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CRA EXPLORATION PTY.LIMITED

ROCKY CAPE EL 1/77

PROGRESS REPORT FOR YEAR ENDING JANUARY 31ST,1984

Author: D.J.Weir

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Submitted to: T.W.Dickson

Accepted by:

Copies:
CRAE Library
CRAE Sydney
CRAE Hobart
CRAE Burnie
Geopeko Sydney
Geopeko Devonport
Mines Department, Tasmania.

Report No.12484

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1. SUMMARY

A regional stream sediment survey at an approximate density of one sample per 2km² was completed over an area of 450km² to infill gaps left by previous surveys.

Field mapping has indicated a thick monotonous sequence of green and grey - black siltstones with intercalated quartzites younging to the east.

The regional geochemical drainage survey has indicated anomalies at several prospects, the most worthy of follow-up being:

(a) The Frankland River Prospect.
Weak values of lead, zinc, barium and arsenic were obtained in creeks draining a significant aeromagnetic anomaly.

(b) The Salmon River Prospect.
Anomalous values of lead, arsenic and tin drain a sequence of grey-black siltstones and shales overlain by a small 20nT "bulls-eye" shaped aeromagnetic anomaly.

(c) Blackwater Rivulet.
Anomalous values of nickel, zinc and barium drain outcrops of the Smithton dolomite.

(d) Sundown Chert Prospect.
Anomalous lead values were obtained from both stream sediments and chert float. The prospect is enhanced by its possible on-strike location to the Nelson River prospect.

(e) Alert Creek.
Anomalous tin values in panned concentrates previously ascribed to a derivation from Tertiary gravels.

Detailed follow-up at the Frankland River, Salmon River, Sundown Chert and Alert Creek prospects has included detailed geochemical drainage and rock chip sampling in conjunction with mapping and ground magnetic surveys. In each case, exploration is incomplete.

An appraisal of available literature in conjunction with limited field investigations of the Salmon River chromite occurrences and the Balfour copper trend has been undertaken.

Chromite bearing gravels in the vicinity of the Salmon River are limited in extent and thickness. Previous auger/percussion drilling has indicated that chromite grades do not approach levels acceptable to CRA Exploration Pty.Limited.

Narrow, discontinuous sub-economic copper mineralisation hosted by a pyritic quartz dolomite rock of possible sedimentary origin can be traced via a number of small workings along a minimum strike length of 20km to the North-West and South-East of Balfour. Fault controlled remobilisation and redeposition of mineralisation provides a generous ore reserve estimate of approximately 0.5mT @ 0.8% copper at the Murrays Reward Mine. Grade and thickness are stated to decrease towards the North-West. Limited field inspection confirms the narrow, sub-economic nature of the mineralisation.

What the grade or the mineralisation?

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2. INTRODUCTION

This report outlines exploration activities conducted within the northern parts of EL 1/77 between February 1983 and 31st January 1984. The exploration programme has included a regional stream sediment programme with subsequent follow-up at a number of geochemical ± geophysical targets. Detailed exploration of these targets is incomplete.

3. CONCLUSIONS

The regional stream sediment survey has delineated a number of prospects worthy of follow-up. Concern over the effectiveness of the technique is indicated where known copper mineralisation along the northern parts of the Balfour Copper trend has not been picked up. In addition, the geochemical response to known mineralisation in the Temma area is much lower than expected. This is due in part to a dilution and/or masking effect by lag gravels.

Of the prospects followed up to date, reconnaissance sampling at the Salmon River prospect was contaminated by Arthur River floodplain material. However, the possibilities of Carlin style gold mineralisation remain to be tested.

Incomplete ground magnetics imply a lithological source for the aeromagnetic anomaly at the Frankland River prospect.

Work undertaken at the Sundown Chert prospect indicates the possibility of base metal mineralisation related to a chert-black shale facies environment and is possibly the most encouraging.

Appraisal of the Salmon River chromite areas show that chromite grades and gravel thicknesses are unacceptable to CRA Exploration. Similarly with the Balfour copper trend, though potential for orebody development might exist to the south within suitable structural sites.

4. RECOMMENDATIONS

Continued reconnaissance drainage sampling in the more remote parts of the Licence area to the south.

Exploration to be completed at the Salmon River, Frankland River, Sundown Chert, Alert Creek and Blackwater Rivulet prospects.

Limited gridding and ground magnetic traversing over a NW trend of aeromagnetic highs to the NE of the Salmon River prospect.

Special attention should be paid to structural features intersecting the southern extensions of the Balfour copper trend.

Mines Department aeromagnetic data in the southern parts of EL 1/77 should be reviewed, modelled and assigned priorities for further exploration.

5. HISTORY OF PREVIOUS INVESTIGATIONS

5.1 Regional Surveys

Three major drainage geochemical surveys have been undertaken within the northern part of the Rocky Cape licence area namely, Pickands Mather International (stream sediments), Anzeco (panned concentrates) and CRA Exploration P/L. (stream sediments and panned concentrates). All three surveys have been documented in previous progress reports.

Two airborne geophysical surveys, Input and aeromagnetics have been flown by ESSO and RTZ respectively, though the Input did not extend into the northwest portions of EL 1/77.

5.2 Detailed Surveys

The A.C.I. syndicate conducted detailed investigations within EL 16/68 concentrating upon the Balfour copper trend, a narrow zone of sub-economic copper mineralisation that can be observed in eight discrete prospects over a strike length of approximately 20km. Methods employed include detailed mapping, soil geochemistry, I.P. and diamond drilling. 37 drill holes totalling 5816 metres were completed. The mineralisation, principally chalcopyrite occurs in narrow en echelon shear zones? and is hosted by a pyrite - quartz - dolomite rock. A.C.I. suggest the ore zone to be conformable with the enclosing carbonaceous and chloritic sediments. Potentially economic mineralisation was located at Murrays Reward (now outside EL 1/77) as a result of fault remobilisation with dimensions 220m strike length, 5m width, 220m down dip extent at a grade of 0.8% copper.

This would give an ore reserve estimate of 542,080 tons at 0.8% copper using an S.G. of 2.8. Grades and thicknesses are stated to diminish to the northwest.

6. REGIONAL GEOLOGY

The northwestern part of the Rocky Cape licence area is poorly documented. Longman and Matthews (1961) indicate a thick sequence of younger Precambrian green siltstones and quartzites to the west of Balfour, successively overlain by black carbonaceous siltstones and greywackes towards the western, faultbound margin of the Smithton trough. Grades of metamorphism are low and probably diagenetically related. Minor development of sericite and perhaps remobilisation of carbonaceous material to form sub-graphitic films is observed in the various siltstones.

Limited photo-interpretation and field observations has confirmed that a relatively flat lying sequence (20° - 30°) of grey laminated siltstones (exhibiting various sedimentary structures) and quartzites is predominant to the west of Balfour. A pervasive? north easterly trending structural grain is apparent from photo-interpretation. In the coastal areas near Temma, NNW faulting is pronounced producing a localised parallel trending cleavage.

Detailed mapping in the vicinity of Sundown Creek has indicated an easterly facing sequence, striking 330° of spotted chloritic laminated siltstones, grey-black laminated siltstones/shales and quartzites. Minor North-West trending folding is apparent in the upper reaches of Sundown Creek.

7. STREAM GEOCHEMISTRY

Regional minus 80 mesh drainage sampling was completed over an area of approximately 450km² to the north and west of Balfour, designed to infill gaps left by previous geochemical surveys. Approximately 205 samples were collected, at an average density of 1 per 2km². Locations are plotted on Plan TASh 1556. Two kilogram grab samples were collected from suitable sediment accumulations, dried and sieved to minus 80 mesh, prior to analysis. In certain instances, samples were sieved to minus 20 mesh in the field for ease of transportation. Full analytical details are located in Appendix I.

Limited orientation work was conducted in the Nelson Bay River area to determine whether the clay fraction (± -200 mesh) would be a more advantageous sampling medium. Samples were stirred in water and the muddy liquid filtered off and dried. The remainder of the sample was dried and sieved to minus 80 mesh. Results (Appendix 2) show that although values for the clay fraction were higher than the -80 + 200 mesh fraction, the values were comparable and therefore minus 80 mesh was utilised throughout the survey.
Samples were analysed for :
Cu, Pb, Zn, Ni, Co, by A.A.S. or I.C.P.
Sn, W, Ba by X.R.F.
As by vapour hydride generation or I.C.P.

The majority of analyses were conducted by Analabs in Cooee, the remainder by ALS in Brisbane.

7.1 Element Thresholds

Element thresholds were calculated using log-probability plots (Appendix III) for the following elements: Cu, Pb, Zn, Ni, Co, Ba, Sn. Values for tungsten (Plan TASh 1586) and gold were below the detection limit whilst a threshold for arsenic

(Plan TASh 1583) was"eyeballed" at 20 ppm As to represent anomalous values.

7.1.1. Copper Plan TASh 1580

Three or four populations can be observed from this plot. Two populations at the lower levels are easily discernible but the higher ones appear to indicate significant overlap.

Low background < 9 ppm
High background 9 - 19 ppm
Possibly anomalous 20 - 39 ppm
Anomalous >40 ppm

7.1.2. Lead Plan TASh 1581

Lead shows an erratic distribution characteristic of several overlapping populations. Threshold values have been defined at:

Low background < 9 ppm
High background 9 - 24 ppm
Anomalous > 24 ppm

7.1.3. Zinc Plan TASh 1582

A large single population comprising approximately 80% of the samples is evident below 50 ppm. Threshold values have been defined at:

Low background < 10 ppm
High background 11 - 73 ppm
Possibly Anomalous 74 - 99 ppm
Anomalous >100 ppm

7.1.4. Nickel Plan TASh 1588

Threshold values for nickel have been set at:

Low background ≤ 10 ppm
High background 11 - 33 ppm
Possibly anomalous 34 - 99 ppm
Anomalous >100 ppm

7.1.5. Cobalt Plan TASh 1587

Cobalt exhibits two major populations as follows:

Low background ≤ 9 ppm
High background 10 - 30 ppm
Anomalous >31 ppm

7.1.6. Barium Plan TASh 1584

Barium can be partitioned into two populations with a breakpoint at 115 ppm. The lower population appears more complex but this can be attributed to analytical reading methods. Populations have been defined at:

Low background ≤ 115 ppm
High background 116 - 250 ppm
Anomalous > 251 ppm

7.1.7. Tin Plan TASh 1585

Tin shows a complex distribution and reflects the variable sources for tin occurrences within the licence area.

Low background ≤ 13 ppm
High background 14 - 30 ppm
Possibly anomalous 31 - 200 ppm
Anomalous >200 ppm

7.2 Discussion

Anomalies together with pertinent results are plotted on Plan TASh 1593.

7.2.1. Frankland River

Weak lead (30 ppm Pb), zinc (87 ppm Zn), Barium (150 ppm Ba) and Arsenic (49 ppm As) drain an aeromagnetic anomaly which lies on the projected continuation of the Balfour copper trend.

7.2.2. Salmon River Anomaly

Multiple copper, lead, zinc, arsenic, barium and tin anomalies occur in both stream sediment and rock chip samples. An Anzeco tin and tungsten anomaly (280 ppm Sn, 20 ppm W) also occurs at this location.

7.2.3. Blackwater Rivulet

Anomalous values of nickel (max. 191 ppm Ni), Barium (1700 ppm Ba) and zinc (210 ppm Zn) with weak lead (25 ppm Pb) drain an area of the Smithton dolomite. The high nickel content might suggest the presence of Cambrian volcanics.

7.2.4. Kenneth Creek

Weak copper, lead, zinc and barium values drain an area already investigated, - Strickland grid. No further work is proposed.

7.2.5 Dawson River

Weak lead (max 26 ppm Pb) and zinc (max. 58 ppm Zn) drain an area of younger Precambrian rocks. Minor lateritic development is exposed in the road and might be causative.

7.2.6. Nelson Bay River

Erratic tin values (max. 210 ppm Sn) were obtained in this river. No apparent source is evident and contamination from the Balfour tramway is a possible cause.

The most significant anomalies warranting further exploration are at the Salmon and Frankland River prospects and the Blackwater Rivulet.

