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EL 1880 FORSTER RANGE N.T.

FINAL REPORT

AUGUST 1982

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accepted by : W.H. Johnston ... *W.H. Johnston*

copy to : N.T. Department of Mines and Energy

date : August, 1982

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1. SUMMARY

CRA Exploration Pty Limited (CRAE) carried out systematic rockchip sampling across controlled stratigraphic sections in tin-bearing pegmatoid rock. A total of 43 rockchip samples were collected over three traverses. Economic tin mineralisation is not indicated. Title should be relinquished.

2. INTRODUCTION

EL 1880 Forster Range, N.T. was first granted to CRA Exploration Pty Limited on December, 1978. During the first year of tenure a uranium exploration programme was carried out; reported by Snelling (1979, CRAE Report 9902). The results of this programme were generally not encouraging. In 1980, the second year of tenure CRAE carried out a geochemical drainage survey with some ground follow-up. The results of this programme were reported by Fraser (1980, CRAE Report 10350). The third year of tenure, 1981, saw detailed follow-up and delineation of a catchment anomalous in tin. (Harvey, 1981, CRAE Report 10979). Detailed sampling across controlled sections of tin-bearing pegmatoid rock was carried out early in 1982. This report presents the results from that work and relinquishment of title.

3. CONCLUSIONS

Economic tin mineralisation was not indicated on Forster Range, EL 1880.

5. PREVIOUS EXPLORATION

During 1979 CRAE carried out an airborne magnetic-radiometric survey and ground follow-up of anomalies. Best radiometric anomalies were over local "hot spots" in Barrow Creek Granite and not encouraging. Full report was by Snelling (1980) in CRAE Report 9902. In 1980 a geochemical drainage survey was carried out resulting in definition of one lead anomaly and one tin anomaly in drainage. Anomalous uranium in bore water (700 - 1300ppb) from the Barrow Creek township area was also reported. Full report was by Fraser (1980) in CRAE Report 10350. During 1981, follow-up on drainage anomalies resulted in negative appraisal of the lead anomaly and the tracing of the anomalous tin to a large area of stratified pegmatoid rock reporting up to 438ppm Sn. The possibility of suitable trap site conditions for labile uranium in Recent or Tertiary sediments was downgraded. Full report was by Harvey (1981) in CRAE Report 10979.

6. GEOCHEMICAL ROCKCHIP SAMPLING

In April, 1982, detailed rockchip sampling over tin-bearing stratified pegmatoid was carried out to test extent and control on the tin mineralisation. The host rock was quartz, feldspar, muscovite, tourmaline pegmatoid rock best exposed beneath the Adelaidean Central Mount Stuart Beds in the Forster Range escarpment. The rock has considerable outcrop extent, in excess of five square km, and a stratified nature delineated by zones of varying crystal size.

Extremely coarse crystal size in places (feldspar up to 5 cm long) meant representative sampling was a difficulty. An attempt to overcome this was made by collecting bulk samples, of about 10 kg weight, over 20m intervals and assaying a split of the crushed sample.

The best returned assay was 760ppm Sn over 20m. This was not considered indicative of economic grade in the Barrow Creek situation. For full results see NTa 619. There was no apparent correlation between tin grade and other variables such as percentage tourmaline or crystal size.

The possibilities for elluvial or alluvial concentrations are limited. Valley fill is shallow as evidenced by outcropping granite and borehole data. A best reported panned concentrate of 60% Sn from an excellent present day trap site represents about 50g Sn per 10 kg material or .5% Sn. Next best panned concentrates reporting in the range 1 - 10% Sn represent a grade of .08% Sn at best.

7. REFERENCES

FRASER, W.J., 1980

EL 1880, Forster Range, N.T.
Annual Report, October 1980
CRAE Report 10350

GROVES, D.I. & TAYLOR, R.G.

Greisenization and mineralisation at Anchor tin mine northeast Tasmania.
Inst. Min. Metall. Trans.
v82, SecB, pB135 - 146.
November 1973.

