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CRA EXPLORATION PTY.LIMITED.

D of M | A.O. | C.G. | E.O. | D.S.M.E
Received 10 MAY 1982
Answered
DEPT. OF MINES
REF. No. 3444/82

MINERAL LEASES 20M/76, 72M/77, 103M/77, 104M/77, 8M/78, 57M/78 and SPL's 774 and 781 BALFOUR

REPORT FOR THE TWELVE MONTHS ENDING 31ST DECEMBER, 1981.

Author: P.Heithersay (Geopeko)

Date: 31st March, 1982.

Submitted to: T.W.Dickson

Copies: P.Laan and W.Baker (Estate)
Department of Mines, Tasmania.
Geopeko
CRAE Library
CRAE Hobart

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1. SUMMARY

Detailed investigations involving geological mapping, jacro bedrock sampling and geophysical surveys were carried out over the Balfour grid. Within the area of the P.Laan and W.Baker leases 20M/76, 72M/77, 103M/77 104M/77, 8M/78, 57M/78 and S.P.L.'s 774 and 781. This work led to the development of one diamond drill hole (DD81 BC3) to test a strongly anomalous zone of zinc geochemistry south-west of Specimen Hill. Five other drill holes were developed within the Balfour area but these all lie on leases held by other syndicates.

No significant mineralisation was intersected in the drill hole and further work on the L. & B. Syndicate area will depend on results of additional drilling within the Specimen Hill area.

2. INTRODUCTION

This report covers work carried out on Mineral Leases 20M/76, 72M/77, 103M/77, 104M/77 8M/78, 57M/78 and S.P.L.'s 774 and 781 held by P.Laan on the estate of W.Baker for the period ending 31st December
The L. & B. Syndicate option agreement was dated 27th June, 1978.
and it is one of a number of farm in - joint venture agreements negotiated between CRA Exploration Pty.Ltd. and various other syndicates in the Balfour area.

P.Laan & S.Caddy

MINING LEASE 73M/77

P.Laan & W.Baker (L. & B.Syndicate)

MINING LEASES 20M/76; 72M/77; 103M/77
104M/77; 8M/78; 57M/78

S.P.L.'s 774 and 781

M.Laan & N.R.Langsford (Balfour Agreement)

MINING LEASES 120M/67; 121M/67 10M/73; 1M/73
2M/76; 93M/77;94M/77; 95M/77

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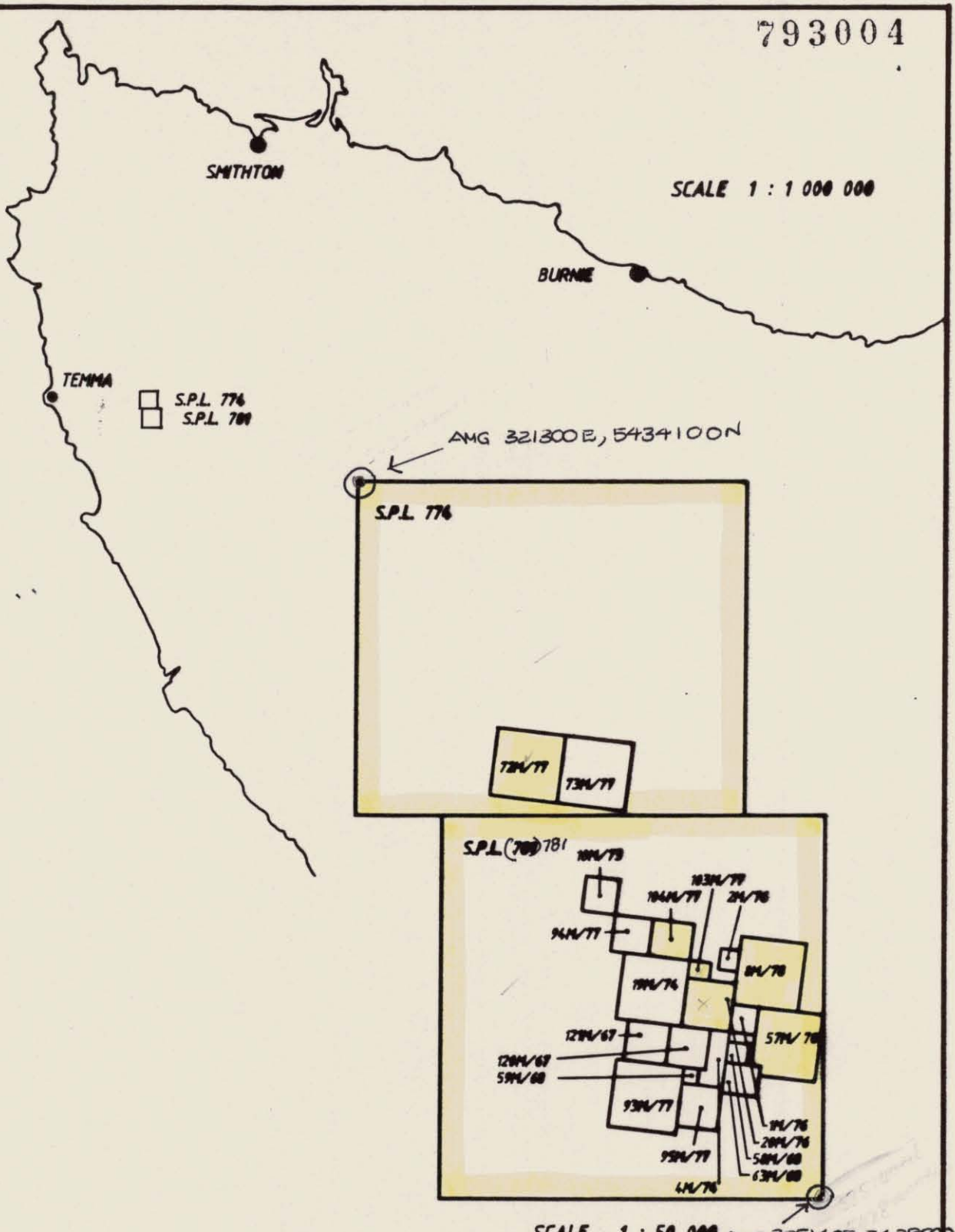

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CRA EXPLORATION PTY. LIMITED

BALFOUR TENEMENTS

LOCALITY PLAN

Ref. s SK55 - 3	
Scale AS SHOWN	Drawn R. T.
Author. T. W. D.	Report No.
Date 16th Feb. 1982	Plan No. TASh 585

P.Laan, M.Laan, N.R.Langsford, W.Baker

MINING LEASE 19M/76

J.Holloway and R.South

MINING LEASE 59M/76; 4M/74

S.Tatlow (Agreement 1)

MINING LEASE 63M/68

S.Tatlow (Agreement 2)

MINING LEASE 58M/68

All the above agreements are part of the Rocky Cape Joint Venture between CRA Exploration and Geopeko.

The township of Balfour is situated approximately 16km inland from Temma Harbour and lies some 50km south of Smithton.

The programme of work carried out within ML's 59M/68 and 4M/74 includes.

- Geological mapping at both regional and 1:5000 scale.
- I.P. Surveying - original data collected 1979 with fill in work carried out in December, 1980.
- A Jacro auger bedrock geochemical sampling programme.
- One diamond drill hole of 143 metres to test a major coincident lead-zinc geochemical target south-west of Specimen Hill.

The I.P. survey was planned and interpreted by M.Flis and carried out by Geoterrex Ltd. The auger sampling and Jacro diamond drilling was carried out under contract by Geopeko Ltd. with geological supervision by P.Heithersay. The auger samples were prepared and the core split by Geopeko Ltd. All assays were by Analabs of Cooee, Tasmania.

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3. CONCLUSIONS

DD81 BC3 was designed to test the best development of the coincident lead-zinc anomaly located on the western side of Specimen Hill.

The hole penetrated a series of finely laminated siltstones with disseminated pyrite throughout. Base metal mineralisation however was limited to three narrow quartz-pyrite-sphalerite veins.

The mineralisation intersected is insufficient to explain the surface lead-zinc anomaly and it is felt that the surface anomaly could be due to a series of north-westerly trending faults.

4. RECOMMENDATIONS

Further work on these leases should wait until additional drill holes are developed on the Specimen Hill sheeted vein system.

This work will give a better idea of the extent of the vein system and possible economic worth of the whole Balfour region.

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5. GEOLOGY

5.1 Regional Geology (Refer Fig.1)

S.W.Careys (1981) photogeological study of the Rocky Cape E. 1/77 places the Balfour region within his Epsilon Group rocks. Epsilon Group is upper Proterozoic in age and is the most extensive Precambrian sequence delineated by his study. Where Epsilon Group runs into areas where field data are available the group correlates with the Balfour Slates and Interview Slates.

The structure of the Balfour region is dominated by north-north westerly trending faults which form within Careys 'Balfour-Redpa deep fault corridor'.

The style of folding in the region is a series of doubley plunging anticlines and synclines forming 'dome and basin' structures with fold axes trending NW-SE and E-W.

5.2 Prospect Geology (Refer Plan TASh 639)

Methods

Grid extensions were mapped at 1:2500 scale using enlarged Lands Department aerial photos.

Stratigraphy

The Balfour stratigraphy is illustrated in figure 2. Facing criteria such as crossbedding and graded bedding established that the sequence youngs from west to east.

The rock sequences exhibit gradational contacts and mapping has illustrated the facies relationships between them. Hence they will be described as lithofacies.

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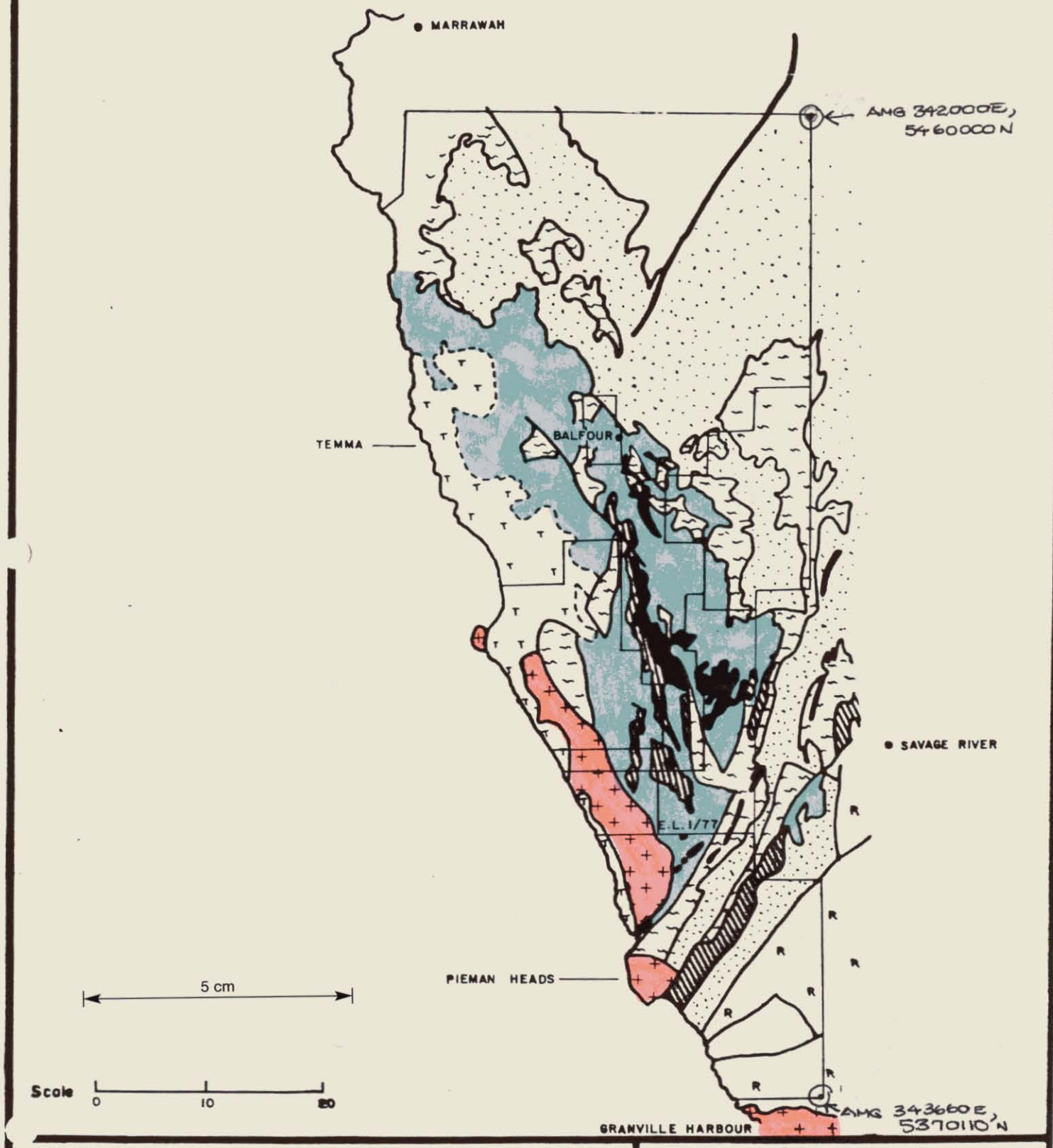


LEGEND:

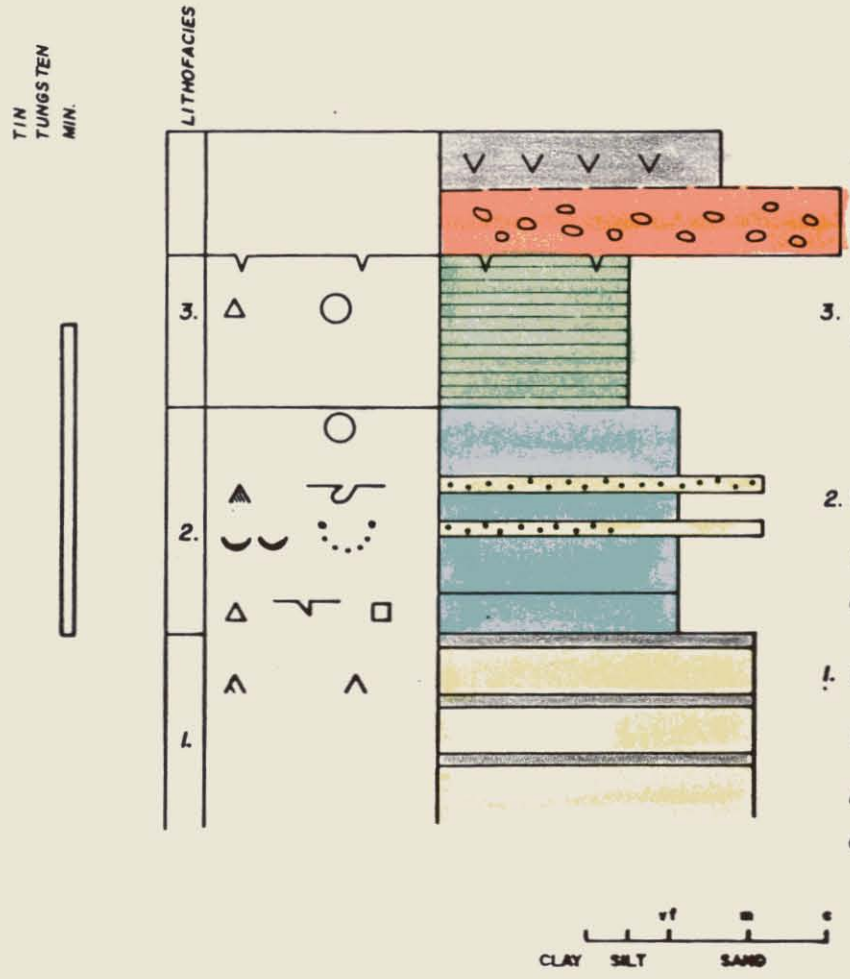
- Quaternary, Tertiary
- Eocambrian, Sigma Group
- Proterozoic Phi Group
- Epsilon Group
- Proterozoic Alpha Group
- Rho Group
- Devonian Granite
- Eocambrian: Kappa Group

GEOPEKO

ROCKY CAPE E.L. 1/77
SUMMARY REGIONAL GEOLOGY
LOCATION MAP

FIG. 1 TASh 680

STRATIGRAPHIC COLUMN - BALFOUR REGION



LEGEND:

- Wave Ripples
- Cross Lamination
- Mud Cracks
- Flaser Bedding
- Load Casts
- Possible Evaporite Casts
- Channel Scour And Fill
- Upwards Finning Grading
- Horizontal Lamination
- Syngenetic Pyrite

TASh 681

FIGURE 2

Lithofacies 1: Consists dominantly of fine sandstone: siliceous sericitic-submature quartz arenite. Carbonaceous black shales and brown ferruginous sandstones are interbedded in the sequence, Crossbedding, rip up shale clasts are common sedimentary features and bedding planes showing symmetric ripple marks are occasionally seen.

Lithofacies 2: Consists dominantly of irregularly laminated and banded rock which is characterized by beds and laminae which grade from white fine grained sericitic sandstone to grey green or brown, chlorite or tourmaline rich, argillaceous siltstone. Sedimentary features include oversteepened cross-stratification, 'sandstone dikelets', load structures and scour and fill structures. Soft sediment deformation is ubiquitous. Interbedded in the lower part of the sequence are thin black shale interbeds which appear to be laterally extensive.

Further up in the sequence, are interbeds of silica and sericite rich quartz arenites. These form the backbones of the ridges in the area. They are individually quite thin, rarely exceeding 3 metres in thickness, but are laterally extensive.
This lithofacies has been termed Pyjama Siltstones by CRAE geologists. This is a general name applied to tourmaline bearing siltstones and quartzites commonly found in the Upper Precambrian of Western Tasmania.

This sequence hosts the tin and tungsten bearing veins of Specimen Hill and a similar rock type is present in the footwall of the massive pyrrhotite cassiterite lodes at Mt.Bischoff.

The sequence has undergone lower greenschist facies metamorphism and an incipient schistosity develops to varying degrees.

Tourmaline content varies throughout the 'Pyjama Siltstones' but is generally confined to the argillaceous layers. A tourmaline rich zone has been mapped on Specimen Hill (Porter 1979) which crosscuts bedding, suggesting epigenetic replacement. A syngenetic origin involving boron rich sediments has been suggested in the past. Petrographic evidence has given conflicting viewpoints. Drill hole data suggests however that tourmalinisation has preceeded veining, hence this zone could be viewed as an alteration zone associated with veining.

Rare thin beds of probable andesite has been noted in this lithofacies.

Lithofacies 3: Lithofacies 2 grades both vertically and laterally into a monotonous, finely laminated, green, chloritic shale and slate sequence. Pyrite is common and is usually disseminated along bedding planes. This sequence hosts the Murray's Reward copper mineralisation and Tatlow's tin prospect.

Unconformably overlying this is a remnant Tertiary basalt flow on which the Balfour township is located. To the south remnant flat lying silicified Tertiary conglomerate beds can be seen.

Structure

The general lack of continuous marker beds has made structural interpretation difficult. However, the strata generally dip fairly steeply to the east. Southerly plunging flexures can be mapped on Specimen Hill and around the baseline on line 9100N. Plotting of cleavages developed on Specimen Hill reveals two distinct cleavages at approximately 335°/80E and 035/95E

This suggests that fold axes have developed with approximately 60° difference in trend. This would result in dome and basin structures, which ties in well with Carey's (1981) regional interpretation.

A structural problem which is apparent at Balfour is the difference in dip between Lithofacies 1 and 2. The sandstones of Lithofacies 1 form generally flat lying small scale domes and basins. As you proceed into Lithofacies 2, the dips become very steep. The contact between the two is gradational and no evidence for an unconformity or fault can be seen.

Strike slip faults are common displacing prominent sandstone/quartzite ridges.

The main quartz veins are generally between 1 to 10cm in thickness with a maximum thickness of 30cm. Two trends of veining are evident. The dominant trend is approximately 300°M while the subordinate trend is 235°M. The main concentration of veining which is exposed, occurs between 9600N and 9700N.

The veining exposed consists of massive white quartz containing varying amounts of cassiterite and rare wolframite. Bladed voids after wolframite are, however, commonly seen. Cassiterite occurs as small crystals in 'vughs' with blebs up to 5cm in diameter or as thin layers on margins of veins.

6. GEOCHEMICAL INVESTIGATIONS

During 1963-1964 BHP undertook exploration centred around the Specimen Hill mineralisation. Peat and gravel samples were taken and assayed for tin so as to define surface areas in which tin mineralisation appeared strongest. Small scattered areas of high tin content emerged mainly in the north west quadrant of the hill (Chestnut 1964).

1979 saw the establishment of 2.6km x 0.65km grid by the CRAE/Geopeko joint venture partners. A rock chip sampling programme over available outcrop was initiated, followed later by a Jacro auger sampling programme over areas of sparse outcrop, where magnetic and I.P.anomalies had been defined.

A summary of significant results generated to the end of 1979 is as follows:

1. Anomalous bedrock values up to 1900ppm Sn were found in the low lying area between Specimen Hill and Murray's Reward.
2. An erratic response for Sn, with values up to 555ppm were observed on line 10 100N over a major IP anomaly.
3. A weak Sn anomaly (225ppm) coincident with the magnetic anomaly on line 10 900N.
4. No distinct Sn anomaly occurred over the broad magnetic anomaly in the south west portion of the grid.
5. Rock chip sampling enabled a broad 100ppm Sn contour to be drawn. This embraced Specimen Hill, particularly the northern half and highlighted a narrow zone along Peter's Ridge. Two smaller anomalous areas in the south east part of the grid between 9300N and 8800N were documented. It should be noted that the rock chip sampling deliberately avoided visible quartz veins.

6.1 1980 Geochemical Programme

During 1980 a more comprehensive programme of Jacro bedrock sampling was completed. The first stage was completed during the period 25/4/80 to 10/6/80 and the lines selected on the following basis:

1. Lines 8800N to 1010N from the base line to as far east as was practical, to gain detailed information about the area of poor outcrop between Specimen Hill and Murray's Reward.
2. Lines 8900N, 94/9500N and 9800N extending to the west of Specimen Hill, to act as reconnaissance lines over this area of sparse outcrop.
3. Lines 10 800N and 11 200N to further test the two northern magnetic anomalies and weak Sn anomaly.

The second stage, completed during the period 10/7/80 to 15/7/80 was a fill in programme with the following lines selected:

1. Lines 10 200N, 10 300N and 10 400N, from the base line to as far east as was practical, to find the northern extent of the geochemical anomalies generated by the initial programme.
2. Lines 9400N, 9500N and 9600N to fill in information around Specimen Hill which was missed by the first programme.

The third and final stage covered the western side of the extended grid from 8600N to 10 000N. The object of this programme was to cover the Multicoil II EM anomalies generated by the Dighem Survey flown in March, 1980.

Auger holes were drilled to depths ranging from 0.5 to 3 metres using a Bombardier mounted Jacro auger. Particular care was taken to achieve a clean bedrock or if impractical, a 'C' horizon sample and to avoid contamination from alluvial and elluvial material at the tops of the holes. Where it was thought contamination could not be avoided, it was duly noted in the ledger sheets.

The samples were analysed for tin, tungsten, copper, lead, zinc, silver and iron by A.A.S. The results, on CRA Exploration Geochemical Ledger Sheets, are given in Appendix 1 with geological description of the rock chips by A.McKay, N.R.Langsford and P.Heithersay.

6.2 Discussion of Results

Generally results were very encouraging with strong geochemical anomalies over Specimen Hill and Peter's Ridge.

Tin Geochemistry

Refer Plan TASh 643

Values suggest that greater than 100ppm should be regarded as a significant anomaly. Background values are concentrated in the 5 to 30ppm range.

Two important anomalous zones can be noted. The first is centred some 350m east of the base line and forms a north-south striking, linear zone 50 to 100m wide, which extends from 9200N to 10 200N. At 9400N, 10 325E a narrow, discontinuous anomaly extends down the eastern side of Peter's Ridge.

It is noteworthy that the anomalous zone is in close proximity to the lithological boundary between the Pyjama Siltstones and the green shale sequence.

The central anomalous zone forms a discontinuous north-south trending anomaly approximately 100m x 200m in extent which covers Specimen Hill.

The prominent geochemical low between these two zones is a function of inadequate sample density. Current alluvial mining has uncovered quartz veins mineralised with cassiterite and wolframite in this area. This suggests that if adequate sampling could be achieved, the two anomalous zones would link up.

Geochemical results on the western side of the grid, away from Specimen Hill give a distribution of spot highs, with the high values in the order of 450ppm. A poorly defined linear anomaly occurs between 9200N and 9400N.