8. SALMON RIVER PROSPECT

Initial attention was drawn to this area by the presence of a 20 ppm tungsten anomaly together with 280 ppm max. tin. Initial minus 80 mesh stream sediment sampling returned maximum values of 1000 ppm tin, 200 ppm arsenic and 156 ppm lead. 1750 ppm tin was obtained from black pyritic shale outcrop whilst the panned concentrates failed to repeat the initial anomaly.

The area was followed up in detail by means of road and creek traversing, mapping, gridding and further drainage sampling. Ground magnetics was completed routinely. Sample locations and results are plotted on Plan TASh 1577, whilst full assay details are located in Appendix IV.

8.1 Geology Plan TASh 1578

The area comprises a regular, easterly facing sequence of greywacke interbedded with grey to black siltstones/shales. The more carbonaceous shales contain euhedral pyrite along bedding planes and develop frequent limonite weeps. The sequence strikes to the north-west and dips to the north-east at 50 - 60°.

A thin (max. 2 metres) veneer of Tertiary gravels overlie these units and appear to be restricted to the crests of ridges.

8.2 Geochemistry

Follow-up stream sediment and rock chip sampling failed to repeat the initial sample results. The initial stream sediment sampling must have been too close to the Arthur River with resulting contamination. The 1750 ppm Sn recorded in black shales remains an enigma despite resampling of the same site.

However, minor gold values, (maximum 10 ppb) were recorded from limonite weeps approximating to the local strike direction. Panned concentrates have been collected from the relevant drainage systems (initial weight approx. 20kg of sieved minus 2mm material) and results are awaited.

Two lines approximately 250 metres apart were cut through the gold anomaly and soil samples were collected using a 4 inch diameter shell type hand auger at 20 - 25 metre intervals. Assay results are awaited.

8.3 Geophysics

Routine ground magnetics was completed over both lines at 10 - 12½ metre spacings. A 120nT magnetic anomaly was obtained on line 5250N whose shape implies a narrow body having a steep easterly dip. The body is absent on line 5000N trough may occur further to the east. Profiles are located in Appendix V.

The ground magnetic anomaly is coincident with a small 20nT "bullseye" aeromagnetic anomaly (Plan TASh 1594 which has an apparent east-west trend though, this is severely affected by "line pull".

9. FRANKLAND RIVER PROSPECT

A large aeromagnetic anomaly having a strike length of approximately 5km and a width of 1km lies on the North-West continuation of the Norfolk Ranges - Balfour aeromagnetic trend, (Plan TASh 1594). The anomaly overlies a sequence of laminated chloritic siltstones and black shales. Regional stream sediment sampling indicated several weak lead, zinc, barium and arsenic anomalies draining the aeromagnetic anomaly.

Three cut lines totalling approximately 10km have been constructed to intersect the anomaly. Approximate locations are plotted on Plan TASh 1595. To date, only the southernmost line has been surveyed with ground magnetics.

9.1 Geophysics

Line 5000N has been covered with ground magnetics, readings were collected at 12.5 metre intervals. The profile is located in Appendix VI. Initial impressions of the ground magnetic profile implies a lithological source for the body.
Completion of the ground magnetics and mapping is required before further work is undertaken.

10. SUNDOWN CHERT PROSPECT

Attention was focussed on this prospect following traversing of Sundown Creek in which float samples of black carbonaceous chert returned maximum assay results of 305 ppm lead. Similarly, stream sediments returned anomalous lead values, maximum 100 ppm lead. The prospect lies on the possible north-western strike continuation of the Nelson River prospect.

10.1 Geology (Plan TASh 1590)

Traversing of Sundown, Little Sundown and Bottle Creeks has indicated an easterly facing sequence of green, chloritic, laminated siltstones, black carbonaceous siltstone/shales and quartzite. Much of the sequence contains varying quantities of pyrite. A tuffaceous component is indicated by petrological examination of sample number 1142179, (Appendix VII, Petrological report).

The general strike direction is to the northwest with a north-easterly dip of approximately 50°. A minor NW trending synclinal structure has been mapped in the upper reaches of Sundown Creek. Towards the coast, a north-north-west trending cleavage is observed in the siltstones and can be attributed to shear faulting. Minor quartz veining with coarse recrystallised pyrite is associated with the fault zones and may provide some potential for gold mineralisation.

10.2 Geochemistry

Routine rock chip sampling and collection of stream sediments was undertaken in each of the creeks. Sample locations are plotted on Plan TASh 1591, whilst full assay details are located in Appendix VIII.

The stream sediment results failed to indicate any further presence of lead or any other element assayed for, except an erratic distribution of tin. Pertinent results are plotted on Plan TASh 1592.

The rock chip samples returned minor copper "kicks" (maximum 370 ppm Cu) in black carbonaceous siltstones whilst values of 340 ppm lead and 680 ppm arsenic were returned from a float sample of quartz-pyrite

rock described by Fander (Appendix VII) as being a pyritic siliceous sinter related to volcanic activity. Assays for gold and barium are awaited.

10.3 Discussion

The initial location of black carbonaceous chert float in Sundown Creek remains an anomaly to be further explored. The presence of a tuffaceous horizon in conjunction with "black shale facies" is encouraging and together with pyritic quartz veins developed in fault zones may provide impetus? for gold mineralisation. Why?

11. ALERT CREEK TIN PLAN TASh 1592

Previous geochemical drainage surveys have indicated anomalous tin values (maximum 1.1% Sn) in panned concentrates taken from Alert, Tiger and Bottle Creeks. The high tin values have generally been ascribed to a Tertiary gravel source, though this has not been proven conclusively.

The relevant drainage systems between Alert and Sundown Creeks were sampled along the coast road using panned concentrates and minus 80 mesh stream sediments.

In addition, a number of bulk samples (20kg) were collected from various sites representing aeolian sands, Tertiary gravels and fluviatile? sands in an attempt to pinpoint the source of the tin.

Analyses for tin in the stream sediments have been received (Appendix I) and confirm the presence of anomalous tin (0.17% Sn, max.) in Tiger Creek. The panned concentrates have been dispatched to Amdel laboratories for elemental and microscopic analysis in an attempt to distinguish between a primary or reworked source for the tin. Results are awaited.

12. SALMON RIVER CHROMITE

Regional stream sediment sampling in the vicinity of the Salmon River during 1981-82 showed a number of anomalous tin values, maximum 182 ppm tin. This area coincides with known alluvial chromite workings and has formed the subject of a number of reports.

12.1 Previous Investigations

12.1.1. Hughes (1957) Technical Report No.1 (T.M.D.)

Hughes inspected the area at the invitation of Mr.A.A.Walker who held an S.P.L. over the area at that time. He reported the gravels as being of fluviatile origin deposited in a number of rivers prior to their capture by the Arthur River during the Pleistocene. A broad alluvial plain resulted which has been further dissected by more recent erosion. Four samples varying from 6 - 105 lbs in weight were analysed subsequent to jig and magnetic concentration. Maximum values obtained were 55.5% Cr_2O_3, 7.5% Sn and 7.9 g/t Au. Hughes suggests a local, basic or ultra-basic source for the chromite.

12.1.2. Quest Mining and Exploration, EL 5/68

Quest Mining and Exploration drilled 73 auger/percussion drill holes totalling 854ft in six areas during 1969. (Plan TASh 1597). Of the 73 holes drilled, only two achieved overall grades approaching economic, both of which are located in Walker's Quarry.

Best results are:

Drill hole AWQ5 average 56lbs magnetic concentrate per cu.yd. Assaying 54.5% Cr_2O_3.

Drill hole AWQ6 average 70.1lbs magnetic concentrate per cu.yd. Assaying 48.8% Cr_2O_3.

Values for tin and gold were not reported.

12.1.3. D.J.Jennings (1973) Technical Report No.15 (T.M.D.)

Jennings briefly investigated the prospect and concluded tht the gravel deposits occur on the crests of ridges and thin away rapidly and that Walker's gravel pit is unique in providing high concentrates of chromite values and considerable thicknesses of gravels. He recommended that close space traversing or a geophysical survey might define chromite bearing channels but was pessimistic concerning upgrading the grades and thicknesses of the gravels.

12.1.4. Mineral Holdings S.P.L. 142

Mineral Holdings applied for S.P.L. 142 in 1975. No further work appears to have been conducted on the property apart from collation of previous data. An attempt to interest other parties in joint venture appears to have failed.

12.2 Present Investigations

Creeks containing anomalous tin values were resampled using minus 80 mesh stream sediments and bulk samples (approximately 20kg) later panned down.

In addition a bulk samples of basal gravels was collected from the quarry at the junction of Chromite road and Salmon River road and panned down. Best results obtained were 12.5% Cr and 340 ppm tin from the basal gravels though panned concentrates in creeks averaged 4.5% Cr. Locations and results are plotted on Plan TASh 1596, whilst full assay results are located in Appendix IX.

Further gravels have been encountered in mapping to the south of the Arthur River and all previous stream sediments were re-assayed for chromium. Results and possible extensions to chromite bearing gravels are plotted on Plan TASh 1596.

The possibility of platinoid accumulation within the gravels was tested by bulking the remaining portions of the panned concentrates and analysing them by XRF scan and for platinium, palladium and gold. Results were negative.

12.3 Discussion

The chromite bearing gravels are fluviatile in origin and restricted in outcrop. Previous drilling has shown the gravels to be thin with sub-economic chromite grades apparent in Walker's gravel pit. Potential for further gravels exist to the south of the Arthur River though considerable thicknesses are not immediately apparent.

CRA Exploration requires a grade of 2% chromite in pre-concentrated gravels which approximates to 90lbs of magnetic concentrate per cubic yard. This has not been obtained in the best sections of the prospect and therefore severely downgrades its potential.

13. BALFOUR COPPER TREND

Brief inspection was made of a number of copper workings along the Balfour Copper Trend, namely The Clump Shaft, The Waratah Adit and The Pierpont Morgan mine. Rock chips collected from mullock heaps returned maximum assay values of :

0.71% Copper Clump Prospect
0.20% Copper Pierpont Morgan Mine
0.69% Copper Waratah Adit.

Inspection and rock chip sampling of pyritic carbonaceous shales in a quarry along strike from the Clump prospect returned assay values of 470 ppm copper. Full assay details are located in Appendix X. Pertinent results are plotted on Plan TASh 1593.

Although these results appear encouraging, mineralisation is restricted to narrow, en echelon shear zones? and occurs within a quartz-dolomite rock.

The ACI Syndicate conducted extensive investigations on this portion of the copper trend and proved sub-economic reserves of 542,080 tons @ 0.8% copper at the Murrays Reward Mine. The grades and thickness of the ore body are stated to decrease to the northwest.

14. KEYWORDS

Mapping-detailed, regional, Rocky Cape Basin, Precambrian-shale, sandstone, quartzite, black shale, geochem drainage, orientation, rock, soil.
Geophysics - magnetics.
Chromite - gravels.
Sedimentary copper - reserves.

15. LOCATION

Burnie 1:250 000 Sheet SK55-3

16. LIST OF REFERENCES

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APPENDIX I

REGIONAL GEOCHEMICAL SURVEY

ASSAY RESULTS

458028

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL 1/77 No. .... Sample numbers........ Collected by: D.J. WEIR, M. BRUNKER Sheet no. ....

