

**MICROFILMED**  
FICHE No. "redone"  
8/1/96

95-3735

E.L.31/90(REDPA), 32/90(MONTAGU PLAINS)&33/90(BRITTONS SWAMP)

ANNUAL REPORT

1994-95

TO THE DIVISION OF MINES

MINERAL HOLDINGS AUSTRALIA PTY. LTD.

by

VIC THREADER

**MICROFILMED**  
FICHE No. 013641-42

SEARCHED		
FILE REF.		
15 JUN 1995		
DOC. REF.		
OFFICE		
EL 31/90	SEE FOLIO	36, 37
EL 32/90	SEE FOLIO	30, 31
EL 33/90	SEE FOLIO	38, 39
REVIEWED		
FILE		

EL 31/90 SEE FOLIO 36, 37

EL 32/90 SEE FOLIO 30, 31

EL 33/90 SEE FOLIO 38, 39

95-3735

EXPLORATION LICENCES 31/90 REDPA, 32/90 MONTAGU PLAINS, 33/90 BRITTONS SWAMP - ANNUAL REPORT 1995  
THREADER, V

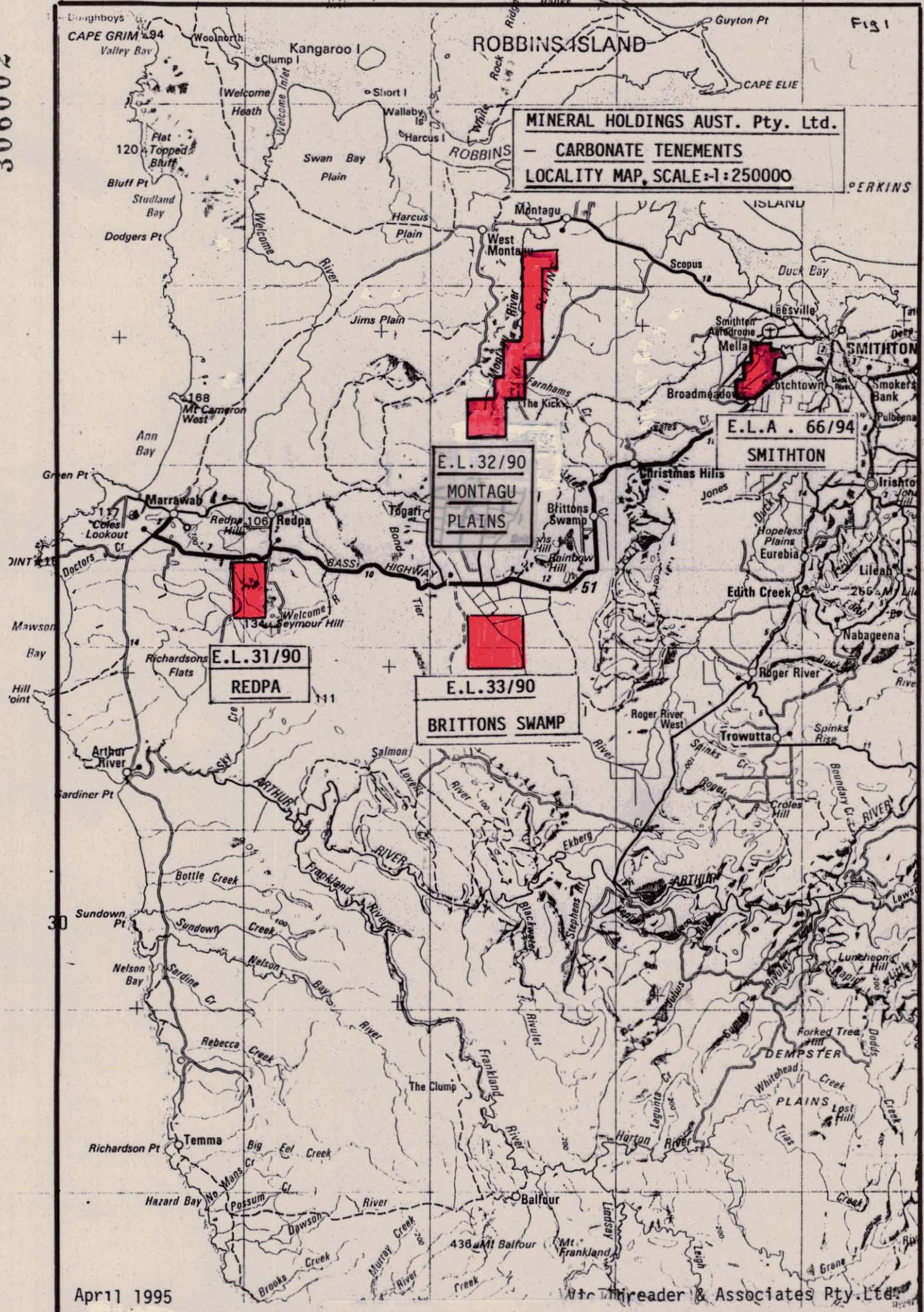
Vic Threader and Associates Pty. Ltd.  
Kingston Beach

306002

Fig 1

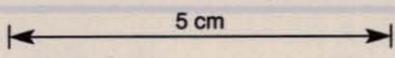
**MINERAL HOLDINGS AUST. Pty. Ltd.**  
**- CARBONATE TENEMENTS**  
**LOCALITY MAP, SCALE 1:250000**

PERKINS



Apr 11 1995

Mc Threader & Associates Pty. Ltd.



# C O N T E N T S

306003

Introduction  
Previous Exploration  
Current Exploration  
Proposed Exploration

## Figures:

- 1 Locality Map
- 2 Geological Map
- 3 Regional geological Structure (Seymour et.al.)
- 4 EL 31/90 (Redpa)
- 5 EL 32/90 (Montagu Plains) } Sample Locations
- 6 EL 33/90 (Brittons Swamp) }

## Appendix

- |         |  |
|---------|--|
| Table 1 | AMG Coordinates  |
| 2       | Sample Descriptions (1) 32/90<br>(2) 33/90                     |
| 3       | Chemical Analyses (1) 250kg. samples<br>(2) 32/90<br>(3) 33/90 |
| 4       | Grain Size Nomenclature  |

INTRODUCTION MHA holds three exploration licences and a fourth is in the application stage for carbonates in northwestern Tasmania.

Tenement Details:

EL Number	Name	Area km	Distance from Pt.Latta(Approx)
31/90	Redpa	6	90
32/90	Montagu Plains	15	60
33/90	Brittons Swamp	9	70
ELA 66/94	Smithton	5	35

There is a common purpose linking these tenements which is the search for metallurgical and chemical grade dolomite. The wide variation in grade of samples tested to date indicates the difficulty of the task especially when combined with finding a sufficient resource of acceptable grade in an environmentally acceptable location.