Geochemistry from the south west grid extensions, does not rise above background.

North of Specimen Hill, some anomalous geochemical character is expressed between lines 10800N and 10900N, near the baseline.

Tungsten Geochemistry (Refer Plan TASh 641)

Anomalous values are considered to be greater than 20ppm against a background of 10ppm. As the detection limit of XRF for tungsten is 10ppm, anomalies of 20ppm should be regarded with caution.

Two well defined anomalies emerge. A fairly narrow eastern anomaly extends from 9100N to 9900N approximately 250m from the baseline. A broader anomaly centres over Specimen Hill, between lines 9400N and 9900N. Some extremely anomalous spot highs occur, particularly around 9200N and 9300N, near the baseline.

The only other anomaly of significance occurs on line 11200N, just east of the baseline.

Copper Geochemistry (Refer Plan TASh 642)

The results recorded, imply that greater than 50ppm copper is anomalous while background values average from 2-15ppm.

Contouring revealed a number of highs in the area between Specimen Hill and Murrays Reward. These have comparatively limited linear extent. Noteworthy is the highest value of 0.34% which occurs in an anomalous zone between lines 9500N and 9200N some 300m east of the baseline. Similarly spot high values occur west of the baseline, with no apparent trend.

The bedrock sampling survey recorded a surprisingly weak response over the Murrays Reward, Central Mt.Balfour line of known copper mineralisation.

A possible explanation for this is that the gangue mineralogy may have combined with ground waters to give a solution capable of leaching copper out of the soil profile. The anomalous zone which were recorded may reflect a different style of copper mineralisation.

Zinc Geochemistry

Refer Plans TASh 646

Visual estimation suggests that background values of around 50ppm is appropriate, while samples exceeding 100ppm are anomalous. Approximately 3 percent of the samples exceed 1000ppm.

A well defined, anomaly trending grid north-south occurs between lines 9200N and 10 000N approximately 400m east of the baseline. At 9700N, 10 400E, visible sphalerite occurs as small stratabound pods within the siltstones.

A less well defined anomaly occurs between 8800N and 9400N approximately 500m east of the baseline. This generally low value anomaly is characterised by two spot highs on line 9300N with values of 0.92% and 0.94%. These are the highest values for zinc recorded in the Jacro programme.

A significantly anomalous western zone occurs between 8400N and 9700N with possible extensions both grid north and south. The best development occurs on lines 8800N with three values greater than or equal to 0.14% zinc. Although the anomaly is complicated in detail, the overall trend suggests that the zone is the surface expression of discrete strata which is geochemically anomalous in zinc. Another suggestion however is that the anomalous geochemistry is related to grid north easterly and north westerly trending faults. Coincidence between mapped faults and anomalous geochemistry is clearly seen, but the fact that other related faults are geochemically flat, mitigates against this suggestion.

Some further anomalous geochemical expression occurs north of Specimen Hill between lines 10 000N and 10 400N.

Lead Geochemistry

Refer Plan TASh 644

Anomalies of greater than 40ppm show the best expression on the western side of the grid.

A discontinuous zone appears between 8600N and 9600N. The highest values obtained are 0.11% at 8800N 9200E, 0.28% at 9100N 9375E and 0.12% at 9200N 9600E.

Background values for lead are in the 5-10ppm range.

Iron Geochemistry Refer Plan TASh 645

Greater than 2% iron is considered anomalous. The striking feature of this plan is the coincidence of the 2% contour line with the lithological contact between the 'Pyjama siltstone' sequence and the green chloritic shales and slates which host the Murray's Reward Cu mineralisation.

Clearly the green shale sequence is iron rich overall with respect to other sequences in the area. Furthermore, some linear zones are apparent which may reflect beds with increased pyrite or chlorite content. West of the baseline, scattered high values are developed with limited continuity between lines.

7. GEOPHYSICS

A review of geophysical surveys undertaken up until December, 1980 is compiled in McKay and Flis (1980). Comments and recommendations on Balfour IP by J.Sumpton is included in Appendices

Ground magnetics has revealed three major anomalies (McKay and Flis 1980).

1. Centred on line 108N. Remnant magnetic susceptibility measurements made on core from DDB 5 (drilled by B.H.P.) suggested that the remnant magnetism of disseminated pyrrhotite in the core was sufficient to explain the size of the magnetic anomaly.

2. Centred over Specimen Hill. Chestnut (1965) considered that a combination of vein type quartz with variable amounts of pyrrhotite together with disseminated pyrrhotite in the sediments, explained the magnetic anomaly.

3. Modelling of magnetic data from line 10 800N shows a westward dipping 'dyke' at a depth of 70m.

Of these anomalies, the one centred on 10 800N remains untested. The possibility of massive pyrrhotite hosting tin mineralisation cannot be discounted.

IP Surveys: An IP survey was commissioned in May of 1979 to cover selected portions of the Specimen Hill grid. These areas included the magnetic anomaly on line 108N and tin anomalies on the eastern portions of 90N and 96N. In general, none of the anomalous IP zones were associated with magnetic anomalies; they were, however, correlatable to the elevated tin values.

A second survey was designed to test the continuity of zones delineated in the previous survey and to test the southern magnetic high. The anomalous zones were shown to be linearly continuous. A weak IP response was detected over the southern magnetic anomaly.

Self potential (or spontaneous potential) readings taken concurrently with this survey were inconclusive.

The Specimen Hill area exhibits significant responses to both magnetic and electric geophysical methods. The spatial correlation between the two, however, is almost non existant. Whilst these two types of responses form two linear and parallel zones anomalous tin geochem samples seem to occur independently of these.

Surface geology gives an explanation for the zone of electrical response in that black micaceous carbonaceous siltstones occur in the zone. In the magnetic zone surface geology seems to offer little cause for the observed response and may, in fact, be due to some deeper seated "magnetic basement" feature (e.g. a dolerite dyke) which is too deep to be detected by both IP and EM.

8. DIAMOND DRILLING RESULTS

Drill hole nomenclature varies between CRA Exploration and Geopeko. CRAE number the holes as they are drilled within the current exploration programme. That is hole DD81 BC3 is the third hole drilled by the CRAE-Geopeko Joint Venture. Geopeko on the other hand includes all previous drilling with their numbering system, (i.e. they include tne holes previously drilled by B.H.P.) so that their equivalent number for CRAE hole DD81 BC3 is DDB 13.

Both numbers are referred to in this report.

8.1 (DDB 81 BC3) (DDB13 of Geopeko)

DDB81 BC3 was designed to test the best development of the coincident Pb, Zn anomaly located on the western side of Specimen Hill. Plan TASh 687 shows the summary drill hole section. A detailed log is appended.

The hole penetrated a series of finely laminated to bedded siltstones, exhibiting graded bedding, cross lamination scour and fill structures and sandstone dikelets. Disseminated pyrite is obvious throughout.

Mineralisation was confined to 3 veins which consisted of quartz, pyrite and sphalerite.

The core was side ground and only one 5m interval was anomalous, reaching 1500 ppm. It was felt that this could be attributed to vein material. Side grinding is at best a semi-quantitative method and hence results are not included.

The geological and geochemical results, suggested that the source of the Pb, Zn geochemical anomaly was not explained.

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10. KEYWORDS

Tin, Tungsten, veins, Drill-Diamond, Geochem-rock, soil, Geology, Geophysics, Mag, I.P.

Locality: Burnie 1:250 000 Sheet SK55-3

11. LIST OF PLANS

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12. LIST OF APPENDICES

Appendix 1. Geochemical Ledger Sheets

Appendix 2. Diamond Drill Logs.

APPENDIX 1

GEOCHEMICAL LEDGER SHEETS

enement name ... No ... Sample numbers ... Collected by ... Sheet no ...

Area / Prospect BALFOUR CENTRAL

Map / Photo reference ... 025 ... Analysed by A.L.S. ... Date 25/4/80 ... DPO no ...

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth	s sample type **** Horizon	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 101N	Geological Observations
319 301	S	0·8							C		3	20	50	1		0·24		50	<10		10025E	Pyjama siltst, grey siltst, ē qtz, old workings
02	"	2·0	LACRO						"		30	30	360	2		0·29		145	<10		10050E	Grey siltstone
03	"	2·1							"		40	45	920	2		3·20		65	<10		10075E	" "
04	"	0·8							"		10	10	40	2		0·36		580	10		10100E	Black siltst, Alluv. workings
05	"	1·2	AUGER						"		20	30	100	1		1·24		160	<10		10125E	SST, ē qtz, " "
06	"	1·1							"		210	350	270	1		1·52		5	<10		10150E	Weathered brown siltst. " "
07	"	0·5							"		5	5	30	<1		0·22		20	<10		10175E	White siltstone, qtzite
08	"	1·0							"		20	10	40	1		2·32		<5	<10		10200E	Weathered brown siltst. qtzite
03	"	1·3							"		20	10	55	1		2·64		<5	<10		10225E	Pyjama siltst. Alluv workings near
	NOT SAMPLED																				10250E	sample inaccessible
819 310	"	1·0							C		5	15	40	1		0·48		395	20		10275E	White qtzite, Alluv workings nearby
11	"	2·3							"		60	0·1%	720	5		2·56		90	<10		10300E	Qtzite. " " "
12	"	3 0									75	105	600	2		3·20		245	<10		10325E	Creek bed, Alluv. workings
																						Grey clay
13	"	2·5									80	80	340	1		1·36		25	<10		10350E	Alluv. workings near, Grey shales
14	"	2·2									15	15	70	1		0·68		130	<10		10375E	Qtzite - sample possibly contaminated
																						with alluvial material.
15	"	0·5							C		5	10	30	3		0·44		70	<10		10400E	Quartzite
16	"										5	5	40	<1		0·32		100	<10		10425E	"
17	"										2	10	20	<1		0·10		450	<10		10450E	"
18	"	0·5							C		5	5	20	<1		0·16		110	<10		10475E	"
19	"	0·4							C		5	5	40	<1		0·32		170	<10		10500E	"
819·320	"	0·5							C		5	10	20	<1		0·20		255	<10		10525E	"

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

793026

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. Sample numbers 819321 – 331 Collected by P.H. Sheet no. 34

Area / Prospect BALFOUR CENTRAL Date 28/4/80

Map / Photo reference 026 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth	s sample type ****	Horizon	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 101 N.	Geological Observations 793027
819 321	S	1-3								C		2	10	50	<1		2.64		15	<10		10550E	Green siltstone. Base of ridge
322	"	2								"		15	20	55	<1		2.56		35	"		10575E	Green clay clasts
323	"	2								"		20	50	95	<1		2.36		30	"		10600E	Green yellow shale
324	"	2								"		10	30	70	<1		3.76		<5	"		10625E	Yellow green clay rich
325	"	2								"		5	20	60	<1		2.88		5	"		10650E	" brown " "
326	"	2	JACRO							"		2	15	65	1		3.12		<5	"		10675E	Green Grey shale
327	"	2								"		40	25	90	1		1.88		70	"		10700E	Green clay possibly contaminated
328	"	2								"		10	140	75	1		3.84		5	"		10725E	Green shale
329	"	2	AUGER							"		10	10	35	1		2.08		<5	"		10750E	" "
330	"	2								"		10	15	60	1		3.28		10	"		10775E	" " iron staining
819 331	"	2								"		15	10	25	<1		2.56		<5	<10		10800E	" "

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

Tenement name S.P.L. 781 — C.R.A. EXPLORATION : GEOCHEMICAL SAMPLE LEDGER — No. ... Sample numbers 819332 - 341 ... Collected by P.H. ... Sheet no. 35

Area / Prospect BALFOUR — 027 — Date April 1980

Map / Photo reference ... Analysed by A.L.S. ... DPO no. ...

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth	s sample type ****	Horizon	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn-Fe	Au	Sn	W		Grid ref	Geological Observations
																						100N	793028
819 341	s	2								C		2	5	20	1		0·40		0·11%	<10		10575E	50m South of Nico line white qtzite
340	"	2								"		10	10	50	<1		3·20		35	<10		10612E	Taken on road east Peters ridge orange clay rich
339	"	2	JACRO							"		2	10	70	<1		3·20		<5	<10		10625E	Green clay no rock minor Fe staining
338	"	2								"		10	25	70	<1		2·96		5	<10		10650E	Green shale
337	"	2								"		2	10	65	<1		2·48		20	<10		10675E	" "
336	"	2	AUGER							"		10	20	65	1		3·36		15	<10		10700E	Green yellow shale
335	"	2								"		20	20	80	1		6·40		<5	<10		10725E	" " "
334	"	2								"		5	30	60	1		2·96		<5	<10		10750E	Green clay rich. no rock chips
333	"	1-3								"		45	10	20	1		2·40		10	<10		10775E	
332	"	1-3								"		580	15	65	<1		2·56		<5	<10		10800E	Contaminated by tailings

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. Sample numbers 819342 – 819358 Collected by P.H. Sheet no. 36

Area / Prospect BALFOUR Date APRIL 1980

Map / Photo reference 028 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Horizon	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 100N.	Geological Observations 793029
		Depth										Metal content ppm or %										
819358		1·6								C		50	30	200	1		1·76		5	<10	10000E	Dark grey siltstone
357	S	2								"		30	10	100	1		2·32		35	<10	10025E	Grey siltstone
356	"	1·6								"		80	20	95	1		1·72		45	<10	10050E	Pyjama siltstone
355	"	2·0								"		180	40	100	1		1·68		5	<10	10075E	" "
354	"	1 6								"		10	25	70	1		1·12		5	<10	10100E	" "
353	"	2								"		20	20	140	1		1·92		10	<10	10125E	" "
352	"	2								"		10	20	30	1		2·36		<5	<10	10150E	Iron stained shale
351	"	2								"		20	15	60	1		2·16		75	<10	10175E	Pyjama siltstone
350	"	2								"		30	15	45	1		2·12		35	<10	10200E	" "
349	"	2								"		55	15	50	1		2·16		<5	<10	10225E	" " qtzite
348	"	1·8								"		25	15	20	<1		0·52		480	<10	10250E	" " "
347	"	3								"		25	20	130	<1		1·08		15	<10	10275E	Grey siltstone
																					10300E	Not sampled
																					10325E	" "
																					10350E	" "
																					10375E	" "
																					10400E	" "
																					10425E	" "
819346	S	2								C		5	10	30	<1		0·30		320	<10	10450E	Pyjama siltstone
345	"	2								"		2	5	20	<1		0·28		190	<10	10475E	Pyjama siltstone qtzite grey siltstone along strike from phal occur.
344	"	2								"		5	10	340	1		2·28		25	<10	10500E	Pink cream siltstone just nth Plaans workings
343	"	2								"		<2	10	20	<1		0·18		25	<10	10525E	Pink brown siltstone
342	"	3·4								"		2	30	30	1		0·76		460	<10	10550E	Green shale

UPPER BUGER SAMPLING

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. ● Sample numbers 819359 - 819376 Collected by P.H. Sheet no. 37

Area / Prospect BALFOUR Date APRIL 1980

Map / Photo reference 029 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth	s sample type **** Horizon	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 99N.	Geological Observations 793030
319359	S	0·4							C		40	15	40	1		1·28		65	20		10000E	Black siltstone
360	"	2							"		25	10	25	1		1·20		5	10		10025E	" "
361	"	2							"		2	10	10	<1		0·20		685	70		10050E	Pyjama siltstone, qtzite
362	"	2							"		25	25	65	<1		1·44		5	10		10075E	" "
363	"	1							"		15	15	10	<1		0·88		20	10		10100E	" "
364	"	0·6							"		10	10	35	<1		0·76		170	10		10125E	" " Alluvial workings
365	"	2							"		55	40	250	<1		1·92		10	<10		10150E	" " " "
366	"	2							"		60	40	220	<1		0·76		195	60		10175E	" " "
367	"		hand auger						"		5	10	60	4		0·20		90	30		10200E	" " contaminated
368	"	2							"		2	10	40	2		0·10		695	20		10225E	" "
369	"	1·3							"		5	10	10	1		0·10		265	10		10250E	contaminated sample
																					10275E	NOT SAMPLED
																					10300E	" "
																					10325E	" "
819370	S	2							C		2	10	10	<1		0·12		105	20		10350E	Quartzite
371	"	2							"		110	30	0·16%	<1		1·60		135	20		10375E	Pyjama siltstone
372	"	0·4							"		50	50	150	<1		1·36		10	<10		10400E	" " along strike from SBR
373	"	1·2							"		20	115	20	5		0·78		575	10		10425E	" "
374	"	2·7							"		5	10	10	<1		0·48		140	20		10450E	Qtzite pyjama siltstone
375	"	2							"		10	20	20	<1		1·28		25	<10		10475E	" " "
																					10500E	NOT SAMPLED
																					10525E	" "
819376	S	1							C		10	10	25	<1		2·36		50	20		10550E	Qtzite, probably contaminated TOP OF PETERS RIDGE

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample ty● gs = grab sample rc = rock chip (state interval & length) cs = channel sample (st● ength)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. [redacted] Sample numbers 819377 - 819389 Collected by P.H. Sheet no. 38

Area / Prospect BALFOUR 030 Date APRIL 1980

Map / Photo reference Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Horizon	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref	Geological Observations
									Depth			Metal content ppm or %										99 N.	793031
819377	S	1·5								C		2	10	10	<1		0·12		225	20		10575E	White qtzite
378	"	1·6								"		35	10	25	<1		2·32		80	<10		10600E	Green grey siltstone
379	"	1·7								"		2	10	45	<1		2·16		20	<10		10625E	Green shale
380	"	0·6								"		5	10	25	<1		1·88		5	<10		10650E	Green grey shale
381	"	1·5								"		5	15	60	<1		4·08		<5	<10		10675E	Tailings dump green shale
382	"	1·4								"		<2	10	45	<1		3·36		<5	<10		10700E	" " " "
383	"	2								"		30	10	50	<1		3·20		10	<10		10725E	" " " "
384	"	2								"		50	15	50	<1		3·52		5	<10		10750E	" " " "
385	"	1·6								"		15	20	70	<1		2·96		<5	<10		10775E	Near tailings L. Green shale.
386	"	2								"		20	20	50	1		6·00		5	<10		10800E	Dark to light green shale
																						10825E	NOT SAMPLED.
387	"	2								C		20	10	30	<1		2·64		<5	<10		10850E	Grey shale qtzite top of M.R. Ridge
388	"	2								"		20	30	25	<1		1·64		5	<10		10875E	Grey siltstone, qtzite
389	"	2								"		5	15	10	<1		0·10		<5	<10		10900E	White clay

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample ty[redacted]gs = grab sample rc = rock chip (state interval & length) cs = channel sample (s[redacted]ength)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. [redacted] Sample numbers 819390 – 819407 Collected by P.H. Sheet no. 39

Area / Prospect BALFOUR Date April 1980

Map / Photo reference 031 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Horizon	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 98N	Geological Observations 793032
819390	S	2								C		5	10	10	<1		0.12		<5	<10	10850E	Qtzite. Top of Murray's reward ridge
																					10825E	NOT SAMPLED.
																					10800E	" "
																					10775E	" "
819391	S	2								C		5	10	50	1		2.56		<5	<10	10750E	Green shale
392	"	2								"		10	10	60	1		3.20		<5	<10	10725E	" "
393	"	2								"		25	15	80	1		4		<5	<10	10700E	Green grey shale
394	"	2								"		30	15	55	1		3.04		75	<10	10675E	" " "
395	"	2								"		15	20	60	<1		3.28		25	<10	10650E	Green clay
396	"	2								"		20	30	50	<1		3.04		10	<10	10625E	Brown green clay rich sample
397	"	2								"		10	10	45	<1		2.72		5	<10	10600E	" " " " "
398	"	2								"		10	10	50	<1		2.48		20	<10	10575E	Green grey shale
399	"	2								"		2	20	40	1		2.48		5	<10	10550E	" " "
400	"	2								"		5	15	40	1		1.64		10	<10	10525E	Green shale
401	"	1.5								"		10	10	30	1		0.40		15	<10	10500E	" " qtzite east side Peters ridge
402	"	1.6								"		10	20	25	1		1.32		280	<10	10475E	qtzite. Green shale iron staining West " " "
																					10450E	NOT SAMPLED WESTERN SLOPE OF P. RIDGE
403	S	2								C		10	20	20	1		0.40		195	<10	10425E	" " Sampled 50m N'ly: ground too hard
404	S	2								C		80	50	0.28%	1		0.88		300	20	10400E	Along strike from sphal; pyrite occurrence
																						pyjama rock. qtzite. sulphides conformable
405	S	2								C		70	30	0.26%	<1		0.52		170	10	10375E	qtzite. pyjama rock. overburden dumping area possible contamination
819406	"									C		180	25	0.12%	1		1.96		345	30	10350E	In swamp qtzite grey clay probable contamination from old alluvial workings
819407	"	2								C		20	40	145	<1		1.24		35	<10	10325E	Near cassiterite creek

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. [redacted] Sample numbers 819408 – 819424 Collected by P.H. Sheet no. 40

Area / Prospect Balfour Date April 1980

Map / Photo reference 032 Analysed by A.L.S DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth	s sample type **** Horizon	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 96N	Geological Observations 793033
																				10000 E	–10275E NOT SAMPLED
																				10300 E	NOT SAMPLED OLD WORKINGS.
819408	S	2					C				40	20	170	<1		1·52		225	30	10325E	Pyjama rock, qtzite possible contamination from old workings above.
819 409	S	2					C				10	15	100	<1		0·36		<5	<10	10350 E	Light grey siltstone
819 410	"	2					"				30	25	110	<1		1·16		230	10	10375E	" " "
819411	"	2					"				55	30	100	<1		0·68		560	20	10400E	" " "
																				10425E	Qtzite. Peters Ridge not sampled ground too hard
412	S	0·6					C				120	90	30	<1		0·76		10	10	10450 E	Pyjama rock green shale
413	"	1·3					"				30	15	50	<1		2·8		90	<10	10475 E	Light green shale next to road
414	"	0·7					"				10	55	50	<1		2·24		230	10	10500 E	Alluvia Workings green shale
415	"	1·7					"				175	50	10	<1		0·64		0·1%	30	10525 E	" " light green shale
416	"	1·3					"				60	120	40	<1		2·48		95	10	10550E	" " green shale qtzite
417	"	2					"				10	15	10	<1		2·72		<5	<10	10575E	" " " "
418	"	1·3					"				5	15	65	<1		3·76		115	10	10600E	" " dark " "
																					Iron staining next to creek
419	S	2					C				10	10	55	<1		4·08		5	<10	10625E	Green shale
420	"	1·7					"				5	10	45	<1		2·12		60	<10	10650E	Browny green shale?
421	"						"				5	10	20	<1		1·56		5	<10	10675E	Green shale. Iron staining
																				10700E	Not Sampled.
422	S	2					C				140	10	30	1		4·72		5	<10	10725E	Edge of costeen black grey shale. qtzite
423	"	1·5					C				10	15	20	<1		3·60		5	<10	10750E	" " " next to road grey green shales, qtzite
819424	S	2					C				10	10	25	<1		1·76		<5	<10	10775E	Grey green shale qtzite.

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. [redacted] Sample numbers 819425 - 819439 Collected by P.H. Sheet no. 41

Area / Prospect BALFOUR Date MAY 1980

Map / Photo reference 033 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	cs	pH	o/c sample type ***	s sample type **** Depth	Horizon	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 95N	Geological Observations 793034
																					11000E	NOT SAMPLED
																					10975E	" "
																					10950E	" "
																					10925E	" "
																					10900E	" "
																					10875E	" "
819425	S									C		5	5	35	<1		1·80		5	<10	10850E	Green shale
426	"	2								"		5	15	60	<1		4·00		<5	<10	10825E	Green grey shale
427	"	1·7								"		5	20	40	<1		3·28		5	<10	10800E	Green shale next to track
428	"	2								"		2	10	10	<1		0·18		<5	<10	10775E	" "
429	"	2								"		340	75	50	1		4·64		<5	<10	10750E	" " Qtzite
430	"	1·5								"		40	20	40	<1		2·56		<5	<10	10725E	Next to main road black siltstone qtzite
431	"	2								"		10	10	15	<1		0·24		<5	<10	10700E	Green shale
432	"	1·2								"		5	10	10	<1		0·26		5	<10	10675E	" "
433	"	0·1								Bedrock		10	15	35	<1		3·60		5	<10	10650E	25m south along strike in costean green shale
434	"	2								C		10	10	45	<1		3·04		5	<10	10625E	Grey shale
435	"	2								"		<2	20	65	<1		3·28		5	<10	10600E	Green shale
436	"	2								"		60	30	70	<1		2·48		55	10	10575E	Green grey siltstone
437	"	2								"		5	15	50	<1		2·48		10	<10	10550E	Green shale
438	"	2								"		180	20	60	1		2·96		525	20	10525E	" "
439	"	2								"		10	15	95	<1		3·20		15	<10	10500E	" "
																					10475E	No sample no recovery
																					10450E	No sample alluvium no penetrated

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. Sample numbers 819440 — 819443 Collected by P.H. Sheet no. 42

Area / Prospect BALFOUR Date MAY. 1980.