HARVEY, B.E., 1981

EL 1880, Forster Range, N.T.
Annual Report, December 1981
CRAE Report 10979

SNELLING, A.A., 1990

EL 1880, Forster Range, N.T.
Annual Report, January 1980
CRAE Report 9902

8. KEYWORDS

Adelaidean, assays - geochem - surf., granite, pegmatite, Tertiary, tin, tourmaline, unconformity.

9. LOCALITY

Barrow Creek SF53-6

10. LIST OF PLANS

Plan No

Title

NTa 619

EL 1880, Forster Range
Rockchip sampling sections

Geochemical Rockchip Ledgers

Arank. Rec.

PROJECT Foster Range

E.L. -----

MAP OR PHOTO REFERENCE

C.R.A. EXPLORATION PTY. LIMITED

GEOCHEMICAL ROCK CHIP SAMPLING LEDGER

g - grab
ca - composite
ch - channel

SAMPLE No. 768 312 - 768 336

D.P.O. No. 21734

DATE 19-4-82

COLLECTED BY BEA

SHEET No. -----

Trace on East end excavation

ANALYSED BY AMDEL

Grid Co-ordinates	Sample Number	Sample		Metal Content, p.p.m.																Scint.	Geological Observations		
		Width	Sample Type	Pb	Zn	Cu	Ni	Co	Cr	Mo	W	Sn	As	Ag	Au	Mn						U	Th
206A	768 312	20	Co									8											
40	313	1	"									10											
60	314	"	"									26											
80	315	"	"									22											
100	316	"	"									18											
120	317	"	"									30											
140	318	1	"									26											
160	319	"	"									32											
180	320	"	"									26											
200	321	"	"									36											
220	322	1	"									40											
240	323	1	"									32											
260	324	1	"									22											
280	325	1	"									48											
300	326	1	"									55											
320	327	1	"									44											
340	328	1	"									200											
360	329	1	"									90											
380	330	1	"									290											
400	331	1	"									300											
420	332	1	"									170											
440	333	"	"									460											
460	334	"	"									220											
480	335	"	"									20											
500 (n)	336	1	"									95											

Dist Rd
Murr
Tong
Peg

C.R.A. EXPLORATION PTY. LIMITED

GEOCHEMICAL ROCK CHIP SAMPLING LEDGER

D.P.O. No. 21754

DATE 19-6-82

PROJECT ARUNTA REC.

gr - grab
co - composite
ch - channel

E.L. FORESTER RANGE

SAMPLE Nos. 968337 - 968346

COLLECTED BY B.F.H.