PREVIOUS EXPLORATION

EL31/90: A comprehensive investigation of the Tertiary limestone was undertaken during 1991-1992 for dimension stone and metallurgical limestone. Since that time the focus of attention has shifted to exploration of Smithton Dolomite. Hammer drilling and diamond drilling to depths of 20m. has demonstrated that the area has potentially huge reserves of dolomite but the drilling has not been sufficiently concentrated to establish Indicated Reserves

EL32/90: A limited surface sampling programme was carried out in natural forest owned by Northern Forest Products west of Montagu River. The owners have declared a Caves Reserve around the outcrop to protect an assemblage of vertebrate fossils.

EL33/90: A line of samples (Nos. 1 to 11) from sub outcrop exposed in drainage channels was taken in 1991. Sample 11 was ironstone from an assumed spring deposit.

A moratorium was granted to MHA by the Director of Mines for 1993-1994 to compensate the company for its expenditure relating to magnesium metal production.

EXPLORATION DURING 1994-1995

ELs 31&33/90: Three 500 kg. samples were blasted from dolomite outcrops, two from 31/90 & one from 33/90, the locations are plotted on Figures 2, 4, & 6. AMG coordinates are listed in the Appendix. The 33/90 sample was taken from a 400m. long dolomite exposure in a drainage channel; it was in fact sub outcrop. These samples were cleaned, broken down to uniform particle size and split into two equal fractions. A half of each sample was sealed in drums and airfreighted overseas for furnace trials. The other half is in storage here in Tasmania. Chemical analyses of a 2 kg. sample of each

are given in Table 3(i)

ELs 32&33/90: A programme of backhoe test pits combined with a continuation of surface sampling was undertaken in these two tenements. The use of a backhoe rather than an excavator was justified on the basis of mobility but digging depth capacity was limited to 3+m. In comparison, a 20t. excavator could dig to 6m. but moves at less than half the speed and would have to be transported between properties. <sup>DC5 R7</sup>

32/90: 22 pits were dug and 3 surface samples (Nos. 5, 6 & 7., Nos. 1, 2, 3 & 4 were taken in 1991 and chemical analyses have already been reported) were taken. Sampling details and chemical analyses are given in Tables 3(i, j) in the Appendix to this report. In summary, overburden was too deep for the machine to penetrate east of Montagu River; better results, in terms of overburden thickness were obtained in the north of the licence and there is a 5km. stretch in the middle of the licence on this side of the river to be sampled. For this a power auger with diamond drilling capacity may be a better machine for the job. Apart from the safety considerations of sampling in pits and trenches it is difficult to obtain meaningful samples from weathered sub outcrop.

In general results were better on the western side of the river. Five pits were dug and four of them intersected dolomite.

Two of the surface samples taken were from D. Curtain's property on the southern boundary and about 50m from the river (AMG250150m.E. 5480150m.N.). No. 5 was from outcrop, contained quartz veins and was not submitted for analysis; No. 6 occurred as sub outcrop at 2m. depth in a drainage channel. No. 7 was taken from a river bank exposure close to Pit No. 21 (AMG325000m.E. 5481600m.N.).

33/90: In this licence no distinction has been made between surface samples and Backhoe samples, thus:

Nos. 1 to 11	(drainage channel 1991)
12	25 (backhoe pits 1995)
26	41 (drainage channels 1995)

This distinction is not of significance because all of the samples were taken from sub outcrop.

### QUALITY OF DOLOMITE

STRENGTH: It is necessary that the dolomite maintains its physical integrity during mining, handling and processing. Its performance in the furnace is, to a large extent, dependent on this factor.

Judging by the difficulty in chipping samples from outcrops and the low fines content of blasted rock, the strength of Smithton Dolomite is adequate for the purpose but this would need the confirmation of a bulk sample trial.

CHEMICAL PURITY :Although specifications vary according to the end use of the material, a low level of contaminants is necessary for most uses; in the highly competitive world market for Industrial Minerals it has become essential .

The main impurities in the dolomite are: 1) silica occurring as quartz veins and possibly in other forms such as silicates. 2) Iron, occurring as iron oxides but it may also be present in the crystal lattice of the dolomite. Deposits of iron oxides, locally called "Blows", occur throughout the area They are thought to be spring deposits, sometimes in mounds 2-3m. high and probably associated with artesian water .The extent to which iron rich waters from this source would have contaminated the dolomite is not known. 3) Calcite is frequently (almost invariably) present in the dolomite, usually as infilling of veins and vugs probably due to solution and redeposition by and from meteoric water. Calcite may also occur within the dolomite lattice or around grain margins. Acid reaction has been observed in most samples tested .The theoretical CaO/MgO ratio for dolomite is 1.40,

Acid reaction has been observed in most of the samples tested .The theoretical CaO/MgO ratio for dolomite is 1.40, a higher ratio indicates the presence of excess calcium usually in the form of calcite. A value of 1.7 indicates a 10% calcite content which, for a number of end uses is unacceptably high. The ratio has been calculated for each of the sample analyses in this report (Table ). To date no pattern of distribution has become apparent. Except to note that the ratio is higher in these three licences than it was in the Smithton area. It is also noted that these licences appear to be located lower in the Smithton Dolomite (stratigraphically) than is Smithton. however this may not be so and of no significance if it is.

GRAIN SIZE: Coarsely grained carbonates have been found to decrepitate at high temperatures, which limits their use in the metallurgical industry. The most desirable grain size is in the  $<10\mu\text{m}$ . range (micro- & crypto-crystalline) Table 5 sets out the Wentworth grade scale and the grain size nomenclature employed for carbonate rocks by Bissett & Chilinga (1967). Estimation of grain size is difficult and inherently subjective but bearing this limitation in mind, the following table, based on the size classification of Table has been devised for use in the field.

DESCRIPTOR	GRAIN SIZE ( $\mu\text{m.}$ )	CRITERION
macro.	>1000	estimate by eye
meso C	500-1000	" " "
" M	250-500	" " "
" F	50-250	" " "
FC	10-50	Grains can be distinguished with the aid of a hand lens.
micro	<10	Grains cannot be distinguished with a hand lens.
crypto.	<1	cherty texture.

This method has been employed in this report. Grain Sizes shown on the analysis sheets (Table 3) are descriptions by sample preparation staff at the laboratory are not made with reference to any standard and do not agree with descriptions in this report. They should be discounted.

A microscopic examination of a sample of dolomite from a bore hole drilled at Redpa was made by R.S. Bottrill (Annual Report for EL 31/90 1992). He found that the grain size lay in the range of 150-200 $\mu\text{m.}$ , and that no cryptocrystalline material was seen in the thin sections examined. He classified the sample as mesocrystalline; In this report it is described as meso F.

Of 49 grain size estimations (Table 2), the distribution was : macro-4%, meso C-12%, meso M-12%, meso F-20%, FC-33%, and micro-18%. Macro & micro constitute 50% of the total observations and FC & micro make up the other 50%.

Many more observations are required both horizontally and vertically before this approach can be assessed as an exploration tool.

