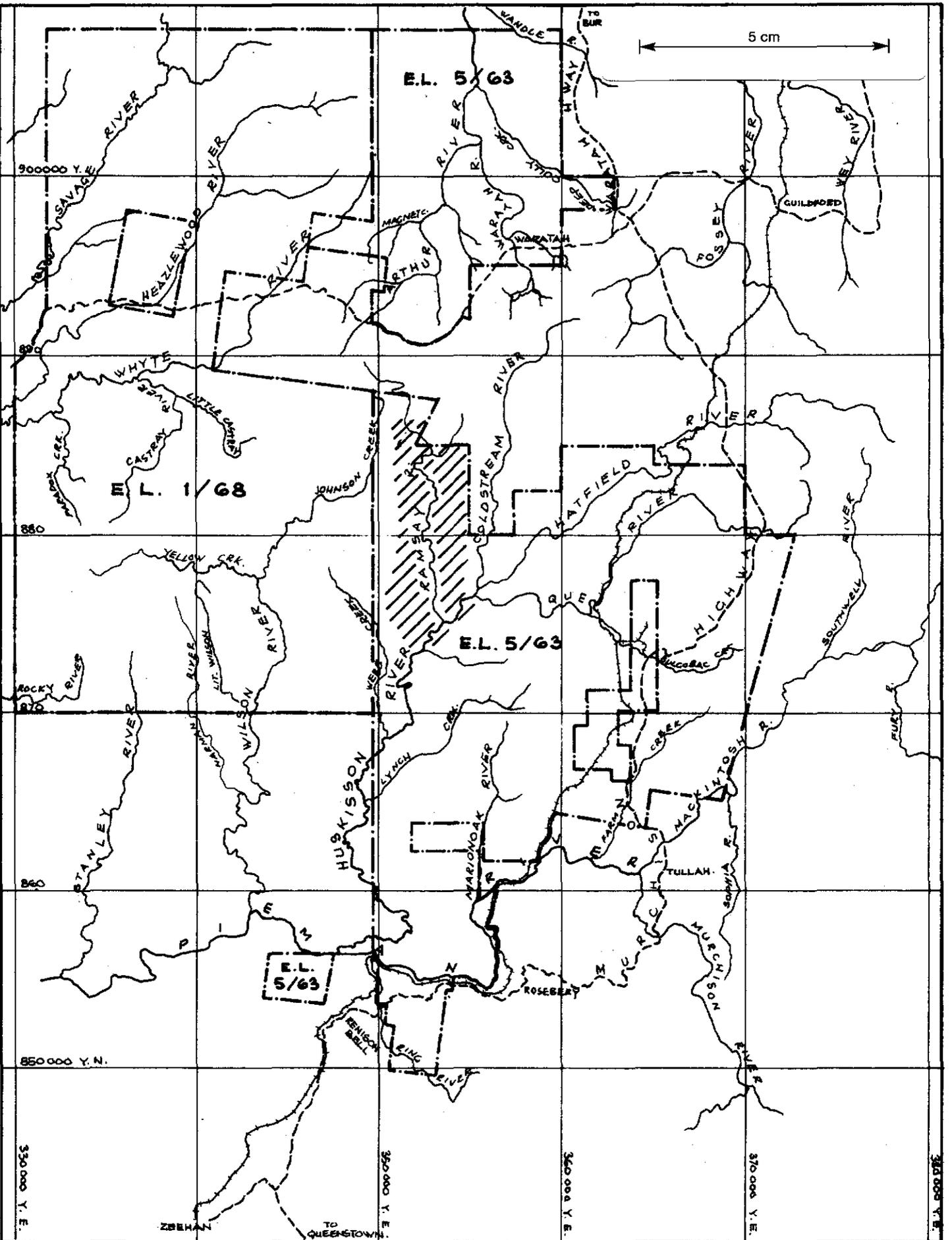
777015

ANOMALIES

<u>Anomaly</u>	<u>Element 1969/70</u>	<u>Element 1971/72</u>	<u>Explanation</u>
R1	Ag	Cu	Anomalous Cu may be derived from two dolerite dykes 3,000' upstream. There is no explanation for the anomalous Ag values recorded in the previous season
R2	Zn	Zn	A very high Mn value (2.2%) coincides with the anomalous Zn value.
R3	Zn	Sn	The Zn recorded in the previous season is due to a goethite outcrop within the river, with a background Zn content. The anomalous Sn values are probably due to the high Sn content within highly metasomatised dolomitic conglomerates 500' upstream from the anomaly.
R5	Zn	Zn, Pb	The two southernmost anomalies of this group can be attributed to black shales with high background Pb and Zn values. The northernmost anomalies may be due to a manganese oxide, goethite concretionary found to be associated with dolomites. A rock chip sample from this area (F6008) had a high background in Pb and Zn.
R6 & R7		Cu, Zn, Ni	There is no present explanation for these anomalies. They are in streams draining a sequence of interbedded fine greywackes, mudstones and shales.
R9	Sn		This was not regarded as anomalous in the 1969/70 field season. There is no explanation for its presence.
R10		Sn	These anomalies are from a creek where no outcrop exists.