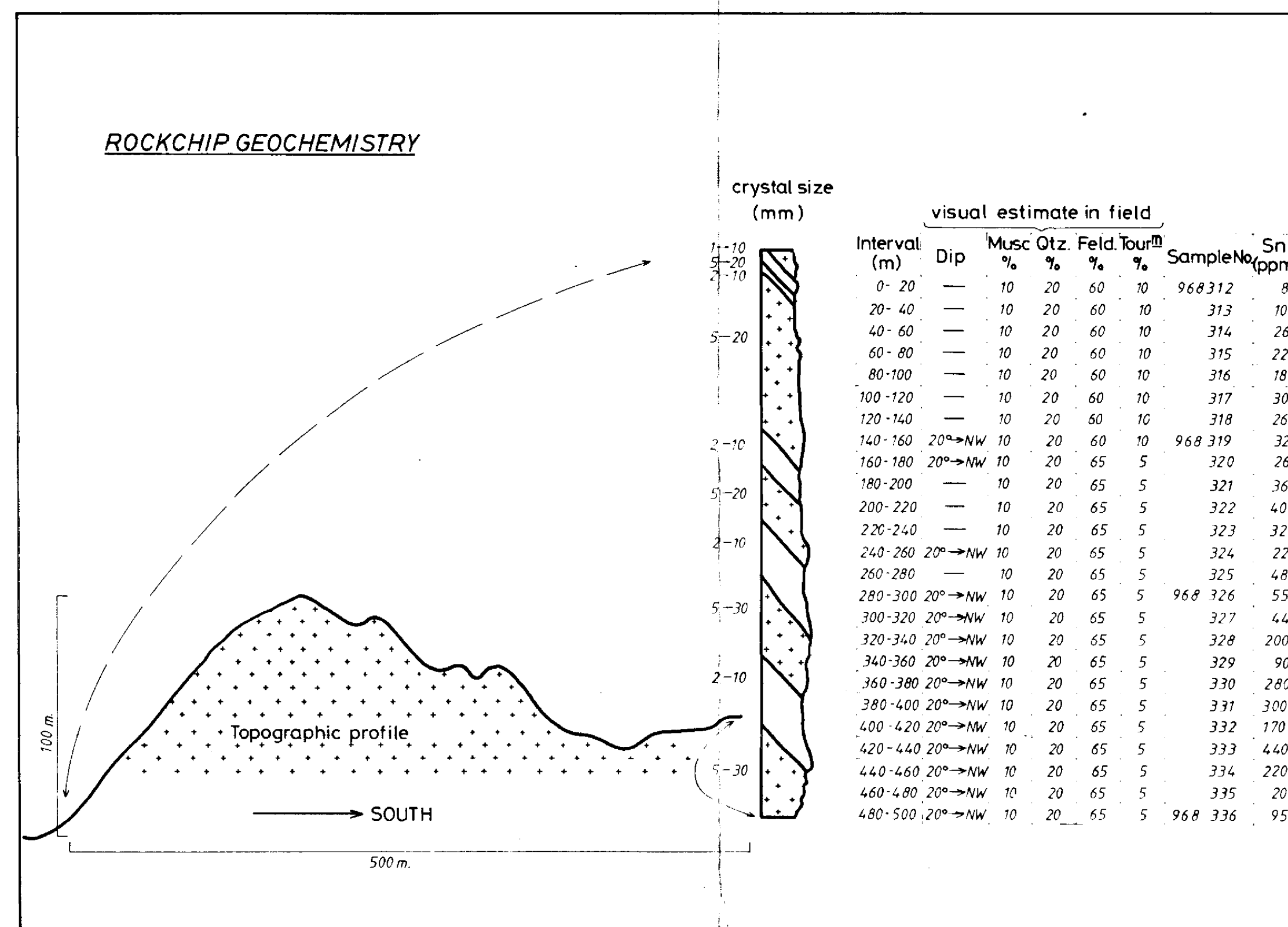
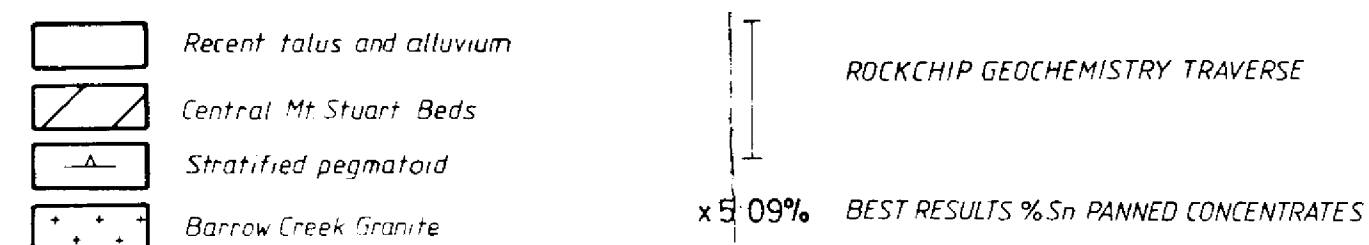