PROPOSED EXPLORATION (1995-1996) Further backhoe/excavator pit sampling is required to complete the assessment of EL32/90 (Montagu Plains) This will be given priority as it will complete the surface evaluation of the 3 licences.

The next stage will be bulk sampling so that furnace trials can be run to allow assessment of the material for various processes. The choice of site(s) will be made by visiting technical experts who will be inspecting the licence areas in June 1995.

The area or areas selected will test drilled and sampled to ensure that the dolomite is of the required quality and is present in sufficient quantity to be viable.

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Figure 2

Geological, Map (Woolnorth, Geol. Atlas  
T:50,000 Sheet 7816S 1992

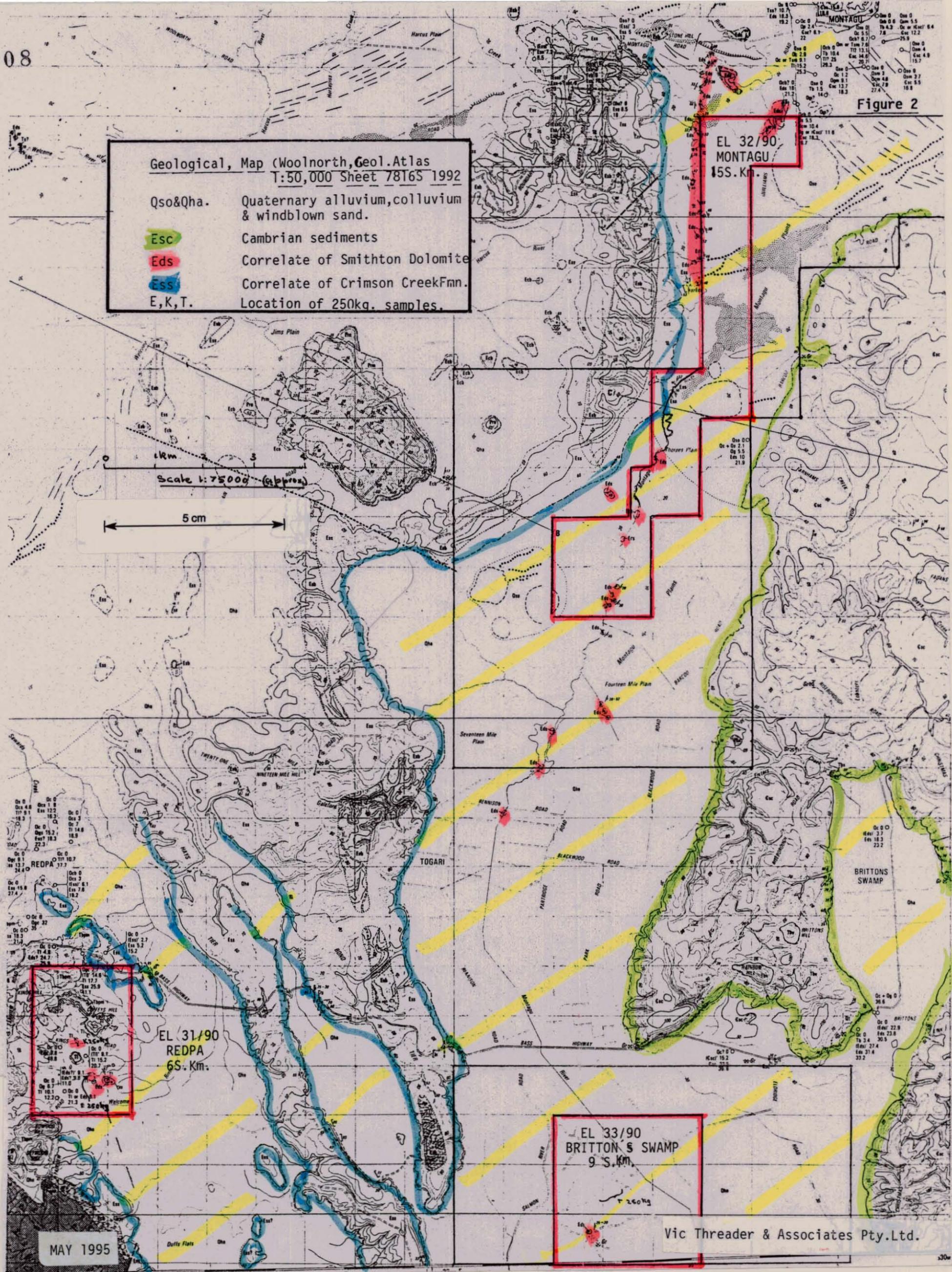
Qso&Qha. Quaternary alluvium, colluvium  
& windblown sand.

**Esc** Cambrian sediments

**Eds** Correlate of Smithton Dolomite

**Ess** Correlate of Crimson Creek Fmn.

E, K, T. Location of 250kg. samples.



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Figure 3.

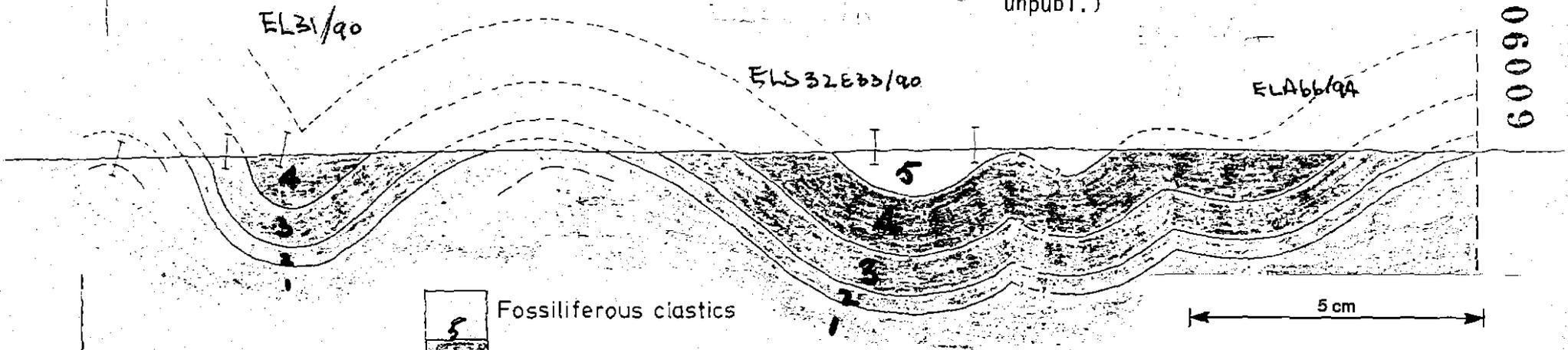
Figure 3

# SMITHTON BASIN

(Annual Report EL 32/90  
after Seymour D. et.al.  
Woolhorth Explan. Notes  
unpubl.)

west coast

306009



-  Fossiliferous clastics
-  Smithton Dolomite
-  Crimson Creek Fm.
-  Forest Conglomerate + Black River Dolomite
-  undiff. Rocky Cape Gp.