Map / Photo reference 034 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth	s sample type **** Horizon	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 95 N	Geological Observations 793035
																					10425E	NOT SAMPLED
																					10400E	" "
																					10375E	" " Alluvium to deep
819440	S	3					C				10	45	0·10%	<1		1·36		105	10		10350E	Grey clay
441	S	1·7					C				30	15	50	<1		0·96		25	10		10325E	Grey siltstone
																					10300E	NOT SAMPLED
442	S	3					C				10	15	320	<1		1·72		85	20		10275E	Grey siltstone
443	S	1·5					C				10	160	45	<1		1·48		25	20		10250E	Light grey brown siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. Sample numbers 819444 - 819451 Collected by N.R.L. Sheet no. 43

Area / Prospect FOUR Date Mar 1980

Map / Photo reference 035 Analysed by A.L.S DPO no

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Horizon	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 94N	Geological Observations 793036
819444	S	3								C											10225E	10m N along strike
																						Grey siltstone, contaminated
																					10250E	0-3.5m peaty mud
		3.5																				Couldn't get uncontaminate sample
																						Peaty wash coarse abundant alluvial tin
445	S	4										35	5	330	1		0.54		110	20	10275E	0-2.5m peaty mud
																						2.5-4m pale grey green siltstone
446	S	2										15	15	65	1		2.96		135	40	10300E	0-1m peat
																						0-2m green silts.
447	S	3										0.34%	15	0.74%	3		15.20		1.07%	80	10325E	Junct. W. of Tin Creek
																						0-2m peat + wash
																						2-3m black pyritic siltstones
448	S	2										430	10	140	1		0.62		195	30	10350E	0-2m yellow clay + off white
																						pyritic siltstone
449	S	2										195	35	450	2		2.68		455	70	10400E	0-2m Kakhi siltst.
450	S	2										2	20	40	2		2.40		10	<10	10425E	0-1m peat
																						1-2m light grey green siltst.
451	S	2										15	10	75	1		3.04		5	<10	10450E	0-1.5m peat
																						1.5-2m pale green siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE . DGER

Tenement name S.P.L. 781 No. ● Sample numbers 819452 - 819461 Collected by N.R.L. Sheet no. 44

Area / Prospect BALFOUR ● Date MAY 1980

Map / Photo reference 036 Analysed by A.L.S DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Horizon	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 94N.	Geological Observations 793037
819452	S	2·5										10	10	75	1		240		20	<10		10475E	0-2m peat
																							2-2·5m pale green siltstone
453	"	2										65	15	135	2		7·20		20	<10		10500E	0-1·8m peat
																							1·8-2m pale green siltstone
454	"	2										65	10	310	2		3·00		45	<10		10525E	0-1·5m peat
																							1·5-2m light green siltstone
455	"	2										2	5	50	1		3·16		<5	<10		10550E	0-1·2m peat
																							1·2-2m light green siltstone
456	"	2										2	5	45	1		3·20		10	<10		10575E	0-1·7m peat
																							1·7-2m light green siltstone
457	"	1·2										50	10	50	1		2·84		5	<10		10600E	0-1m peat
																							1-2m light green siltstone
458	"	2										10	10	40	1		2·72		5	<10		10625E	0-1·2m peat
																							1·2-2m light green siltstone
459	"	1										25	10	30	2		2·32		<5	<10		10670E	On lower road, Murrays Ridge
																							0-1m light grey siltst.
460	"	1·5										80	15	35	2		2·94		<5	<10		10710E	Top Murrays Ridge
																							0-1m waste
																							1-1·5m yellow siltstone
461	"	1										10	5	25	1		1·68		<5	<10			
																						10750E	0-0·5m road
																							0·5-1m yellow brown siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

Tenement name S.P.L. 781 No. Sample numbers 819462 - 819471 Collected by N.R.L. Sheet no. 45

Area / Prospect BALFOUR Date MAY 1980

Map / Photo reference 031 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Horizon	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref	Geological Observations 793038
												50	5	40	1		304		<5	<10	94N	
819462	S	0·5																			10775E	0-0.2m road
																						0.2-0.5m green siltstone
463	"	0·5										15	5	40	1		2·64		<5	<10	10800E	0-0·1m peat
																						0·1m-0·5m yellow siltstone
464	"	0·5										15	10	50	1		3·28		<5	<10	10825E	0-0.2m peat
																						0.2-0.5m yellow-red brown clay
465	"	1										5	5	10	1		2·40		<5	<10	10850E	0-0·3m peat
																						0·3-1m yellow clay
466	"	1·2										170	15	30	2		2·20		5	<10	93N	
																					10700E	0-0·3m waste
																						0·3-1·2m grey green siltstone
																						(near Murrays big dump)
467	S	2										2	15	50	1		4·00		<5	<10	10725E	0-1m peat
																						1-2m grey green siltstone
468	S	2										10	5	45	1		2·52		<5	<10	10750E	0-1m peat
																						1-2m pale green siltstone
469	S	1·5										50	10	100	1		4·68		<5	<10	10775E	0-0·4m waste
																						0·4-1·5m yellow siltstone
470	S	1·5										30	95	75	1		6·00		5	<10	10800E	0-0·5m clay soil
																						0·5-1·5m yellow siltstone
471	S	2										10	30	30	1		2·68		15	<10	10825E	0-1m basalts clay
																						1-2m yellow siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: S.P.L. 781 No. Sample numbers: 819472 – 819482 Collected by: N.R.L. Sheet no.: 46

Area / Prospect: FOUR Date: MAY 1980

Map / Photo reference: 038 Analysed by: A.L.S. DPO no.:

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
	ss * oc f s	fl	wi	al	co	ca	pH		Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W			
		o/c sample type ***																		
		Depth	s sample type ****				Horizon													
																			92N	793039
819472	S	2							65	5	35	1		2·36		<5	<10		11000E	92N 0-1·5m peat
																				1·5-2m green taleose? siltstone
473	u	1·7							25	10	135	2		6·40		<5	<10		10975E	0-1m peat
																				1-1·7m green siltstone?
474	u	2							25	20	70	2		3·44		<5	<10		10950E	0-1m peat
																				1-2m reddish clay
475	u	2							10	5	100	2		4·16		<5	<10		10925E	0-1m peat
																				1-2m green siltstone?
476	u	2							5	60	150	1		2·96		<5	<10		10900E	0-1m peat
																				1-2m green siltstone
477	u	1·8							90	85	320	2		2·56		<5	<10		10875E	0-1m peat
																				1-1·8m green siltstone
478	u	1·5							40	200	580	2		11·60		<5	<10		10850E	0-0·1m peat
																				0·1-1·5m dark green siltstone
479	u	2							15	35	200	1		3·36		<5	<10		10825E	0-1·5m peat
																				1·5-2m light green siltstone
480	u	1·5							15	10	120	1		4·16		5	<10		10800E	0-1m peat
																				1-1·5m light green siltstone
481	u	3							5	30	80	1		2·72		<5	<10		10775E	0-2·5m peat + gravel
																				2·5-3m pale green siltstone
819482	u	3							<2	5	75	1		2·84		<5	<10			(sample may be contam.)
																			10750E	0-2·5m peat + gravel
																				2·5-3m green siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION : GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. Sample numbers 819483 - 819492 Collected by N.R.L. Sheet no. 47

Area / Prospect SOLFOUR Date Mar 1980

Map / Photo reference 039 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Horizon	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref	Geological Observations 793040
												35	5	55	1		2·80		5	<10		(on loop nr. Murray's Rud)
819483	S	2																			10725E	0-1·5m peat + gravel
																						1·5-2m grey siltstone
484	S	1·5										10	5	55	1		3·56		5	<10	10700E	0-1m peat
																						1-1·5m grey siltstone
485	S	1										<2	5	45	1		3·24		<5	<10	10675E	0-1m yellow siltstone
486	"	0·5										<2	<5	5	2		0·10		10	10	10650E	0-0·2m peat
																						0·2-0·5m light grey siltstone
487	"	0·5										10	5	<2	1		480 ppm		15	<10	10625E	0-0·5m " " "
488	"	0·5										10	15	15	1		2·84		45	<10	10600E	0-0·5m " " "
489	"	3										5	5	50	1		1·28		10	10	10575E	0-2·5m (Tin Creek) peat
																						2·5-3m white-pale green siltstone
																					93N.	
490	"	0·5										30	10	40	1		2·52		15	<10	10600E	0-0·5m pale yellow siltstone
491	"	0·5										10	10	10	1		0·98		<5	10	10625E	0-0·5m grey siltstone (West ridge)
492	"	1										5	5	15	2		480 ppm		45	10	10650E	0-1m soft grey siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

Tenement name S.P.L 781 No. 040 Sample numbers 819493 – 819503 Collected by N.R.L. Sheet no. 48

Area / Prospect GOLFOUR Date May 1980

Map / Photo reference Analysed by A.L.S DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 92N	Geological Observations 793041
819493	S	0.6								45	25	150	4		3.68		35	<10		10550E	0-0.3m peat
																					0.3-0.6m light grey siltstone
494	"	0.6								2	5	30	1		1.40		30	<10		10525E	0-0.3m peat
																					0.3-0.6m light grey siltst.
495	"	0.6								2	5	60	1		4.56		20	<10		10500E	0-0.3m peat
																					0.3-0.6m yellow clay
496	"	1								10	5	45	1		4.72		30	<10		10475E	0-0.6m peat
																					0.6-1m yellow siltstone
497	"	1.2								5	15	55	1		3.36		10	<10		10450E	0-0.5m peat
																					0.5-1.2m yellow siltstone
498	"	1.0								30	20	160	1		4.00		5	<10		10425E	0-0.6m peat
																					0.6-1m grey siltstone
499	"	1.2								<2	15	65	1		3.56		5	<10		10400E	0-0.6m peat
																					0.6-1.2m yellow siltstone
500	"	1								25	10	115	1		3.60		45	<10		10375E	0-0.3m peat
																					0.3-1m green grey siltstone
501	"	1								<2	<5	2	1		0.14		295	40		10350E	0-0.5m peat
																					0.5-1m red brown siltstone
502	"	1								<2	5	15	1		0.46		30	<10		10325E	0-0.5m peat
																					0.5-1m brown-green siltstone
503	"	1.8								<2	15	5	1		0.16		120	50		10300E	0-1m peat
																					1-1.8m brown grey siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION : GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. 041 Sample numbers 819504 - 819513 Collected by N.R.L. Sheet no. 49

Area / Prospect BALFOUR Date MAY 1980

Map / Photo reference Analysed by A.L.S. DPO no

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 92N	Geological Observations 793042
819504	S	1·2	(m)							<2	15	2	1		400ppm		520	30		10275E	0-0·5m peat
																					0·5-1·2m white siltite + qtzite
505	"	2m								5	10	50	1		2·28		10	10		10250E	0-1m peat
																					1-2m green siltstone
506	"	1								2	5	5	1		200ppm			20		10225E	(Road) 0-0·5m peat
																					0·5m-1m brown siltstone
507	"	1								<2	<5	5	1		80ppm		225	20		10200E	0-0·3m peat
																					0·3-1m white siltite + qtzite
508	"	0·8								<2	<5	5	1		0·10		435	30		10175E	0-0·5m peat + rubble
																					0·5-0·8m white siltite + qtzite
																	10125E, 10150E Omitted				
509	"	1								<2	<5	110	1		1·92		10	<10		10100E	0-0·3m peat
																					0·3-1m green siltstone
510	"	0·8								85	10	125	1		2·68		35	<10		10075E	0-0·3m peat
																					0·3-0·8m kahki siltstone
511	"	0·6								<2	10	20	2		0·92		50	<10		10050E	(On road) 0-0·3m peat
																					0·3-0·6m green siltstone
512	"	1								2	5	25	1		1·26		10	<10		10025E	0-0·3m peat
																					0·3-1m yellow brown siltstone
513	"	1								<2	<5	2	1		440ppm		20	20			
																				10000E	0-0·3m peat + rubble
																					0·3-1m brown siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

Tenement name S.P.L. 781 — Sample numbers 819513 - 819524 — Collected by N.R.L. — Sheet no. 50

Area / Prospect BALFOUR — Date MAY 1980

Map / Photo reference 042 — Analysed by A.L.S. — DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 91N	Geological Observations 793043
819514	S	1							(m)		<2	5	20	1		680ppm		745	40		10025E	near old shaft 0-0.3m peat
																						0.3-1m grey green siltstone
515	"	1									15	15	15	1		0.54		0.24%	60		10050E	0-0.3m peat
																						0.3m-1m grey green siltstone
516	"	1									5	5	20	1		1.42		165	20		10075E	(Road) 0-0.3m peat
																						0.3-1m yellow siltstone
517	"	1									5	5	50	1		0.26		20	10		10100E	0-0.3m peat
																						0.3-1m grey siltstone
518	"	1									<2	<5	30	1		440ppm		20	10		10125E	0-0.3m peat
																						0.3m-1m white siltite
519	"	1									<2	<5	30	1		400ppm		355	10		10150E	as above
520	"	1.2									<2	15	35	<1		0.14		30	10		10175E	0-0.3m peat
																						0.3-1.2m brown siltstone
521	"	1.4									2	15	70	1		1.78		40	10		10200E	0-0.3m peat
																						0.3-1.4m yellow brown siltstone
522	"	1.4									5	10	95	<1		2.60		10	10		10225E	0-0.3m peat
											91N	10250E	(diamond	drill	site)							0.3-1.4m yellow brown siltstone
523	"	0.5									15	10	290	1		3.48		5	<10		10275E	(road) 0-0.5m green siltstone
524	"	1									2	10	90	1		3.28		10	20		10300E	0-0.5m peat
																						0.5-1m green siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. ● Sample numbers 819525 – 819535 Collected by N.R.L. Sheet no. 51

Area / Prospect BALFOUR Date MAY 1980

Map / Photo reference 043 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn / Fe	Au	Sn	W	Grid ref 91N	Geological Observations 793044
819525	S	1	(m)								5	10	80	1		2·72		5	<10	10325E	0-0·3m peat
																					0·3-1m yellow green siltstone
526	"	1·2									2	5	105	1		4·04		5	<10	10350E	0-0·3m peat
																					0·3-1·2m yellow green siltstone
527	"	1									10	15	100	1		2·52		<5	<10	10375E	0-0·6m peat
																					0·6-1m pale grey green siltstone
528	"	1									5	10	100	1		2·80		95	10	10400E	0-0·3m peat
																					0·3-1m pale grey green siltstone
529	"	1									20	25	125	2		3·52		20	10	10425E	0-0·3m peat
																					0·3-1m green siltstone
530	"	1·5									50	30	190	2		2·40		5	20	10450E	0-1m peat, rubble
																					1-1·5m green siltstone
531	"	1·2									5	25	145	2		2·40		155	40	10475E	0-0·3m peat
																					0·3-1·2m pyritic green siltstone
532	"	1·2									5	10	90	1		4·80		115	<10	10500E	0-0·3m peat
																					0·3-1·2m yellow siltstone
533	"	1·5									85	35	60	1		2·30		10	<10	10525E	0-0·6m peat
																					0·6-1·5m yellow siltstone
534	"	1									15	10	120	1		2·44		5	<10	10550E	0-0·3m peat
																					0·3-1m grey green siltstone
535	"	1									5	5	75	1		2·64		10	<10	10575E	0-0·3m peat
																					0·3-1m grey green siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. Sample numbers 819536 – 819546 Collected by N.R.L. Sheet no. 52

Area / Prospect ALFOUR Date MAY 1980

Map / Photo reference 044 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref	Geological Observations 793045
819536	S	0·8	(m)								5	5	40	1		0·54		30	10		10600 E	South Mine road 0-0·3m rubble
																						0·3 - 0·8m off white siltstone
537	"	1									30	15	65	1		2·72		5	<10		10625 E	0 - 0·3m peat
																						0·3 - 1m Grey siltstone
538	"	0·8									5	10	70	1		2·02		<5	<10		10650E	0-0·3m peat
																					90 N	0·3-0·8m grey green siltstone
539	"	1									2	10	80	1		3·53		20	<10		11000 E	0-0·5m peat
																						0·5 - 1m grey siltstone
540	"	1									2	5	90	<1		2·24		5	<10		10975E	0-0·5m peat
																						0·5 - 1m grey green siltstone
541	"	1									2	10	75	<1		3·04		10	<10		10950E	0-0·5m peat
																						0·5-1m grey green siltstone
542	"	1									2	10	90	<1		3·76		15	<10		10925 E	As above
543	"	1									2	10	70	<1		3·20		<5	<10		10900E	As above
544	"	2									2	10	105	1		3·36		5	<10		10875E	0-1m peat
																						1-2m grey green siltstone
545	"	1·7									2	5	70	1		1·30		30	<10		10850E	0-1m peat
																						1-1·7m grey green siltstone
546	"	1·5									5	10	80	1		2·92		5	<10		10825E	0-1m peat
																						1-1·5m grey green siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. Sample numbers 819547 - 819557 Collected by N.R.L. Sheet no. 53
Area / Prospect BALFOUR Date May 1980
Map / Photo reference 045 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 90 N	Geological Observations 793046
819547	S	1·5	(m)							5	25	130	1		4·60		<5	<10	10800E	0-1m peat
																				1-1·5m yellow clay
548	"	1								5	5	115	1		2·96		<5	<10	10775E	0-0·5m peat
																				0·5-1m yellow green siltstone
549	"	1								10	15	130	1		3·60		5	<10	10750E	As above
550	"	1								10	65	150	1		4·24		<5	<10	10725E	As above
551	"	1								60	5	90	1		0·20		<5	<10	10700E	0-0·5m peat
																				0·5-1m grey green siltstone
552	"	1								2	5	105	1		3·60		<5	<10	10675E	As above
553	"	0·8								<2	10	50	1		2·36		15	<10	10650E	0-0·2m peat
																				0·2-0·8m yellow siltstone
554	"	0·5								5	5	40	1		2·16		20	<10	10625E	5m E. of S. mine road 0-0·2m peat
										(10600E, 575, 550, 525 chip sampled)										0·2-0·5m green siltstone
555	"	0·5								45	25	180	2		11·2		35	10	10500E	0-0·2m peat
																				0·2-0·5m yellow siltstone
556	"	1								10	5	80	1		3·00		<5	<10	10475E	0-0·5m peat
																				0·5-1m green siltstone
557	"	1								10	15	110	2		4·00		25	<10	10450E	0-0·5m peat
																				0·5-1m yellow grey siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil
** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. Sample numbers 819558 - 819563 Collected by N.R.L. Sheet no. 54
Area / Prospect ...FOUR Date MAY 1980
Map / Photo reference 046 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 90 N	Geological Observations 793047
819558	S	1	(m)							35	10	110	<1		3·29		5	<10		10425E	0-0·3m peat
																					0·3m-1m grey siltstone
559	"	2								15	35	150	1		4·48		10	<10		10400E	0-1m peat
																					1-2m yellow green siltstone
560	"	2								15	55	120	<1		3·32		25	10		10375E	As above
561	"	2								50	120	190	3		2·80		70	10		10350E	As above
562	"	2								2	10	135	<1		3·44		20	10		10325E	As above
563	"	2								2	5	165	<1		0·62		80	20		10300E	near costean 0-1 peat rubble
																					1-2m pale cream pyritic siltstone
564	"	1								15	10	65	<1		1·24		115	10		10275E	0-0·5m peat
																					0·5-1m brown siltstone
565	"	1								20	20	70	<1		2·64		55	<10		10250E	0-0·5m peat
																					0·5-1m yellow clay
566	"	1								5	10	105	<1		1·72		45	60		10225E	0-0·5 peat
																					0·5-1m brown siltstone
567	"	1								2	5	60	<1		0·90		35	10		10200E	0-0·5m peat
																					0·5-1m brown-grey siltstone
568	"	1								2	5	55	<1		0·30		5	10		10175E	As above

* Sample type ss = stream sediment oc = outcrop f = float s = soil
** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION : GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L 781 No. Sample numbers 819569 - 819579 Collected by N.R.L Sheet no. 55

Area / Prospect BALFOUR 047 Date MAY 1980

Map / Photo reference Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl / wi / al / co / ca / pH; o/c sample type ***; Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 90 N	Geological Observations 793048
819569	S	1·2 (m)		<2	5	40	<		0·10		25	20		10150 E	0-0·3m peat
															0·3-1·2m dark grey siltstone
570	"	1·8		2	5	35	<1		0·20		25	<10		10125E	0-1m peat rubble
															1-1·8m dark grey siltstone
571	"	1		2	25	60	<1		1·16		20	<10		10100E	0-0·5m peat
															0·5-1m grey siltstone
572	"	1·5		5	10	65	1		3·76		<5	10		10075E	0-1m peat
															1-1·5m yellow siltstone
573	"	1·5		<2	10	40	<1		0·30		<5	<10		10050E	As above
574	"	2		2	5	100	1		2·92		5	<10		10025E	0-1·5m peat rubble
															1·5-2m stiff green clay
575	"	1		<2	5	85	<1		3·28		15	<10		10000E	0-0·5m peat
														89 N	0·5-1m grey green siltstone
576	"	1		5	15	80	1		1·80		10	<10		10625 E	0-0·3m peat
															0·3-1·0m brown siltstone
577	"	1		2	10	290	<1		2·02		<5	<10		10650 E	As above
578	"	1		10	10	110	1		4·24		5	<10		10675 E	" "
579	"	1		15	25	135	<1		3·60		5	<10		10700E	0-0·3m peat
															0·3-1m dark grey siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

U.N.A. EXPLORATION : GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. 051 Sample numbers 819580 – 819590 Collected by N.R.L. Sheet no. 56

Area / Prospect CLEFOUR Date MAY 1980

Map / Photo reference Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl / wi / al / co / ca / pH; o/c sample type ***; Depth; s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 89 N.	Geological Observations 793049
819580	S	1·2 (m)		15	25	100	<1		2·80		5	<10	10725E	0-0·3m peat
														0·3-1·2m dark grey siltstone
581	"	1·2		5	35	100	<1		3·92		<5	<10	10750E	As above
582	"	0·6		<2	10	105	<1		2·40		5	<10	10775E	0-0·3m peat
														0·3-0·6m pale green siltstone
583	"	1		<2	5	85	<1		3·16		<5	<10	10800E	0-0·5m peat
													88N	0·5-1m yellow siltstone
584	"	1·8		5	10	110	<1		2·76		<5	<10	11000E	0-1m peat
														1-1·8m bright green siltstone
585	"	2		70	5	70	<1		1·62		<5	<10	10975E	0-1m peat
														1-2m bright green siltstone
586	"	2		2	20	45	<1		0·14		<5	<10	10950E	0-1m peat
														1-2m pale yellow siltstone
587	"	2		2	10	180	<1		2·96		<5	<10	10925E	0-1m peat
														1-2m pale green siltstone
588	"	1·5		5	10	170	<1		3·44		<5	<10	10900E	0-1m peat
														1-1·5m green siltstone
589	"	1·5		<2	10	125	1		2·80		15	30	10875E	0-1m peat
														1-1·5m yellow grey siltstone
590	"	2		5	5	130	1		2·04		30	10	10850E	0-1m peat
														1-2m yellow grey siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION : GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. [redacted] Sample numbers 819591 - 819601 Collected by N.R.L. Sheet no. 57

Area / Prospect BALFOUR 048 Date MAY 1980

Map / Photo reference Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl / wi / al / co / ca / pH; o/c sample type ***; s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn-Fe	Au	Sn	W	Grid ref 88 N	Geological Observations 793050
819591	S	2m (m)		<2	10	75	1		0·10		<5	<10	10825E	0-1m peat
														1-2m yellow green siltstone
592	"	2m		<2	10	40	1		0·46		<5	<10	10800E	0-1m peat
														1-2m light brown siltstone
593	"	2m		<2	5	35	1				5	<10	10775E	0-1m peat
														1-2m dark brown siltstone
594	"	2		<2	5	30	1				5	<10	10750E	As above
595	"	1·8		<2	10	75	1		2·38		10	<10	10725E	As above
														0-1m peat
596	"	2		<2	5	80	1		2·88		10	<10	10700E	1-1·8m pale green siltstone
597	"	1·8		65	5	105	1		2·84		85	30	10675E	0-1m peat
														1-2m pale green siltstone
598	"	2		<2	5	90	1		3·76		20	<10	10650E	As above
599	"	2		20	20	95	1		2·48		10	<10	10625E	" "
600	"	2		2	30	145	1		2·28		115	20	10600E	" "
														0-1m peat
601	"	1·8		35	130	0·2%	2		1·50		65	30	10575E	1-1·8m grey brown siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. Sample numbers 819602 - 819612 Collected by N.R.L. Sheet no. 58