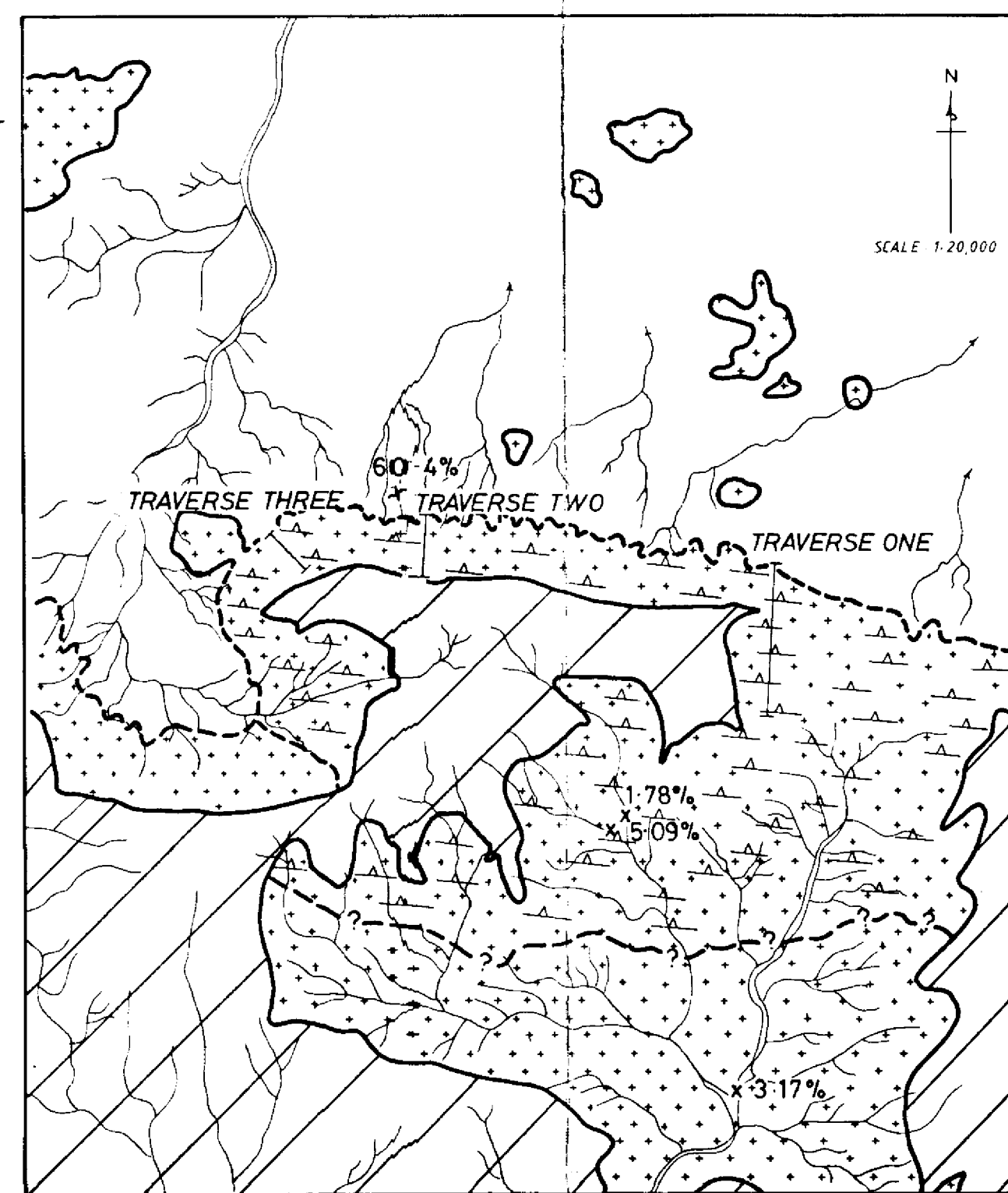
SHEET No.