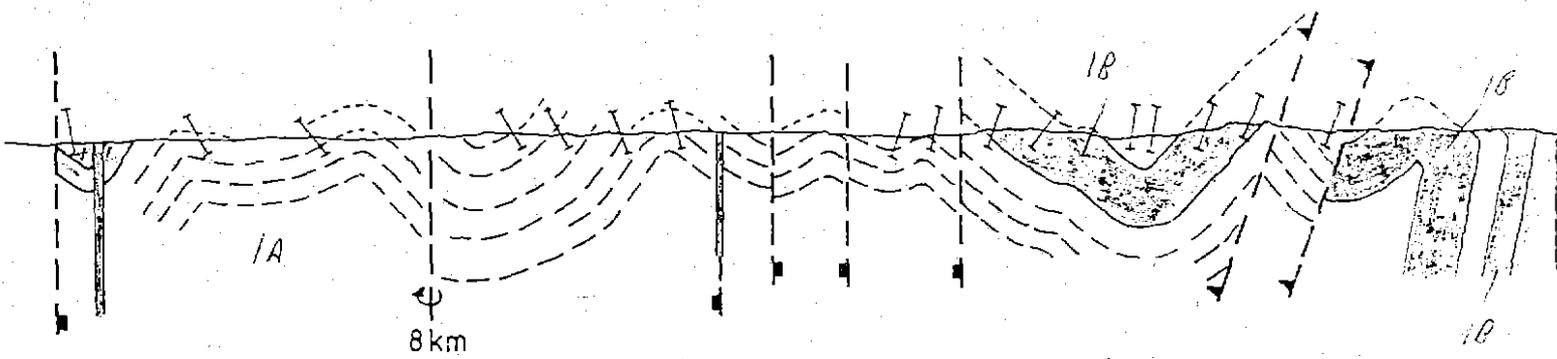
0 5 10 km

V/H=1

SMITHTON | TABLE CAPE

ARTHUR LINEAMENT

PHYLITE | SCHIST



-  orthoquartzite
  -  siltstone
- Rocky Cape Gp.