Area / Prospect K FOUR Date MAY 1980

Map / Photo reference 049 Analysed by A.L.S. DPO no

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 88N.	Geological Observations 793051
819602	S	1	(m)								15	15	110	<1		2·26		15	<10		10550E	0-5m peat
																						0·5-1m grey green siltstone
603	"	1									5	10	70	<1		2·32		<10	<10		10525E	0-0·5m peat
																						0·5-1m yellow siltstone
604	"	1									30	65	75	1		1·08		115	20		10500E	0-1m pale green siltstone
605	"	1·5									55	35	210	1		2·72		65	<10		10475E	0-0·5m peat
																						0·5-1·5m pale green siltstone
606	"	2									35	10	150	1		1·98		55	10		10275E	0-1m peat
																						1-2m grey green siltstone
607	"	1·2									5	20	120	1		4·24		5	<10		10250E	0-0·5m peat
																						0·5-1·2m grey green siltstone
608	"	0·8									<2	10	90	1		4·16		30	<10		10225E	0-0·2m peat
																						0·2-0·8m brown siltstone
609	"	1·5									<2	10	90	1		3·36		130	<10		10200E	0-1m peat
																						1-1·5m yellow siltstone
610	"	1									2	5	40	1		5·60		35	<10		10175E	0-0·5m peat
																						0·5-1·0m orange clay
611	"	1									5	10	80	1		4·32		10	<10		10150E	AS ABOVE
612	"	2									5	10	80	1		3·68		20	10		10125E	0-1m peat
																						1-2m pale yellow green siltstone
											10											

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. Sample numbers 819613 – 819623 Collected by N.R.L. Sheet no. 59

Area / Prospect LEFOUR Date MAY 1980

Map / Photo reference 050 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 88 N.	Geological Observations 793052
819613	S	1m	(m)									<2	10	70	1		3·60		10	<10		10000E	0-0·5m peat
																							0·5-1m dark grey green siltstone
614	"	1m										55	15	35	2		1·00		15	10		8850N	0-0·5m peat
																						9990E	0·5-1m orange brown siltstone
615	"	1·5										<2	10	75	1		2·88		20	<10		8950N	0-1m peat
																						10000E	1-1·5m yellow brown siltstone
616	"	1·5										<2	10	80	1		4·36		15	<10		8975 N	As above
																						10000E	
617	"	1·5										<2	10	90	1		4·00		<5	10		9025 N	0-1m peat
																						10000E	1-1·5m grey green siltstone
618	"	1										<2	5	55	1		2·96		5	<10		9050N	0-0·5m peat
																						10000E	0·5-1m brown siltstone
619	"	1										<2	5	35	1		0·42		575	40		9075N	0-0·5m peat
																						10000E	0·5-1m pale grey siltstone
620	"	2										2	260	880	1		2·64		200	<10	89N	9425 E	0-1m peat
																							1-2m yellow green siltstone
620	"	2										15	25	740	<1		0·86		<5	<10		9400E	0-1·5m peat
																							1·5m-2m grey green siltstone
622	"	1·5										35	140	370	1		0·94		20	<10		9375E	0-1m peat
																							1-1·5m grey siltstone
623	"	1·5										<2	105	200	1		3·12		<5	<10		9350E	" " "

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: E.P.L. 781 No. Sample numbers: 819624 – 819634 Collected by: N.R.L. Sheet no: 60
Area / Prospect: BALFOUR Date: MAY 1980
Map / Photo reference: 052 Analysed by: A.L.S. DPO no:

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 89 N	Geological Observations 793053
816624	S	2							(m)			25	15	150	<1		0·32		5	<10		9300E	0-1m peat
																							1-2m dark grey siltstone
625	"	3·5										25	620	0·28%	2		0·38		75	10		9275E	0-2·5m peat gravel
																							2·5-3·5m stiff grey clay
626	"	2										<2	15	50	<1		0·18		5	<10		9250E	0-1·5m peat, gravel
																							1·5-2m light grey siltstone
627	"	2										5	440	470	<1		0·26		<5	<10		9225E	As above
628	"	1·5										5	55	190	<1		0·26		<5	<10		9200E	0-1m peat
																							1-1·5m brown sandy siltstone
629	"	1·5										5	10	40	<1		0·18		5	30		9175E	As ABOVE
630	"	1·5										<2	10	40	<1		0·22		10	10		9150E	" "
631	"	2										2	25	45	<1		0·20		<5	10		9125E	0-1·5m peat, gravel
																							1·5-2m brown siltstone
632	"	2										<2	5	40	<1		0·10		15	20		9100E	AS ABOVE
																						94 N	
633	"	1										120	30	10	1		3·28		20	<10		9800E	(Road) 0-0·5m peat
																							0·5-1m yellow brown siltstone
634	"	1										45	80	145	1		0·70		15	<10		9775E	0-0·5m peat
																							0·5-1m dark brown siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil
** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
**** Soil sample type auger hole or pit depth m A, B or C horizon

Tenement name S.K.L. 781 No. Sample numbers 819635 - 819646 Collected by N.K.L. Sheet no. 01

Area / Prospect BALFOUR D MAY 1980

Map / Photo reference 053 Analysed by A.L.S. DPO

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 94 N.	Geological Observations 793054
819635	S	2	(m)								120	30	10	1		3·28		20	<10		9750E	0-1·5m peat, gravels
																						1·5-2m pale grey siltstones
636	"	2									45	80	145	1		0·70		15	<10		9725E	As above
637	"	1·5									30	45	100	1		1·14		10	<10		9700E	0-0·5m peat
																						0·5-1·5m pale grey siltstones
638	"	1·5									5	180	0·16%	2		1·32		30	10		9675E	As above
639	"	2									10	35	800	1		1·40		15	10		9650E	0-1m peat, gravels
																						1-2m pale grey siltstone
640	"	2									10	40	200	1		1·36		15	<10		9625E	0-1m peat, gravels
																						1-2m grey green siltstones
641	"	2									5	20	310	1		0·82		<5	<10		9600E	0-1m peat
																						1-2m brown green siltstones
642	"	2									35	80	300	1		1·28		25	<10		9575E	0-1m peat
																						1-2m yellow grey siltstones
643	"	1									20	50	10	1		0·24		5	40		9550E	0-0·5m peat
																						0·5-1·0m red brown siltstones
644	"	1									2	15	20	1		0·64		515	60		9525E	0·-0·5m peat
																					95N	0·5-1m pale yellow siltstones
645	"	2									2	20	5	2		0·68		20	10		9375E	0-1m peat
																						1-2m yellow ferruginous sandstone
* 646	MISSING																					

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: E.P.L. 781 No. ..... Sample numbers: 81964 - 819657 Collected by: N.R.L. Sheet no.: 62

Area / Prospect: BALFOUR Date: MAY 1980

Map / Photo reference: 054 Analysed by: A.L.S. DPO no.:

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref	Geological Observations 793055
819647	S	2	(m)							5	35	5	1		0.58		15	10		9325E	0-1m peat
																					1-2m yellow-green siltstone
648	"	2								2	20	5	1		0.28		40	10		9300E	0-1.5m peat
																					1.5-2m grey siltstone
649	"	1.2								2	15	5	1		0.10		20	<10		9275E	0-1m peat
																					1-2m pale brown sandy siltstone
650	"	2								2	15	5	1		0.18		50	20		9250E	0-1m peat
																					1-2m grey siltstone
651	"	2								2	25	5	1		0.22		5	<10		9225E	0-1m peat, - gravel
																					1-2m yellow grey sandy siltstone
652	"	1								2	5	2	1		490ppm		15	10		9200E	0-0.5m peat
																					0.5-1m light grey sandstone
653	"	1.5								2	20	5	1		0.10		5	10		9175E	0-1m peat, gravel
																					1-1.5m dark grey siltstone
654	"	1.5								2	25	5	1		0.10		<5	<10		9150E	AS ABOVE
																					0-1m peat, gravel
655	"	1.5								2	15	5	1		0.14		<5	10		9125E	1-1.5m light grey silty sandstone
																9100E - too steep				98N	
656	"	2								2	20	<2	1		600ppm		5	<10		9100E	0-1m peat, gravel
																					1-2m dark brown sandy siltstone
657	S	2								10	110	130	1		0.14		5	30		9125E	AS ABOVE

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name E.P.L. 781 No. ..... Sample numbers 819658 - 819668 Collected by N.R.L. Sheet 63

Area / Prospect BALFOUR Date MAY 1980

Map / Photo reference 055 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 98N.	Geological Observations 793056
819658	S	2	(m)								25	800	5	1		0·16		<5	<10	9150E	0-1m peat, gravel
																					1-2m dark brown sandy siltstone
659	"	2									5	30	20	1		0·10		<5	800	9175E	As ABOVE
660	"	2									2	10	5	1		0·12		<5	<10	9200E	" "
661	"	1·5									5	15	2	1		660ppm		<5	10	9225E	0-1m peat, gravel
																					1-1·5m dark grey siltstone
662	"	1·5									5	20	5	2		0·10		<5	20	9250E	As above
																					"
663	"	1·5									5	25	5	1		0·18		<5	10	9275E	" "
664	"	1·5									5	20	5	3		880ppm		<5	10	9300E	" "
665	"	1·5									5	20	2	1		0·10		25	10	9325E	" "
666	"	2									5	10	2	2		0·12		10	10	9350E	0-1m peat, gravel
																					1-2m dark grey siltst. + qtzite frags.
667	"	2									5	20	5	3		0·10		25	20	9375E	As ABOVE
668	"	1·5									5	20	5	1		0·10		5	10	9400E	0-1m peat, gravel
																					1-1·5m dark grey siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. Sample numbers 819669 - 819679 Collected by N.R.L. Sheet no. 64

Area / Prospect CALFOUR Date MAY 1980

Map / Photo reference 056 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref 98N.	Geological Observations 793057
819669	S	1·5	(m)							5	40	5	1		0·12		5	10		9425E	0-1m peat, gravel
																					1-1·5m dark grey siltstone
670	"	1·5								2	35	2	1		800ppm		40	30		9475E	0-1m peat, gravel
																					1-1·5m Brown siltstone
671	"	1·5								5	40	2	1		0·10		445	30		9500E	As above
672	"	0·8								2	10	10	3		800		160	40		9525E	0-0·5m peat
																					0·5-0·8m Hard grey quartzite
673	"	2								5	15	2	1		400ppm		20	10		9550E	0-1m peat, gravel
																					1-2m dark green siltstone
674	"	1·5								2	10	2	1		0·10		120	20		9575E	0-1m peat, gravel
																					1-1·5m yellow, brown siltstone
675	"	2								2	5	5	1		0·16		210	30		9600E	0-1m peat, gravel
																				108N	1-2m pale grey sandstone
676	"	1·5								2	5	10	1		600ppm		<5	<10	108N	9950E	(Tramline) 0-0·5m gravel
																					0·5-1·5m light grey siltstone
677	"	1								2	10	10	1		1·56		<5	<10		9975E	0-0·5m peat
																					0·5-1m yellow siltstone
678	"	1								2	10	20	1		1·24		5	<10		10000E	As above
679	"	2								20	25	35	1		1·24		<5	<10		10050E	0-1·5m peat, gravel
																					1·5-2m yellow brown siltstone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

Tenement name S.F.L. 101 No. Sample numbers 819680 - 819690 Collected by N.K.L. Sheet no. 05

Area / Prospect BALFOUR Date MAY 1980

Map / Photo reference 057 Analysed by A.L.S. DPO

Sample No.	Type ss * oc f s	ss channel ** fl / wi / al / co / ca / pH; o/c sample type ***; Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 108N	Geological Observations 793058
819680	S	2 (m)		15	15	25	<1		2·32		5	<10	10075E	(Tin Creek) 0-1·5m peat and alluvium
														1·5-2m Dark grey siltstone
681	"	2·5		15	15	25	<1		2·36		5	<10	10100E	0-1·5m peat and alluvium
														1·5-2·5m grey siltstone
682	"	0·7		5	15	15	1		3·32		5	<10	10125E	0-0·5m peat
								10150, 10175E			MISSING			0·5-0·7m hard yellow siltstone
683	"	2		2	15	15	1		2·00		<5	<10	10200E	0-1m peat
														1-2m white siltstone
684	"	2		2	25	25	1		2·44		<5	<10	10225E	As above
685	"	2		10	15	30	1		1·26		40	10	10250E	0-1·7m peat
														1·7-2m grey green clay
686	"	2		10	15	15	<1		1·08		35	<10	10275E	0-1·5m peat, alluvium
														1·5-2m pale green siltstone
687	"	2		10	20	20	1		1·52		5	<10	10300E	As above
688	"	2		20	30	35	1		2·24		10	40	10325E	As above
689	"	2		35	25	85	1		2·48		15	40	10350E	As above
											10375E	MISSING		
690	"	4·5		10	20	60	1		1·02		5	20	10400E	0-4m peat
														4-4·5m grey siltstones

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. Sample numbers 819691 - 819698 Collected by N.R.L. Sheet no. 66

Area / Prospect DAFOUR Date MAY 1980

Map / Photo reference 058 Analysed by A.L.S. DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth	s sample type ****	Horizon	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W		Grid ref	Geological Observations 793059
819691	S	2	(m)										20	25	45	1		1.40		<5	10		112N 10400E	0-1.5m peat
																								1.5-2m light grey siltstone
692	"	1.5											15	25	40	1		0.90		5	<10		10375E	0-1m peat
																								1-1.5m grey siltstone
693	"	1											2	10	10	1		0.18		35	10		10350E	0-0.5m peat
																								0.5-1m dark brown sandy siltstone
694	"	2											20	30	55	1		2.50		5	<10		10325E	0-1m peat
																							101 N	1-2m yellow siltstone
695	"							C					<2	10	15	<1		0.12		290	<10	101N	10950E	Quartzite
696	"							C					5	10	5	<1		0.16		195	30	101N	10925E	"
697	"							C					5	10	2	<1		0.28		95	20	101N	10900E	"
																							100 N	
698	"							C					20	15	40	1		2.12		5	<10	100N	10900E	Top of Murray's reward ridge, qtzite shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION GEOCHEMICAL SAMPLE LEDGER

Tenement name S.P.L. 781 No. [redacted] Sample numbers 819701 – 819711 Collected by N.R.L. Sheet no. 67

Area / Prospect [redacted] FOUR Date MAY 1980

Map / Photo reference 059 Analysed by A.L.S DPO no.

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	Grid ref 112N.	Geological Observations 793060
819701	S	2	(m)								5	15	15	1		1.14		<5	10	10300E	0-1m peat
																					1-2m yellow siltstone
702	"	2									10	15	50	1		2.32		<5	<10	10275E	0-1m peat
												10225E, 10250E MISSING									1-2m grey siltstone
703	"	2									10	15	15	1		1.16		<5	10	10200E	0-0.3m peat
												10125E, 10150E, 10175E, MISSING									0.3-1m yellow siltstone
704	"	1									5	10	10	1		1.30		10	20	10100E	as above
705	"	1									5	25	20	2		3.92		<5	10	10075E	0-1m peat
																					1-1.5m yellow brown siltstone
706	"	1.5									15	20	20	1		1.84		<5	60	10050E	0-0.5m peat
																					0.5-1m grey siltstone
707	"	1									15	20	20	1		1.64		<5	60	10025E	AS ABOVE
708	"	1.5									5	125	30	1		1.54		<5	10	10000E	0-0.5m
																					0.5-1.5m yellow grey siltstone
709	"	1.5									15	15	15	1		0.76		<5	<10	9975E	AS ABOVE
710	"	1.5									5	10	5	1		0.20		5	10	9950E	0-1m peat
																					1-1.5m grey siltstone
711	"	1.5									50	10	25	1		0.76		5	10	9925E	AS ABOVE

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE EDGER

Tenement name: S.P.L. 781 | No. | Sample numbers: 5201 – 5210 | Collected by: N.R.L. | Sheet no: 68

Area / Prospect: McFOUR | Date: July 1980

Map / Photo reference: 060 | Analysed by: A.L.S. | DPO no:

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W		Grid ref	Geological Observations 793061
TS 5201		1.6									60	15	10					25	<10	10400N	10000E	0 – 0.4m peat
																						0.4 – 1.6m grey yellow clay
5202											5	10	10					10	<10	10400N	10025E	0 – 0.5m peat
																						0.5 – 2m soft white to yellow clay micaceous and pyritic
5203		1.5									10	15	15					10	<10		10050E	0 – 1m peat. 1 – 1.8m yellow to grey green weathered siltstone
5204		1									5	10	10					<5	<10		10075E	0 – 0.2m peat
																						0.2 – 1m grey mottled siltstone
5205		1.2									5	30	20					20	<10		10100E	0 – 0.2m peat
																						0.2 – 1.2m grey clay
5206		1.3									175	30	500					10	<10		10125E	0 – 0.2m peat
																						0.2 – 0.8m stamiferous muddy gravels
																						0.8 – 1.3m grey pyritic siltstone
5207		1.3									10	15	20					5	<10	10300N	10000E	0 – 0.7m peat
																						0.7 – 1.3m light grey shale
5208		2									20	25	290					35	<10		10025E	0 – 1m peat
																						1 – 2m light grey siltstone
5209		1.2									15	20	25					<5	<10		10050E	0 – 0.5m peat and rubble
																						0.5 – 1.2m light grey shale
5210		1.8									10	25	10					10	20	10200W	10000E	0 – 0.4m peat 0.4 – 1.3m gravel
																						1.3 – 1.8m Brown shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE EDGER

Tenement name S.P.L. 781 No. [redacted] Sample numbers 5211 – 5222 C[redacted]ed by N.R.L Sheet no. 69

Area / Prospect [redacted]FOUR 061 Da[redacted] July 1980

Map / Photo reference Analysed by A.L.S DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W		Grid ref	Geological Observations 793062
		depth									Metal content ppm or %											
5211		1·1									2	10	10					<5	<10	10200N	10025E	0-0·5 peat
																						0·5-1·1 grey siltstone
5212		2									10	15	15					5	<10		10050E	0-1·0 sand, peat
																						1-2·0m soft yellow-grey clay
5213		1·1									15	15	45					5	<10		10075E	0-0·7m peat
																						0·7-1·1m light grey green shale
5214		1									10	30	20					225	20		10100E	0-0·2m peat
																						0·2-1m dark brown shale
5215		0·5									10	20	10	2				5	<10	10300N	10075E	0-0·5m yellow siltstone/shale
5216		2									30	35	80	2				20	<10		10100E	0-1·5m peat and gravel
																						1·5m-2m white clay
5217		2									20	25	150	1				<5	<10		10125E	0-1m peat, gravel
																						1-2m grey shale
5218		2									70	160	0·16%	3				360	80		10150E	0-1m peat
																						1-2m stiff grey clay
5219		1·5									30	65	490					85	10		10225E	0-1m peat, rubble
																						1-1·5m brown sandy siltstone
5220		2·7									20	15	60					70	<10	10200N	10150E	0-2m gravels
																						2-2·7m light grey clay
5221		1·7									20	20	45					25	<10			0-1m peat
																						1-1·7m light grey shale
5222		1·5									30	25	180					25	<10		10200E	0-1·2m peat
																						1·2-1·5m light grey clay

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE EDGER

Tenement name SPL 781 No. Sample numbers 5223 – 5234 Collected by N.R.L. Sheet no. 70

Area / Prospect FOUR 062 Date JULY 1980

Map / Photo reference Analysed by A.L.S DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W		Grid ref	Geological Observations 793063
5223		1									5	10	25					5	<10	10200N	10225E	0 – 0·7m qtz rubble
																						0·7 – 1m green brown shale
5224		1·5									60	50	680					90	10			0 – 1·2m peat, rubble
																						1·2 – 1·5m grey clay
5225		1·2									25	30	240					10	<10			0 – 0·5m peat
																						0·5 – 1·2m grey shale with pyritic qtzite
5226		1·5									110	30	75					530	<10			0 – 1·4m peat + gravel
																						1·4 – 1·5m hard grey shale
5227		0·6									10	10	10					40	10			0 – 0·4m peat
																						0·4 – 0·6m pale yellow qtzite
5228		1·2									15	20	340					65	<10			0 – 1m peat
																						1 – 1·2m stiff grey clay
5229		1·5									10	30	95					<5	<10		10375E	0 – 0·5m peat
																						0·5m – 1m light grey shale
5230		1·7									10	20	165					5	<10		10400E	1·7 light grey shale
5231		1·5									30	880	640					45	10		10425E	0·5 m qtzite rubble
																						0·5 – 1m brown shale
5232																						
5233		2									10	35	45					70	<10	10400N	10150E	0 – 1·7m peat
																						1·7 – 2m pale grey green shale
5234		3									10	25	25					15	<10		10175E	0 – 2·5m peat and gravel
																						2·5 – 3m white clay

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. Sample numbers 5235 - 5245 Collected by N.R.L Sheet no. 71

Area / Prospect FOUR 063 Date July 1980

Map / Photo reference Analysed by ALS DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W	-	Grid ref	Geological Observations 793064
5235		2								25	30	50					10	<10	10400N	10200E	0-1m peat and sand
																					1-2m pale grey shale
5236		1·8								25	20	200					50	<10			0-1·5m peat
																					1·5-1·8m stiff green clay
5237		2								10	20	65					10	<2			0-1m peat
																					1-2m pale green pyritic shale
5238		1·5								10	20	30					10	<10			0-1m peat
																					1-1·5m yellow shale
5239		2·5								2	5	5					<5	10	10400N	10300E	0-2m peat and quartz rubble
																					2-2·5m pale yellow sandy qtzite
5240		2								2	5	5					5	<10		10400E	0-1m peaty qtzite rubble
																					1-2m grey + brown clay with shale
5241		0·7								5	5	2					<5	10		10425E	0-0·5m peat, qtzite rubble
																					0·5-0·7m white sandy qtzite
5242		1·2								2	10	20					<5	<10		10450E	0-1m peat qtzite rubble
																					1-1·2m white qtzite
5243		2								2	5	2					<5	<10		10475E	0-1m. peat, quartz rubble
																					1-2m brown shale
5244		1·7								2	10	20					<5	<10			0-1m peat, quartzite rubble
																					1-1·7m white siltite
5245																					

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

Tenement name S.P.L. 781 No. Sample numbers 5246 - 5256 Collected by N.R.L. Sheet no. 12

Area / Prospect BALFOUR Date July 1980

Map / Photo reference 064 Analysed by A.L.S. DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W		Grid ref	Geological Observations 793065
		o/c sample type *** / s sample type **** depth																		
5246		1·8							10	25	20					520	10	10400N	10525E	0-1m peat
																				1-1·8m dark brown shale
5247		2							2	15	20					<5	<10	10400N	10550E	0-1m peat
																				1-2m Karlik. shale
5248		2							10	40	35					<5	<10	10400N	10600E	0-1m peat
																				1-2m dark brown to green clay (weathered clay)
5249		1·8							5	10	5					<10	<10		10625E	0-1m peat
																				1-1·8m brown shale
5250		1·8							5	10	10					5	<10	10300N	10450E	0-1m peat, rubble
																				1-1·8m pale green shale
5251		1							5	15	5					5	10			0-0·5m peat
																				0·5-1m dark brown shale
5252		1·2							15	10	5					5	<10			0-0·2m peat
																				0·2-1·2m weathered yellow shale
5253		1·2							10	15	2					<5	<10			0-0·5m peat
																				0·5-1·2m yellow grey shale
5254		1·5							10	10	5					<5	<10			0-1m peat
																				1-1·5m yellow shale
5255		2							10	15	10					<5	10			0-1·2m peat
																				1·2-2m yellow clay
5256		1·5							10	10	10					<5	<10		10600E	0-1·5m yellow clay

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE EDGER

Tenement name: S.P.L. 781 | No. | Sample numbers: 5257 - 5269 | Collected by: N.R.L | Sheet no: 73

Area / Prospect: MCFOUR | Date: July 1980

Map / Photo reference: A 02143 | 065 | Analysed by: A.L.S | DPO no:

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type **** depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W		Grid ref	Geological Observations 793066
5257		1·2								10	25	10					550	10	10200N	10475E	0-0·2 road
																					0·2-1·2m orange clay
5258		1·2								60	30	20					50	<10		10450E	0-0·7m peat
																					0·7-1·2m orange clay
5259		2·5								2	15	2					160	10	9400N	10000E	0-1·5m tin bearing wash. 1·5-2·5m pale
																					grey to brown silty shale
5260		2								2	5	2					40	20		10025E	0-0·5m qtzite rubble
																					0·5-2m soft white siltstone
5261		1·2								2	10	2					235	60		10050E	0-0·7 qtzite rubble
																					0·7-1·2m white siltstone and qtz
5262		1·4								2	15	2					75	20		10075E	0-1m gravel
																					1-1·4 dark brown weathered shale
5263		0·5								2	5	2					55	20		10100E	0-0·5m white qtzite
5264		3·5								2	15	2					145	10		10125E	0-3m wash
																					3-3·5m dark brown shale
5265		0·7								5	15	2					50	10	9500N	10000E	0-0·5m peat
																					0·5-0·7m brown shale
5266		1·2								2	10	5					0·1%	60		10025E	0-0·7m peat, gravel
																					0·7m-1·2m dark brown sandy shale
5267		0·8								2	10	2					35	50		10050E	light brown shale
5268		0·5								2	10	2					40	<10	9600N	10075E	" " "
5269		1·5								5	5	2					145	50		10100E	light brown sandy tourmulinised qtzite - poss. fault zone

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION : GEOCHEMICAL SAMPLE EDGER

Tenement name S.P.L. 781 No. Sample numbers 5270 — 5282 Coll by N.R.L Sheet no. 74

Area / Prospect LEFOUR Date July 1980

Map / Photo reference 066 Analysed by A.L.S DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** depth	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W	.	Grid ref	Geological Observations 793067
5270		1·5									2	10	5					225	10	9600N	10125E	light grey green siltstone
5271		1·5									2	5	2					75	10		10000E	" " " sandy shale
5272		1·5									2	10	20					50	60		10025E	0-0·5m peat
																						0·5-1·5m pale yellow green sandy shale
5273		1									<2	10	5					195	70		10050E	thinly laminated grey green shale
																						and qtz veins
5274		2									<2	5	2					130	70		10075E	light brown - green sandy shale
5275		1·3									2	10	5					50	40		10100E	0-0·5m peat
																						0·5-1·3m pale yellow shale
5276		1·5									2	15	5					70	20		10125E	0-0·5m peat
																						0·5-1m pale yellow shale
5277		1									5	15	20					30	<10	10100N	9975E	0-0·5m peat
																						0·5-1m brown shale
5278		1·2									2	15	10					0·16%	10		9950E	0-0·7m peat
																						0·7-1·2m light grey shale
5279		1·1									10	15	20					15	<10		9925E	0-0·2 peat
																						0·2-1·1 kahki shale
5280		1									10	15	15					145	20		9900E	0-0·5m road
																						0·5-1m grey shale
5281		0·9									5	30	260					575	10		9875E	0-0·5m peat
																						0·5-0·9m stiff green clay
5282		1·2									10	20	300					60	<10		9850E	0-0·7m peat
																						0·7-1·2m grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE EDGER

Tenement name S P.L. 781 No. Sample numbers 5283 - 5294 Collected by N.R.L Sheet no. 75

Area / Prospect LEFOUR Date July 1980

Map / Photo reference 067 Analysed by A.L.S DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	depth	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W		Grid ref	Geological Observations 793068
5283		1·2										10	20	30					335	20	10000N	9975E	0-0·5m road
																							0·5m-1·2m yellow and green shale
5284		0·4										110	40	50					550	20		9950E	0-0·4m dark green pyritic clay
5285		1										10	20	15					255	20		9925E	0-0·5 peat
																							0·5-1 hard brown and grey shale
5286		1										5	10	10					265	40		9900E	0-0·5m peat
																							0·5-1m light grey shale
5287		1·2										15	20	50					25	10		9875E	0-0·7m peat
																							0·7-1·2m grey shale
5288		0·5										40	15	20					10	<10		9850E	0-0·5 yellow green clay
5289		1										35	15	30					40	<10		9825E	0-0·5m peat
																							0·5-1m grey shale
5290		3										35	40	520					120	60		9800E	0-2·5m peat
																							2·5-3m sandy grey shale
5291		1·5										2	10	5					5	<10		9725E	0-0·5m peat
																							0·5-1·5m white silty qtzite
5292		2										5	10	5					<5	<10		9700E	0-1m peat rubble
																							1-2m white silty qtzite
5293		1·2										2	5	2					<5	10		9675E	0-0·7m peat rubble
																							0·7m-1·2m white silty qtzite
5294		3·5										2	5	2					420	<10		9650E	0-1m peat
																							1-3·5m soft white silty qtzite

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE EDGER

Tenement name S.P.L. 781 No. Sample numbers 5294 — 5304 Collected by N.R.L. Sheet no 76

Area / Prospect B FOUR 068 Date July 1980

Map / Photo reference Analysed by A.L.S. DPO no

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W		Grid ref	Geological Observations 793069
		depth																				
5294		3.5									2	5	2					420	<10	10000N	9650E	0-1m peat
																						1-3.5m soft white silty qtzite
5295		2.5									2	10	5					<5	<10		9625E	0-0.2m peat rubble
																						0.2-2.5m hard black silty shale
5296		1.5									2	5	10					30	<10		9600E	0-1m peat, rubble
																						1-1.5m pale grey sandy shale
5297		1.3									2	5	2					15	<10		9575E	0-1m peat, qtzite, rubble
																						1-1.3m white silty qtzite
5298		1.5									5	5	5					<5	<10		9550E	0-1m peat, rubble
																						1-1.5m grey shale
5299		1									5	10	2					10	<10		9525E	0-0.8m rubble
																						0.8m-1m light grey sandy shale
5300		1.4									5	10	2					10	<10		9500E	0-1.2m peat rubble
																						1.2-1.4m dark grey shale
5301		1.2									2	<5	<2					45	40		9450E	0-1.2m peat, rubble
																						1.2m grey shale
5302		1.5									2	10	<2					5	<10		9425E	0-1m peat, rubble
																						1-1.5m hard dark grey shale
5303		1.2									5	50	5					10	<10		9400E	0-1m peat, rubble
																						1-1.2m dark brown sandy shale
5304		1.2									10	10	<2					<5	<10		9375E	0-0.7m peat
																						0.7m-1.2m dark green grey sandy shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION GEOCHEMICAL SAMPLE EDGER

Tenement name S.P.L. 781 No. Sample numbers 5305 — 5315 Collected by N.R.L. Sheet no. 77

Area / Prospect Four Da July 1980

Map / Photo reference 069 Analysed by A.L.S. DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W		Grid ref	Geological Observations 793070
5305		1·6									5	10	<2					<5	<10	10002N	9350E	0-0·2m peat
																						0·2-1·5m light green brown sandy shale
5306		1									<2	20	<2					10	<10		9325E	0-0·5m peat
																						0·5m-1m light brown sandy shale
5307		1									5	15	<2					5	10		9300E	0-0·5m peat
																						0·5-1m light brown sandy shale
5308		1·7									10	20	2					<5	10	9900N	9300E	0-1m peat, rubble
																						1-1·7m dark green sandy shale
5309		1·2									10	50	275					<5	<10		9325E	0-0·7m peat
																						0·7-1·2m yellow grey shale
5310		1·5									<2	5	100					<5	<10		9350E	0-1m peat rubble
																						1-1·5m yellow silty sandy clay
5311		1·2									<2	5	10					45	10		9375E	0-0·7m peat, rubble
																						0·7-2m white silty qtzite
5312		1·5									<2	5	<2					60	20		9400E	0-1m peat, rubble
																						1-1·5m white silty qtzite
5313		1·7									5	10	<2					35	10		9425E	0-1·2m peat, rubble
																						1·2-1·7m grey shale
5314		1·5									10	70	40					<5	<10		9450E	0-1m peat rubble
																						1-1·5m light brown green shale
5315		1·2									2	20	<2					<5	<10		9475E	0-0·7m peat, rubble
																						0·7-1·2m light brown shale
																					9500E	0-0·5m peat, rubble

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION GEOCHEMICAL SAMPLE EDGER

Tenement name S.P.L. 781 No. Sample numbers 5316 — Collected by N.R.L Sheet no. 78

Area / Prospect BOOR 070 Date July 1980

Map / Photo reference Analysed by A.L.S. DPO no

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** depth	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn	Au	Sn	W		Grid ref	Geological Observations 793071
5316		0·7									45	20	2					5	40	9900N	9500E	0-0·5m peat rubble
																						0·5-0·7m hard light brown shale
5317		1									<2	10	<2					10	<10		9525E	0-0·5m peat
																						0·5-1m white silty qtzite
5318		1·5									2	5	<2					5	<10		9550E	0-1m peat, rubble
																						1-1·5m white silty qtzite
5319		2									<2	10	<2					<5	10		9575E	0-1m peat rubble
																						1-2m white silty qtzite
5320		3·5									2	20	<2					40	20		9600E	0-3m peat, rubble, white siltstone
																						3-3·5m hard black siltstone/shale
5321		2·3									20	20	170					10	10	9600N	10325E	0-1·8m peat, alluvium
																						1·8m-2·3m light grey shale
5322		1·5									2	35	280					25	10	9500N	10350E	0-1m peat
																						1-1·5m light grey green shale
5323		2·3									100	50	480					125	20.		10375E	0-2m peat wash
																						2-2·3m stiff green clay

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name EL 7581 No. Sample numbers 071 Collected by NRL Sheet no. 1
Area / Prospect BALFOUR Date OCT 1990
Map / Photo reference Analysed by A.L.S. DPO no.
A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Fe	Au	Sn	W.	Grid ref	Geological Observations 793072
7522		2								<5	5	10	1		0·34		5	<10	9200E	0-1 peat
																				1-2 grey shale
7521		2								5	10	20	1		1·32		<5	<10	9225E	0-1 peat
																				1-2 yellow shale
7520		1								10	20	10	1		0·38		<5	<10	9250E	0-0.5 peat
																				0.5-1 hard khaki shale
7519		0·5								15	30	65	1		0·32		<5	<10	9275E	0-0.3 peat
																				0.3-0.5 hard khaki shale
7518		2								10	20	40	1		0·36		<5	<10	9300E	0-1 peat
																				1-2 grey shale
7517		2								40	15	75	1		0·58		<5	<10	9325E	0-0.5 peat
																				0-1 sand
																				1-2 yellow to grey shale
7516		2								5	5	10	1		0·20		<5	<10	9350E	0-0.2 peat
																				0.2-1 sand
																				1-2 dark brown shale
7515		3·5								<5	10	20	<1		0·28		<5	<10	9375	0-1 peat
																				1-2.5 gravel, sand
																				2.5-3.5 brown pyritic wh. sandy shale?
7514		5								5	10	30	<1		0·38		<5	<10	9600E	0-4 peat, sand, gravel
																				4-5 yellow green sand shale
7513		5								15	25	70	1		0·44		<5	<10	9625E	0-3 peat, rubble
																				3-5 grey shale.

* Sample type ss = stream sediment oc = outcrop f = float s = soil
** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)
**** Soil sample type auger hole or pit depth m A, B or C horizon

C[illegible] EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S[illegible] 781 No. ..... Sample numbers ..... Collected by NRK Sheet no. 2

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... 072 Analysed by ALS DPO no. .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl wi al co ca pH; o/c sample type *** Depth; s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	900cN	Grid ref	Geological Observations 793073
7512		1.5		10	5	10	1		0.34		5	<10		96506	0-1 peat
															1-1.5 light grey shale
7511		2		10	10	60	1		0.46		<5	<10		96756	0-1 peat
															1-2 dark grey pyritic shale
7510		2		10	15	100	<1		0.30		<5	<10		97006	0-1 peat
															1-2 light grey shale
7509		2		110	35	240	2		4.40		<5	10		97256	0-1 peat
															1-2 dark green shale
7508		1.5		5	5	5	<1		1.10		<5	<10		97506	0-1 peat, rubble
															1-1.5 yellow shale
7507		1.2		<5	20	10	1		0.90		<5	<10		97756	0-0.5 peat rubble
															0-1.2 grey-green shale
7506		1.5		5	50	10	2		1.00		10	<10		98006	0-0.5 peat
															0.5-1.5 yellow shale
7505		2.2		65	40	20	1		1.24		10	<10		98256	0-0.5 peat
															0.5-1.7 gravel
															1.7-2.2 green sandy shale
7504		1.2		10	40	90	1		2.40		5	<10		98506	0-0.2 peat
															0.2-1.2 light grey shale
7503		3.3		<5	10	100	<1		0.26		<5	10		98756	0-0.5 peat
															0.5-3.3 brown sandy gravel - possible alluvial SnO_2 grains. Unable to penetrate boulder bed

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ST 781 No. ..... Sample numbers ..... Collected by: NRL Sheet no. 3

Area / Prospect: BALFOUR Date: Oct 1980

Map / Photo reference: 073 Analysed by: ALS DPO no.

A 02143

Sample No.	Type (ss * oc f s)	ss channel ** fl	wi	al	co	ca	pH	Carbon	Cu	Pb	Zn	Ag	Mo	~~Mn~~ Fe	Au	Sn	W	8000N	Grid ref	Geological Observations 793074
		o/c sample type *** / s sample type **** Depth							Metal content ppm or %											
7502		0.5							<5	<5	5	<1		800		<5	<10		9950E	0-0.2 peat
																				0.2 - 0.5 white sandy, wh. conglom
7501		1							<5	<5	2	<1		600		<5	40		10000E	0-0.7 peat
																				0.7-1 white sandy quartzite v. hard
7523		2							<5	5	10	<1		0.40		5	<10	8200N	9200E	0-0.2 peat
																				0.2-1 quartzite rubble
																				1-2 grey shale
7524		1.5							<5	50	10	3		0.22		10	<10		9225E	0-1 peat
																				1-1.5 light brown sandy shale
7525		2							<5	10	10	6		0.34		15	<10		9250E	0-0.5 peat
																				0.5-2 light grey shale
7526		2							100	350	300	3		1.12		15	<10		9275E	0-0.5 peat
																				0.5-2m light grey shale
7527		2							20	60	620	1		1.96		<5	<10		9300E	0-1 peat
																				1-2 grey shale
7528		2							55	130	330	1		2.40		<5	<10		9325E	0-1 peat
																				1-2 grey shale
7529		2							25	30	90	2		1.24		<5	<10		9350E	0-1 peat
																				1-2 grey pyritic? shale.
7530		1.8							15	20	140	1		1.40		<5	<10		9375E	0-1 peat
																				1-1.8 grey shale
7531		2							10	10	30	1		1.06		<5	<10		9400	0-0.5 peat
																				0.5-2 pale grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. ..... Sample numbers 074 Collected by N.R.L Sheet no. 4

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... Analysed by A.L.S DPO no.....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl wi al co ca pH; o/c sample type *** Depth; s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Me Fe	Au	Sn	W	8200N	Grid ref	Geological Observations 793075
+532		2		45	10	30	3		1·84		<5	<10		94256	0-1 peat
															1-2 yellow and grey laminated shale
+533		2		20	10	25	1		1·52		<5	<10		94506	0-0.5 peat
															0.5-2 yellow to grey shale
+534		2		25	5	2	1		2·80		<5	<10		94756	0-0.5 peat
															0.5-2 grey to khaki shale
+535		1·5		15	10	20	2		2·40		<5	<10		95006	0-0.2 peat
															0.2-1.5 grey shale
7536		2		45	10	10	1		1·56		<5	<10		95256	0-0.5 peat
															0.5-2 grey shale with yellow clays
+537		1·5		5	10	30	1		1·32		<5	<10		95506	0-0.5 peat
															0.5-1.5 dark grey green shale
7538		2		10	20	50	2		1·92		<5	<10		95756	0-0.5 peat
															0.5-2 grey green shales with yellow clay
7539		2		20	175	180	2		1·32		<5	<10		96006	0-0.5 peat
															0.5-2 grey green shale
7540		2		5	25	135	1		0·28		<5	<10		96256	0-0.5 peat
															0.5-2 yellow grey shale
7541		2		10	20	10	1		0·46		<5	<10		96506	0-0.5 peat
															0.5-2 grey shale
7542		2		20	20	20	2		0·48		<5	<10		96756	0-0.5 peat
															0.5-2 grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S[illegible]781 No. ..... Sample numbers ..... Collected by NRL Sheet No. 5

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... 075 Analysed by ALS DPO no. .....

A 02143

Sample No.	Type (ss * oc f s)	ss channel ** fl	wi	al	co	ca	pH	Carbon	Cu	Pb	Zn	Ag	Mo	~~Mn~~ Fe	Au	Sn	W	8200N	Grid ref	Geological Observations 793076
		o/c sample type *** / s sample type **** Depth							Metal content ppm or %											
7543		2							115	150	40	3		6		<5	<10		9700E	0-0.5 peat
																				0.5-2 Khaki shale
7544		1.5							5	15	5	1		1.36		<5	<10		9725E	0-0.5 peat
																				0.5-1.5 grey green shale
7545		1.2							10	20	15	2		1.54		<5	<10		9750E	0-0.2 peat
																				0.2-1.2 grey shale
7546		1.5							<5	10	10	1		0.80		5	<10		9775E	0-0.5 peat
																				0.5-1.5 light grey shale
7547		2							20	15	50	3		2.40		30	<10		9800E	0-1.5 quartzite rubble
																				1.5-2 hard yellow shale
7548		1.8							5	10	10	1		0.46		<5	<10		9825E	0-1m peat rubble
																				1-1.8 pale yellow-grey shale
7549		1.5							90	20	30	2		1.95		5	<10		9850E	0-0.2 peat
																				0.2-1.5 light grey shale
7550		1.5							10	95	235	1		1.80		5	<10		9875	0-0.2 peat
																				0.2-1.5 pale yellow green shale
7551		2							65	50	140	1		2.80		5	<10		9900E	0-0.5 peat
																				0.5-2 pale grey shale
7552		1.5							5	10	75	1		3.60		<5	<10		9925E	0-0.2 peat
																				0.2-1.5 pale grey shale
7553		2							10	25	110	2		4.40		<5	<10		9950E	0-0.5 peat
																				0.5-2 pale grey green shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SP 781 No. ..... Sample numbers ..... Collected by N RL Sheet no. 6

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... 076 Analysed by A.A.S DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn / Fe	Au	Sn	W	8200N	Grid ref	Geological Observations 793077
7554		2									30	20	50	2		3.20		5	<10		99756	0-0.5 peat
																						0.5-2 pale yellow green shale
7555		1.5									<5	10	75	2		2.80		<5	<10		100006	0-0.2 peat
																						0.2-1.5 pale grey-green shale
7586		1.5									20	15	10	<1		0.80		5	<10	9400N	92006	0-0.2 peat
																						0.2-1.5 grey shale
7585		1.5									10	5	10	<1		0.66		<5	<10		92256	0-0.5 peat
																						0.5-1.5 Hard yellow sandy shale
7584		1.5									25	55	40	<1		1.44		<5	<10		92506	0-0.2 peat
																						0.2-1.5 pale green-grey shale
7583		1.5									20	15	25	<1		1.99		5	<10		92756	0-0.2 peat
																						0.2-1.5 yellow to grey shale
7582		1.5									<5	<5	20	<1		0.96		<5	<10		93006	0-0.5 peat
																						0.5-1.5 light grey-green shale
7581		1.5									<5	5	25	<1		1.04		<5	<10		93256	0-0.5 peat
																						0.5-1.5 yellow to grey-green shale
7580		1.5									85	110	35	1		0.28		<5	<10		93506	0-0.5 peat
																						0.5-1.5 grey green shale
7579		2									5	10	20	1		.58		<5	<10		93756	0-1 peat
																						1-2 grey green shale (wht to orange brown)
7578		1.5									5	5	10	1		0.16		<5	<10		94006	0-0.5 peat
																						0.5-1.5 grey to brown shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SP 781 No. ..... Sample numbers ..... Collected by NRL Sheet 7

Area / Prospect BALFOUR Date Oct 1990

Map / Photo reference ..... 077 Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9400N	Grid ref	Geological Observations 793078
7577		2									90	75	30	1		1·60		5	<10		94256	0-1 peat
																						1-2 black pyritic shale
7576		1·5									690	80	30	<1		2·04		<5	<10		94506	0-0·5 peat
																						0·5-1·5 grey green shale
7575		2									5	10	20	<1		1·80		<5	<10		94756	0-1 peat
																						1-2 dark grey shale
7574		1·5									15	15	20	<1		1·52		<5	<10		95006	0-0·5 peat
																						0·5 dark grey shale
7573		2									30	50	70	1		2·40		<5	<10		95256	0-1 peat
																						1-2 grey shale
7572		2									15	5	30	<1		1·24		5	<10		95506	0-0·5 peat
																						0·5-2 grey shale
7571		2									<5	5	70	1		2·40		<5	<10		95756	0-1 peat
																						1-2 grey green shale
7570		2									10	30	150	<1		0·50		5	<10		96006	0-1 peat
																						1-2 dark grey-green shale
7569		2									10	25	155	<1		0·28		<5	<10		96256	0-1 peat
																						1-2 light grey shale
7568		2									15	10	70	<1		1		5	<10		96506	0-1 peat
																						1-2 grey pyritic shale
7567		2									15	105	65	1		0·64		<5	<10		96756	0-1 peat
																						1-2 pyritic grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type ... depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 791 No. ..... Sample numbers ..... Collected by NRL Sheet No. 8

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... 078 Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9400N	Grid ref	Geological Observations 793079
7566		2									15	30	55	1		1·40		<5	<10		97006	0-1 peat
																						1-2 pale green shale
7565		1·5									155	610	400	1		0·36		<5	<10		97256	0-0·5 peat
																						0·5-1·5 red brown wh. shale
7564		1·5									10	10	10	1		0·66		<5	<10		97506	0-05 peat, quartzite rubble
																						0·5-1 pale grey to yellow shale
7563		2									5	10	10	1		0·36		5	<10		98006	0-1 peat, quartzite rubble
																						1-2 pale grey-brown shale
7562		1·2									15	20	15	2		2·80		10	<10		99506	0-0·2 Peat
																						0·2-1·2 grey shale
7561		1·5									680	50	40	2		2·40		5	<10		98756	0-0·5 peat
																						0·5-1·5 pale green shale
7560		1·5									20	90	125	2		0·52		5	<10		99006	0-0·2 peat
																						0·2-1·5 green shale
7559		2									10	45	80	1		2·80		5	<10		99256	0-1 peat
																						1-2 light grey green shale
7558		1·5									10	25	70	2		3·20		10	<10		99506	0-0·5 peat
																						0·5-1·5 pale grey green shale
7557		1·5									20	20	90	1		3·20		<5	<10		99756	0-0·2 peat
																						0·2-1·5 pale grey green shale
7556		1·5									5	25	60	1		3·20		<5	<10		100006	0·0·2 peat
																						0·2-1·5 pale grey green shales

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 181 No. ..... Sample numbers 079 Collected by NRL Sheet no. 9

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... Analysed by ALS DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	8600N	Grid ref	Geological Observations 793080
7587		2									5	15	115	<1		0·56		5	<10		92006	0-1 peat
																						1-2 light grey shale
7588		2									<5	20	10	<1		0·34		<5	<10		92506	0-1 peat
																						1-2 grey shale
7589		2									<5	5	20	<1		0·54		<5	<10		92756	0-1 peat rubble
																						1-2 pale yellow shale
7590		2									25	580	760	1		1·60		5	<10		93006	0-1 peat
																						1-2 grey shale
7591		2									10	35	200	<1		1·80		<5	<10		93256	0-1 peat
																						1-2 grey shale
7592		2									20	30	295	1		0·88		<5	<10		93506	0-1 peat
																						1-2 yellow shale
7593		2									10	10	240	<1		2·00		5	10		93756	0-1 peat
																						1-2 grey shale
7594		1·5									20	55	175	1		0·32		<5	<10		94006	0-0·5 peat
																						0·5-1·5 grey shale
7595		1·5									10	10	5	1		1·60		70	<10		94256	0-0·5 peat
																						0·5-1·5 grey shale
7596		2									15	5	10	<1		1·92		<5	<10		94506	0-0·5 peat
																						0·5-2 grey green shale
7597		2									25	<5	10	<1		0·44		<5	<10		94756	0-0·5 peat
																						0·5-2m dark grey green shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 81 No. ..... Sample numbers ..... Collected by NRL Sheet no. 10

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... 080 Analysed by ALS DPO no. .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Cu	Pb	Zn	Ag	Mo	~~Mn~~ Fe	Au	Sn	W	8600N	Grid ref	Geological Observations 793081
		o/c sample type *** / s sample type **** Depth							Metal content ppm or %											
7598		2							5	5	10	<1		0.20		<5	<10		9500E	0-0.5 peat
																				0.5-2 pale grey shale with yellow clay
7599		2							15	5	15	<1		1.02		<5	<10		9525E	0-1 peat
																				1-2 grey shale
7600		2							10	5	600	<1		1.04		<5	<10		9550E	0-1 peat
																				1-2 pale grey shale
7601		1.5							10	20	60	<1		1.40		<5	<10		9575E	0-0.5 peat
																				0.5-1.5 pale grey green shale
7602		2							10	15	25	<1		1.02		<5	<10		9600E	0-1 peat
																				1-2 pale grey green shale
7603		1.5							40	20	90	<1		1.32		<5	<10		9625E	0-0.5 peat
																				0.5-1.5 pale yellow to dark green shale
7604		1.5							25	10	55	<1		1.74		5	<10		9650E	0-0.5 peat
																				0.5-1.5 pale grey green shale
7605		1.5							20	30	100	<1		1.68		10	<10		9675E	0-0.2 peat
																				0.2-1.5 pale grey green shale
7606		2							10	15	180	<1		1.44		<5	<10		9700E	0-0.5 peat
																				0.5-2 pale grey shale
7607		2							10	170	105	<1		1.20		5	<10		9725E	0-1 peat
																				1-2 pale green green shale
7608		1.2							20	20	25	<1		1.84		135	<10		9750E	0-1.2 yellow siliceous and
																				shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 11

Area / Prospect BALFOUR Date Oct '80

Map / Photo reference ..... 083 Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	8600N	Grid ref	Geological Observations 793082
7609		2							Depth		45	10	10	<1		2·80		10	<10		97756	0-0·2 peat
																						0·2-2 red shale
7610		2									120	20	10	<1		5·20		35	<10		99006	0-2 red brown shale
7611		1·5									5	5	40	<1		3·20		<5	<10		98256	0-0·2 peat
																						0·2-1·5 pale green shale
7612		1·8									200	10	20	<1		4·40		30	<10		98506	0-0·2 peat
																						0·2-1·8 orange shale
7613		1·5									5	20	65	<1		2·80		20	<10		98756	0-0·5 peat
																						0·5-1·5 pale grey green shale
7614		1·5									15	10	55	<1		2·80		<5	<10		99006	0-0·2 peat
																						0·2-1·5 grey green shales
7615		1·5									10	130	80	1		3·20		10	<10		99256	0-0·5 peat
																						0·5-1·5 pale grey green shale
7616		2									20	10	50	<1		3·20		10	<10		99506	0-0·5 peat
																						0·5-2 pale grey shale
7617		2									10	5	40	<1		1·48		<5	<10		99756	0-2 pale green shale
7618		1·5									15	10	85	1		3·60		5	<10		100006	0-0·2 peat
																						0·2-1·5 light grey green shale
7754		2									20	20	65	<1		0·46		<5	<10	8800N	91006	0-1 peat
																						1-2 grey shale
7753		2									20	35	140	<1		0·80		10	<10		91256	0-1 peat
																						1-2 soft grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SP[illegible]81 No. ..... Sample numbers ..... Collected by NRL Sheet No. 12

Area / Prospect BALFOUR 084 Date Oct '80

Map / Photo reference ..... Analysed by ALS DPO no. .....