Area / Prospect: REGIONAL Date: 28/9/82

Map / Photo reference: ARTHUR RIVER 1:100 000 TOPO SHEET. SANDY CAPE 1:100 000 TOPO SHEET. Analysed by: ANALABS COBEE DPO no. 30095, 30096

Sample No.	Type (ss * / oc / f / s)	ss channel ** / o/c sample type *** / s sample type **** : fl	wi	al	co	ca	pH	Carbon TOPO /10	Cu	Pb	Zn	Ni	As	Ba	Mo	Sn	W		Grid ref	Geological Observations
1055116	SS	s	0,5		✓			1	2	6	6	8	<1	65	1.	<4	<4			WHITEHEAD CK. SYSTEM No o/c No float
1055117	SS	s	10		✓			1	3	9	7	9	<1	70	0,5	<4	<4			WHITEHEAD CK. No o/c No float. Bank dilution?
1055118	SS	s	1,5		✓			3	5	39	16	15	<1	190	1	<4	<4			RH trib BLACKWATER RVT. No o/c Float: banded black-grey Shales.
1055119	OC	cs	3m						13	55	76	38	11	335	2	<4	<4			grey-black siliceous banded Shale - Siltstone.
1055120	OC	g/s.							4	3	20	66	<1	75	0,5	<4	<4			Purple siliceous mudstone. Massive? poorly bedded @ Contact. well bedded away
1055121	SS	s	0,5		✓			5	5	3	11	13	<1	60	1,5	<4	<4			LH trib BLACKWATER RVT. No o/c Float Chert.
1055122	OC	gs							65	20	67	64	<1	85	1	<4	<4			v. hard mottled Siliceous rock Chert?
1055123	SS	m	2,5		✓			3	15	19	53	42	1	65	0,5	46	<4			LH trib BLACKWATER RVT. o/c + Float: chert.
1055124	SS	m-f	6		✓			4	11	10	33	23	<1	105	0,5	5	<4			BLACKWATER RVT. o/c + Float: chert.
1055125	SS	s	0,5		✓			4	3	3	12	11	1	60	<0,5	<4	<4			RH trib BLACKWATER RVT. No o/c float: Chert.
1055126	SS	m-f	6		✓			3	26	5	94	75	2	150	<0,5	<4	<4			LH trib BLACKWATER RVT. (T.M.P. 716312-13-14). o/c + Float: Chert
1055127	SS	m	2,5		✓			6	5	12	16	15	13	225	1,5	<4	<4			RH trib BLACKWATER RVT. o/c + Float Black banded Siltstones - Shale
1055128	OC	cs	10m		\				17	15	37	44	<1	250	6.0	<4	<4			Above locality f.g. black banded siltstone - Shale minor py.
1055129	SS	m-s	2,5		✓			1	3	6	7	12	<1	90	1	<4	<4			LH trib WHITEHEAD CK. No o/c No float.
1055130	SS	s	12	✓	✓			1	5	13	12	12	<1	140	2	<4	<4			WHITEHEAD CK. No o/c Float: black shale, qtz, chloritic Siltstone.
1055131	SS	s	1		✓			1	2	5	4	9	<1	30	0,5	<4	<4			LH trib WHITEHEAD CK. NO o/c Float Sandstone.
1055132	SS	m	1,5		✓			5	26	22	183	191	<1	215	<2	<4	8			LH trib BLACKWATER RVT. o/c grey-green banded Siltstone. Float: Same
1055133	SS	m	10		✓			5	12	16	44	29	<1	95	<2	<4	<4			BLACKWATER RVT o/c grey-black banded shale - siltstone: g'wacke
1055134	SS	m	1,5		✓			4	6	17	19	11	<1	110	2	<4	<4			RH trib BLACKWATER RVT. o/c grey-black shale - siltstone - greywacke?
1055135	SS	m	0,5	✓	✓			3	29	25	210	102	23	1700	2	4	9			LH trib BLACKWATER RVT. No o/c Float: chert + green amygdaloidal basalt.
1055136	SS	s	1	✓	✓			1	4	5	15	10	<1	10	<2	<4	<4			RH trib BLACKWATER RVT. Unsatisfactory site. No o/c No Float. Sl. organic.
1055137	SS	m	3	✓				1	25	11	81	59	<1	85	<2	7	<4			BLACKWATER RVT. No o/c or Float.
1055138	SS	s	1,5	✓	✓			1	4	5	22	15	<1	10	<2	44	<4			LH trib BLACKWATER RVT. NO o/c or Float.

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

458029 028

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name... ROCKY CAPE EL 1/77 ... No. ... Sample numbers... ... Collected by... D.J. WEIR, M. BRUNKER ... Sheet no. ...

Area / Prospect... REGIONAL ... Date... 28/9/82

Map / Photo reference... ARTHUR RIVER 1:100 000 TOPO SHEET ... Analysed by... ANALABS COOEE ... DPO no... 30095, 30096, 30097

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon Topo /10	Metal content ppm or % Cu	Pb	Zn	Ni	As	Ba	Mo	Sn / Fe	W / Mn	Au	Grid ref	Geological Observations
1055139	SS	S	1	✓	✓				1	4	6	15	7	<1	10	<2	20	<4	-1	-1	LH trib BLACKWATER RVT. No % or Float.
1055140	SS	m	7	✓	✓				1	12	8	36	26	<1	10	<2	12	<4			
1055141	SS	m	1		✓				4	18	12	60	36	7	225	1	20	<4			RH trib BLACKWATER RVT. No % Float Chert.
1055142	SS	m	3		✓				3	6	11	22	16	<1	120	1	4	<4			RH trib BLACKWATER RVT. % Chert.
1055143	SS	S	1		✓				2	3	4	11	8	<1	20	0,5	5	<4			LH trib BLACKWATER RVT No % Float Chert.
1055144	SS	S	4		✓				2	10	10	33	29	<1	160	1	<4	<4			RH trib BLACKWATER RVT. No % Float Chert.
1055145	SS	m-f	10		✓				2	24	7	71	52	<1	110	1	<4	<4			BLACKWATER RVT. % Dolomite Breccia.
																	Sn ↑	W ↑			
																	Sn	W			
1055151	OC	g/s								10	17	23	44	<1	380	4	<4	6	<0,005		black carbonaceous shale + greywacke. sl. ferruginous.
* 1055152	SS	S	1		✓				2	8	10	11	11	<1	130	4	I/s	I/s	0,054	✓ S4	RH trib BLACKWATER RVT. + euhedral Py. % grey-bl shale - mudstone Float. same + Qtz.
1055153	OC/CS	150m à		10m						42	25	42	84	47	320	<2	<4	5	0,010		Herton Loop road ripple marks. Black pyritic shales. minor qtz veining in places
1055154	OC/CS	100m à		5m						61	22	19	25	16	260	16	5	18	<0,005		grey-bl banded shales. Pyritic along bedding planes.
1055155	OC/CS	150m à		10m						110	33	66	111	47	270	6	<4	<4	0,009		black pyritic banded shale pyrite along bedding minor pale blue strng - 'chrysocolla??'
1055156	OC/CS	25m à		2m						32	89	25	40	24	260	26	6	6	<0,005		black pyritic shale minor qtz veining.
1055157	OC/CS	75m à		5m						169	26	59	90	100	225	6	<4	5	0,011		black pyritic banded shale. Euhedral Py along bedding. minor ripple masking.
* 1055158	SS	S	1		✓				4	23	125	275	92	13	120	2	2,55	160			RH trib unnamed ck. (LH trib Arthur R.). % + Float Chert.
* 1055159	SS	m-f	3		✓				3	18	63	125	24	17	80	<2	7500	235			Unnamed ck. (LH trib ARTHUR R.) % black + white 'oolitic' chert + limonitic gossan.
* 1055160	SS	m-f	2	✓	✓				4	81	61	305	150	18	465	2	16,0	2750			Unnamed Creek (LH trib ARTHUR R.) No % Float: f.g. Or-brn. Siltstones.
* 1055161	SS	m-f	2	✓	✓				4	99	22	200	130	15	385	2	14,5	2000			Above ck. LH trib. No % Float: Or-brown mudstones v. weathered.

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

Fe Mn

458030 029

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name NELSON BAY RIVER. No. ..... Sample numbers ..... Collected by D.J. WEIR. I. HALL Sheet no. .....

Area / Prospect ROCKY CAPE EL 1/77 Date 14/2/83.

Map / Photo reference SANDY CAPE 1:100 000 TOPO SHEET. ANALABS CODEE DPO no. 30457, 30458. 30466 (Au)

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type ***	s sample type ****	Carbon Topo /10	Metal content ppm or % Cu	Pb	Zn	Ni	Cr	As	Sn	W	Co	Ba / Au	Grid ref	Geological Observations
1055405	SS	S.	1,5		✓					1	3	5	9	8	470	<1	20.	<10	n.d	<0.02	317500 5437000	RH trib Nelson Bay River. No 9c Float Siltstone (Pyjama) Quartzite.
1055406	SS	m	6		✓					4	59	16	35	11	65	39	710	20	n.d	<0.02	322350 5433500	Cascade Creek – Contaminated. 9c green Siltstone Float Same + bl. Shale, basalt.
1055407	SS	m	1		✓					2	4	5	12	8	325	8	7	<10	n.d		321600 5429000	9c grey Quartzite Float: Same.
1055408	SS.	S	4	✓	✓					2	6	5	13	7	250	2	15	<10	n.d	<0.02	317700 5437100	Nelson Bay River. No 9c Float Quartzite, Qtz + Siltstone.
1055409	SS	Dry	4	✓						2	2	6	6	6	165	1	6	<10	n.d	<0.02	317850 5437550	LH trib Nelson Bay River. No 9c No float – Swampy.
1055410	SS	S	1	✓	✓					1	4	8	10	7	160	<1	15	15	n.d.		316900 5438050	RH trib Nelson Bay River. in main R. No 9c Float Quartzite 9c Pyjama Siltstone.
1055411	SS	S	1,5		✓					2	3	7	10	6	210	<1	6	<10	n.d.		316100 5439100	LH trib Nelson Bay R. 9c Pyjama Siltstone.
1055412	SS	S	6		✓					2	4	6	29	10	355	<1	7	<10	n.d.		316100 5438900	Nelson Bay River. No 9c float Pyjama Siltstone + Quartzite.
1055413	SS	Dry	2	✓	✓					1	4	7	12	12	420	1	8	10	n.d		315900 5438900	RH trib Nelson Bay R. No 9c Float Pyjama Siltstone + Quartzite.
1055414	SS	Dry	0,5	✓	✓					2	3	9	13	10	365	<1	3	<10	n.d.		312650 5439450	RH trib Nelson Bay R. – U. reaches. No 9c No float.
1055425	SS.	Dry puds.	6		✓					1	SEE ORIENTATION SURVEY.									<0.02	314500 5440650	Nelson Bay River 9c finely lam Pyjama Siltstones.
1055426	SS	puds	2		✓					1										<0.02	314700 5440800	LH trib Nelson Bay River. 9c Pyjama Siltstones bl. ferruginous.
1055427	SS	Dry	0,5	✓	✓					2											315600 5441800	RH trib of above 9c pyjama rocks. Float same + Quartzite
1055429	SS	Dry	1,5	✓	✓					2											315700 5441200	LH trib Nelson Bay River 9c finely banded Pyjama Siltstone.
1055429	SS	Dry	1,0	✓	✓					1											319300 5428250	RH trib Murray Ck. No 9c Float Quartzite.
1055430	SS	Dry + puds	1.0	✓	✓					1											319200 5428400	Murray Ck. 9c Quartzite + Pyjama Siltstones.
1055431	SS	Dry	0,5		✓					2											317850 5428700	RH trib Dawson R. 9c + Float Quartzite.
1055432	SS	Dry + puds	1,5		✓					1											316150 5428850	Dawson R. 9c Pyjama Siltstones Float Quartzite.
1055433	SS	Dry	0,5	✓						1											313250 5428900	Grace Ck. No 9c Float Quartzite Qtzite 9c on track.
1055434	OC	GS	/OC/	RC.							7	2	20	96	n.d	2	6	<10	32	20		Same G of above, on track. Lamonite – pisolitic, after basalt?
1055435	SS	Dry + puds	2,0		✓					2											314250 5428250	Dawson R. 9c Interbedded quartzite + Siltstones Float Same.
1055436	SS	Dry	1,0	✓	✓					1											314580 5428100	RH trib Dawson R. No 9c Float Quartzite.

* 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)

458031 030

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: ROCKY CAPE EL 1/77 No. ..... Sample numbers..... Collected by: D.J. WEIR, I. HALL Sheet no. .....