-  Bedding form-line
-  Cleavage

primary foliation

late foliation

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306010

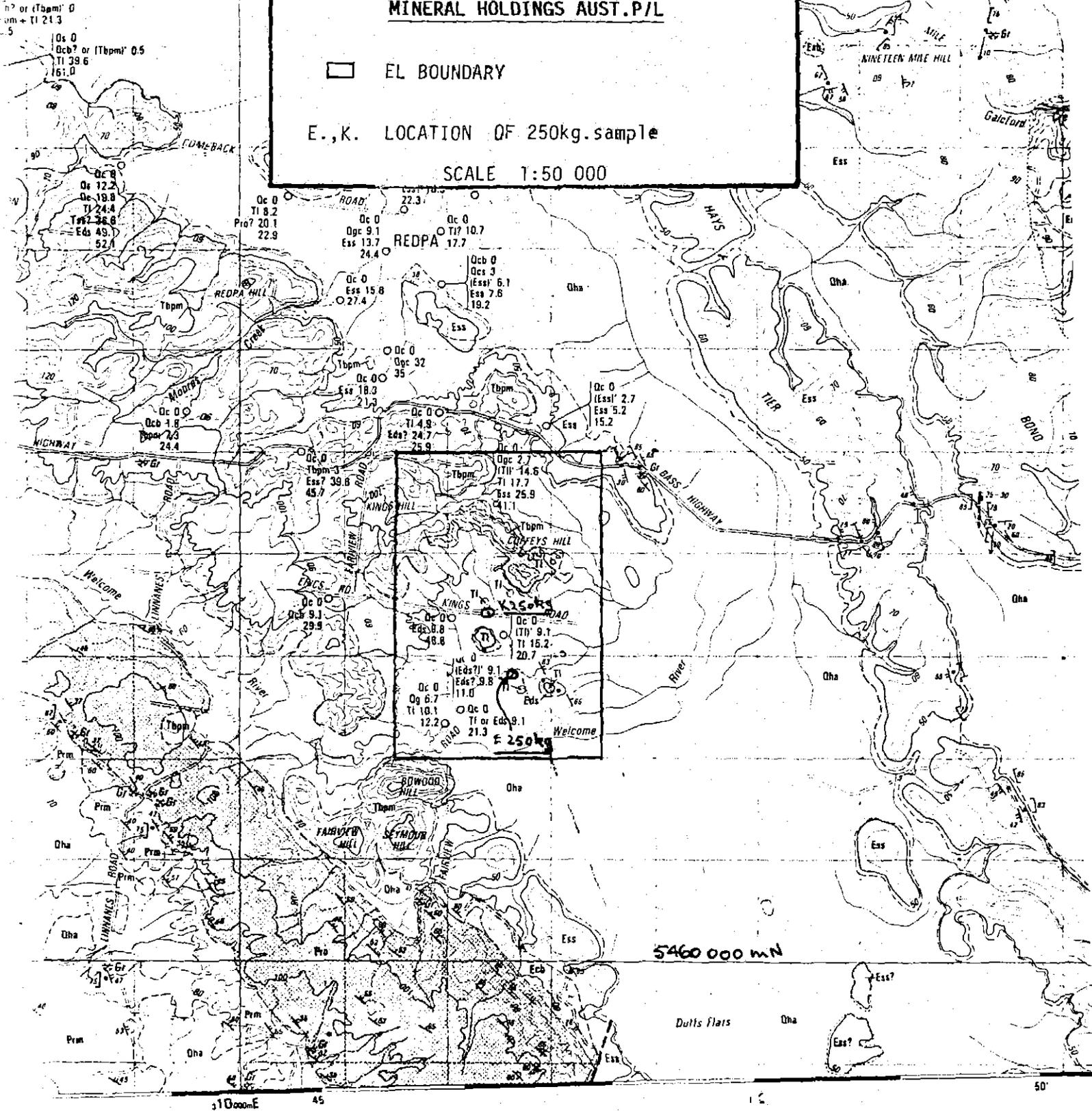
Figure 4

**EL 31/90 (REDPA)**  
**MINERAL HOLDINGS AUST. P/L**

□ EL BOUNDARY

E.,K. LOCATION OF 250kg. sample

SCALE 1:50 000



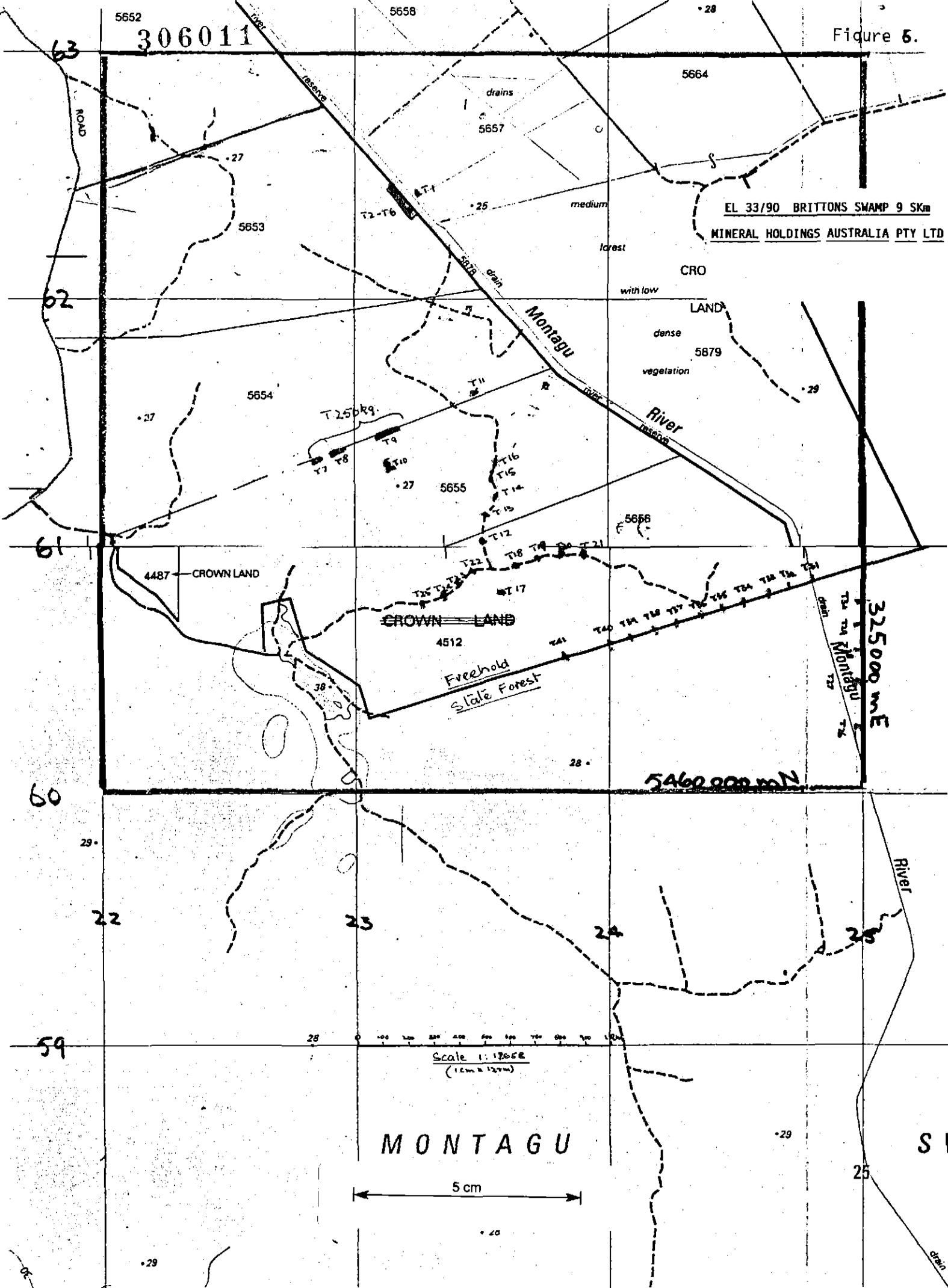
5460 000 mN

5 cm

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Figure 5.



EL 33/90 BRITTONS SWAMP 9 SKm  
MINERAL HOLDINGS AUSTRALIA PTY LTD

CROWN LAND  
4512  
Freehold  
State Forest

325000 mE

5460000 mN

Scale 1:12500  
(1 cm = 125 m)

5 cm

MONTAGU

S I

APPENDIX

AMG Coordinates of Test Pits

306013

Table 1.

<u>EL 32/90</u>			<u>EL 33/90</u>					
No.	m.E	m.N	No.	m.E	m.N	No.	m.E.	m.N.
1	323300	5472000	1	323250	5462350	21	323890	5460980
2	350	-	2	150	475	22	410	910
3	400	-	3	200	450	23	400	850
4	700	900	4	250	420	24	340	810
5	700	800	5	200	400	25	250	790
6	950	3800	6	250	350	26	4980	210
7	950	4000	7	2850	1350	27	920	400
8	980	4550	8	900	800	28	890	510
9	830	-	9	3150	450	29	860	620
10	5050	82000	10	120	320	30	830	720
11	-	1900	11	470	640	31	800	870
12	2050	72200	12	490	020	32	700	840
13	300	000	13	500	120	33	610	810
14	300	200	14	540	200	34	520	780
15	300	300	15	530	270	35	430	750
16	250	3000	16	540	330	36	340	730
17	950	150	17	560	0830	37	250	700
18	950	400	18	610	930	38	150	670
19	5050	81750	19	700	960	39	070	630
20	-	500	20	800	970	40	000	600
21	-	350				41	3810	550
22	-	80250						

AMG Coordinates of 250 kg. samples

K	312400	5463400	(EL31/90 Redpa, Kings property)
E	600	2800	( " " " Edwards property)
T	3000	1400	(EL33/90 Brittons Swamp/Togari, Leis&Williamsons property)

## EL32 /90 (MONTAGU PLAINS)

## BACKHOE PIT LOGS

Table 2.41

306014

NUMBER	DEPTH	OVERBURDEN	COLOUR	ACID REACTION	HARDNESS	GRAIN SIZE	
1	1.7	1.7	Grey	Strong	Hard	meso F	
2	3.0	3.0	Bluish grey				Strong flow of water at 3.0m. Hole too wet & unstable to sample.
3	3	>3.3					No rock, no water.
4	3.0	3.0	iron stained				Ironstone on dolomite. Strong flow of water at 3.0m.
5	2.5	2.5	Grey				Soft dolomite.
6	3.0	>3.0					Sand only, no rock, no water.
7	3.0	>3.0					" " " " " "
8	3.1	>3.1					Boulder of grey dolomite at 3.1m.
9	3.1	>3.1					2m. of yellow clay & 1.1m. of grey sandy clay. Water coming at 3.1m. No rock.
10	2.0	0.8 to 2.0	Grey	Strong	Soft	micro	Solution cavities with clay infilling.
11	1.8	0.8	Ironstained at top.	Strong	Hard	micro	Soft dolomite. Sampled at 1.5m.
12	3.0	>3.0					Peat and sand to 3.0m. Hole abandoned.
13	1.4	0.9 to 1.4	Blue/Grey	medium	Hard	micro	
14	0.0	0.9	Grey	"	Hard	meso F	Extremely tough. only very small sample possible.
15	1.2	1.2	Grey	"	Hard	meso C	Well jointed easy to sample, but hard dolomite.
16	3.0	3.0	Light grey	Strong	Hard	meso M	2.2m. of black peaty clay 0.8m. of grey sandy clay water coming in at 3.0m. Sampled from bucket.
17	0.7	0.7	Light grey	Medium	Slightly crumbly	F C	
18	0.9	0.9	"	Medium	Hard	F C	No dolomite to 1.5m. at other end of excavation.
19	0.9	>0.9					0.6m. of sandy soil & sand 0.3m. of brown clay Water coming at 0.9m. Hole abandoned.
20	3.0	>3.0			Soft		0.6m. of sandy soil 0.3m. of sand 2.40m. of sandy clay Soft dolomite.
21	3.0	>3.0			Soft		Black sandy clay with bands of sand. Yellow clay at 3.0m. Soft dolomite, sampled from bucket.
22	2.0	2.0	Grey	Strong	H	F C	0.3m. of brown sandy soil 1.7m. of brown sandy clay