MAP OR PHOTO REFERENCE Tmza luo. middle excavation

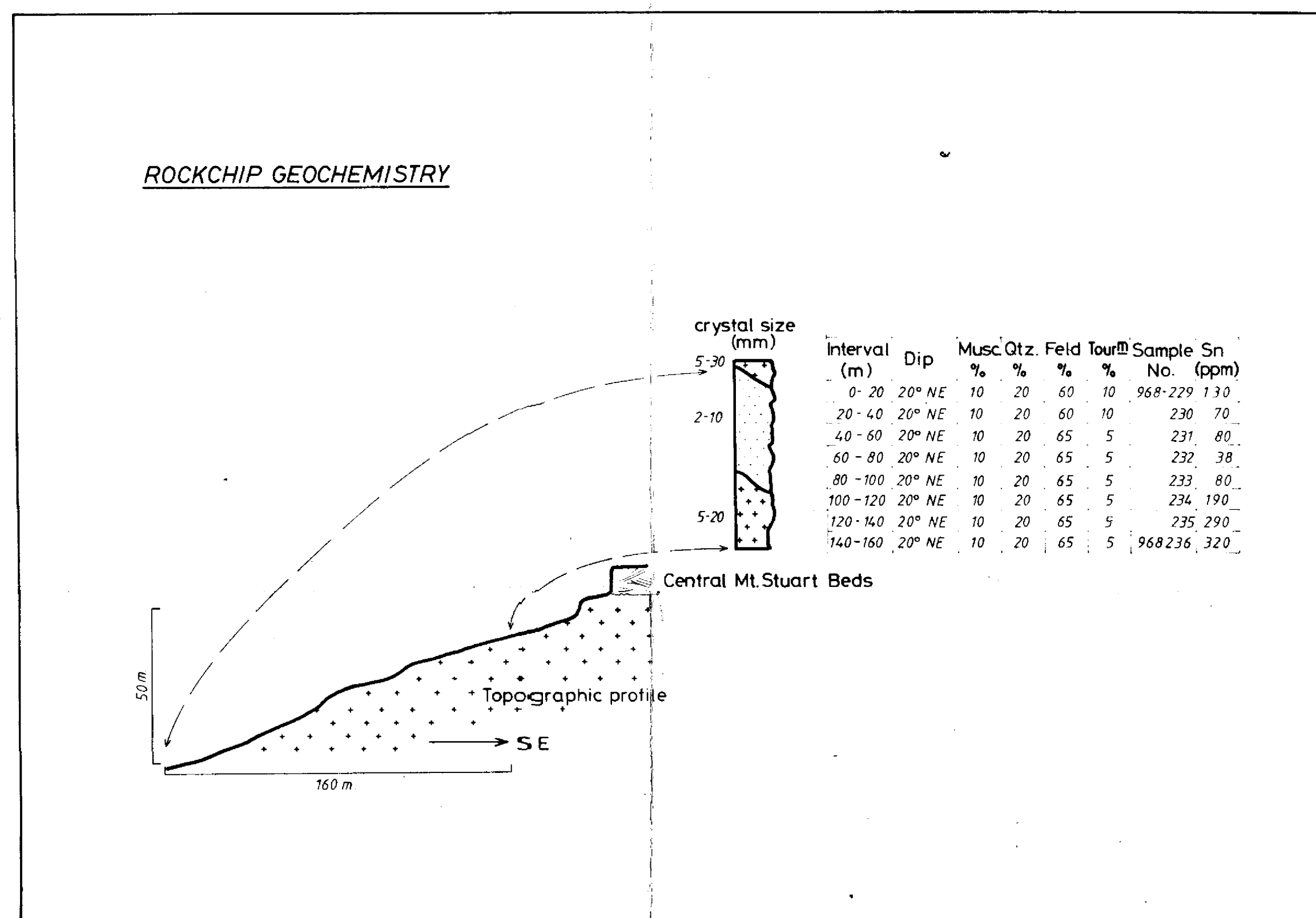
ANALYSED BY AMDEK

Grid Co-ordinates	Sample Number	Sample		Metal Content, p.p.m.																Scint. c.p.s	Geological Observations					
		Wt%	Sample Type	Pb	Zn	Cu	Ni	Co	Cr	Mo	W	Sn	As	Ag	Au	Mn			U			Th				
20 (-)	968337	20	Co																							
40	338	•	•																							
60	339	•	•																							
80	340	•	•																							
100	341	•	•																							
120	342	•	•																							
140	343	•	•																							
160	344	•	•																							
180	345	•	•																							
200	346	•	•																							