Area / Prospect: NELSON BAY RIVER AREA Date: 14/2/83

Map / Photo reference: SANDY CAPE 1:100 000 TOPO SHEET Analysed by: ANALABS COOKE DPO no. 30458, 30466 (Au)

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
	ss * oc f s	fl	wi	al	co	ca	pH	Topo /10	Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Au		
		o/c sample type ***																		
		s sample type ****																		
1055437	SS	S	4		✓			2		SEE	ORIENTATION	SURVEY.						<0.02	311500 5436900	RACHAEL CK. No % Float: quartzite, quartz.
1055438	SS	Dry	2.5	✓				1											311850 5436800	RH trib Rachael CK. No % No float.
1055439	SS	Dry	1.5	✓				1											311600 5437000	LH trib Rachael CK. No % Float quartz.
1055440	SS	Dry	1.5	✓	✓			2.											312000 5437050	LH trib Rachael CK. % in main ck. Pyjama Siltstones.
1055441	OC	GS.							6	2	34	100	30	40	15	<3	<10			Limonite - Psuedo - after basalt?
1055442	f	GS.	6ft	Mullock heap					28	3	8	560	14	140	<5	<3	<10			Pyritic Quartzite ~30% Py.
1055443	SS.	Dry	0.5	✓	✓			1										<0.02	322400 5431825	LH trib Nelson Bay R. No % Float: Quartzite.
1055444	SS	Dry	1,0		✓			1											321250 5431950	Nelson Bay R. No %. No Float. Quartz gravel.
1055445	SS	S	0,5		✓			3											321200 5430050	RH trib Nelson Bay R. No % Float quartzite, quartz, spotted Quartzite
1055446	SS	S	1,0		✓			2											321375 5430050	Nelson Bay R. % finely banded grey Siltstones.
1055447	OC	GS.							7	6	8	194	6	1	90	3	<10			Above locality finely banded grey Siltstones.
1055448	SS.	Dry	0,5	✓	✓			1											321500 5430100	LH trib Nelson Bay River. % Grey banded Siltstone Float: Same + quartzite.
1055449	SS	S	0,5	✓	✓			1											321000 5430725	RH trib Nelson Bay R. No % Float: Siltstone + Quartzite.
1055450	SS	S	0,5	✓	✓			2											319150 5432800	RH trib Nelson Bay R. No % Float Quartzite.
1055451	SS	Dry	1,0		✓			2										<0.02	318650 5432150	Trib Nelson Bay R. Quartzite % on No % Float quartzite. Tramway.
1055452	SS	Dry + Pools	1,0		✓			2										<0.02	317300 5431200	Big Eel CK. No % Float Quartzite.
1055453	SS	Dry	0,5	✓	✓			1										<0.02	317200 5431100	RH trib Big Eel CK. No % Float Quartzite + quartz.
1055454	SS	Dry & Pools	1,0		✓			3											318650 5430450	Big Eel Creek. No % Float quartzite + quartz.
1055455	SS	Dry & Pools	1,0		✓			1											318950 5436150	LH trib Nelson Bay R. No % No float.
1055456	SS	Dry & Pools	1.5		✓			2											319000 5436375	Cyril CK. No % Float quartz + Quartzite.
1055457	SS	Dry	1.5		✓			1										<0.02	318050 5434775	RH trib Nelson Bay R. % laminated Siltstone (Pyjama Rocks) Float: qtzite.
1055458	SS	Dry	1,0	✓				1										<0.02	318600 5434500	RH trib Nelson Bay R. No % Float Quartzite.
1055459	SS	Dry	2,0		✓			2										<0.02	318800 5434550	Nelson Bay River. No % Float: quartz + Quartzite.

* 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)

458032 031

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by: D.J. WEIR . Sheet no. .....

Area / Prospect: REGIONAL Date: 24/2/83 .

Map / Photo reference: SANDY CAPE 1:100 000 TOPO SHEET . Analysed by: ANALABS, CODEE DPO no: 30458 30459 30466 (Au)

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon Topo /10	Metal content ppm or % Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Au	Grid ref	Geological Observations
1055460	SS	6	0.5	✓	✓				1											321860 5427750	Thornton R. No Pc, Float Quartzite.
1055461	SS	Dry & Pools	0.5		✓				2											321628 6428200	LH trib Thornton R. No Pc Float: Quartzite.
1055462	OC	QS.								13	18	35	390	4	3	5	<3	<10			Costean by 1055459. Quartzite native Cu???
1055463	SS	Dry	0.5	✓	✓				2	4	7	44	9	2	<1	20	5	<10		316250 5431350	RH trib Big Eel Ck. No Pc No float. Scree on ridge: quartzite.
1055464	SS	Dry	2.0		✓				2	12	6	22	9	3	<1	30	7	<10		316600 5432550	Big Eel Ck. No Pc Float: qtz. qtzite + v.f. lam. black siltstone ± minor Py < 1%.
1055465	SS	Dry	1.5		✓				2	3	4	9	10	4	<1	20	8	<10		315500 5432400	RH trib Big Eel Ck. No Pc Float: laminated Siltstone (Pyjama Rock).

* 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

458033 032

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by: D.J. WEIR. Sheet no. .....

Area / Prospect: REGIONAL Date: 23 March 85.

Map / Photo reference: SANDY CAPE 1:100 000 TOPO SHEET. Analysed by: ANALABS COOEE. DPO no: 30459 30466 (Au)

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
	ss * oc f s	fl	wi	al	co	ca	pH	Topo/10	Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Au		
		o/c sample type ***																		
		s sample type ****																		
1055466	SS	S	2		V			6	4	15	22	7	3	2	30	5	<10	<0.02		RH trib Frankland R. 90% grey-bl. laminated Siltstone.
1055467	SS	Dry i pools	2.5		V			4	14	15	87	20	35	23	160	15	<10	<0.02		LH trib Frankland R. 90% grey-bl f. lam. Siltstone.
1055468	OC	GS.							9	61	91	78	11	5	200	5	<10			Grey lam. Siltstone. minor Py.
1055469	SS	Dry i pools	1.5		V			5	9	30	63	16	15	24	150	20	15			LH trib Frankland R. 90% Fl. finely lam. Siltstones.
1055470	SS.	m-S	30		V			6	13	10	38	15	6	5	60	290	<10	<0.02		Frankland R. 90% f. lam. banded Siltstone Fl. Same + Qtzite
1055471	SS	Dry	2		V			2	6	12	16	9	3	1	50	15	25			RH trib Rachael Ck. No 90% Fl. Py. Siltstone.
1055472	SS	Dry	1	V				1	11	7	29	8	2	6	30	7	<10			Rachael Ck. No 90% No Float.
1055482.	SS	M	2		V			3	6	6	18	9	2	2	30	3	<10	<0.02		Waratah Ck. No 90% Float Quartzite + Py. Siltst.
1055483	SS	S-M	3		V			4	11	7	17	14	3	3	40	5	<10	<0.02		Gaffney Ck. 90% Py. Siltst. Fl: Same + Qtzite.
																				Siltst. - Contorted + microfractured.
1055487	SS	S	1	V				2	3	1	6	9	2	1	15	<3	<10			Daisy Ck. No 90% Float: Py. Siltst + quartzite.

* 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)

458034 033

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by: D.J. WEIR Sheet no. .....

Area / Prospect: REGIONAL Date: 31/3/83

Map / Photo reference: SANDY CAPE 1:100 000 TOPO SHEET. Analysed by: ANALABS COOEE DPO no: 30461 30466 (Au)

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon TOPO /10	Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Au	Grid ref	Geological Observations
1055661	SS	m	1.5		✓				4	8	7	33	13	3	49	35	18	<10	<0.02		LH trib Frankland R. 9/c green lam. Sltst. Float: Same + qtz.
1055662	SS	m	3.0		✓				4	5	7	36	30	6	7	60	4	10	<0.02		RH trib Frankland R. 9/c green laminated Sltst. Float: Same + qtz.
1055663	SS	s	1.5		✓				5	6	10	25	12	4	3	50	5	<10			RH trib Frankland R. 9/c green laminated Sltst. Float: Same.
1055664	SS	s	1.5		✓				5	8	9	19	11	3	3	60	12	<10	<0.02		LH trib Frankland R. 9/c green-grey lam. Sltst. Sl. spotted. + qtz Veining
																					Float: Same.
1055665	SS	Dry f pods	2.0		✓				5	6	6	58	21	15	4	105	6	14	<0.02		RH trib Frankland R. 9/c green lam. spotted Sltst. ± graded bedding.
																					Float: Same.
1055666	SS	s	3.0		✓				5	6	2	14	13	4	1	30	5	<10	<0.02		RH trib Frankland R. 9/c Sheared bl. Carb. Shales.
																					Float: Same + qtz.
1055667	SS	Dry f pods	2.0		✓				3	4	1	9	10	2	<1	25	26	<10	<0.02		LH trib Frankland R. 9/c Sheared grey pyritic Sltst.
																					Float: Same + minor green lam. Sltst.
1055668	OC	GS.								4	1	11	63	6	3	120	<3	<10	<0.02		Above locality Sheared grey pyritic Sltst.
1055669	OC	GS.								8	11	35	19	8	100	125	<3	<10	<0.02		Bl. pyritic shale ± 5% py. Sl. Carb.
1055670	SS	m	3.0		✓				7	7	8	36	15	10	10	75	6	16	<0.02		RH trib Frankland R. 9/c Sheared, grey Sltst. Sl. Carb? Fl. bl. Shale.
1055671	OC	GS								4	11	40	53	22	15	35	<3	<10	<0.02		Above locality Sheared grey Sltst.
1055672	OC	GS								22	150	300	72	1060	110	105	5	<10	n.d.		Above locality Mn rich? gossanous coating 5ft w'fall.
1055673	OC	GS								13	50	27	27	7	28	125	3	11	<0.02		Bl. Carb. Shale ± 5% Py.
1055674	SS	s	3.0		✓				4	4	4	10	8	2	2	40	20	<10	<0.02		LH trib Frankland R. 9/c Bl. Carb. Shale Float: Same.
																					5-10% Py minor lam, weepr. & Jnct.
1055675	SS	s	2.0		✓				3	8	12	11	10	4	2	45	4	<10	<0.02		RH trib Frankland R. 9/c Bl. Carb Shale 15-20% Py. ± qtz Vein.
																					Float: Same + grn. lam. Sltst.
1055676	OC	GS								39	98	59	240	8	14	160	<3	<10	<0.02		Above locality Bl. Carb. Shale.
1055677	SS	s	2.0		✓				5	9	7	45	21	19	2	80	7	<10	<0.02		RH trib Frankland R. (LH side). 9/c + Fl. green lam. Spotted. Sltst.

* 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)

458035

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by: D.J. Weir Sheet no. .....

Area / Prospect: REGIONAL Date: 21/3/83

Map / Photo reference: SANDY CAPE 1:100 000 TOPO SHEET. Analysed by: Analabs Cooee DPO no: 30461, 30466 (Au)

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon Topo /10	Metal content ppm or % Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Au.	Grid ref	Geological Observations
1055678	SS	S	2.0		✓				6	8	4	32	17	12	1	65	4	<10	<0.02		RH trib Frankland R. (RH side). Qc + Fl. Green lam. Spotted Slst.
1055679	SS	S	1.0	v	✓				2	7	11	13	11	2	1	60	3	<10	<0.02		RH trib Frankland R. Qc + Fl: Bl. Carb Shale ± 5% Py
																					A: minor grey-green quartzite.
1055680	SS	m	30		✓				4	8	6	21	16	6	3	30	775	14	<0.02		Frankland R. Qc Black carb. Shales.
1055681	SS	S	2.0		✓				5	16	13	42	20	7	15	80	6	15	<0.02		RH trib Frankland R. Qc + Fl: Bl. Carb. Shales ± 5-10% Py.
1055682	SS	Dry; pools	1.5		✓				5	36	21	34	18	6	17	45	48	<10	<0.02		LH trib Frankland R. Qc + Fl.: Black Carb. Shales. ± minor limonitic veins.
1055683	OC	GS.								19	220	30	20	7	51	85	<3	<10	<0.02		Above locality. Black Carb. Shales.
1055684	SS	S	3.0		✓				8	9	27	32	16	10	3	60	5	<10	<0.02		RH trib Frankland R. Qc green lam. Spotted Slst. tending to be v. quartzitic. Float: Same.
1055685	OC	GS.								149	25	168	96	78	170	100	<3	<10	n.d.		Above locality & Junct. Bl. Carb Shale ± 25-30% Py. Sl. hematitic.
1055686	SS	S	2.0		✓				4	8	8	33	16	19	12	55	6	<10	<0.02		Squealing Ck. LH trib. Qc + Float: Green lam. Slst.
1055687	SS	S	3.0		✓				4	5	7	26	16	7	3	55	14	11	<0.02		RH trib Squealing Ck. Qc + Float: Green lam Slst.
1055688	OC	GS.								7	3	51	29	12	2	120	<3	<10	<0.02		Black Shale, Sl. Sheared. ± 5% Py.
1055689	SS	m	30		✓				6	11	9	30	20	5	3	35	112	10	<0.02		Frankland R. Qc + Float: Black Shales.
1055690	OC	GS.								5	1	28	38	6	2	80	5	<10	<0.02		Above locality. Black, Bl. nodular (2mm) Shales ± 5% Py.
1055691	SS	Dry; pools.	1.5		✓				3	4	2	10	9	3	<1	40	4	<10	<0.02		LH trib Frankland R. Qc Black Shale. Float Same + green lam Slst.
1055692	SS	Dry; pools	2.0		✓				4	6	3	11	13	2	1	35	64	16	<0.02		LH trib Frankland R. Qc Green lam. Spotted Slst., Bl. Shale & Junct. Fl. Same, ± white rounded q'z gravel.