DESCRIPTIONS OF SAMPLES EL 33/90(BRITTONS SWAMP)

Table 2.(2)

NUMBER	COLOUR	ACID REACTION	GRAIN SIZE
12	Grey	Medium	Meso.M
13	"	Strong	"
14	Pale Grey	"	Meso.F.
15	Pale Brown	"	Micro.
16	" "	"	F.C.&Meso.C.
17	Pale Grey	"	F.C.
18	" "	"	Macro.& Meso C.
19	" "	Medium	Meso.C.
20	Grey/Brown	Slight	Macro
21	Brown/Grey	Medium	F.C.
22	" "	Strong	Meso.C.
23	" "	Slight	Micro.
24	" "	Strong	F.C.
25	" "	"	F.C.
26	" "	Medium	F.C.& Meso.C.
27	" "	"	F.C.& Micro.
28	" "	"	" "
29	" "	"	Meso.F
30	" "	Nil	F.C.& Micro.
31	" "	"	F.C.
32	" "	Slight	F.C.& Micro.
33	" "	Nil	F.C.
34	Grey	"	Meso.F.
35	Brown/Grey	Medium	Meso.M.
36	Pale Grey	"	" "
37	Grey	Strong	Meso.C.
38	"	"	Meso.M.
39	"	Slight	F.C.
40	"	Nil	Meso F.
41	Pale Grey	"	" "

306015

Key to Grain Size Descriptors: See Table



**ANALYTICAL DATA**

SAMPLE PREFIX		REPORT No.	REPORT DATE	CLIENT ORDER No.			PAGE	
		109515.60.10210	06/06/94				1 OF 1	
SAMPLE No.	Ca	Mg	Fe	Cu	Ni	Al <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	TiO <sub>2</sub>
METHOD	GA104	GA104	GA104	GA104	GA104	OX408	OX408	OX408
1	MHA 23.5.94 E	24.5	11.0	310	<20	<25	0.05	0.01
2	MHA 23.5.94 K	24.5	11.5	430	<20	<25	0.05	0.01
3	MHA 23.5.94 T	23.5	10.5	860	<20	<25	0.07	0.01
4								

SAMPLE PREFIX		REPORT No.	REPORT DATE	CLIENT ORDER No.			PAGE	
		109515.60.10210	06/06/94				2 OF 2	
SAMPLE No.	Fe <sub>2</sub> O <sub>3</sub>	MnO	CaO	K <sub>2</sub> O	HgO	P <sub>2</sub> O <sub>5</sub>	SO <sub>3</sub>	Na <sub>2</sub> O
METHOD	OX408	OX408	OX408	OX408	OX408	OX408	OX408	OX408
1	MHA 23.5.94 E	<0.1	<0.01	32.6	0.01	19.30	0.007	0.02
2	MHA 23.5.94 K	<0.1	<0.01	31.5	0.01	19.60	0.007	0.02
3	MHA 23.5.94 T	0.2	<0.01	32.7	0.02	19.00	0.007	0.02
4								

SAMPLE PREFIX		REPORT No.	REPORT DATE	CLIENT ORDER No.			PAGE		
		109515.60.10210	06/06/94				3 OF 3		
SAMPLE No.	TOTAL	LOI							
METHOD	OX408	OM615	<i>CaO/mgO</i>						
1	MHA 23.5.94 E	99.51	47.29	1.69					
2	MHA 23.5.94 K	99.60	45.91	1.61					
3	MHA 23.5.94 T	99.62	46.95	1.72					
4									

Sample Locations:								
9	E. Edwards property (EL 31/90) figure 6.							
10	K. Kings property							
11	T. Lets property (EL 33/90) figure 7							
12								
13								

**MONTAGU PLAINS DOLOMITE EL.32/90  
& SMITHTON EL.66/94**

Prospect	Sample #	CaO %	MgO %	SiO <sub>2</sub> %	LOI %	Fe <sub>2</sub> O <sub>3</sub> ppm	TiO <sub>2</sub> ppm	Al <sub>2</sub> O <sub>3</sub> ppm	Na <sub>2</sub> O ppm	Mn ppm	Cu ppm	Cr ppm	Ni ppm	Colour	Hard	Grain	Ratio
MONTAGU	BP 1	30.47	21.04	0.84	46.74	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	G	H	M	1.46
"	BP 10	28.47	20.00	4.10	44.88	12900	521	7890	1376	153	9	17	20	OW	H	F	1.42
"	BP 11	29.44	20.88	0.44	46.52	18520	244	4670	1210	223	6	16	20	OW	H	F	1.41
"	BP 13	23.65	15.85	23.80	36.14	1960	27	1070	989	80	5	4	14	LG	H	M	
"	BP 14	32.48	19.69	0.31	46.52	2425	50	1690	1266	41	6	11	19	LG	H	M	1.65
"	BP 15	32.51	19.46	0.13	46.92	947	57	1590	936	28	4	14	23	OW	H	M	1.67
"	BP 16	30.54	21.20	0.07	47.17	945	42	792	1058	62	5	10	25	LG	H	M	1.44
"	BP 17	31.15	20.32	0.51	46.72	1671	250	5350	917	49	5	7	17	OW	H	F	1.53
"	BP 18	31.50	19.79	1.14	46.52	1976	76	1810	728	57	6	4	15	LG	H	F	1.59
"	BP 22	29.86	20.40	0.92	46.34	10350	469	8300	854	139	7	17	18	G	H	F	1.46
"	DC 5	49.57	4.97	<0.05	44.46	1581	23	370	588	50	5	5	15	G	H	F	
"	R7	28.68	20.21	4.58	44.76	7840	146	2890	1060	78	6	13	19	LG	H	F	1.42
Roger River	Outcrop	30.65	20.93	0.06	46.99	8060	78	1200	719	775	8	15	41	LG	H	F	1.46
Smithton	QR2105	30.41	21.40	0.40	46.97	2268	125	3060	1155	54	4	7	16	LG	H	F	1.42

\*Roger River is several km's south of El.33/90 near Trowutta

LEGEND:
LG = LIGHT GREY
G = GREY
OW = OFF WHITE
H = HARD
F = FINE
M = MEDIUM
BP = Backhoe Pit Montagu Plains
DC5 = David Curtain's property at Montagu Plains
R7 = Montagu River Outcrop
QR = Quarry reserve 2105 Smithton as mapped by Dept Mines.