015

777016



COMSTAFF PROPRIETARY LIMITED

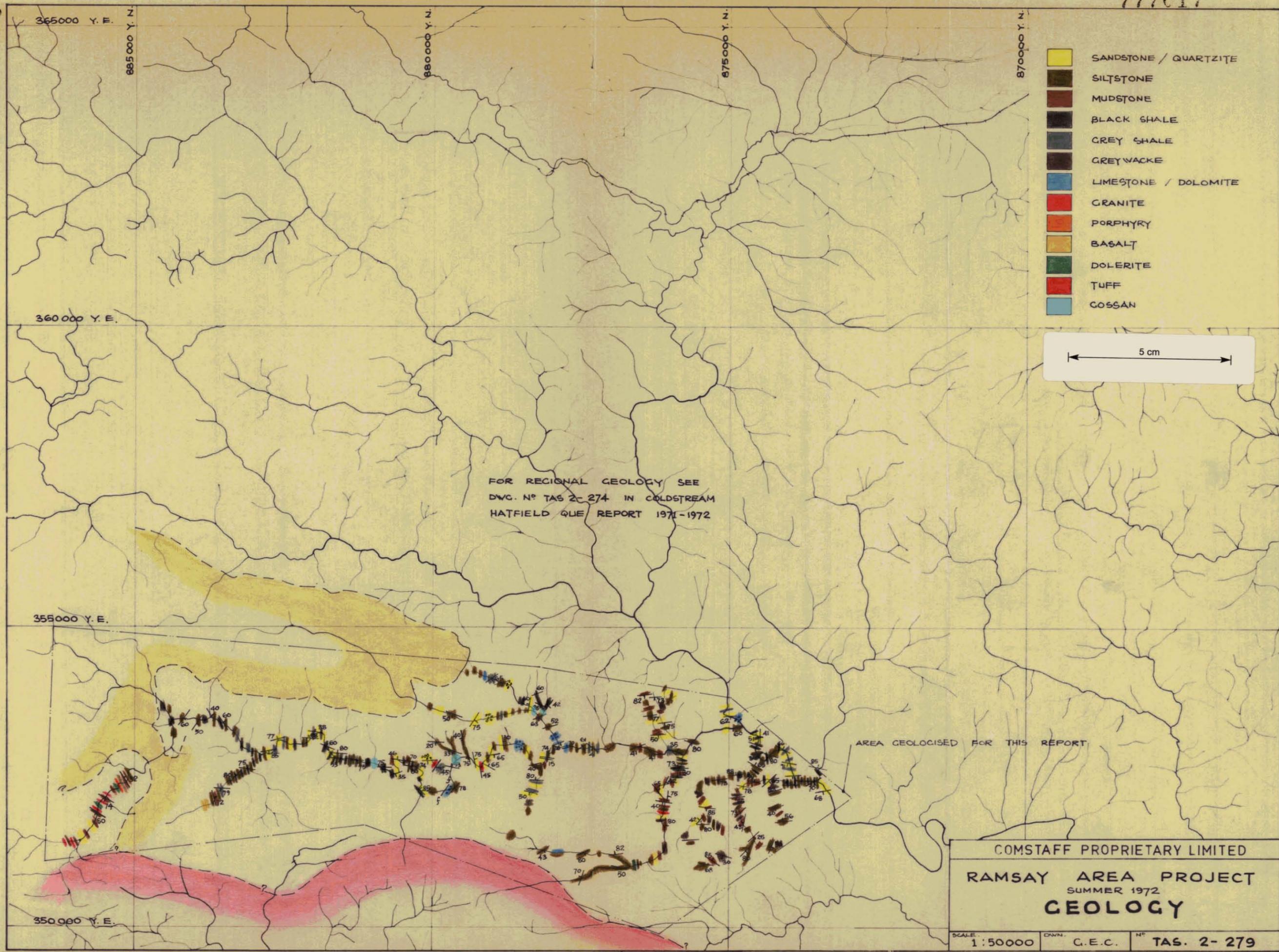
RAMSAY AREA

LOCATION PLAN
SUMMER 1972

DRAWN GC.	COMPILED	SCALE 1:250,000.	TAS-2-278
--------------	----------	---------------------	-----------

016

777017



FOR REGIONAL GEOLOGY SEE