* 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)

458036 035

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by: D.J. Weir. Sheet no. .....

Area / Prospect: REGIONAL Date: 31/3/83, 27/4/83

Map / Photo reference: SANDY CAPE 1:100 000 Topo Sheet. Analysed by: Analabs, Cooee DPO no: 30461, 30463, 30466 (Au)

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon Top /10	Metal content ppm or % Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Au.	Grid ref	Geological Observations
1055693	SS	myl pubs	2.0		✓				6	5	5	15	14	5	1	60	10	17	<0.02		LH trib Frankland R. 9/c Sheared green spotted Slt-st. Sl. Carb?
																					→ tending to bl. Shale. Float: green lam. spotted Slt-st.
1055694	SS	S	5.0		✓				3	3	<1	8	9	3	1	20	27	11	<0.02		RH trib Frankland R. 9/c Bl. Shale.
																					Float: green lam. spotted Slt-st.
1055695	SS	m	0.5	✓					2	2	2	7	7	2	1	10	4	<10			Proudfoot ck. No 9/c Float Quartzite. Qtzite 9/c on ridge.
1055696	SS	m	1.0		✓				4	3	<1	5	5	<1	1	10	<3	<10	<0.02		LH trib Brookes ck. 9/c + float Quartzite.
1055697	SS.	F	2.5		✓				5	2	2	6	7	<1	1	10	<3	<10	<0.02		Brookes ck. 9/c Quartzite Float Same + minor Coarse Slt-st.
1055698	SS	m	1.5		✓				4	4	1	7	6	1	1	10	<3	<10			LH trib Brookes ck. 9/c Quartzite Fl. Same.
1055699	SS	F	3.0		✓				4	2	2	9	5	1	1	10	<3	<10			Brookes ck. No 9/c Float: qtzite 9/c on bank Coarse greenish Slt-st
1055700	OC	GS.								2	3	111	60	29	1	80	<3	<10			Above locality Coarse greenish weath. Slt-st.
1055711	SS	S	1.5	✓	✓				3	3	3	8	11	4	1	10	<3	<10	<0.02		RH trib Possum ck. No 9/c float Qtzite + Coarse banded Slt-st.
1055712	SS	F	2.5		✓				3	2	2	4	6	1	1	10	<3	<10	<0.02		Possum ck. 9/c Coarse banded Slt-st. Fl: Same + Qtzite.
1055713	SS	S	1.5		✓				4	2	1	3	8	2	2	10	<3	<10			RH trib Possum ck. No 9/c Fl: qtzite, Coarse Slt-st, quartz.
1055714	SS	m	0.5	✓	✓				2	5	2	9	9	1	1	10	<3	<10			RH trib Thornton R. 9/c Pyj. Slt-st. Float Qtzite + minor Slt-st.
1055715	SS	S	1.0	✓	✓				2	2	<1	2	4	1	1	<10	<3	<10			Thornton R. No 9/c float Qtzite.
1055716	SS	S	0.5		✓				3	2	<1	2	5	<1	<1	<10	<3	<10			RH trib Thornton R. No 9/c Float Qtzite. Qtzite 9/c on ridge.
1055717	SS.	m	5.0		✓				6	3	10	20	8	1	1	10	<3	<10	<0.02		Thornton R. 9/c Quartzite Float: Pyj. Slt-st + graphitic Shale.
1055718	SS.	m	2.0		✓				5	3	8	19	9	3	1	40	<3	<10	<0.02		RH trib Thornton R. 9/c Pyj. Slt-st. Float: Same + qtzite.
1055719	f.									3	8	8	40	4	1	70	<3	<10			Same locality as 1055717 black graphitic 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)

458037

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL1/77 No. ..... Sample numbers..... Collected by: D.J. Wein Sheet no. .....

Area / Prospect: REGIONAL Date: 18 May 1983.

Map / Photo reference: SANDY CAPE 1:100 000 TOPO Sheet Analysed by: ANALABS COOKE DPO no. 30465 30466 (Au)

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon Tot/10	Metal content ppm or % Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Au	Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
1055726	SS	M	2.0		✓			3	2	3	12	7	2	<1	10	<3	<10			RH trib Thornton R. Qc Quartzite Float: Same.
1055727	SS	M	1.5		✓			3	3	<1	7	5	1	<1	20	<3	<10			LH trib Thornton R. No Qc Float: Quartzite + Quartz.
1055728	SS	M-f	2.0		✓			5	4	8	17	11	3	<1	50	<3	<10			RH trib Thornton R. Qc interbed. Pyj Sltst + Quartzite. Float: Same + Qtz.
1055729	SS	M	1.0		✓			2	4	5	11	8	3	<1	30	<3	<10	<0.02		Buckby Ck. No Qc Float: Quartzite + Qtz.
1055730	SS	S	0.5	✓	✓			3	3	3	9	9	3	<1	20	14	<10	<0.02		RH trib McLeod R. No Qc Float: Quartzite.
1055731	SS	M	2.0		✓			3	7	8	17	13	4	1	20	4	<10	<0.02		LH trib McLeod R. No Qc Float: Quartzite.
1055732	SS	M	2.0		✓			3	4	8	14	10	2	<1	10	<3	<10			Buckby Ck. Qc Quartzite. Float Same + Qtz.
1055733	SS	S	0.5	✓				1	4	4	11	10	2	<1	10	<3	<10			Buckby Ck. No Qc No float.
1055734	SS	S-M	1.0		✓			4	4	7	8	8	2	<1	10	<3	<10			LH trib McLeod R. Qc + Float Quartzite
1055735	SS	M	1.5		✓			4	3	2	8	7	2	<1	10	<3	<10			RH trib Daisy R. No Qc Float: Quartzite.
1055736	SS	M	4.0		✓			5	3	4	7	8	3	<1	20	<3	15	<0.02		Daisy R. Qc Quartzite Float: Qtzite + Qtz.
1055737	SS	S	0.5	✓				2	3	8	6	7	2	<1	10	<3	<10			LH trib McLeod R. No Qc No Float Sl. Organic.
1055738	SS	M	1.0	✓	✓			2	3	8	11	8	2	1	20	<3	<10			McLeod R. No Qc Float Qtzite + Qtz.
1055739	SS	S	0.5	✓	✓			2	3	10	9	8	2	<1	30	<3	<10			LH trib Daisy Ck. No Qc No Float.
1055740	SS	S-M	1	✓	✓			2	3	1	4	9	3	<1	<10	#3	<10			Trib Thornton R. No Qc Float Quartzite.
1055741	SS	M	2		✓			3	7	11	27	13	5	<1	50	9	<10	<0.02		Trib Thornton R. Qc interbed. Qtzite + Pyj. Sltst. Float: Same + Qtz.
1055742	SS	M	2.5		✓			6	6	9	18	14	4	<1	30	<3	<10	<0.02		Trib Thornton R. Qc Pyj. Sltst. Float Same + Qtzite.
1055743	SS	M	1.5	✓	✓			3	5	4	14	11	3	<1	<10	4	<10			Murray Ck. Qc Quartzite Float: Same + Qtz.
1055744	SS	M	4.0		✓			4	4	5	12	10	3	1	30	<3	<10	<0.02		Murray Ck. Qc Pyj Sltst Float Same + Qtzite + Qtz.
1055745	SS	M	3.0		✓			5	5	9	26	9	4	1	60	<3	13	<0.02		LH trib Murray Ck. Qc Pyj Sltst. Float: Same + Qtzite, Qtz + Chert?
1055746	f																			Above locality Chert? / Quartzite.
1055747	SS	S	1.5	✓	✓			2	3	2	8	6	2	<1	<10	<3	<10			LH trib Murray Ck. No Qc Float: Qtzite, Pyj Sltst + Qtz.
																				Quartzite subcrop on 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 type gs = grab sample rc = rock chip (state interval & length) cs = channel sample (state length)

458038 037

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by: D.J. Weir. Sheet no. .....

Area / Prospect: Regional. Date: 18 May 1983

Map / Photo reference: Sandy Cape 1:100 000 Sheet. Analysed by: Analabs Coorparoo. DPO no: 30465 30466 (Au)

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	Carbon TOPO/10	Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Au	Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		
1055748	SS	S	1.5	✓				2.	3	1	5	8	2	<1	<10	3	<10			Brookes CK. No %c. Float: Qtzite. Qtzite Subcrop on ridge.
1055749	SS	S	1.0	✓				2	4	5	7	7	4	<1	20	<3	<10			RH trib Big Eel CK. No %c Float Quartzite. Qtz + Pyj Sltst.
1055750	SS.	M	3.0		✓			2	4	6	13	9	3	<1	20	<3	<10			Big Eel CK. %c Pyj. Sltst. Float: Same + Qtzite + Qtz.
1055751	SS	M	5.0		✓			3	5	8	16	9	4	<1	20	<3	<10	<0.02		Big Eel CK. %c Pyj Sltst - contorted. Float Same + Qtzite + Qtz.
1055752	SS	S	1.0		✓			3	3	4	10	7	3	<1	10	3	<10			LH trib Possum CK. %c Quartzite Float: Same + Pyj Sltst.
1055753	SS	M	2.0		✓			5	3	3	10	7	3	<1	10	<3	<10			Possum CK. %c Pyj Sltst Float Same + Qtzite.
1055754	SS.	Dry	3.0	✓				1	7	7	12	15	4	<1	30	7	<10			LH trib Symes CK. No %c No Float V. Organic.
1055755	SS	B	10.0	✓				1	5	8	18	13	4	<1	20	<3	<10			Symes CK. Pyj Sltst Subcrop from burrow. V. Organic.
1055756	SS	M	3.0		✓			3	8	19	35	15	5	<1	60	3	<10	<0.02		Dawson R. %c Pyj Sltst. Float same + Qtzite.
1055757	SS	M	3.0		✓			4	5	3	11	9	4	<1	20	<3	<10	<0.02		Grace CK. %c Pyj. Sltst Float Same + lt. Ferrug. Qtzite.
																				Sltst lt brownish @ Junction.
1055758	SS	M	2.0	✓	✓			2	3	1	18	13	5	<1	<10	35	<10	<0.02		Greenes CK. %c Pyj. Sltst. Float Same + Qtzite.
																				Dilution from Dune sands?
1055759	SS.	S	1.5	✓				1	2	1	5	5	4	<1	<10	<3	<10			Unnamed CK. No %c No float %c on beach Pyj Sltst.
																				Dilution from Dune Sand?
1055760	SS	M	1.0	·	✓			3	2	<1	4	7	2	<1	<10	3	<10			RH trib Brookes CK. %c Quartzite Float Same + minor Pyj Sltst.
1055761	SS	M	2.0		✓			3	4	8	9	11	3	<1	<10	4	<10			RH trib Brookes CK. %c Quartzite Float Pyj Sltst + 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)

458039038

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL1/77 No. ..... Sample numbers ..... Collected by: D.J. WEIR. Sheet no. .....