Sampled: April, 1995 by Vic Threader

306017

Table 3.(2)

## EL.33/90 TOGARI (Brittons Swamp) SUMMARY OF DOLOMITE SURFACE SAMPLING FEBRUARY 1995

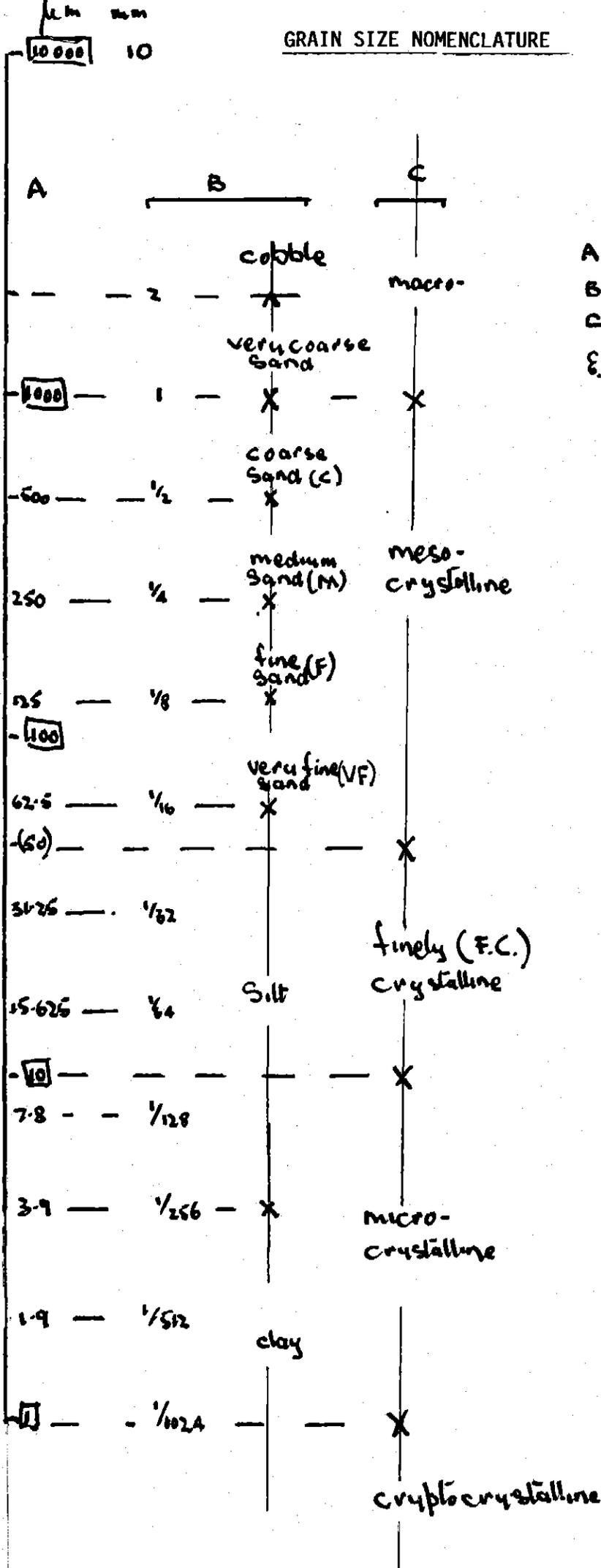
Sample No.	CaO %	MgO %	SiO <sub>2</sub> %	LOI %	Fe <sub>2</sub> O <sub>3</sub> ppm	TiO <sub>2</sub> ppm	Al <sub>2</sub> O <sub>3</sub> ppm	Na <sub>2</sub> O ppm	Mn ppm	Cu ppm	Cr ppm	Ni ppm	Color	Hard	Grain	Ratio
T12	33.50	19.18	1.03	45.40	1579	194	1677	1744	63	6	6	12	LG	H	F	1.75
T13	33.18	20.01	0.35	45.70	7472	143	840	1125	64	6	4	11	LG	H	F	1.66
T14	32.14	20.77	0.19	46.50	3258	190	764	884	70	5	4	10	LG	H	F	1.55
T15	32.34	20.52	0.29	46.20	2927	150	1082	555	61	5	4	9	LG	H	F	1.58
T16	32.96	20.47	0.07	46.20	1432	42	714	709	44	2	4	9	LG	H	F	1.61
T17	33.29	19.75	0.09	46.50	1520	134	687	854	52	6	3	9	LG	H	F	1.69
T18	34.32	19.22	<0.05	46.40	1655	20	354	901	46	5	4	9	LG	H	F	1.79
T19	32.65	20.36	0.23	46.20	2902	287	456	877	51	5	6	10	LG	H	F	1.60
T20	33.79	18.75	0.96	45.60	3920	247	799	520	74	5	4	10	G	H	M	1.80
T21	33.53	19.33	0.90	45.60	4658	268	2110	459	80	10	4	10	LG	H	F	1.73
T22	34.22	18.90	0.24	46.50	1216	39	465	1179	34	3	2	8	LG	H	F	1.81
T23	32.14	20.62	<0.05	46.90	4832	119	606	852	93	5	5	12	LG	H	F	1.56
T24	33.54	19.78	0.24	46.10	926	72	590	1050	47	3	3	9	LG	H	F	1.70
T25	30.69	18.04	4.52	43.50	4707	1076	-	921	110	6	24	17	G	H	F	1.70
T26	31.83	21.02	0.29	46.60	2355	157	1918	877	47	3	4	9	G	H	F	1.51
T27	32.21	20.82	0.07	46.50	2687	64	813	421	72	3	4	9	G	H	F	1.55
T28	32.61	20.34	0.44	46.20	1840	182	1079	544	31	4	3	10	LG	H	F	1.60
T29	33.85	19.52	0.19	46.20	2210	109	886	566	41	4	3	9	LG	H	F	1.73
T30	33.28	19.73	0.06	46.60	1426	36	702	955	59	3	3	9	LG	H	F	1.69
T31	33.81	19.18	<0.05	46.50	2351	61	560	1077	49	4	3	9	LG	H	F	1.76
T32	32.16	19.46	0.31	47.00	6372	64	870	470	84	3	4	10	OW	H	F	1.65
T33	32.88	18.90	0.32	46.90	1624	68	913	455	50	4	4	9	LG	H	F	1.74
T34	32.74	18.91	0.37	47.00	918	160	2114	681	39	4	4	9	G	H	M	1.73
T35	33.24	18.73	0.31	47.00	730	46	680	567	46	3	3	9	LG	H	M	1.77
T36	32.92	19.03	0.11	47.20	1008	64	1281	799	39	3	4	9	LG	H	M	1.73
T37	32.46	19.45	0.21	47.10	573	24	986	1161	31	4	3	8	G	H	M	1.69
T38	32.47	19.21	0.07	47.50	536	46	920	1249	41	5	4	9	LG	H	M	1.69
T39	32.96	19.20	0.06	47.00	1675	50	447	1335	50	4	4	9	LG	H	M	1.72
T40	33.16	18.68	0.72	46.40	1383	83	1158	543	45	3	4	8	LG	H	M	1.78
T41	30.78	20.75	0.36	47.10	1408	53	988	531	48	3	6	9	OW	H	F	1.48