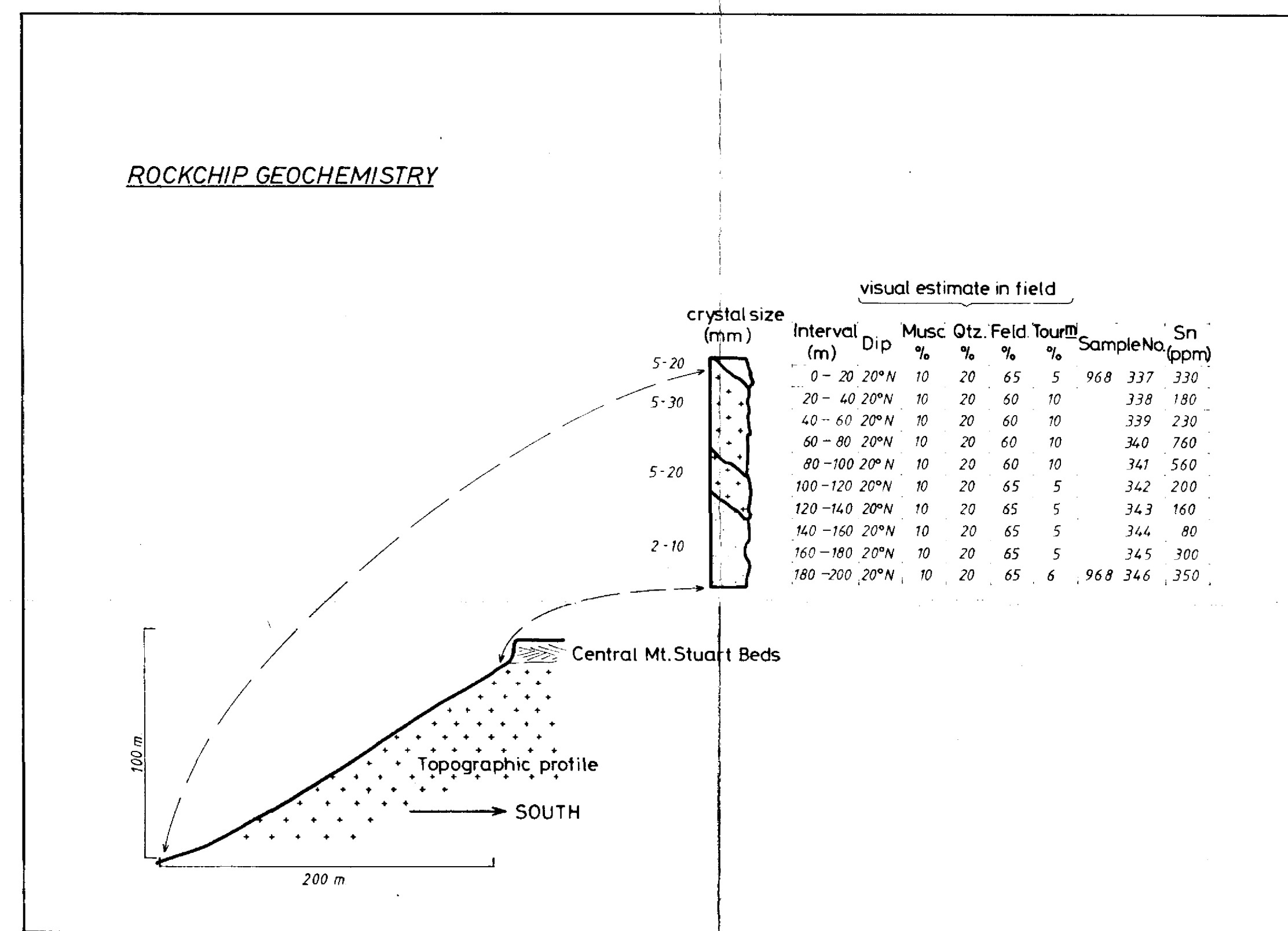
Qtz
 Feld
 Musk
 Tourmaline
 Pyrox



TRAVERSE ONE



TRAVERSE THREE



TRAVERSE TWO