A 02143

Sample No.	Type (ss * oc f s)	ss channel ** fl	wi	al	co	ca	pH	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	8800N	Grid ref	Geological Observations 793083
		o/c sample type *** / s sample type **** Depth							Metal content ppm or %											
7752		1.5							90	240	0.26	1		2.20		140	10		9150E	0-0.5 peat
																				0.5-1.5 yellow-grey shale
7751		1.8							15	110	0.17	<1		0.88		10	10		9175E	0-0.5 peat
																				0.5-1.8 pale grey shale
7650		1.8							55	0.11	780	1		1.40		20	<10		9200E	0-1 peat
																				1-1.8 dark grey shale
7649		3.5							70	325	0.14	5		1.36		80	<10		9225E	0-0.5 peat
																				0.5-2.5 gravel
																				2.5-3.5 hard grey clay (wh. shale)
7648		2							15	30	180	<1		1.12		10	<10		9250E	0-1 peat
																				1-2 grey shale
7647		1.5							15	25	90	<1		1.16		5	<10		9275E	0-0.2 peat
																				0.2-1.5 pale grey shale
7646		1.5							20	45	95	<1		1.40		<5	<10		9300E	0-0.2 peat
																				0.2-1.5 grey shale
7645		2							20	30	165	2		6.00		60	<10		9325E	0-0.2 peat
																				0.2-2 grey and yellow clay
7644		1.5							30	235	85	1		2.00		30	<10		9350E	0-0.5 peat
																				0.5-1.5 pale grey shale
7643		1.5							<2	10	20	<1		1.08		5	<10		9375E	0-0.5 peat
																				0.5-1.5 pale grey shale
7642		1.5							10	20	40	<1		1.96		10	<10		9400E	0-0.5 peat
																				0.5-1.5 dark grey green shales

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPZ 781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 13

Area / Prospect BALFOUR 081 Date Oct 1980

Map / Photo reference ..... Analysed by ALS DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl wi al co ca pH; o/c sample type ***	Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	8800N	Grid ref	Geological Observations 793084
7641			2		55	340	325	<1		1·92		5	<10		94256	0-1 peat
																1-2 Khaki shale
7640			1·5		10	10	10	<1		0·36		10	<10		94506	0-0·5" peat
																0·5-1·5" black shale
7639			2		15	20	45	<1		1·00		5	<10		94756	0-1 peat
																1-2 pale grey shale
7638			2		10	15	185	<1		1·60		<5	<10		95006	0-1 peat
																1-2 Khaki shale
7637			2		120	130	100	1		2·40		5	<10		95256	0-1 peat
																1-2 Khaki shale
7636			1·5		20	5	25	<1		2·04		5	10		95506	0-0·5 peat
																0·5-1·5 dark Khaki shale
7635			2		30	50	40	1		1·60		30	<10		95756	0-1·7 peat, gravel
																1·7-2 hard grey shale
7634			2		15	35	50	<1		1·76		<5	<10		96006	0-1 peat
																1-2 pale grey shale
7633			2		30	15	125	1		0·24		25	<10		96256	0-1 peat
																1-2 grey shale
7632			2		15	10	120	<1		2·80		10	<10		96506	0-1 peat
																1-2 grey shale
7631			1·7		15	50	215	1		3·20		15	<10		96756	0-0·5 peat
																0·5-1·7 grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SP[illegible]781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 14

Area / Prospect BALFOUR 085 Date OCT 1980

Map / Photo reference ..... Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl wi al co ca pH; o/c sample type *** / s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	880DW	Grid ref	Geological Observations 793085
7630		1·5		25	15	90	<1		2·40		15	<40		9700E	0-0·5 peat, rubble
															0·5-1·5 grey shale
7629		2		25	80	200	1		1·76		50	<10		9725E	0-1 peat
															1-2 grey shale
7628		2		210	120	225	4		1·40		100	<10		9750E	0-1 peat
															1-2 dark grey shale
7627		2		55	60	500	<1		1·36		30	<10		9775E	0-1 peat
															1-2 grey shale
7626		1·5		50	260	255	<1		0·92		15	<10		9800E	0-1·5 grey shale
7625		1·5		5	5	25	<1		0·20		10	<10		9825E	0-0·2 peat
															0·2-1·5 pale grey shale
7624		2		70	25	10	<1		2·40		35	<10		9850E	0-0·5 peat
															0·5-2 yellow brown shale
7623		1·5		5	10	60	1		2·80		5	<10		9875E	0-0·5 peat
															0·5-1·5 pale grey shale
7622		2		5	10	110	1		3·60		5	<10		9900E	0-0·5 peat
															0·5-2 light grey shale
7621		1·5		5	15	80	<1		3·60		5	<10		9925E	0-0·2 peat
															0·2-1·5 light grey shale
7620		1		5	10	70	<1		3·20		15	<10		9950E	0-0·2 peat
															0·2-1 pale grey shale
7619		1		<5	5	5	<1		0·46		15	<10		9975E	0-0·2 peat
															0·2-1 hard light grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SP 781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 15

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... 082 Analysed by AMS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	900cN	Grid ref	Geological Observations 793086
7756		2									5	30	15	<1		0·60		25	<10		91506	0-1 peat, gravel
																						1-2 grey sandy shale
7757		3·5									10	90	660	1		0·38		5	20		91756	0-0·5 peat
																						0·5-3 gravel
																						3-3·5 hard grey clay (shale)
7758		2									30	150	720	<1		0·36		10	<10		92006	0-1 peat, rubble
																						1-2 grey to cream shale
7759		2									15	300	320	<1		0·32		10	<10		92256	0-0·5 peat
																						0·5-2 grey and yellow shales
7760		1·5									20	390	60	<1		0·36		5	<10		92506	0-0·2 peat
																						0·2-1·5 grey shale
7761		2									10	30	10	1		0·36		5	<10		92756	0-0·5 peat
																						0·5-2 grey shale
7762		2									10	45	40	<1		0·96		<5	<10		93006	0-0·5 peat
																						0·5-2 yellow to white clay
7763		2									30	115	240	1		1·04		15	<10		93256	0-0·5 peat
																						0·5-2 grey to cream shales
7764		2									10	40	640	<1		1·28		<5	<10		93506	0-0·5 peat
																						0·5-2 grey shale
7765		2									10	200	0·22	1		0·72		<5	<10		93756	0-0·5 peat
																						0·5-2 grey green shale
7766		1·5									15	30	80	2		2·60		5	<10		94006	0-0·5 peat
																						0·5-1·5 yellow shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S 781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 16

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... 086 Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9000N	Grid ref	Geological Observations 793087
767		1.5							Auger		5	30	80	1		3.40		5	<10		94256	0-0.5 peat
																						0.5-1.5 yellow shale
768		1.5									5	20	40	1		1.48		<5	<10		94506	0-0.5 peat
																						0.5-1.5 grey green shale
769		1.5									20	20	20	<1		1.28		<5	<10		94756	0-0.2 peat
																						0.2-1.5 yellow to grey shales
770		1.5									30	25	30	1		2.40		10	<10		95006	0-0.2 peat
																						0.2-1.5 dark green shale
771		1.5									35	30	35	1		3.20		5	<10		95256	0-0.2 peat
																						0.2-1.5 dark grey green shale
772		1.5									10	30	45	1		2.00		10	<10		95506	0-0.2 peat
																						0.2-1.5 grey to yellow shale
773		1.5									10	20	25	1		1.60		5	<10		95756	0-0.2 peat
																						0.2-1.5 dark grey green shale
774		1.5									5	20	15	1		0.98		65	<10		96006	0-0.2 peat
																						0.2-1.5 light grey green shale
775		1.5									2	25	40	1		2.40		5	<10		96256	0-0.2 peat
																						0.2-1.5 light grey green shale
776		2									5	20	55	1		1.22		<5	<10		96506	0-0.2 peat
																						0.2-2 yellow to grey shale
777		1.5									50	60	95	1		0.52		10	<10		96756	0-0.2 peat
																						0.2-1.5 dark grey green shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SL 781 No. Sample numbers Collected by NRL Sheet no. 17
Area / Prospect BALFOUR Date Oct 1980
Map / Photo reference 088 Analysed by ALS DPO no.
A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9000N	Grid ref	Geological Observations 793088
		Depth									Metal content ppm or %											
7778		1.5									70	290	340	1		1.72		<5	<10		97006	0-0.2 peat
																						0.2-1.5 grey shale
7779		2									40	145	720	1		0.64		<5	<10		97256	0-0.5 peat
																						0.5-2 grey green shale
7780		1.5									30	20	40	1		1.16		<5	<10		97506	0-0.2 peat
																						0.2-1.5 grey green shale
7781		1.5									30	20	50	<1		1.56		<5	<10		97756	0-0.2 peat
																						0.2-1.5 yellow shale
7782		2									25	20	45	<1		2.20		<5	<10		98006	0-0.5 peat
																						0.5-2 yellow to red clay (wh. shale)
7783		1.5									10	25	90	1		3.00		10	<10		98256	0-0.2 peat
																						0.2-1.5 grey shale
7784		1.5									10	25	40	<1		3.20		10	<10		98506	0-0.2 peat
																						0.2-1.5 grey shale
7785		1.5									10	25	50	1		3.60		5	<10		99006	0-0.2 peat
																						0.2-1.5 yellow shale
7786		2									35	75	370	1		6.40		15	<10		99256	0-0.5 peat
																						0.5-2 grey green shale
7787		2									10	30	90	<1		4.00		15	<10		99506	0-0.5 peat
																						0.5-2 grey green shale
7788		1.5									20	30	55	<1		2.20		15	<10		99756	

* Sample type ss = stream sediment oc = outcrop f = float s = soil
** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2
*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name 72781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 18

Area / Prospect BALFOUR Date OCT 1980

Map / Photo reference ..... 089 Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9100N	Grid ref	Geological Observations 793089
7684		2							Depth		10	15	<2	<1		028		<5	20		89006	0-0.5 peat
																						0.5-2 light grey shale
7683		1.2									2	15	<2	<1		054		<5	<10		89256	0-0.2 peat
																						0.2-1.2 pale yellow to grey shale
7682		1.5									<2	15	<2	<1		0.22		<5	<10		89506	0-0.2 peat
																						0.2-1.5 yellow to grey shale
7681		1.5									2	30	<2	<1		024		5	10		89756	0-0.5 peat, rubble
																						0.5-1.5 grey, green shale
7680		2									2	10	<2	<1		012		55	<10		90006	0-1 peat, rubble
																						1-2 light brown shale
7679		2									5	10	<2	<1		440		<5	<10		90256	0-1 peat, sand
																						1-2 dark brown shale
7678		2									2	15	<2	<1		0.15		5	<10		90506	0-0.5 peat
																						0.5-2 dark grey shale
7677		2									5	25	<2	<1		0.10		10	<10		90756	0-0.5 peat
																						0.5-2 grey to black shale
7676		3.5									2	40	<2	<1		0.20		5	10		91006	0-0.5 peat
																						0.5-2.5 sand
																						2.5-3.5 yellow sandy shale
7675		1.8									15	<5	<2	<1		360		5	<10		91256	0-0.5 peat
																						0.5-1.8 dark green brown shale
7674		1.5									5	5	<2	2		0.15		230	20		91506	0-0.5 peat
																						0.5-1.5 dark grey to grey green shales

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name [redacted] 781 No. ..... Sample numbers [redacted] ..... Collected by NRL ..... Sheet no. 19

Area / Prospect BOLTFOUR ..... Date Oct 1980

Map / Photo reference ..... 090 ..... Analysed by ALS ..... DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl wi al co ca pH; o/c sample type ***; s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9100N	Grid ref	Geological Observations 793090
7673		1.5 Depth		20	15	<2	1		800		10	<10		91756	0-0.5 peat
															0.5-1.5 red-brown to grey shale
7672		2		10	640	70	<1		0.28		10	<10		92006	0-0.5 peat
															0.5-2 dark grey green shale
7671		2		15	55	575	<1		0.28		<5	<10		92256	0-1 peat
															1-2 grey to brown sandy shale
7670		1.5		2	10	5	1		520		<5	<10		92506	0-0.5 peat, rubble
															0.5-1.5 grey to yellow shale
7669		1.5		15	15	<2	1		400		<5	<10		92756	0-0.5 peat
															0.5-1.5 dark grey green shale
7668		2		2	10	5	<1		880		40	10		93006	0-1 peat, rubble
															1-2 sandy yellow shale with qtz flags
7667		2		5	15	10	<1		021		35	<10		93256	0-1 peat, rubble
															1-2 light yellow grey shale
7666		2		10	65	15	<1		380		15	<10		93506	0-1 peat
															1-2 light grey shale
7665		2		25	0.28	800	1		014		40	<10		93756	0-0.5 peat
															0.5-2 yellow-green shale pyritic
7664		2		35	30	820	<1		0.60		30	10		94006	0-0.5 peat
															0.5-2 grey shale
7663		2		60	30	0.19	<1		1.24		55	<10		94256	0-0.5 peat
															0.5-2 grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: PL 781 No. ..... Sample numbers: ..... Collected by: NRL Sheet No. 20

Area / Prospect: BALFOUR Date: OCT 1980

091

Map / Photo reference: ..... Analysed by: ALS DPO no. .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Cu	Pb	Zn	Ag	Mo	~~Mn~~ Fe	Au	Sn	W	9100N	Grid ref	Geological Observations 793091
		o/c sample type *** / s sample type **** Depth							Metal content ppm or %											
7662		2							45	280	460	<1		1.32		<5	<10		9450E	0-0.5 peat
																				0.5-2 grey shale
7661		2							35	40	45	<1		2.40		40	<10		9475E	0-0.5 peat
																				0.5-2 grey-green clay (wh. shale)
7660		1.5							20	25	40	1		3.60		5	<10		9500E	0-0.5 peat
																				0.5-1.5 grey shale
7659		1.5							30	55	280	1		2.00		15	<10		9525E	0-0.2 peat
																				0.2-1.5 dark grey green shale
7658		1.5							10	10	520	<1		1.44		<5	<10		9550E	0-0.2 peat
																				0.2-1.5 grey shale
7657		1.5							20	<5	25	<1		1.44		15	<10		9575E	0-0.2 peat
																				0.2-1.5 pale grey shale
7656		1.5							35	5	15	<1		1.52		35	<10		9600E	0-0.2 peat
																				0.2-1.5 pale grey green shale
7655		1.5							20	40	30	<1		1.60		10	<10		9625E	0-0.5 peat
																				0.5-1.5 dark grey-green shale
7654		1.5							<2	<5	<2	<1		0.20		290	10		9650E	0-0.5 peat
																				0.5-1.5 light grey shale
7653		1.5							5	<5	30	<1		1.24		<5	<10		9675E	0-0.5 peat
																				0.5-1.5 yellow grey shale
7652		1.2							35	65	305	<1		0.62		60	<10		9700E	0-0.5 peat
																				0.5-1.2 hard grey green clay
																				(w. shale?)

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S 781 No. ..... Sample numbers ..... Collected by NRL Sh no. 21

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... 092 Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn / Fe	Au	Sn	W	1100N	Grid ref	Geological Observations 793092
7651		2									40	25	480	<1		2.40		35	<10		97256	0–1 peat
																						1–2 grey shale
7798											<2	20	55	1		0.88		10	<10		97506	
7797		1.5									90	90	150	1		1.48		10	<10		97756	0–0.5 peat
																						0.5–1.5 dark grey green shale
7796		1.2									55	85	110	1		0.76		<5	<10		98006	0–0.2 peat
																						0.2–1.2 hard light brown shale
7795		1.5									<2	15	55	1		2.20		60	<10		98256	0–0.5 peat
																						0.5–1.5 pale brown shale
7794		1.5									<2	25	35	1		3.60		5	<10		98506	0–0.5 peat
																						0.5–1.5 pale yellow shale
7793		1.5									5	20	50	1		2.20		<5	<10		98756	0–0.5 peat
																						0.5–1.5 light grey green shale
7792		1.5									10	25	350	1		3.20		<5	<10		99006	0–0.5 peat
																						0.5–1.5 pale grey green shale
7791		1									5	20	170	1		2.00		250	<10		99256	0–0.5 peat
																						0.5–1 hard green-grey shale
7790		1.5									95	20	560	1		2.60		55	<10		99506	0–0.5 peat
																						0.5–1.5 grey green shale
7789		1									<2	20	40	1		1.90		65	<10		99756	0–0.2 peat
																						0.2–1 hard grey green shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name 5781 No. ..... Sample numbers ..... Collected by N.R.L. Sheet no. 22

Area / Prospect BALFOUR Date OCT. 1980

Map / Photo reference ..... 093 Analysed by A.L.S. DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9200N	Grid ref	Geological Observations 793093
		o/c sample type ***																		
		Depth s sample type ****																		
7685		1.5							2	10	5	<1		0.36		<5	<10		89006	0-0.5 peat
																				0.5-1.5 pale yellow to green shale
7686		2							<2	20	<2	<1		0.11		<5	<10		89256	0-0.5 peat
																				0.5-2 light grey to yellow shale
7687		1.5							<2	10	<2	<1		0.88		<5	<10		89506	0-0.2 peat
																				0.2-1.5 dark grey green to black shale
7688		2							<2	5	<2	<1		0.15		<5	<10		89756	0-1 peat, sand
																				1-2 light grey sandy shale
7689		2							<2	10	<2	1		0.18		5	10		90006	0-1 peat, sand
																				1-2 hard brown clay (wh. shale)
7690		1.5							<2	10	<2	1		0.13		10	<10		90256	0-0.2 peat
																				0.2-1.5 dark brown to grey shale
7691		2							2	20	<2	<1		0.14		<5	<10		90506	0-0.5 peat
																				0.5-2 brown shale
7692		1.5							<2	20	<2	1		0.15		<5	<10		90756	0-0.5 peat, rubble
																				0.5-1.5 light grey sandy shale
7693		2							2	330	<2	<1		800		5	<10		91006	0-1 peat, rubble
																				1-2 black shale
7694		1.5							<2	20	<2	1		400		<5	<10		91256	0-0.5 peat
																				0.5-1.5 light grey sandy shale
7695		1.7							<2	10	<2	1		640		<5	20		91506	0-1 peat, rubble
																				1-1.7 hard brown sandy shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name [illegible]781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 23

Area / Prospect BALFOUR 094 Date Oct 1980

Map / Photo reference ..... Analysed by ALS DPO no. .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl wi al co ca pH; o/c sample type *** Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9200N	Grid ref	Geological Observations 793094
7696		1.5		<2	35	10	3		460		5	<10		91756	0-0.5 peat
															0.5-1.5 grey to dark brown sandy shale
7697		1.5		5	10	10	1		0.18		10	<10		92006	0-0.2 peat
															0.2-1.5 black shale
7698		2		45	20	25	1		0.72		10	<10		92256	0-0.5 peat
															0.5-2 black shale
7699		1.5		10	15	15	1		0.22		10	<10		92506	0-0.2 peat
															0.2-1.5 dark grey green to brown shale
7700		2		20	5	10	<1		0.48		<10	<10		92756	0-0.5 peat
															0.5-2 yellow to grey shale
7701		2		10	30	15	1		4.80		5	<10		93006	0-0.5 peat
															0.5-2 orange clay
7702		2		10	20	10	<1		0.28		5	<10		93256	0-0.5 peat
															0.5-2 pale grey shale
7703		2		10	15	20	2		6.40		535	30		93506	0-0.5 peat
															0.5-2 brown clay, white mottled
7704		1.8		10	20	15	2		0.26		5	<10		93756	0-0.5 peat
															0.5-1.8 hard brown to grey shale
7705		1		100	160	45	1		0.14		10	<10		94006	0-0.2 peat
															0.2-1 hard brown shale
7706		1.2		10	25	115	1		1.60		<5	<10		94256	0-0.2 peat
															0.2-1.2 dark grey green shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name.....EL 2791..... No. ..... Sample numbers..... Collected by.....N.R.L..... Sheet no. 24

Area / Prospect.....BALFOUR..... Date.....OCT. 1980.....