 DWG. NO TAS 2-274 IN COLDSTREAM
 HATFIELD QUE REPORT 1971-1972

AREA GEOLOGISED FOR THIS REPORT

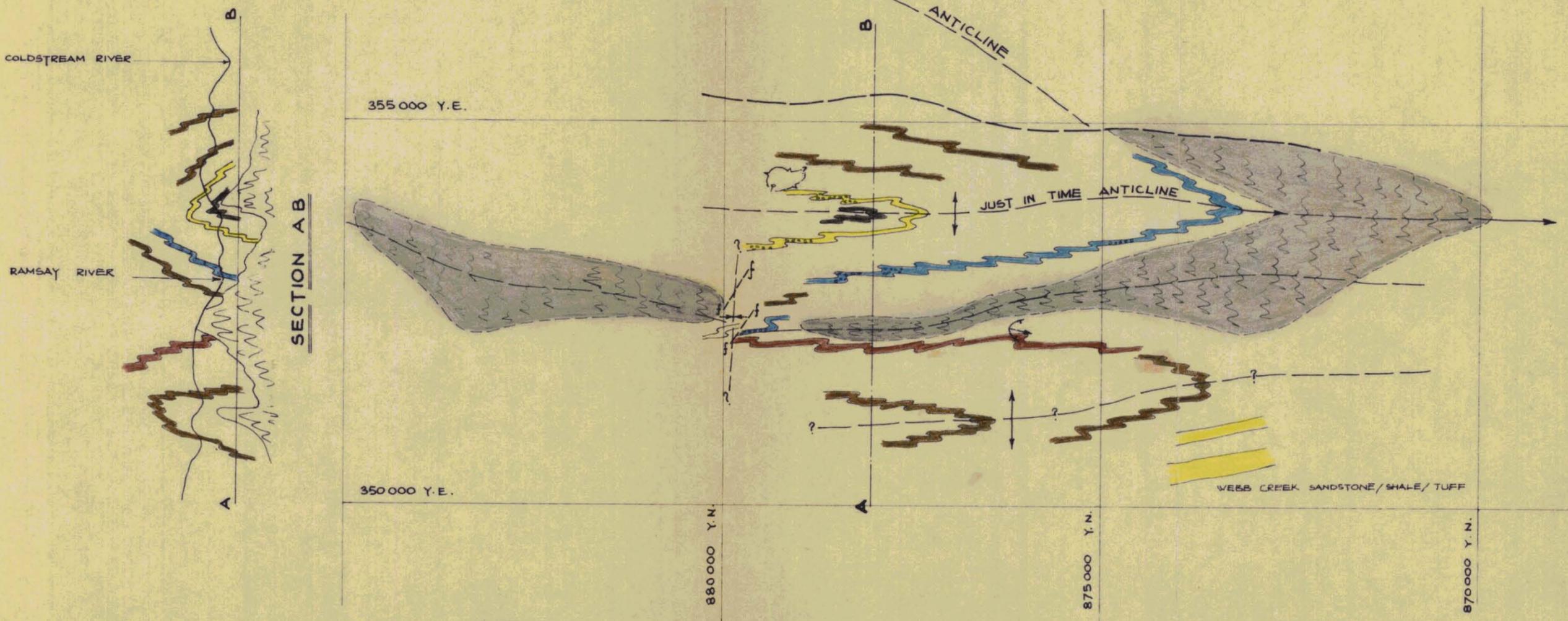
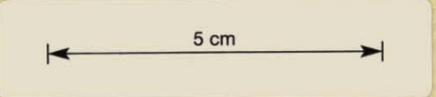
COMSTAFF PROPRIETARY LIMITED		
RAMSAY AREA PROJECT		
SUMMER 1972		
GEOLOGY		
SCALE 1:50000	DWN. G.E.C.	NO TAS. 2-279