Area / Prospect: REGIONAL Date: 7/6/83

Map / Photo reference: SANDY CAPE 1:100 000 SHEET. Analysed by: ANALABS COOEE. DPO no: 30467

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** s sample type ****	Carbon Topo /10	Metal content ppm or % Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W		Grid ref	Geological Observations
1055762	SS	Dry	1.0	✓					1	7	8	21	9	3	2	45	4	24			Unnamed Ck. No % Fl. Pyjama Siltstones.
763	SS	3	0.5	✓					2	16	3	13	8	2	1	10	<4	<10			RH trib. Dawson R. No % No Float. Dilution by Dune Sand.
764	SS	S	0.5		✓				2	10	3	18	13	4	6	15	95	<10			LH trib Possum Ck. No % No Float. Dune Sand dilution?
765	SS	S	1.0	✓					2	5	4	15	14	5	5	10	12	11			No Name Ck. No % Fl: PyJ Sltst + Quartzite.
766	SS	Dry	4.0	✓					3	11	4	37	39	12	6	30	13	11			LH trib Templar Ck. No % No Fl. Agricultural Contam?
767	SS	S	1.5		✓				3.	10	2	40	42	18	3	105	15	<10			RH trib Templar Ck. 0% PyJ Sltst. minor Mn Stng. Agricult. Contam?
768	SS	S	1.0	✓					1	4	2	10	11	4	1	20	<4	<10			Magazine Ck.? No 0% No float mod. Organic mat.
769	SS	Dry pools	1.5	✓					1	13	11	50	38	47	6	50	4	<10			Little Eel Ck.. 0% Sl. chloritic banded Sltst. Float: Same.
770	SS	S	0.5		✓				3	6	4	18	13	7	<1	35	3	11			RH trib Big Eel Ck. 0% PyJ Sltst. Float Same + Quartzite.
771	SS	m	4.0		✓				4	7	8	24	14	5	2	35	3	<10			Big Eel Ck. 0% Banded Siltstone – quite psammitic. Float Same + Quartzite + PyJ Sltst.
772	SS	S	2.0		✓				3	6	5	23	20	20	2	25	<4	<10			Little Eel Ck. No % No Fl.
773	SS	S-m	2.0		✓				3	29	10	53	48	46	10	105	6	<10			LH trib Kenneth Ck. 0% Black Carb.? Sltst. Fl: Same minor Mn Stng.
774	SS	S	1.0		✓				3	18	20	26	29	13	2	25	3	<10			RH trib Kenneth Ck. No % No Float minor Ferrug.° ooze.
775	SS	m	10		✓				4	13	17	34	16	5	3	55	14	<10			Nelson Bay R. 0% PyJ Sltst – psammitic. Float: Same + Qtzite.
776	f									24	5	16	360	5	7	15	21	11			Above locality Quartzite float
777	SS	S	3		✓				4	10	14	34	14	10	2	55	3	13			trib RH trib Nelson Bay R. 0% + Float: banded Siltstone.
778	SS	Dry	3		✓				4	13	22	73	20	15	3	90	5	13			trib RH trib Nelson Bay R. 0% greenish banded psammitic Sltst.
779	SS	S	10		✓				3	10	15	30	19	5	2	50	20	<10			Nelson Bay R. 0% grey psammo-pelitic banded Sltst. Float Quartzite + PyJ. Sltst.
780	SS	m	4		✓				4	6	8	16	10	4	1	25	<4	<10			RH trib Nelson Bay R. 0% banded Sltst. Float: Same + Quartzite.
781	oc	GS.								13	22	37	191	7	3	15	<4	23			Same locality as 779. Quartzite, Sl. Ferruginous.
1055782	SS	m	1	✓	✓				2	4	<1	9	12	4	<1	10	5	<10			LH trib Blaney Ck. No % No Float. Sl. Org. Agricult. Contam?

* 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)

458040 039

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by: D.J. Weir. Sheet no. .....

Area / Prospect: REGIONAL Date: 7/6/83

Map / Photo reference: SANDY CAPE 1:100 000 Sheet Analysed by: Analabs, Coore DPO no: 30467

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon Tot% /10	Metal content ppm or % Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Grid ref	Geological Observations
105'5783	SS	DM	1,0	✓	✓				1	10	3	30	31	23	4	25	<4	<10		Barney Ck. No % No float. Agricult. contam — Cattle.
784	SS	S-m	1,5	✓	✓				1	5	1	7	10	2	<1	10	<4	<10		LH trib Barney Ck. No % No fl. Agricult. contam? + Cattle.
785	SS	S	1,5	✓	✓				1	5	1	15	19	7	1	20	<4	<10		Tempday Ck. No % No float. Agricult. contam.
786	SS	S	1	✓	✓					13	8	22	23	12	2	20	<4	<10		LH trib Kenneth Ck. No % No float. dilution by dune Sand?
787	SS	S	1	✓	✓				1	7	3	12	16	4	1	15	<4	<10		Kenneth Ck. No % No float. Sl. Org. dilution by dune Sand?

* 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)

Updated June 1983

040

TASMANIA

CRA EXPLORATION PTY. LTD.

458041

SS

Sample Number	LOCATION AMG Co-ordinates East	North	SAMPLE DESC. S. Type	Mesh	% Gravel	% Sand	% Silt	Organic	SITE DESCRIPTION Width	Flow	Bank	Catchment	Vegetation	Staining	Contam.	Sit. Rating	ROCK TYPE Outcrop	Maj Float	Min. Float	LOOK	METAL CONTENT ppm / % Cu	Pb	Zn	Ni	Co	Bi	As	Ag	Sn / W	Ba	Geological Observations
1142130			1	4	40	30	30	-1	4.0	4	2		3	-1	-1	1	8	8	100		10	10	30	25	20	<5	1	<1	5 / <10	200	Rebecca Ck. 9c Sheared f. lam. Pyj. Slst.
1142131			1	4	60	20	20	-1	1.0	2	3		3	-1	-1	1	-1	100	8		20	<5	15	20	10	<5	<1	<1	<5 / <10	110	LH Trib Rebecca Ck. No 9c Fl. Qtzite + f. lam Slst.
1142132			1	4	50	30	20	-1	2.0	3	3		1	-1	-1	1	8	8	100		10	<5	15	15	<5	<5	<1	<1	5 / <10	60	Sardine Ck. 9c F. lam. Pyj. Slst.
1142133			1	4	60	20	20	-1	0.5	3	3		1	-1	-1	1	-1	100	120		2	<5	10	15	<5	<5	<1	<1	<5 / <10	40	RH Trib Sardine Ck. Float Qtzite No 9c.
1142134			1	4	40	40	20	-1	2.0	4	3		4	1	-1	1	-1	120	100		2	<5	15	15	5	<5	1	<1	<5 / <10	140	Sardine Ck. No 9c Fl: Slst, Qtzite, Pyj Slst.
1142135			1	4	40	30	30	-1	1.5	3	3		1	-1	-1	1	8	8	-1		5	10	20	20	10	5	<1	<1	25 / <10	110	LH Trib Sardine Ck. 9c Pyj. Slst.
1142136			1	4	70	20	10	-1	6.0	4	3		1	-1	-1	1	100	100	-1		2	<5	10	20	10	10	<1	<1	<5 / <10	70	Rebecca Ck. 9c Quartzite → Arkose.
1142137			1	4	-1	80	20	3	0.5	3	3		4	-1	-1	3	-1	-1	-1		<2	<5	15	15	5	<5	<1	<1	20 / <10	40	Unnamed Ck. No 9c No Fl. Aeolian Sands.
1142138			1	4	80	10	10	-1	3.0	4	2		4	1	-1	1	8	8	100		5	15	20	20	5	<5	1	<1	5 / <10	120	RH Trib Nelson Bay R. 9c lam Slst → Pyj Slst. Fl. Qtzite.
1142139			1	4	80	10	10	-1	10.0	4	2		4	1	-1	2	8	8	100		20	10	30	20	<5	<5	1	<1	5 / <10	140	Nelson Bay R. 9c Pyj. Slst. Fl. Same + Qtzite
1142142			1	4	-1	80	20	-1	2.0	3	3		1	-1	6	2	-1	-1	-1		10	<6	10	20	5	<5	<1	<1	<5 / <10	50	Alert Ck. No 9c No fl Dil^n by Dune Sand.
1142144			1	4	30	40	30	-1	1.5	3	3		1	-1	-1	1	-1	13	-1		10	<5	20	20	<5	10	<1	<1	55 / <10	40	LH Trib Alert Ck. No 9c Fl. grey sandstone.
1142146			1	4	20	60	20	-1	1.5	3	3		1	-1	-1	1	-1	8	100		5	<5	30	25	5	<5	<1	<1	STO / 10	60	Alert Ck. No 9c Fl grey Slst Quartzite.
1142186			1	4	40	30	30	-1	2.5	3	2		3	-1	7	1	8	8	100		10	<5	25	20	<5	<5	<1	<1	60 / <10	90	trib Sky Ck. 9c grey lam Slst. Float Same
1142187			1	4	10	45	45	1	0.5	3	3		3	1	7	1	-1	-1	-1		10	<5	15	20	<5	<5	<1	<1	10 / <10	150	trib Sky Ck. → Seepage. No 9c No fl.
1142188			1	4	80	5	15	-1	2.0	2	2		3	-1	7	1	8	8	100		10	<5	40	20	<5	<5	<1	<1	15 / <10	120	Trib Sky Ck. 9c grey-bl. lam Slst. Fl Same + Qtzite
1142189			1	4	70	20	10	-1	2.5	3	2		3	-1	-1	1	8	93	11		10	5	35	20	<5	<5	1	<1	75 / <10	120	Sky Ck. 9c g/y-bl lam Slst → greywacke. Fl. Basalt + Qtz gravels.
1142190			1	4	60	30	10	-1	2.0	3	2		3	-1	-1	1	8	93	-1		10	<6	30	20	<5	<5	<1	<1	70 / <10	70	RH Trib Sky Ck. 9c Slst ± Ck. Braeton ridge.
GEOCHEMICAL STREAM SEDIMENT SAMPLING LEDGER									DETECTION LIMIT												2	5	2	5	5	5	1	1	5 / 10	10	
									ANALYTICAL METHOD												ICS80	→							XRF 1A	XRF 1A	

Tenement Name: ROCKY CAPE EL 1/77.

Area / Prospect: REGIONAL SAMPLING.

Map / Photo Ref: SANDY CAPE 1:100 000 SHEET.

Project: REGIONAL SAMPLING AMG Zone: 55

DPO's: 30477

Sample No's:

Sheet No.:

Laboratory:

Collected By: DJW + BM. Date: 1/12/83.

Updated June 1983

458042 041

TASMANIA

CRA EXPLORATION PTY. LTD.