Map / Photo reference..... 095 Analysed by.....ALS..... DPO no.....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9200N	Grid ref	Geological Observations 793095
7707		1									5	20	40	1		2.20		5	<10		9450E	0-0.2 peat
																						0.2-1 hard grey shale
7708		1.2									20	25	115	1		1.00		25	<10		9475E	0-0.2 peat
																						0.2-1.2 dark grey shale
7709		2									40	40	85	1		0.92		5	<10		9550E	0-0.5 peat
																						0.5-2 grey shale
7710		2									400	300	0.12	3		0.64		120	10		9575E	0-1 peat
																						1-2 brown green clays (w. shale)
7711		2									250	0.12	0.12	2		1.28		40	<10		9600E	0-1 peat
																						1-2 grey shale
7712		2									20	30	180	1		1.00		5	<10		9625E	0-1 peat
																						1-2 grey shale
7713		2									10	25	290	1		2.00		5	<10		9650E	0-1 peat
																						1-2 pale grey shale
7714		1									480	540	720	2		1.12		75	30		9675E	0-0.2 peat
																						0.2-1 grey brown shale
7715		2									15	30	70	1		2.20		45	<10		9700E	0-0.5 peat
																						0.5-2 yellow green shale
7716		1.5									10	20	45	1		2.00		30	<10		9725E	0-0.2 peat
																						0.2-1.5 grey green shale
7717											15	30	40	1		2.20		10	<10		9750E	

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name EL 781 No. ..... Sample numbers 096 Collected by NRL Sheet no. 25

Area / Prospect BALFOUR Date OCT 1980

Map / Photo reference ..... Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo Fe	Mn	Au	Sn	W	9200N	Grid ref	Geological Observations 793096
7718		1									5	15	35	1	1·20			5	<10		97756	0-0·2 peat
																						0·2-1 pale grey green shale
7719		1·5									10	20	80	1	1·04			20	<10		98006	0-0·2 peat
																						0·2-1·5 dark green grey shale
7720		2									25	30	35	3	0·72			20	10		98256	0-0·5 peat
																						0·5-2 pale green shale
7721		1·5									10	50	40	2	2·00			0·20	330		98506	0-0·2 peat
																						0·2-1·5 pale grey green shale
7722		2									10	20	20	<1	1·68			25	40		98756	0-0·5 peat
																						0·5-2 pale yellow green shale
7723		1·5									5	25	35	1	2·40			10	<10		99006	0-0·2 peat
																						0·2-1·5 light grey green shale
7724		1·5									5	25	35	1	2·20			<5	<10		99256	0-0·2 peat
																						0·2-1·5 light grey green shale
7725		1·5									10	20	15	2	0·98			35	<10		99506	0-02 peat
																						0·2-1·5 grey brown shale
7726		2									5	15	10	1	0·76			45	10		99756	0-0·5 peat
																						0·5-2 pale grey green shale
7815		1·5									5	20	2	1	0·32			5	<10	9300N	99006	0-0·5 peat
																						0·5-1·5 grey shale
7814		1·2									5	20	5	1	0·40			<5	10		89256	0-0·5 peat
																						0·5-1·2 dark brown shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL791 No. ..... Sample numbers ..... Collected by NRL Sheet no. 26

Area / Prospect BALFOUR 098 Date Oct 1980

Map / Photo reference ..... Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9300N	Grid ref	Geological Observations 793097
		o/c sample type ***																		
		Depth s sample type ****																		
T813		3							5	20	5	<1		0·40		<5	<10		8950E	0-0·5 peat
																				0·5-2·5 sand, rubble
																				2·5-3 grey, sandy shale
T812		2							10	20	2	1		0·76		<5	10		8975E	0-0·5 peat
																				0·5-1·5 orange (Fe st.) sand
																				1·5-2 yellow sandy shale? (hard)
7811		1·5							5	15	2	<1		0·58		<5	10		9000E	0-0·5 peat, rubble
																				0·5-1·5 yellow sandy shale
7810		1·5							10	20	5	1		0·30		<5	<10		9025E	0-0·2 peat
																				0·2-1·5 light yellow to cream shale
7809		1·5							10	15	5	<1		0·32		<5	<10		9050E	0-0·2 peat
																				0·2-1·5 hard brown sandy shale
7808		2							2	20	5	<1		0·28		<5	<10		9075E	0-1 peat, white sand
																				1-2 grey sandy shale
7807		2							5	20	5	<1		0·16		<5	<10		9100E	0-1 peat, white sand
																				1-2 dark brown to grey sandy shale
7806		2							10	105	10	1		1·10		<5	<10		9225E	0-1 peat, rubble
																				1-2 yellow-grey shale
7805		1·8							20	85	35	1		0·94		10	<10		9275E	0-0·5 peat, gravel
																				0·5-1·8 dark grey-black shale
7804		2							10	80	10	2		0·66		15	10		9300E	0-0·5 peat
																				0·5-2 dark grey brown shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name S 781 No. ..... Sample numbers ..... Collected by NRL Sh no. 27

Area / Prospect BALFOUR 099 Date OCT 1980

Map / Photo reference ..... Analysed by ALS DPO no. .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl / wi / al / co / ca / pH; o/c sample type ***; s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9300N	Grid ref	Geological Observations 793098
7803		1.5		2	25	20	1		0.32		50	30		93256	0-0.5 peat
															0.5-1.5 grey shale
7802		1.5		10	40	25	1		0.22		<5	<10		93506	0-0.5 peat, gravel
															0.5-1.5 brown shale
7801		2		5	50	10	1		1.96		10	<10		93756	0-0.5 peat, gravel
															0.5-2 bright orange to white clay
7750		1.5		10	25	5	1		0.84		10	<10		94006	0-0.5 peat, gravel
															0.5-1.5 grey shale
7749		1.5		10	280	15	1		1.78		450	<10		94256	0-0.2 peat
															0.2-1.5 yellow to grey shale
7748		1.5		5	25	10	1		0.72		25	10		94506	0-0.2 peat
															0.2-1.5 grey to yellow shale
7747		1		20	20	5	1		1.56		<5	<10		94756	0-0.2 peat
															0.2-1 Khaki shale
7746		0.9		20	25	120	2		7.60		5	<10		95006	0-0.2 peat
															0.2-0.9 Khaki shale
7745		0.8		30	50	10	1		1.28		<5	<10		95256	0-0.2 peat
															0.2-0.8 dark grey green shale
7744		1		10	20	60	1		0.88		10	<10		95506	0-0.2 peat
															0.2-1 yellow-grey shale
7743		1.5		270	60	0.18	1		1.72		95	<10		95756	0-0.5 peat
															0.5-1.5 dark grey-green shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A B or C horizon

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SP 7981 No. Sample numbers Collected by NRL Sheet no. 28

Area / Prospect BALFOUR Date OCT 1980

Map / Photo reference Analysed by ALS DPO no

A 02143

100

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9300	Grid ref	Geological Observations 793099
7742		2							Depth		15	20	230	1		0.98		35	<10		96006	0-1 peat, gravel
																						1-2 grey green shale
7741		1.5									15	20	220	1		1.56		20	<10		96256	0-0.5 peat
																						0.5-1.5 grey green shale
7740		2									10	30	115	1		0.76		5	<10		96506	0-1 peat
																						1-2 grey shale
7739		2									15	35	160	1		0.96		25	20		96756	0-1 peat
																						1-2 grey shale
7738		2									15	30	110	1		1.52		5	<10		97006	0-1 peat
																						1-2 grey shale
7737		3.5									20	45	350	1		0.92		10	20		97256	0-1.5 peat, gravel
																						1.5-3.5 grey shale
7736		1.5									5	30	190	1		0.94		20	<10		97506	0-0.5 peat
																						0.5-1 light grey shale
7735		1.5									95	90	210	1		1.20		10	<10		97756	0-0.7 peat
																						0.7-1.5 grey shale
7734											10	20	25	<1		1.08		50	<10		98006	
7733		2									10	20	30	<1		1.32		35	<10		98256	0-0.5 peat
																						0.5-2 grey green shale
7732		2									10	15	10	1		0.64		20	<10		98506	0-0.5 peat
																						0.5-2 light yellow grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: SPL 781 No. ..... Sample numbers ..... Collected by: NRL Sheet no. 29

Area / Prospect: BELFOUR Date: OCT 1980

Map / Photo reference: 101 Analysed by: ALS DPO no.

A 02143

Sample No.	Type (ss * oc f s)	ss channel ** fl	wi	al	co	ca	pH	Carbon	Cu	Pb	Zn	Ag	Mo	~~Mn~~ Fe	Au	Sn	W	9300N	Grid ref	Geological Observations 793100
		o/c sample type *** / s sample type **** Depth							Metal content ppm or %											
7731		2							15	30	25	1		4.40		10	<10		9875E	0-0.5 peat
																				0.5-2 khaki shale
7730		1.5							5	20	5	<1		0.44		5	<10		9900E	0-0.5 peat
																				0.5-1.5 light brown shale
7729		1.5							10	20	15	1		0.12		10	<10		9925E	0-0.5 peat
																				0.5-1.5 brown shale
7728		1.5							45	60	0.26	1		0.80		75	20		9950E	0-0.5 peat
																				0.5-1.5 brown shale
7727		1.5							20	15	95	1		1.64		20	<10		9975E	0-0.7 peat
																				0.7-1.5 khaki shale
7816		2							5	20	5	<1		0.28		10	<10	7500N	9400E	0-0.5 peat, rubble
																				0.5-2 dark grey shale
7817		1.5							10	20	10	1		0.24		25	10		9425E	0-0.5 peat, rubble
																				0.5-1.5 dark grey shale
7818		2							5	25	5	1		0.16		10	<10		9450E	0-0.5 peat
																				0.5-2 dark grey shale
7819		1.5							120	125	10	2		0.26		10	<10		9475E	0-0.5 peat
																				0.5-1.5 dark grey green shale
7820		1.2							10	25	15	1		0.60		45	20		9500E	0-0.2 peat
																				0.2-1.2 black shale
7821		1.2							10	40	45	1		1.60		10	10		9525E	0-0.2 peat
																				0.2-1.2 pale grey green shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SP 7781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 30

Area / Prospect BALFOUR Date Oct 1985

Map / Photo reference ..... 102 Analysed by ALS DPO no. .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Fe	Au	Sn	W	9500N	Grid ref	Geological Observations
									Depth		Metal content ppm or %											793101
7822									1		10	25	55	1		1.40		5	<10		95 E	0-0.2 peat
																						0.2-1 light grey green shale
7823		2									25	20	100	1		1.64		<5	<10		95756	0-2 light grey shale
7824		2									20	30	65	1		2.04		5	<10		96006	0-1 peat, gravels
																						1-2 light grey shale
7825		1.2									30	30	310	<1		1.92		<5	10		96256	0-0.2 peat
																						0.2-1.2 brown shale
7826		1.2									75	50	300	1		2.26		15	<10		96506	0-0.2 peat
																						0.2-1.2 brown shale
7827		1.5									10	40	95	2		0.74		60	20		96756	0-0.5 peat, gravel
																						0.5-1.5 brown to grey shale
7828		3.5									20	45	280	1		1.96		10	10		67006	0-2.5 peat, gravel
																						2.5-3.5 light grey shale
7829		2.5									15	15	250	1		1.54		<5	<10		97256	0-2 peat, gravel
																						2-2.5 light grey shale
7830		2									70	25	700	1		1.72		200	<10		97506	0-1 peat, gravel
																						1-2 light grey shale
7831		3.5									50	200	0.14	2		1.18		450	30		97756	0-2.5 peat, gravel
																						2.5-3.5 grey clay
7832		2									110	400	0.28	2		2.06		45	10		98006	0-1 peat, gravel
																						1-2 grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** S... [illegible]

C.R. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name 4781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 31

Area / Prospect BALFOUR Date Oct 1980

Map / Photo reference ..... 103 Analysed by ALS DPO no. .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9500N	Grid ref	Geological Observations 793102
7833		1.2							Dpth		30	50	260	1		1·18		30	<10		9925E	0-0.2 peat
																						0.2-1 grey shale
7834		1.5									40	95	115	1		0.58		10	<10		9850E	0-0.2 peat
																						0.2-1.5 light grey brown shale
7835		2									5	10	20	1		0.44		120	100		9875E	0-1 road fill
																						1-2 light brown grey shale
7836		1.5									10	10	15	1		0.42		40	20		9900E	0-0.7 peat, rubble
																						0.7-1.5 hard grey shale
7837		1.5									90	15	30	2		4.40		25	10		9925E	0-0.5 peat
																						0.5-1.5 yellow shale
7838		1									10	15	5	2		0.50		145	50		9975E	0-0.5 road
																						0.5-1 brown shale
7872		2									2	30	5	1		0.24		30	<10	9600N	9100E	0-0.5 peat
																						0.5-2 grey sandy shale
7871		1.5									2	15	5	1		0.28		<5	<10		9125E	0-0.5 peat
																						0.5-1.5 grey shale
7870		2									5	20	5	2		0.60		<5	30		9150E	0-1 peat, rubble
																						1-2 grey to yellow sandy shale
7869		1.5									2	10	5	1		0.12		10	10		9175E	0-0.8 peat, rubble
																						0.8-1.5 brown to grey sandy shale
7868		3.5									5	15	5	1		0.20		5	10		9200E	0-0.5 peat
																						0.5-2.5 qutz rubble
																						2.5-3.5 grey green sandy shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SL 781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 32

Area / Prospect BALFOUR 104 Date OCT 1980

Map / Photo reference ..... Analysed by ALS DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl wi al co ca pH; o/c sample type *** Depth; s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9600N	Grid ref	Geological Observations 793103
7867		2		5	10	5	1		0·16		<5	10		92256	0 - 0·5 peat
															0·5 - 2 light grey green sandy shale
7866		1·5		2	35	5	2		0·44		5	10		92506	0 - 0·5 peat
															0·5 - 1·5 grey green shale
7865		1·5		2	20	5	1		0·20		5	20		92756	0 - 0·5 peat
															0·5 - 1·5 light grey sandy shale
7864		1·8		10	20	5	2		0·36		<5	20		93256	0 - 0·5 peat
															0·5 - 1·8 light brown to grey green shale
7863		2		15	160	10	2		0·36		10	20		93506	0 - 1 peat
															1 - 2 grey shale
7862		2		10	30	5	2		0·52		65	10		93756	0 - 1 peat, rubble
															1 - 2 grey shale
7861		2		10	20	5	1		0·28		<5	10		94006	0 - 1 peat rubble
															1 - 2 light grey sandy shale
7860		2		5	20	5	1		1·16		10	<10		94256	0 - 1 peat, rubble
															1 - 2 dark grey green shale
7859		2		10	30	10	1		0·46		65	<10		94506	0 - 0·5 peat
															0·5 - 2 grey sandy shale
7858		2		80	740	15	2		1·02		120	10		94756	0 - 0·5 peat
															0·5 - 2 grey shale
7857		1·5		15	20	15	1		0·42		35	10		95006	0 - 0·2 peat
															0·2 - 1·5 black shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL791 — No. Sample numbers 105 — Collected by N.R.L — Sheet no. 33

Area / Prospect BOFOUR — Date Oct 1980

Map / Photo reference — Analysed by ALS — DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn/Fe	Au	Sn	W	9600N	Grid ref	Geological Observations 793104
		o/c sample type ***																		
		Depth s sample type ****																		
7856		2							20	20	25	3		0·66		285	120		95256	0-0·5 peat
																				0·5-2 black shale
7855		1·5							760	70	25	2		0·46		10	<10		95506	0-0·5 peat
																				0·5-1·5 light brown shale
7854		1·5							5	20	20	1		0·88		15	10		95756	0-0·2 peat
																				0·2-1·5 light brown shale
7853		1·5								10	20	1		0·56		370	20		96006	0-0·5 rubble
																				0·5-1·5 light brown-grey shale
7852		1·5							2	10	25	1		0·22		40	<10		96256	0-0·5 peat
																				0·5-1·5 grey shale
7851		1·5							50	25	460	1		4·00		30	<10		96506	0-0·5 peat, gravel
																				0·5-1·5 light grey shale
7850		2							25	15	170	1		1·02		70	30		96756	0-1 peat, gravel
																				1-2 grey green shale
7849		2							50	35	016	1		0·76		255	40		97006	0-0·5 peat
																				0·5-2 grey green shale
7848		2							20	20	640	1		0·79		15	70		97256	0-0·5 peat
																				0·5-2 light grey green shale
7847		2							30	15	180	1		1·36		15	10		97506	0-1 peat, rubble
																				1-2 light grey shale
7846		2							20	30	0·11	1		0·82		10	50		97756	0-1 peat gravel
																				1-2 light grey shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. [redacted] Sample numbers [redacted] Collected by NRL Sheet no. 34

Area / Prospect BARBOUR Date OCT 1980

Map / Photo reference 106 Analysed by ALS DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	Depth s sample type ****	Carbon	Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9600N	Grid ref	Geological Observations 793105
7845		1.5									30	110	12	2		2.24		25	<10		98006	0-0.2 peat
																						0.2-1.5 light grey green shale
7844		1.5									10	10				0.50		15	70		98256	0-0.5 peat, rubble
																						0.5-1.5 light green brown shale
7843		1.5									5	10	15	<1		0.28		15	10		98506	0-0.5 peat, rubble
																						0.5-1.5 grey-brown shale
7842		1.5									90	20	20	1		0.32		10	25		98756	0-0.5 peat, rubble
																						0.5-1.5 cream to light brown shale
7841		1.2									15	10	15	1		0.52		25	<10		99006	0-0.7 peat, rubble
																						0.7-1.2 light brown shale
7840		1									5	10	5	1		0.44		60	40		99256	0-0.2 peat
																						0.2-1 light grey shale
7839		1									10	10	10	1		0.50		125	50		99506	0-0.2 peat
																						0.2-1 brown shale
7873		2									2	30	2	2		0.26		55	20	9700N	91006	0-1 peat, sand
																						1-2 light brown sandy shale
7874		2									<2	25	10	1		0.24		55	40		91256	0-0.2 peat
																						0.2-1.5 red brown sand
																						1.5-2 pale brown sandy shale?
7875		2									5	20	5	2		0.30		5	20		91506	0-1 peat, sand
																						1-2 dark brown sandy shale
7876		2									2	20	10	1		0.30		10	10		91756	0-1 peat, sand
																						1-2 dark brown to grey sandy shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C. . EXPLORATION . GEOCHEMICAL SAM LEDGER

Tenement name SEL 781 No. Sample numbers Collected by NRL Sheet no. 35

Area / Prospect ALFOUR Date OCT 1980

Map / Photo reference 107 Analysed by ALS DPO no.

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9700N	Grid ref	Geological Observations 793106
		o/c sample type ***																		
		Depth s sample type ****																		
7877		2							2	20	10	2		0·18		340	40		92006	0-1 peat, sand (with quartzite)
																				1-2 light brown sandy shale
7878		2							<2	10	5	1		0·22		15	10		92256	0-1 peat, sand
																				1-2 light brown to grey sandy sha
7879		2							<2	15	5	1		0·24		<5	10		92506	0-1 peat, sand
																				1-2 grey to brown sandy shale
7880		3·5							2	20	10	1		0·28		10	<10		92756	0-0·5 peat
																				0·5-2·5 sand
																				2·5-3·5 grey sandy shal
7881		2							2	15	5	1		0·20		<5	10		93006	0-0·5 peat, rubble
																				0·5-2 light grey sandy shale
7882		2							2	20	5	1		026		10	<10		93256	0-0·5 peat rubble
																				0·5-2 grey to grey green sandy shale & pilste
7883		2							2	10	10	1		0·28		<5	<10		93506	0-0·5 peat
																				0·5-2 grey green to grey shale
7884		2							2	20	10	1		0·24		15	10		93756	0-0·5 peat
																				0·5-2 dark grey green shale
7885		1·5							5	20	5	<1		0·08		5	<10		94006	0-0·5 peat
																				0·5-1·5 pale grey shale
7886		1·5							5	30	10	1		0·36		<5	<10		94256	0-0·5 peat
																				0·5-1·5 dark grey green shale
7887		1·5							30	70	10	1		0·26		<5	<10		94506	0-0·2 peat
																				0·2-1·5 grey green shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SPL 781 No. ..... Sample numbers ..... Collected by N.R.L. Sheet no. 36

Area / Prospect BALFOUR Date Oct. 1980

Map / Photo reference ..... 109 Analysed by ALS DPO no .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** Depth s sample type ****	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9700	Grid ref	Geological Observations 793107
7888		1.2								20	40	10	1		0.26		<5	<10		94756	0-0.2 peat
																					0.2-1 light grey shale
7889		2								10	30	35	2		1.12		40	20		95506	0-1 peat, rubble
																					1-2 pale grey sandy shale
7890		1.5								20	20	15	1		1.04		30	20		95756	0-0.2 peat
																					0.2-1.5 black shale
7891		1.5								20	45	25	1		2.00		150	40		96006	0-0.5 peat, rubble
																					0.5-1.5 grey green sandy shale
7892		1								5	15	55	1		3.00		60	<10		96256	0-0.2 peat
																					0.2-1 light grey shale
7893		1.5								5	10	20	1		0.96		325	20		96506	0-0.2 peat
																					0.2-1.5 pale grey shale
7894		1								45	20	75	1		3.40		20	<10		96756	0-0.2 peat
																					0.2-1 grey shale
7895		1.5								55	15	200	2		4.00		45	<10		97006	0-0.5 peat
																					0.5-1.5 grey green shale
7896		1.5								165	20	30	1		0.86		90	<10		97256	0-0.5 peat, gravel
																					0.5-1.5 light grey sandy shale
7897		1.5								15	20	105	1		2.16		605	50		97506	0-0.5 peat
																					0.5-1.5 grey shale
7898		0.5								7200	30	40	2		0.86					97756	0-0.5 hard brown shale
7899		1.5								210	85	0.14	2		3.80		270	60		98006	0-0.5 peat
																					0.5-1.5 dark grey green shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** D

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name SL 781 No. ..... Sample numbers ..... Collected by NRL Sheet no. 37

Area / Prospect BALFOUR Date OCT 1980

Map / Photo reference ..... 108 Analysed by ALS DPO no. .....

A 02143

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type **** Depth	Carbon	Metal content ppm or % Cu	Pb	Zn	Ag	Mo	Mn Fe	Au	Sn	W	9700N	Grid ref	Geological Observations 793108
7900		1.5									250	20	45	1		0.48		250	60		98256	0-0.5 road
																						0.5-1.5 grey shale
7901		1.2									10	30	20	1		0.60		175	30		99006	0-0.2 road
																						0.2-1.2 light grey shale
7902		1.5									5	10	15	1		0.52		45	10		99256	0-0.5 peat gravel
																						0.5-1.5 grey shale
7903		2									15	20	60	1		0.40		280	80		99506	0-0.2 peat
																						0.2-2 red yellow shale

* Sample type ss = stream sediment oc = outcrop f = float s = soil

** Stream sed. sample description fl = flow m3/sec wi = width m al = alluvial co = colluvial ca = catchment km2

*** Outcrop sample type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

**** Soil sample type auger hole or pit depth m A, B or C horizon

793109

BALFOUR DIAMOND DRILL HOLES

GRID CO-ORDINATES.

B.H.P. Diamond Drill Holes (coords approx.)

DDB 1 Coords 9640 N 9960E
Inclin Vertical
Depth 88·6m

DDB 2 Coords 9810 N 9940E
Inclin Vertical
Depth 73·15m

DDB 3 Coords 9640N 9860E
Inclin Vertical
Depth 30·6 m

DDB 4 Coords 9440N 9860E
Inclin Vertical
Depth 167·49m

DDB 5 Coords 8860N 9750E
Inclin Vertical
Depth 281·54

DDB 6 Coords 10000N 10000E
Bearing 236° M
Inclin -55°
Depth 181·81 m

GEOPEKO · Jacro Diamond Drill Holes

DDB 7 Coords : 9500 N 10460E
Bearing 227° M
Inclin : -60°
Depth : 40·1 m

DDB 8 Coords : 9100 N 10240E
Bearing : 227° M
Inclin : -60°
Depth : 40·3 m

DDB 9 Coords : 10300 N 10050E
Bearing : 47° M
Inclin : -60°
Depth : 15·5m

DDB 10 Coords : 10100 N 9770 E
Bearing : 227° M
Inclin : 55°
Depth : 39 m

CRAE/GEOPEKO Diamond Drill Holes

DDBC 1 Coords : 9630 N 10075 E
Bearing : 227° M
Inclin : -45°
Depth : 11·9 m

DDBC2 Coords : 9585 N 10060E
Bearing : 260° M
Inclin : -45°
Depth 210·5m

DDBC3 Coords : 8800 N 9275 E
Bearing : 260° M
Inclin : -45°
Depth : 143·1m

DDBC4 Coords : 9387 N 10425 E
Bearing : 227° M
Inclin : -55°
Depth : 211·4 m

DDBC5 Coords = 9175 N 10460E
Bearing = 047° M
Inclin = -55°
Depth = 100 m

DDBC6 Coords = 9200 N 10100E
Bearing = 047° M
Inclin = -45
Depth = 274·55m

DDBC7 Coords = 10800N 9960E
Bearing 047° M
Inclin = -46°
Depth = 179 m.