LEGEND:	T12-T25 Taken 18-19 Feb. 1995 by K.P. in private land	Pure Dolomite = 30.4% CaO, 21.7% MgO
LG = LIGHT GREY, G = GREY, OW = OFF WHITE	T26-T31 Taken 25-26 Feb. 1995 by K.P. in private land	ratio 1.4, 47.9% LOI
H = HARD, F = FINE, M = MEDIUM	T32-T41 Taken 4-5 March 1995 by K.P. in Crown Land	Ratio = CaO/MgO

GRAIN SIZE NOMENCLATURE

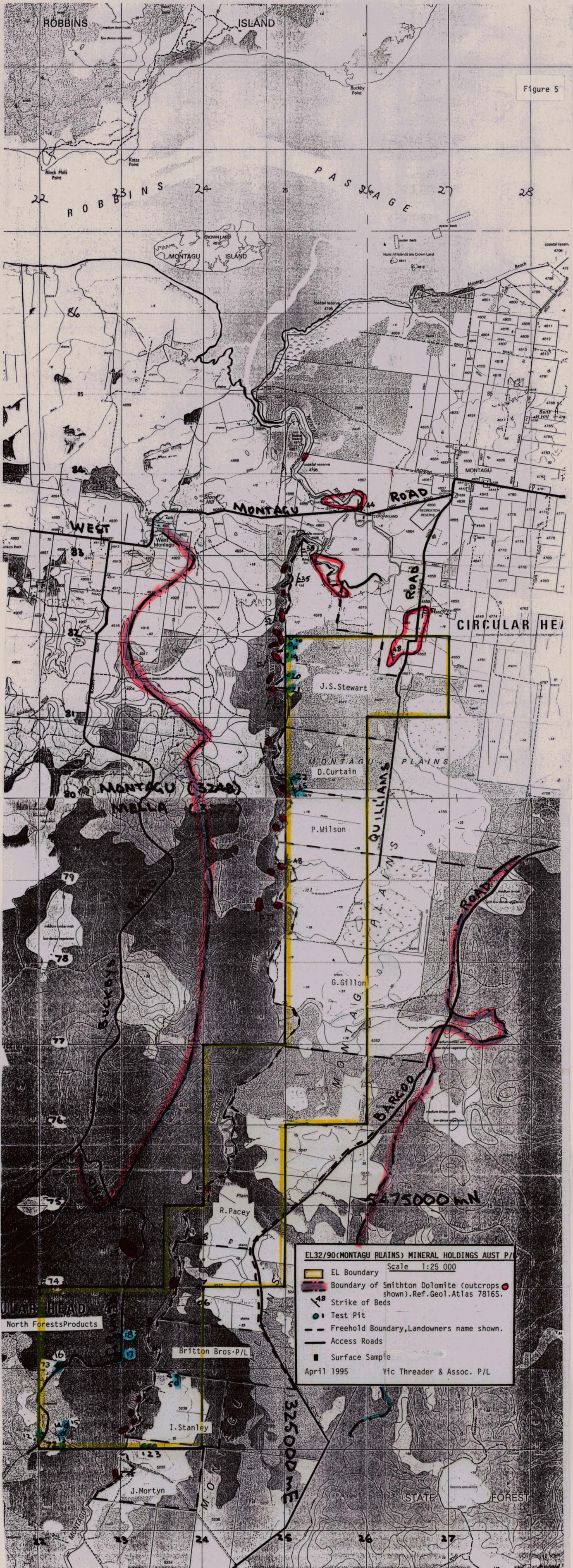
Table 4.

306019



A: Logarithmic scale ( $\mu\text{m}$ )  
 B: Wentworth Grade Scale (mm)  
 C: Crystallinity Scale (Bissett H.S.,  
 E. Chilingar C.V. in:  
 "Carbonate Rocks Elsevier  
 1967)

Figure 5



EL32/90 (MONTAGU PLAINS) MINERAL HOLDINGS AUST P/L  
 Scale 1:25 000

- EL Boundary
- Boundary of Smithton Dolomite (outcrops shown). Ref. Geol. Atlas 7816S.
- Strike of Beds
- Test Pit
- Freehold Boundary, Landowners name shown.
- Access Roads
- Surface Sample

April 1995 Vic Threader & Assoc. P/L

North Forests Products

Britton Bros P/L

I. Stanley

J. Mortyn

STATE FOREST

*Sent by Post*TASMANIA DEVELOPMENT AND RESOURCES <sup>3/7/95</sup>

## INDUSTRY SAFETY AND MINES

## FAX MESSAGE

Date : 3 July, 1995  
To :  
Company : Vic Threader and Associates Pty Ltd  
Fax number :

From Gilbert Oakes Mineral Tenements & Reports Section  
'phone (002) 338 362 Fax (002) 338 338  
number of pages including this cover :

## MESSAGE / SUBJECT :

**Dear Vic,****re Annual report Redpa, Monagu Plains and Brittons Swamp 1994-95  
- TCR 95-3735**

the reviewing geologist, Mr John Pemberton, phone 33 8371,  
makes the following requests and observations to which you are  
asked to respond:

1. were the bulk samples 500 kg or 250 kg?
2. three surface analyses numbers 5, 6 and 7 - you say that  
number 5 was not submitted for analysis but results have  
samples numbered 5 and 7 - are they the same 5 and 7?
3. three ELs are in one report - the sample numbering in each  
needs to be unique.

Regards,  
Gil.

*Vic Threader & Associates Pty. Ltd.*

A.C.N. 009 576 596

CONSULTING GEOLOGIST

43 Kingston Heights  
Kingston Beach Tas. 7050  
Telephone: (002) 29 5277  
& Fax.

18 July 1995

Mr.G.Oakes,  
Mineral Tenements&Reports Section,  
Industry Safety&Mines,  
PO Box 56  
Rosny Park 7018



Dear Gil,

Sprry not to have replied sooner to your letter of 3 July but I have only just returned from holidays on the mainland.

Herewith my replies to Johns queries:

- 1) The 3 bulk samples were all 500kg. A sample of each was analysed and two were selected for furnace trials. A 250kg. sample (ie. half) was air freighted overseas from the E.&K. samples and none from the T. sample. There is therefore 250kg. of E., 250kg. of K. & 500kg. of T. remaining which is stored at Flowerdale, northwest Taasmania.
- 2) Surface sample No.6 was not submitted for analysis. The reference to No.5 on page 2 was an error.
- 3) I am unaware of my sample numbering crossing E.L. boundaries, please let me know where this has occurred and I shall correct it.

Yours sincerely,

VIC THREADER