017

777018

-  GREYWACKE / MUDSTONE / SHALE
-  SILTSTONE / MUDSTONE
-  DOLOMITE / DOL. CONGLOMERATE
-  SANDSTONE / SST. CONGLOMERATE
-  BLACK SHALE
-  HIGHLY CONTORTED FOLIATED GREY/BLACK SHALES / METAQUARTZITES

YOUNGING ?



COMSTAFF PROPRIETARY LIMITED

RAMSAY AREA PROJECT

SUMMER 1972

GEOLOGICAL INTERPRETATION

SCALE 1:50000 DWN. G.E.C. NO. TAS. 2-280

018

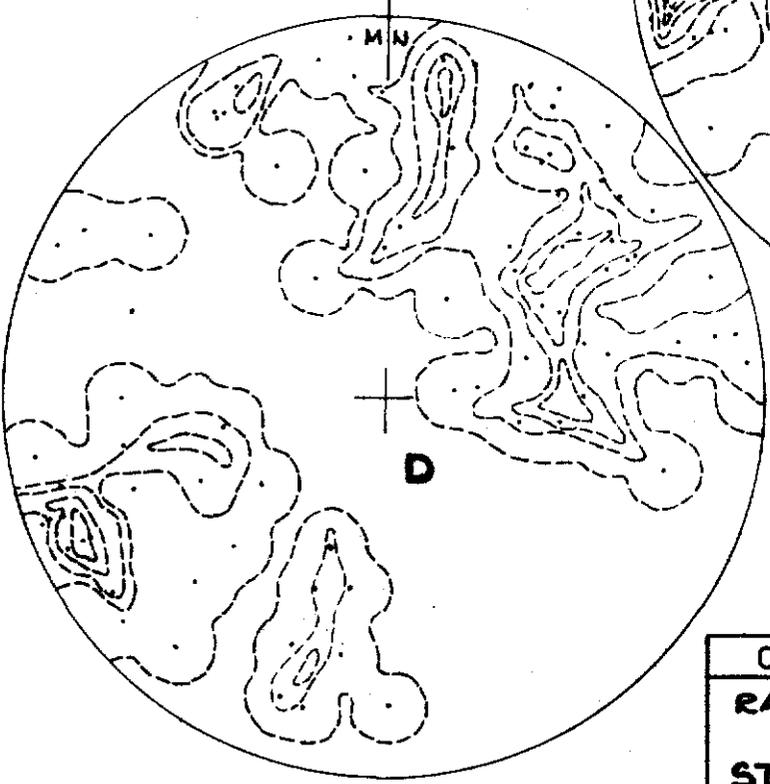
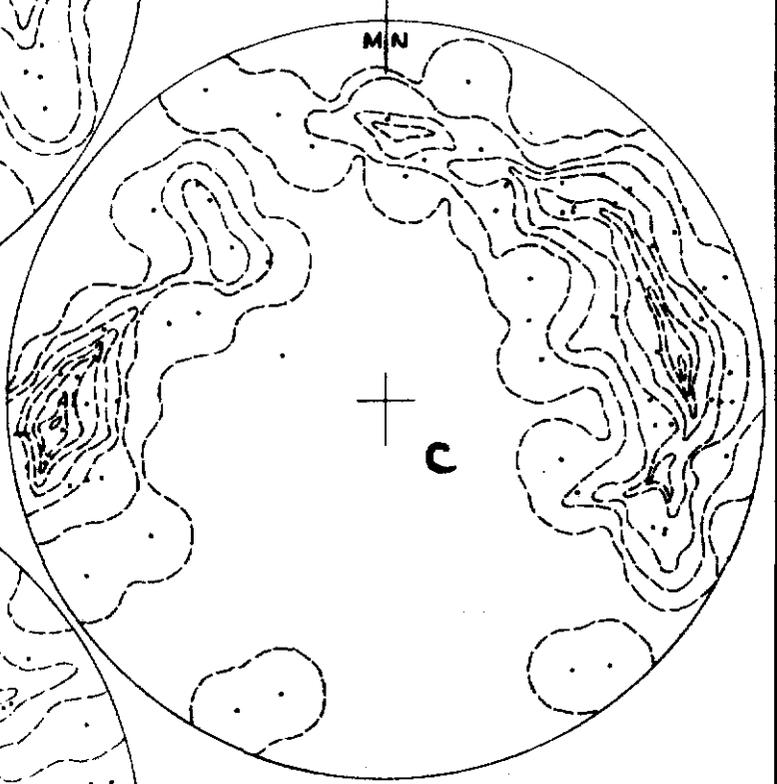
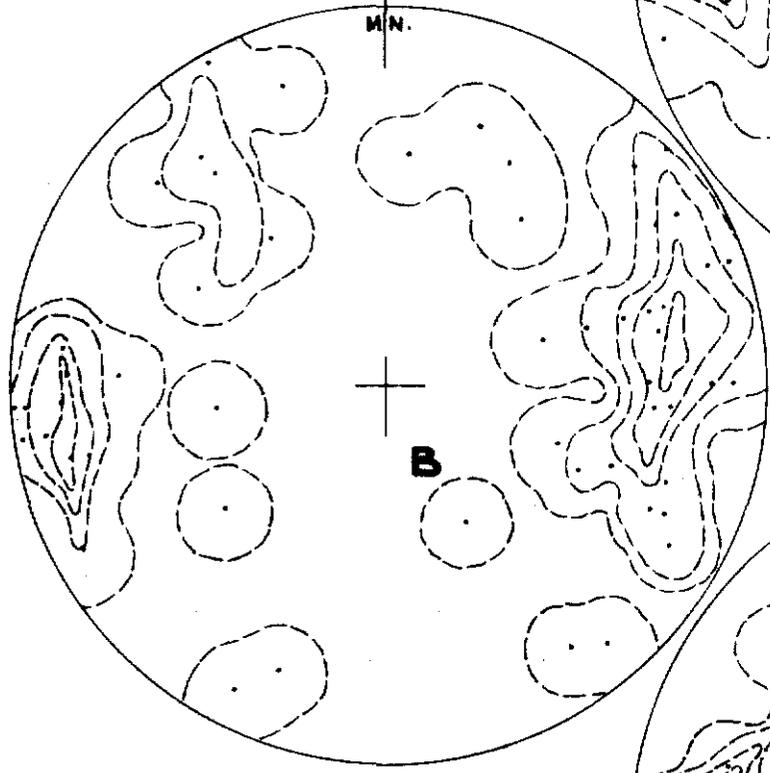
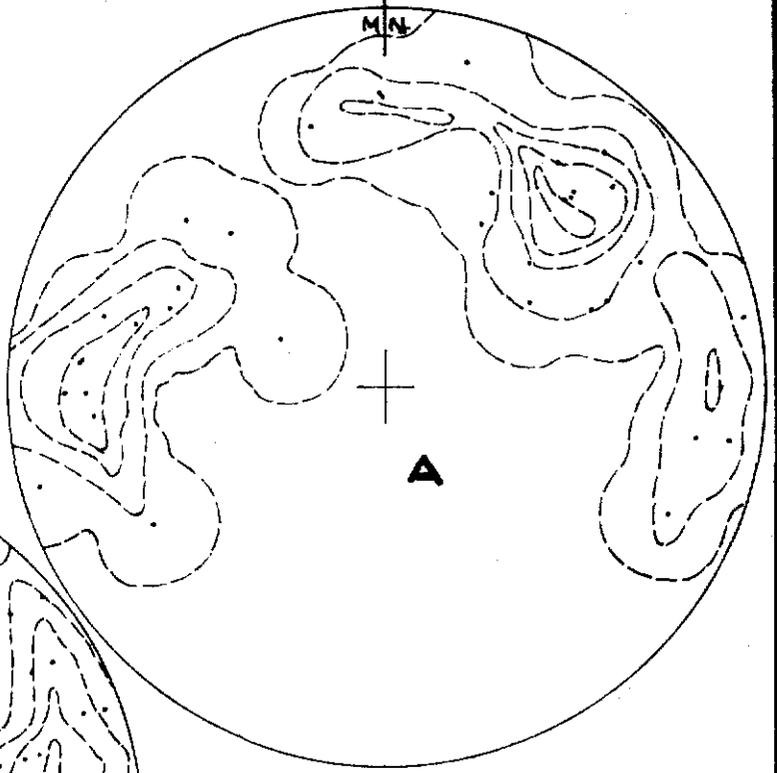
777019