SS

Sample Number	LOCATION AMG Co-ordinates East	North	SAMPLE DESC. S. Type	Mesh	% Gravel	% Sand	% Silt	Organic	SITE DESCRIPTION Width	Flow	Bank	Catchment	Vegetation	Staining	Contam.	Silt. Rating	ROCK TYPE Outcrop	Maj. Float	Min. Float	LOOK	METAL CONTENT ppm / % Cu	Pb	Zn	Ni	Co	Bi	As	Ag	Sn / W	Ba.	Geological Observations
1142191			1	4	70	20	10	-1	2.0	1	2		3	2	-1	1	8	8	93		20	5	30	30	10	<5	2	<1	30 / 10	200	LH trib Skey CK. 9% Grey lam S/Stst, Fl Same + Basalt
1142192.			1	4	80	15	5	-1	5.0	2	2		3	-1	7	1	8	8	11		10	<5	25	20	5	<5	<1	<1	35 / <10	130	Skey CK. 9% grey lam S/Stst. → greywacke Fl Same + 9% qtz
1142193			1	4	80	15	5	-1	1.5	2	2		3	-1	7	1	8	8	11		10	<5	15	25	<5	<5	<1	<1	15 / <10	160	LH trib Skey CK. 9% grn lam S/Stst. fl: Same + 9% gravels.
1142349			1	4	40	30	30	-1	1.5	2	3		1	-1	-1	1	-1	100	8		10	<5	40	30	15	<5	1	<1	0.17% / 20	100	Tiger CK No 9% Fl: Qtzite grey lam S/Stst + Chert?
1142351			1	4	5	80	15	1	10	1	4		1	-1	-1	2	-1	-1	-1		15	<5	30	40	15	<5	3	<1	610 / 30	180	RH trib Tiger CK. No 9% No float.
1142288			1	4	-1	60	40	-1	1.5	3	3		5	-1	5	2	13	13	-1		15	5	20	15	5	<5	3	<1	5 / <10	230	LH trib Richardson's CK. 9% grey Mudstone float Same.
1142289			1	4	-1	60	40	-1	2.0	3	3		5	-1	5	3	-1	-1	-1		10	<5	25	40	15	<5	1	<1	10 / 10	80	RH trib Richardson's CK. No 9% No float.
1142290			1	4	-1	70	30	-1	2.0	2	3		1	-1	5	2	-1	-1	-1		10	5	10	10	5	<5	<1	<1	<5 / <10	50	Skey CK. No 9% Fl: grey lam S/Stst. Qtz gran.
1142291			1	4	-1	30	70	-1	1.5	3	3		1	-1	5	2	-1	-1	-1		10	<5	10	10	5	<5	<1	<1	<5 / <10	50	RH trib Skey CK. No 9% No fl.

GEOCHEMICAL STREAM SEDIMENT SAMPLING LEDGER

DETECTION LIMIT

ANALYTICAL METHOD — ICP80 → XRF 1A, XRF 1A.

Tenement Name: ROCKY CAPE EL 1/77

Project: REGIONAL SAMPLING. AMG Zone: 55

Sheet No.:

Area / Prospect: REGIONAL SAMPLING.

DPO's: 30477

Laboratory: ALS Brisbane.

Map / Photo Ref.: SANDY CAPE 1:100 000

Sample No's:

Collected By: DJW + RM Date: 12/83.

Updated June 1983

458043 042

TASMANIA

CRA EXPLORATION PTY. LTD.

R

Sample Number	LOCATION							ROCK TYPE			MINERALISATION						LOOK	METAL CONTENT ppm / %										Geological Observations
	Co-ordinates AMG / Grid		Exposure	S. Type	Width (m)	Interval		Major Rock	Minor Rock	Alteration	Visible	Style	Major	Minor	Minor	Gangue		Cu	Pb	Zn	Ni	Co	As	Ag	Bi	Sn / W	Au ppb / Ba	
	East	North				From	To																						
1142140			2	3	-1	-1	-1	122	-1	12	3	-1	10	80	-1	-1		5	65	10	10	5	140	2	<5	<5 / 20	45 / 240	Site as 1142139 float: ferrug. hem. py quartz.
1142350			2	3	-1	-1	-1	25	-1	-1	-1	-1	-1	-1	-1	-1	1	10	25	10	10	5	2	1	<5	<5 / 40	<3 / 860	Site as 1142349 Chert? float – remob? Pyrite???
1142354			2	3	-1	-1	-1	25	-1	-1	-1	-1	-1	-1	-1	-1	1	5	5	5	10	5	<1	<1	<5	<5 / 10	3 / 10	Site as per 1142353. Chert float

GEOCHEMICAL ROCK SAMPLING LEDGER

DETECTION LIMIT

ANALYTICAL METHOD

Tenement Name: ROCKY CAPE EL 1/77

Area / Prospect: REGIONAL

Map / Photo Ref: SANDY CAPE 1:100 000 Sheet.

Project:

AMG Zone: 55

DPO's: 30479

Sample No's:

Sheet No.:

Laboratory: ALS Brisbane.

Collected By: DJW

Date: 2/83.

APPENDIX II

STREAM SEDIMENT ORIENTATION SURVEY

ASSAY RESULTS

458045 044

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by D.J. WEIR. I. HALL Sheet no. 1

Area / Prospect NELSON BAY RIVER Date 17/2/83

Map / Photo reference SANDY CAPE 1:100 000 TOPO SHEET −80# − +200# ORIENTATION SURVEY. Analysed by ANALABS COOKE DPO no. 30458

Sample No.	Type ss * oc f s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon TOPO/10	Metal content ppm or % Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Grid ref A.M.G.	Geological Observations
1055495	SS	Dry-Puds	6.0		✓			1	7	14	24	13	5	1	66	90	<10	314500 5440650	Nelson Bay River Qc f. lam. Pyjama Siltstone
426	SS	Puds	2.0		✓			1	5	13	15	10	4	<1	25	15	<10	314700 5440800	LH trib Nelson Bay River. Qc Pyjama Siltstone Sl. Ferruginous
427	SS	Dry	0.5	✓	✓			2	4	7	11	11	4	1	45	45	<10	315600 5441100	RH trib 5Z above Qc Pyjama Siltstone Float: Same + Qtzite.
428	SS	Dry	1.5	✓	✓			2	3	6	9	17	4	<1	20	15	<10	315700 5441200	LH trib Nelson Bay R. Qc f. lam. Pyjama Siltstone
429	SS	Dry	1.0	✓	✓			1	4	3	9	26	4	<1	10	8	<10		RH trib Murray Ck. No Qc Float: Quartzite.
430	SS	Dry-Puds	1.0	✓	✓			1	3	3	9	11	2	<1	5	20	<10		Murray Ck. Qc Qtzite + Pyjama Siltstone.
431	SS	Dry	0.5		✓			2	3	1	7	16	3	<1	<5	4	<10		RH trib Dawson R. Qc + Float Quartzite
432	SS	Dry-Puds	1.3		✓			1	2	2	36	10	2	<1	5	5	<10		Dawson R. Qc Pyjama Siltstones. Float: Qtzite.
433	SS	Dry	0.5	✓				1	7	18	20	15	3	1	5	10	<10		Grace Ck. No Qc. Float Qtzite. Qtzite Qc on track.
435	SS	Dry-Puds	2.0		✓			2	2	6	13	3	3	<1	10	<3	<10		Dawson R. Qc Interbedded quartzite + Siltstone Float: Same.
436	SS	Dry	1.0	✓	✓			1	5	5	13	4	4	<1	5	<3	<10		RH trib Dawson R. No Qc Float: Quartzite.

* 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)

458046 045

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: ROCKY CAPE EL 1/77 No. Sample numbers: Collected by: D.J. WEIR, I. HALL Sheet no.

Area / Prospect: NELSON BAY RIVER AREA Date: 14/2/83

Map / Photo reference: SANDY CAPE 1:100 000 TOPO SHEET ORIENTATION SURVEY -80# - +200# Analysed by: ANALABS COOGEE DPO no: 30458

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
	ss * / oc / f / s	fl	wi	al	co	ca	pH	Topo /10	Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W			
		o/c sample type ***																		
		s sample type ****																		
1055437	SS	S	4		✓			2	4	8	25	14	4	<1	25	8	<10			RACHAEL CK. No 9c Float: quartzite, quartz.
1055438	SS	Dry	2.5	✓				1	8	14	30	34	7	2	45	7	<10			RH trib Rachael CK. No 9c No float.
1055439	SS	Dry	1.5	✓				1	3	5	14	23	3	<1	20	4	<10			LH trib Rachael CK. No 9c Float quartz.
1055440	SS	Dry	1.5	✓	✓			2.	4	8	20	12	4	<1	30	9	<10			LH trib Rachael CK. 9c on main ck. Pyjama Siltstones.
1055441	OC	GS.																		limonite - Psuedo - after basalt?
1055442	f	GS.	off	Mullock heap																Pyritic Quartzite ± 30% Py.
1055443	SS.	Dry	0.5	✓	✓			1	3	2	7	15	3	2	<5	110	<10			LH trib Nelson Bay R. No 9c Float: quartzite.
1055444	SS	Dry	1,0		✓			1	2	3	6	18	3	1	<5	10	<10			Nelson Bay R. No 9c No Float. Quartz gravel.
1055445	SS	S	0,5		✓			3	3	3	11	11	3	2	<5	3	<10			RH trib Nelson Bay R. No 9c Float quartzite, quartz, spotted Quartzite
1055446	SS	S	1,0		✓			2	2	3	9	11	2	<1	<5	8	<10			Nelson Bay R. 9c finely banded grey Siltstones.
1055447	OC	GS.																		Above locality finely banded grey Siltstones.
1055448	SS	Dry	0,5	✓	✓			1	3	3	8	15	2	1	<5	7	<10			LH trib Nelson Bay River. 9c Grey banded Siltstone Float: Sams + quartzite.
1055449	SS	S	0,5	✓	✓			1	2	2	7	20	2	<1	<5	<3	<10			RH trib Nelson Bay R. No 9c Float: Siltstone + Quartzite.
1055450	SS	S	0,5	✓	✓			2	2	2	7	11	1	<1	<5	5	<10			RH trib Nelson Bay R. No 9c Float Quartzite.
1055451	SS	Dry	1,0		✓			2	2	3	10	10	2	<1	<5	15	<10			Trib Nelson Bay R. Quartzite 9c on No 9c Float quartzite. Tramway.
1055452	SS	Dry + Pods.	1,0		✓			2	2	2	7	12	1	<1	<5	6	<10			Big Eel CK. No 9c Float Quartzite.
1055453	SS	Dry	0,5	✓	✓			1	3	4	11	14	1	<1	20	4	<10			RH trib Big Eel CK. No 9c Float Quartzite + quartz.
1055454	SS	Dry & Pods	1,0		✓			3	4	2	8	20	2	<1	<5	<3	<10			Big Eel Creek. No 9c Float quartzite + quartz.
1055455	SS	Dry & Pods	1,5		✓			1	5	9	10	13	2	1	20	5	<10			LH trib Nelson Bay R. No 9c No float.
1055456	SS	Dry & Pods	1.5		✓			2	4	7	9	10	2	<1	15	10	<10			Cyril CK. No 9c Float quartz + quartzite.
1055457	SS	Dry	1.5		✓			1	3	5	9	13	2	<1	10	<3	<10			RH trib Nelson Bay R. 9c laminated Siltstone (Pyjama Rocks.) Float: qtzite.
1055458	SS	Dry	1,0	✓				1	7	2	9	15	3	<1	<5	15	<10			RH trib Nelson Bay R. No 9c Float Quartzite.
1055459	SS	Dry	2,0		✓			2	2	7	23	15	3	<1	5	120	<10			Nelson Bay River. No 9c Float: quartz + Quartzite.

* 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)

458047 046

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name ROCKY CAPE EL 1/77 . No. ..... Sample numbers ..... Collected by D.J. WEIR ..... Sheet no. .....

Area / Prospect NELSON BAY R. ..... Date 17/2/83

Map / Photo reference SANDY CAPE 1:100 000 TOPO SHEET. ORIENTATION SURVEY -80# - +200# Analysed by ANALABS, CLOSE . ..... DPO no. 30458

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref	Geological Observations
	ss * / oc / f / s	fl	wi	al	co	ca	pH	TOPO/10	Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W			
		o/c sample type ***																		
		s sample type ****																		
1058460	SS	5	0.5	v	✓			1	2	1	3	9	2	6	5	<3	<10			Thornton R. No % Float Quartzite.
461	SS	Dry pools	0.5		✓			2	2	3	7	10	2	<1	<5	8	<10			W Trib Thornton R. No % Float Quartzite.