DDBC8 Coords = 8770N 10090E
Bearing = 167° m
Inclin = -60°
Depth = 300 m

RE CALCULATED AMG CO-ORDINATES

SAMPLE No.	SAM_TYPE	REPEAT LEVEL	DPD/SURVEY No.	EASTING	NORTHING	ZONE	QUADRANT
DDB0001	DD		C000145	323662	5429477	55	SE
DDB0002	DD		C000145	323567	5429610	55	SE
DDB0003	DD		C000145	323579	5429430	55	SE
DDB0004	DD		C000145	323671	5429262	55	SE
DDB0005	DD		C000145	323834	5428714	55	SE
DDB0006	DD		C000145	323528	5429797	55	SE
DDB0007	DD		C000145	324147	5429593	55	SE
DDB0008	DD		C000145	324150	5429154	55	SE
DDB0009	DD		C000145	323148	5430576	55	SE
DDB0010	DD		C000145	323288	5429773	55	SE
DDBC001	DD		C000145	323764	5429532	55	SE
DDBC002	DD		C000145	323772	5429477	55	SE
DDBC003	DD		C000145	323481	5428451	55	SE
DDBC004	DD		C000145	324171	5429482	55	SE
DDBC005	DD		C000145	324301	5429320	55	SE
DDBC006	DD		C000145	323986	5429173	55	SE
DDBC007	DD		C000145	322868	5430310	55	SE
DDBC008	DD		C000145	324179	5428807	55	SE

APPENDIX 11

DIAMOND DRILL LOG

DD81 BC 3

2.3 LOG OF BALFOUR DDB 13 ROCKY CAPE E.L. 1/77

Proposed:	A. Mckay
Depth:	150m
Location:	Alluvial flats west of Specimen Hill
Collar coordinates:	8800N 9275E
Collar inclination	-45°
Collar azimuth	227°M
Purpose of hole:	To test a coincident Pb Zn "c" horizon soil anomaly.
Final Depth:	143.1m
Summary Results:	The hole failed to explain the geochemical anomaly.

DRILLING DETAILS

Rig:	Boyles
Driller:	K. Parry
Commenced:	6/2/81
Completed:	14/2/81
Drilling conditions:	Very good. Overall 97% recovery.

113 GEOPEKO TASMANIA DRILL LOG 793113 Prospect Balfour Hole no. DDB 13

DEPTH (m) from	DEPTH (m) to	GRAPHIC LOG	ANGLE TO CORE AXIS Sa	ANGLE TO CORE AXIS Si	GEOLOGICAL DESCRIPTION	Alteration	MINERALISATION by	MINERALISATION	MINERALISATION	MINERALISATION	Fracturing	Sample No.	From (m)	To (m)	Rec (m)	ASSAYS (Lab)
0m					Casing										1	
10	11.5															
					Bleached white to grey, fine grained banded siltstone										1		
					Very porous - holes after sulphides										1		
															1		
															1		
															1		
															1		
															1		
															1		
															1		
															1		
															1		
															1		
															1		
22.5	23.7				White, porcelaneous fine grained siltstone. Pyrite cubes dispersed										80		
					throughout. Chloritic in part.										80		
															85		
															1		
															85		
															1		
25.7															1		
					Finely laminated and banded dk grey to white siltstone										1		
					Chloritic. Bedding irregular and offset by cleavage										0.5		
					Dark layers are carbonaceous										0.5		
															1		
															1		
															1		
															1		
															1		
															1		

114

GEOPEKO TASMANIA DRILL LOG

Prospect

Hole no. 793114

SHEET 2 OF 4

DEPTH (m) from	DEPTH (m) to	GRAPHIC LOG	ANGLE TO CORE AXIS So	ANGLE TO CORE AXIS Si	GEOLOGICAL DESCRIPTION	Alteration	MINERALISATION py	MINERALISATION	MINERALISATION	MINERALISATION	Fracturing	Sample No.	From (m)	To (m)	Rec (m)	ASSAYS (Lab)
															1	
															1	
															1	
42.3	49				Conglomerate to Pyjama Siltstone style rock										1	
					Beds ranging from 3mm to 20cm. Graded bedding										1	
					Sandstone dilutes. Scouring, slumping, mixing, rafted bedding.										1	
															1	
															1	
															1	
49															0.9	
			50°		Gradational change from finely laminated banded dark grey										1	
					to light grey siltstone. Conspicuous minerals crystals scattered										1	
					throughout. Minor sandy layers										0.95	
															1	
															1	
															1

115

GEOPEKO TASMANIA DRILL LOG

793115

SHEET 1 OF 9

Prospect Barrow Hole no. 13

DEPTH (m) from	DEPTH (m) to	GRAPHIC LOG	ANGLE TO CORE AXIS Sa	ANGLE TO CORE AXIS Si	GEOLOGICAL DESCRIPTION	Alteration	MINERALISATION Py	MINERALISATION	MINERALISATION	MINERALISATION	Fracturing	Sample No.	From (m)	To (m)	Rec (m)	ASSAYS (Lab')
93	93.7				Distinctive colour change to grey white siltstone. Banded muscovite rich & chlorite rich. Sericite alteration										90	
															090	
															1	
															1	
															1	
															1	
															1	
															1	
															1	
															1	
93.7	95.7				Finely banded dark grey to white siltstone. Grey to black layers. Disseminated pyrite in sandy layers										0·9	
															0·8	
															0·95	
															1	
															1	
															1	
95.7	100				Broken core. Green grey siltstone and shale. Muscovite and chlorite rich.										?	
															?	
															?	
					98.5 Quartz, pyrite, sphalerite vein 5mm thick 45° CA										?	
															?	
100	110														?	
			45°	30°	Banded white to grey siltstone. Graded bedding. Preconsolidation structures.										0·85	
					At 101·8 5m quartz, chlorite vein 30° CA										1	
					At 102·2 Chlorite veins										1	
					At 106·2 Galena and pyrite on fracture face										1	
															1	
															1	
															1	
															1	
110	115														1	
					Altered finely laminated siltstone. Chlorite prominent in some bedding planes										1	
															1	
															1	
															1	
115	118														1	

116

GEOPEKO TASMANIA DRILL LOG

793116 SHEET 4 OF 4

Prospect Balfour Hole no. DDH 1

DEPTH (m) from	DEPTH (m) to	GRAPHIC LOG	ANGLE TO CORE AXIS Sa	ANGLE TO CORE AXIS Si	GEOLOGICAL DESCRIPTION	Alteration	MINERALISATION py	MINERALISATION	MINERALISATION	MINERALISATION	Fracturing	Sample No.	From (m)	To (m)	Rec (m)	ASSAYS (Lab)
					Finely banded grey to white siltstone Chlorite in part										1	
118	119				Vein 115m 6.5m Quartz chlorite pyrite, hairline										1	
119	128				Altered carbonated quartzite										1	
					Silicified quartzite										1	
			38°												1	
					Altered chlorite sandstone with chlorite laminae										1	
															1	
															1	
															1	
															1	
															1	
			10°												1	
128	129														0.8	
129	130														0.7	
					White finely laminated siltstone Banded										0.9	
															1	
132	132														1	
					Silicified banded siltstone Brecciated										0.35	
															1	
															1	
															1	
137	143														1	
					Banded finely laminated siltstone										1	
															1	
															1	
															1	
															1	
															1	
					EOH 143m										1	
															1	

KR 6471

D.D.B. 13 62.4m (Lithological unit 1.4m thick)

Hand Specimen. Greeny grey tuffaceous siltstone. Bedding not discernible. Fine grained pyrite disseminated throughout (App 3-5%). Fine to medium sand sized particles.

Thin Section Name:	Altered ?Andesite
Composition:	Vague chlorite-semi pseudomorphed ?phenocrysts in thoroughly siderite-stained, chloritised matrix with conspicuous very fine opaques. Minor degraded biotite.
Fabric:	Vague "andesitic" (frequent more or less evenly disseminated phenocrysts).
Accessories:	Minor traces pyrite, microcrystalline quartz.
Comments:	Thoroughly chloritised/carbonated. Opaques tend to confirm altered igneous origin. Fabric suggestive of intermediate lava, but detail obliteraed.

KR 6474

D.D.B. 13 79.4m

Hand Specimen. Greeny white altered siltstone. Finely laminated with medium grain sized green mineral speckled throughout. A very fine red mineral is disseminated throughout and appears as part of the alteration assemblage.

Thin Section Name:	Micaceous Arkose
Composition:	Quartz with subordinate, variably sericitised/ silicified alkali feldspar. Frequent partly phlogopitised/chloritised clastic mica flakes. Sericitic microcrystalline quartz matrix.
Fabric:	Faintly laminated, weakly recrystallized fine sandy siltstone, silty fine siltstone.
Accessories:	Relict detrital opaques, leucoxenic semi-opaques. Minor traces pyritised pyrrhotite.
Comments:	Sparse quartz veinlets but unsheared in contrast to 6454, 6463. Weakly phlogopitised, subsequently weakly chloritised with associated pyritisation of pyrrhotite.

KR 6476

D.D.B. 13 112.8m

Hand Specimen. --

Thin Section Name:	Chloritised Subarkose
Composition:	Recrystallized quartz, minor alkali feldspar framework with sparse shaly partings. More or less pervasive chlorite, minor corroded relics of phlogopite.
Fabric:	Relict shale-parted, moderately-to well-sorted fine sandy to silty clastic fabric.
Accessories:	Clastic leucoxenic semi-opaques, rare tourmaline Minor sericite, ankerite, pyrite.
Comments:	Close affinities with 6474. Shaly partings preferentially phlogopitised, subsquently chloritised. Pyrite is late secondary, heals sporadic microfractures.

120

793120

KR 6470

D.D.B. 13 118.4m Altered "porphyritic" looking rock. Siliceous clots appear surrounded by iron stained carbonate?

Thin Section Name:	Altered Quartzite
Composition:	Quartz with frequent ankeritic carbonate-stained chloritised, sub-radiating to feathery ?tremolite aggregates. Minor clinozoisite.
Fabric:	Fine-to medium-grained, faintly banded, quartzitic.
Accessories:	Sparse relict detrital zircon, leucoxenic semi-opaques, rare tourmaline, apatite.
Comments:	Evidently primarily a carbonate-cemented orthoquartzite. Recrystallized/metasomatically tremolitised; subsquently chloritised/ carbonated.

6861

114 N
113 N
112 N
111 N
110 N
109 N
108 N
107N
106N
105 N
104N
103 N
102 N
101N
100 N
99N
98 N
97N
96N
95 N
94 N
93 N
92N
91N
90 N
89 N
88 N
86N

AIR STRIP

2000 E

BASE LINE

DDB 10

DDB 13

DDB 5

DDB 7

KR 5968

KR 5967

KR 5965

KR 5969

CENTRAL MT BALFOUR

CAMP

Red yellow altered siltstone KR6666

Finely laminated black siltstone

Carbonaceous black shale (multi core KR 6665

Dip and strike of bedding

Vertical dip and strike of bedding

Strike and dip of cleavage

Trend and plunge of lineation

Geological boundary inferred

Fault observed inferred

Mine

Direction of movement of sediment bearing currents Series uncertain

Quartz (cassiterite wolframite) vein showing strike and dip

Structural trendlines

Chloritic iron stained alteration zone

Dip varies conforming pyrite

GEOLOGY

- Tertiary Basalt
- Tertiary Conglomerate
- Green to yellow finely laminated siltstone and shale. Siltstones and quartzite interbeds common
- Irregularly laminated rock which consists of beds and lenses which exhibit grading from white fine grained cemented coarse siltstone to grey green or brown chloritic or tourmaline rich siltstone. Sedimentary features include trough cross stratification sandstone nodules and load structures. Soft sediment deformation is common
- White fine to very fine grained arenite rich sandstone
- White fine grained silica cemented sandstone or quartzite. Sedimentary features include cross stratification and symmetric ripple marks
- Black massive carbonaceous siltstone
- Grey hard laminated siliceous siltstone (limonitic)
- Tourmaline zone (brecciated)
- Breccia zone

LEGEND

- SOIL GEOCHEM SAMPLES (Orange)
- ROCK CHIP CHANNEL SAMPLES (Vein material not sampled)
- ROCK CHIP SAMPLES
- B.H.P. DIAMOND DRILL HOLES
- GEOPEKO JACRO DIAMOND DRILL HOLES
- CRAE/GEOPEKO DIAMOND DRILL HOLES

B.H.P. Diamond Drill Holes (coords approx.)

DDB 1 Coords 1640 N 9960 E, Inclin Vertical, Depth 88·6 m
DDB 2 Coords 1810 N 9940 E, Inclin Vertical, Depth 73·15 m
DDB 3 Coords 1660 N 9860 E, Inclin Vertical, Depth 30·6 m
DDB 4 Coords 1480 N 9860 E, Inclin Vertical, Depth 167·47 m
DDB 5 Coords 0860 N 9750 E, Inclin Vertical, Depth 281·54
DDB 6 Coords 10 000 N 10 000 E, Bearing 338° M, Inclin -55°, Depth 181·81 m

GEOPEKO Jacro Diamond Drill Holes

DDB 7 Coords 9500 N 10 460 E, Bearing 227° M, Inclin -60°, Depth 40·1 m
DDB 8 Coords 9 100 N 10 240 E, Bearing 227° M, Inclin -60°, Depth 40·3 m
DDB 9 Coords 10 300 N 10 050 E, Bearing 47° M, Inclin -60°, Depth 15·5m
DDB 10 Coords 10 100 N 9770 E, Bearing 227° M, Inclin -55°, Depth 35 m

CRAE/GEOPEKO Diamond Drill Holes

DDB 11 Coords 9630 N 10075 E, Bearing 227° M, Inclin -45°, Depth 11·9 m
DDB 12 Coords 9585 N 10 060 E, Bearing 260°M, Inclin -45°, Depth 210·5 m
DDB 13 Coords 8800 N 9275 E, Bearing 260°M, Inclin -45°, Depth 145·1m
DDH 14 Coords 9587 N 10425 E, Bearing 327°M, Inclin -55°, Depth 211·4 m
DDB 15 Coords 9175 N 10460 E, Bearing 047°M, Inclin -55°, Depth 100 m
DDB 16 Coords 9200 N 10100 E, Bearing 047°M, Inclin -45, Depth 274·65 m

SHEET A
SHEET B
SHEET C

5 cm

SCALE 1:2500

20 0 20 40 60 80 100 Metres

793121

82-1743 R

C.R.A. EXPLORATION PTY. LIMITED

L and B Syndicate Balfour Leases

GEOLOGY PLAN

6861

geologist: PH & NRL	scale: 1:2500	report no: 11205
drawn: T.G.D.S.	date: December 1981	PLAN No. TASH 639

6862

LEGEND

- SOIL GEOCHEM SAMPLES (C-Horizon)
- ROCK CHIP CHANNEL SAMPLES (Vein material not sampled)
- ROCK CHIP SAMPLES
- B.M.R. DIAMOND DRILL HOLES
- GEOPEKO JACRO DIAMOND DRILL HOLES
- CRAE/GEOPEKO DIAMOND DRILL HOLES

SHEET A
SHEET B
SHEET C

SCALE 1:2500

793122 82-1743

C.R.A. EXPLORATION PTY. LIMITED

L and B Syndicate Balfour Leases

SAMPLE LOCATIONS

6862

geologist: R.S.H.	scale: 1:2500	report no: 1120S
drawn: T.G.S.	date: October 1982	PLAN No. TASh 640

793123

82-1743R

C R A EXPLORATION PTY LIMITED

L and B Syndicate Balfour Leases

Sh GEOCHEMISTRY 6863

CONTOURED IN ppm EDTA EQUIVALENT SOIL SAMPLE ANALYSIS

SCALE 1:2500	DATE Apr. 1988	DRAWN T.BOS	PLAN No. TASN 643
SHEET 1 of 1	SCALE 1:2500	DATE Apr. 1988	
SHEET No. 1	SCALE 1:2500	DRAWN T.BOS	

11205

LEGEND

- SOIL GEOCHEM SAMPLES (1 metre deep)
- BOX CHIP CHANNEL SAMPLES (1m metre to metre)
- BOX CHIP SAMPLES
- RC & DIAMOND DRILL HOLES
- GEOPEKO DIAMOND DRILL HOLES
- CRAE/GEOPEKO DIAMOND DRILL HOLES

CONTOUR INTERVAL

- 100 - 200 ppm
- 200 - 400 ppm
- 400 - 1000 ppm
- > 1000 ppm

5cm

SCALE 1:2500

6863

6864

AIR STRIP

DDB 10

DDB 5

DDB 13

DDB 7

CAMP

114 N
113 N
112 N
111 N
110 N
109 N
108 N
107 N
106 N
105 N
104 N
103 N
102 N
101 N
100 N
99 N
98 N
97 N
96 N
95 N
94 N
93 N
92 N
91 N
90 N
89 N
88 N
86 N

2000 E

80 BASE - NE

LEGEND

- SOIL GEOCHEM SAMPLES (C-horizon)
- ROCK CHIP CHANNEL SAMPLES (vein material not sampled)
- ROCK CHIP SAMPLES
- BHP DIAMOND DRILL HOLES
- GEOPEKO JACRO DIAMOND DRILL HOLES
- CRAE/GEOPEKO DIAMOND DRILL HOLES

CONTOUR INTERVALS

- 20 - 40 p.p.m.
- 40 - 80 p.p.m.
- >80 p.p.m.

SHEET A
SHEET B
SHEET C

5 cm

SCALE 1:2500

20 0 20 40 60 80 100 Metres

793124 82-1743P

C.R.A. EXPLORATION PTY. LIMITED

L and B Syndicate Balfour Leases.

W GEOCHEMISTRY 6864

COMPOSITE OF DATA FROM ROCK CHIP AND SOIL AUGER SAMPLING (C-HORIZON)

geologist: P.S.H	scale: 1:2500	11205
drawn: T.B.D.S.	date: November 1981	PLAN No. TASh 641

6865

114 N
113 N
112 N
111 N
110 N
109 N
108 N
107 N
106 N
105 N
104 N
103 N
102 N
101 N
100 N
99 N
98 N
97 N
96 N
95 N
94 N
93 N
92 N
91 N
90 N
89 N
88 N
86 N

DDB10
DDB13
DDB7
DDB5
CAMP

LEGEND

- SOIL GEOCHEM SAMPLES (C-Horizon)
- ROCK CHIP CHANNEL SAMPLES (Vein material not sampled)
- × ROCK CHIP SAMPLES
- ⊙ B.H.P. DIAMOND DRILL HOLES
- GEOPEKO JACRO DIAMOND DRILL HOLES
- CRAE/GEOPEKO DIAMOND DRILL HOLES

CONTOUR INTERVAL

- 50 - 100 p.p.m.
- 100 - 200 p.p.m.
- 200 - 400 p.p.m.
- > 400 p.p.m.

SHEET A
SHEET B
SHEET C

5 cm

SCALE 1:2500

20 0 20 40 60 80 100 Metres

793125 82-1743 R

C.R.A. EXPLORATION PTY. LIMITED

L and B Syndicate Balfour Leases

Cu GEOCHEMISTRY 6865

COMPOSITE OF DATA FROM ROCK CHIP AND SOIL AUGER SAMPLING (C-HORIZON)

geologist: P.S.H. & A.D.M.K.	scale: 1:2500	11205
drawn: T.G.D.S.	date: April 1981	PLAN No. TASH 642

6866

AIR STRIP

CAMP

LEGEND

- SOIL GEOCHEM SAMPLES (C-Horizon)
- ROCK CHIP CHANNEL SAMPLES (Vein material not sampled)
- × ROCK CHIP SAMPLES
- B.M.P. DIAMOND DRILL HOLES
- GEOPEKO JACRO DIAMOND DRILL HOLES
- CRAE/GEOPEKO DIAMOND DRILL HOLES

CONTOUR INTERVAL

- 100 - 200 p.p.m.
- 200 - 400 p.p.m.
- 400 - 800 p.p.m.
- > 800 p.p.m.

SHEET A
SHEET B
SHEET C

SCALE 1:2500

793126

82-1743 R

C.R.A. EXPLORATION PTY. LIMITED

L and B Syndicate Balfour Leases

Zn GEOCHEMISTRY 6866

COMPOSITE OF DATA FROM ROCK CHIP AND SOIL AUGER SAMPLING (C-HORIZON)

geologist: RSH	scale: 1:2500	report no: 112.05
drawn: T.B.D.S.	date: April 1981	PLAN No. TASh 646

6867

AIR STRIP

114 N
113 N
112 N
111 N
110 N
109 N
108 N
107 N
106 N
105 N
104 N
103 N
102 N.
101 N.
100 N.
99 N.
98 N.
97 N.
96 N.
95 N.
94 N.
93 N.
92 N.
91 N.
90 N.
89 N.
88 N.

4000 E.
LINE
100 BASE

DDB 10
DDB 9
DDB 8
DDB 7
DDB 5
DDB 4

CAMP

SCALE 1:2500
5 cm
80 0 20 40 60 80 100 Metres

793127
82-1743R

LEGEND

- SOIL GEOCHEM SAMPLES (C-Horizon)
- ROCK CHIP CHANNEL SAMPLES (Vein material not sampled)
- ROCK CHIP SAMPLES
- B.H.P. DIAMOND DRILL HOLES
- GEOPEKO JACRO DIAMOND DRILL HOLES
- CRAE/GEOPEKO DIAMOND DRILL HOLES

CONTOUR INTERVAL

- 40-80 p.p.m.
- 80-160 p.p.m.
- >160 p.p.m.

SHEET A
SHEET B
SHEET C

C.R.A. EXPLORATION PTY. LIMITED

L and B Syndicate Balfour Leases

Pb GEOCHEMISTRY 6867

COMPOSITE OF DATA FROM ROCK CHIP AND SOIL AUGER SAMPLING (C-HORIZON)

geologist: R.S.H.	scale: 1:2500	report no: 11205
drawn: T.B.D.S.	date: April 1981	PLAN N°. TASh 644

6868

LEGEND

- SOIL GEOCHEM SAMPLES (C-Horizon)
- ROCK CHIP CHANNEL SAMPLES (Vein material not sampled)
- × ROCK CHIP SAMPLES
- ⊙ B.H.P. DIAMOND DRILL HOLES
- GEOPEKO JACRO DIAMOND DRILL HOLES
- CRAE/GEOPEKO DIAMOND DRILL HOLES

CONTOUR INTERVAL

19-6	2-2.99%
19-10	3-3.99%
19-15	4%+

SHEET A
SHEET B
SHEET C

5 cm

SCALE 1:2500

20 0 20 40 60 80 100 Metres

79312S 82-17431R

C.R.A. EXPLORATION PTY. LIMITED

L and B Syndicate Balfour Leases

Fe GEOCHEMISTRY 6868

COMPOSITE OF DATA FROM ROCK CHIP AND SOIL AUGER SAMPLING (C-HORIZON)

geologist: P.S.H.	scale: 1:2500	11205
drawn: T.G.D.S.	date: November 1981	PLAN No. TASh 645

9,100N | 9,150N | 9,200N | 9,250N | 9,300N

6869

LEGEND
Lead
Zinc

0·26%
0·17%

1400 ppm
1300
1200
1100
1000
900
800
700
600
500
400
300
200
100
0

C Horizon
Soil Geochemistry

D.D.B.13

LINE 8800N.

0-9m Casing

Bleached white to grey fine grained banded siltstone. Very porous and crumbly

Primary white fine grained siltstone
Pyrite cubes dispersed throughout

Finely laminated and banded grey and white siltstone
Chloritic. Bedding offset by cleavage

Finely laminated blue grey siltstone. Disseminated sulphide throughout

Banded graded siltstone. Beds 3mm to 20cm in thickness. Slumping, scour and fill structures

Gradational change to finely banded siltstone. Muscovite crystals scattered throughout

Graded white to grey siltstone. Infilled dikelets
Graded beds. Oversteepened crosslamination
Pyrite blebs in sandy layers - remobilized into cleavage

Altered Andesite

Distinctive colour change to grey white siltstone. Banded muscovite rich and chlorite rich layers. Sericite alteration

Cavity infilled with pyrite arsenopyrite, sphalerite siderite

Finely laminated banded siltstone

Finely banded white to grey siltstone
Preconsolidation structures

Quartz pyrite sphalerite vein 5mm thick

Sericite altered zone. Finely laminated "bleached siltstone"

Quartz chlorite pyrite vein 5mm thick

Finely laminated banded silicified grey to grey white siltstone
Chloritic in part
Disseminated pyrite

Altered chloritised carbonated quartzite

Gradational contact to silicified quartzite

Sericitized chloritic siltstone

E.O.H. 143·0m

5 cm

5 0 5 10 15 20 25 Metres

Scale 1:500

793129 82-1743R

LEGEND
Vein or zone thickness, showing orientation
Vein or zone thickness, undetermined orientation
Geological boundary, sharp or gradational

Balfour DDB13
Co-ordinates 8,800N. 9,275E.
Azimuth 227° Mag.
Declination 45°
Commenced 6-2-'81
Completed 14-2-'81
Depth 143m.

CRA EXPLORATION PTY. LIMITED

CRAE/GEOPEKO J.V. BALFOUR GRID

PROFILE OF (DD 81 BC 3)

GEOLOGY, GEOCHEMISTRY

6869

Geologist : P.S.H.	Scale : 1:500	Report No: 11205
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