PLOT A - NTH. HUSKISSON RIVER QUARTZITE/FOL. SHALE SEQUENCE

PLOT B - NTH. RAMSAY RIVER QUARTZITE/FOL. SHALE SEQUENCE

PLOT C - COMBINATION OF A & B.

PLOT D - MIDDLE RAMSAY RIVER & TRIBS/NTH. HUSKISSON R. & TRIBS I' BEDDED SEQ. OF MUDSTONES/FINE G' WACKES & SHALES PLUS THE EAST RAMSAY SHALLOW WATER SEDIMENTS



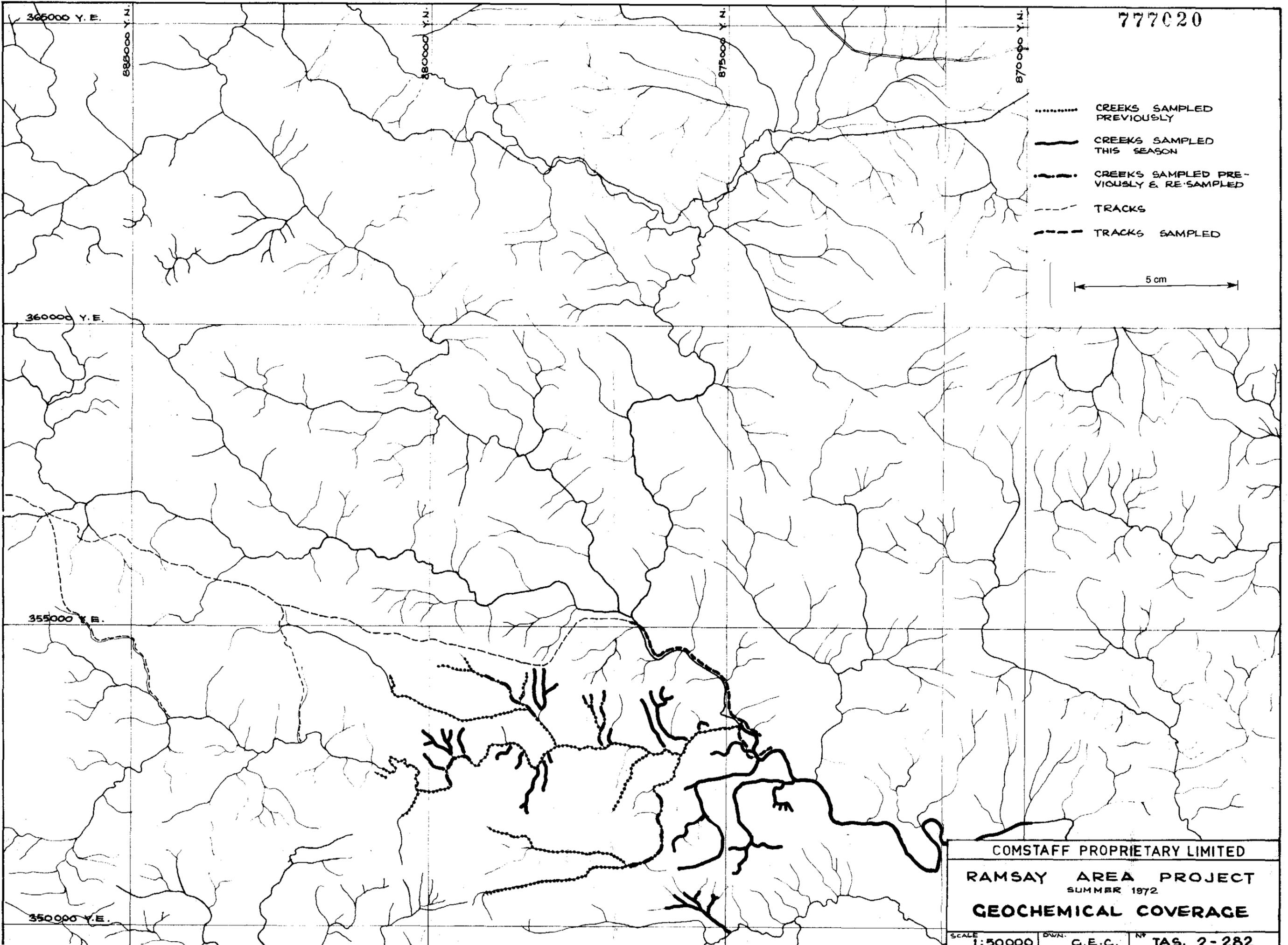
5 cm

CONTOUR DIAGRAM PLOTS OF POLES TO BEDDING.

COMSTAFF PROPRIETARY LIMITED		
RAMSAY AREA PROJECT		
SUMMER 1972		
STRUCTURAL STEREOGRAMS		
COMP. C.S.R.	DVN. G.E.C.	TAS. 2-281

018

777020



- CREEKS SAMPLED PREVIOUSLY
- CREEKS SAMPLED THIS SEASON
- - - - CREEKS SAMPLED PREVIOUSLY & RE-SAMPLED
- TRACKS
- - - - TRACKS SAMPLED

5 cm

COMSTAFF PROPRIETARY LIMITED
 RAMSAY AREA PROJECT
 SUMMER 1972
 GEOCHEMICAL COVERAGE

SCALE 1:50000 DWN. G.E.C. NO. TAS. 2-282

365000 Y. E.

885000 Y. N.

880000 Y. N.

875000 Y. N.

870000 Y. N.

360000 Y. E.

355000 Y. E.

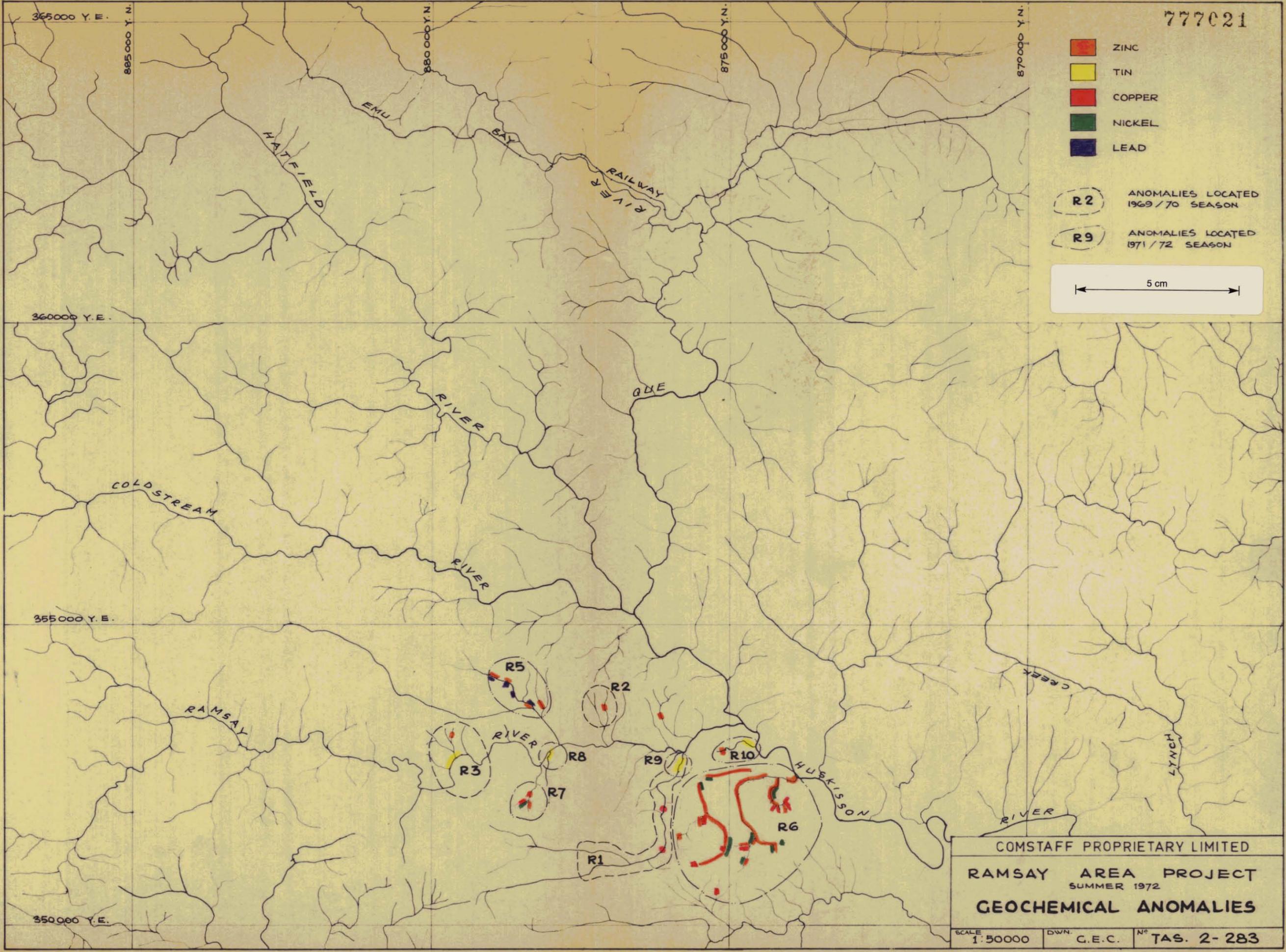
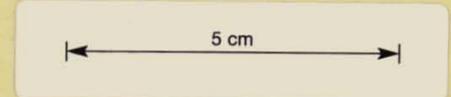
350000 Y. E.

019

777021

- ZINC
- TIN
- COPPER
- NICKEL
- LEAD

- R2 ANOMALIES LOCATED 1969/70 SEASON
- R9 ANOMALIES LOCATED 1971/72 SEASON



COMSTAFF PROPRIETARY LIMITED		
RAMSAY AREA PROJECT		
SUMMER 1972		
GEOCHEMICAL ANOMALIES		
SCALE	DWN.	No
1:50000	G.E.C.	TAS. 2-283