* 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)

458048

047

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by D.J. WEIR. I. HALL Sheet no. 1

Area / Prospect NELSON BAY RIVER Date 17/2/83

Map / Photo reference SANDY CAPE 1:100 000 TOPO SHEET ORIENTATION SURVEY - 200 #Analysed by ANALABS COOKE DPO no 30458

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %										Grid ref A.M.G.	Geological Observations
	ss * oc f s	fl	wi	al	co	ca	pH	TOPO /10	Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W			
		o/c sample type ***																		
		s sample type ****																		
1055485	SS	Dry & Puds	6.0		✓			1	6	19	49	10	4	2	70	n.a	n.a.		314500 5440650	Nelson Bay River 9/c f. lam. Pyjama Siltstone
426	SS	Puds	2.0		✓			1	8	17	40	13	4	1	60				314700 5440800	LH trib Nelson Bay River. 9/c Pyjama Siltstone Sl. Ferruginous
427	SS	Dry	0.5	✓	✓			2	5	9	14	11	.5	5	95				315600 5441900	RH trib 57 above 9/c Pyjama Siltstone Float: Same + Qtzite.
428	SS	Dry	1.5	✓	✓			2	6	10	20	18	5	7	60				315700 5441200	LH trib Nelson Bay R. 9/c f. lam. Pyjama Siltstone
429	SS	Dry	1.0	✓	✓			1	11	23	36	22	3	2	40					RH trib Murray CK. No 9/c Float: Quartzite.
430	SS	Dry & Puds	1.0	✓	✓			1	9	28	41	16	3	2	40					Murray CK. 9/c Qtzite + Pyjama Siltstone.
431	SS	Dry	0.5		✓			2	6	17	31	9	2	<1	15					RH trib Dawson R. 9/c + Float Quartzite
432	SS	Dry & puds	1.3		✓			1	4	6	14	8	1	1	35					Dawson R. 9/c Pyjama Siltstones. Float: Qtzite.
433	SS	Dry	0.5	✓				1	9	26	58	14	2	2	35					Grass CK. No 9/c. Float Qtzite. Qtzite 9/c on track.
435	SS	Dry & puds	2.0		✓			2	8	23	47	23	4	2	60					Dawson R. 9/c Interbedded quartzite + Siltstone Float: Same.
436	SS	Dry	1.0	✓	✓			1	7	11	30	12	2	<1	25					RH trib Dawson R. No 9/c Float: Quartzite.

* 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)

458049 048

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by D.J. WEIR, I. HALL Sheet no. .....

Area / Prospect NELSON BAY RIVER AREA Date 14/2/83

Map / Photo reference SANDY CAPE 1:100 000 TOPO SHEET ORIENTATION SURVEY -200# Analysed by ANALABS COOKE DPO no. 30458

Sample No.	Type	ss channel **						Carbon	Metal content ppm or %									Grid ref	Geological Observations
	ss * / oc / f / s	fl	wi	al	co	ca	pH	TOPO /10	Cu	Pb	Zn	Ni	Co	As	Ba				
		o/c sample type ***																	
		s sample type ****																	
1055437	SS	S	4		✓			2	11	14	58	32	9	1	95				RACHAEL CK. No %c Float: quartzite, quartz.
1055438	SS	Dry	2.5	✓				1	14	8	43	51	12	<1	115				RH trib Rachael CK. No %c No float.
1055439	SS	Dry	1.5	✓				1	9	7	36	29	6	1	50				LH trib Rachael CK. No %c Float quartz.
1055440	SS	Dry	1.5	✓	✓			2.	6	9	24	17	3	1	85				LH trib Rachael CK. %c on main ck. Pyjama Siltstones.
1055441	OC	GS.																	Limonite - Pisolitic - after basalt?
1055442	f	GS.	6ft	Mullock heap															Pyritic Quartzite ≤ 30% Py.
1055443	SS.	Dry	0.5	✓	✓			1	5	8	24	13	2	<1	15				LH trib Nelson Bay R. No %c Float: quartzite.
1055444	SS	Dry	1.0		✓			1	2	1	10	7	1	<1	5				Nelson Bay R. No %c No Float. Quartz gravel.
1055445	SS	S	0.5		✓			3	8	9	36	21	5	21	50				RH trib Nelson Bay R. No %c Float quartzite, quartz, spotted quartzite
1055446	SS	S	1.0		✓			2	8	14	40	18	3	2	20				Nelson Bay R. %c finely banded grey Siltstones.
1055447	OC	GS.																	Above locality finely banded grey Siltstones.
1055448	SS	Dry	0.5	✓	✓			1	4	14	21	12	2	<1	15				LH trib Nelson Bay River. %c Grey banded Siltstone Float: same + quartzite.
1055449	SS	S	0.5	✓	✓			1	16	15	24	21	4	3	25				RH trib Nelson Bay R. No %c Float: Siltstone + Quartzite.
1055450	SS	S	0.5	✓	✓			2	12	19	38	29	5	2	25				RH trib Nelson Bay R. No %c Float Quartzite.
1055451	SS	Dry	1.0		✓			2	7	13	39	13	3	2	25				Trib Nelson Bay R. No %c Float quartzite. Quartzite %c on Tramway.
1055452	SS	Dry + Pools	1.0		✓			2	9	12	38	28	3	1	25				Big Eel CK. No %c Float Quartzite.
1055453	SS	Dry	0.5	✓	✓			1	5	9	25	9	4	<1	95				RH trib Big Eel CK. No %c Float Quartzite + quartz.
1055454	SS	Dry & Pools	1.0		✓			3	10	13	63	22	4	1	20				Big Eel Creek. No %c Float quartzite + quartz.
1055455	SS	Dry & Pools	1.5		✓			1	4	8	15	8	3	1	135				LH trib Nelson Bay R. No %c No float.
1055456	SS	Dry & Pools	1.5		✓			2	7	11	22	17	5	2	70				Cyril Ck. No %c Float quartz + quartzite.
1055457	SS	Dry	1.5		✓			1	7	14	46	14	4	2	80				RH trib Nelson Bay R. %c laminated Siltstone (Pyjama Rocks.) Float: qtzite.
1055458	SS	Dry	1.0	✓				1	8	8	41	19	4	1	45				RH trib Nelson Bay R. No %c Float Quartzite.
1055459	SS	Dry	2.0		✓			2	13	12	57	29	5	1	65				Nelson Bay River. No %c Float: quartz + Quartzite.

* 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)

458050 049

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name ROCKY CAPE EL 1/77 . No. ..... Sample numbers ..... Collected by D.J. WEIR ..... Sheet no. .....

Area / Prospect NELSON BAY R. Date .....

Map / Photo reference SANDY CAPE 1:100 000 TOPO SHEET. ORIENTATION SURVEY -200# Analysed by ANALABS, CLOCE . DPO no. 30458

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	Ni	Co	As	Ba				
		o/c sample type ***																	
		s sample type ****																	
1058460	SS	5	0.5	v	✓			1	5	9	29	10	2	64	30				Thornton R. No 7c Float Quartzite.
461	SS	Dry pools	0.5		✓			2	5	14	25	12	2	2	20				LN trib Thornton R. No 7c Float Quartzite.

* 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

APPENDIX III

LOG PROBABILITY PLOTS

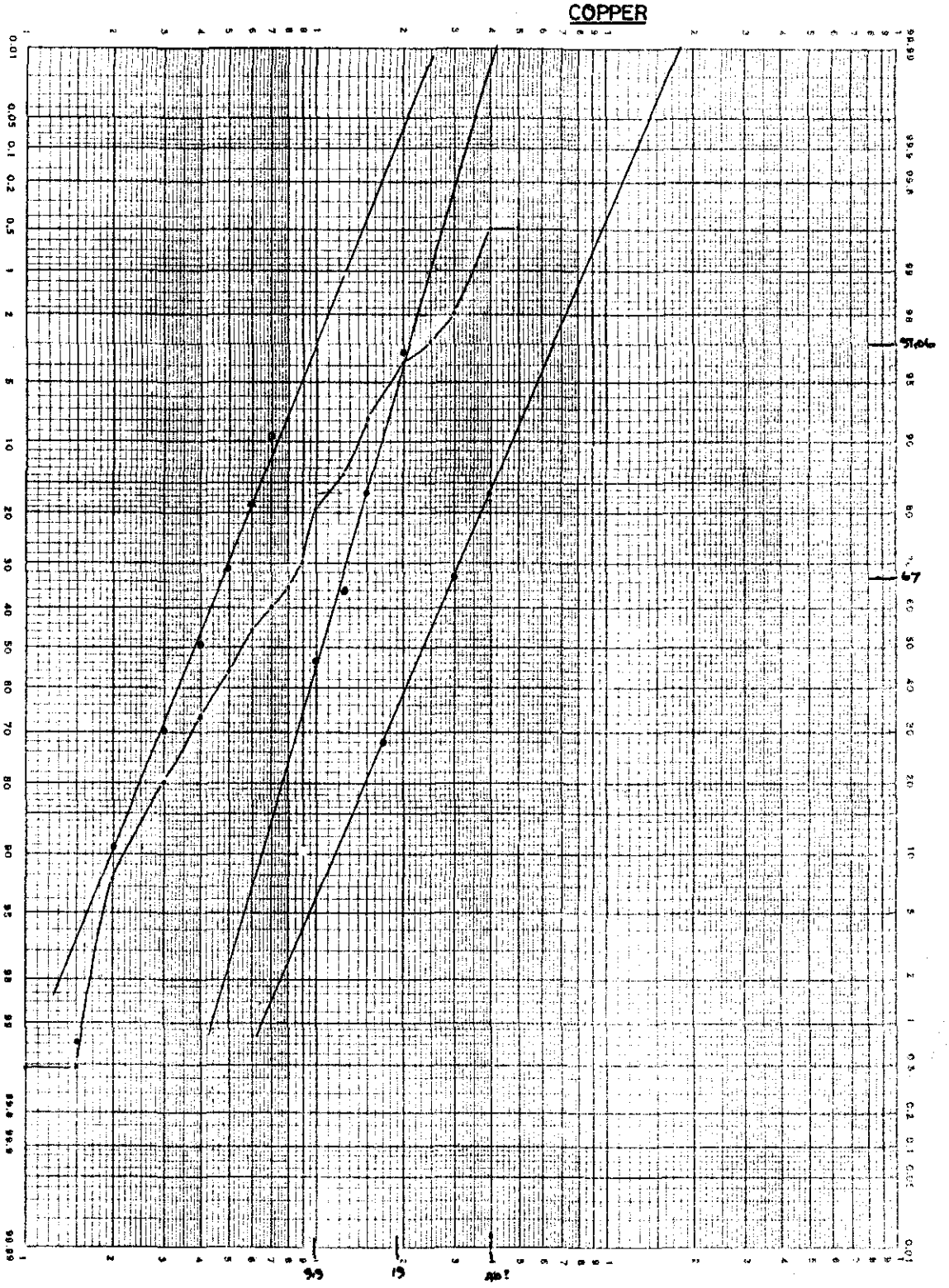
CUMULATIVE FREQUENCY CALCULATION Area: ROCKY CAPE EL 1/77 Element COPPER Name Date

ppm		Total	Cum. Tot	% Cum. Tot	Breaks	Remainder	Recalc. %
1	I	1	1	0.49		0,49	0,73
1.25		0	1	0.49			
1.5		0	1	0.49		0.49	0,73
2	𝍸 𝍸 𝍸	15	16	7.84		7,84	11,76
2.5		0	16	7.84		7.84	11,76
3	𝍸 𝍸 𝍸 𝍸 𝍸	25	41	20,10		20.1	30,15
4	𝍸 𝍸 𝍸 𝍸 𝍸 III	28	69	33,82		33,82	50,73
5	𝍸 𝍸 𝍸 𝍸 𝍸	25	94	46.08		46.08	69,12
6	𝍸 𝍸 𝍸 II	17	111	54,41		54,41	81,61
7	𝍸 𝍸 II	12	123	60.29		60.29	90,43
8	𝍸 𝍸 III	13	136	66.67		66.67	
9	𝍸 II	7	143	70.10	67	3.10	10,3
10	𝍸 𝍸 𝍸 𝍸 II	22	165	80,88		13.88	46.17
12.5	𝍸 𝍸 I	11	176	86,27		19.27	64,10
15	𝍸 𝍸 II	12	188	92.16		25,16	83,70
20	𝍸 III	8	196	96,08		29.08	96,74
25	II	2	198	97,06		30.06	
30	IIII	4	202	99,02	97.06	1,96	66.67
40	I	1	203	99.51		2,45	83,3
50		0	203	99,51		2,45	
60	I	1	204	100		2,94	
70							
80							
90							
100							
125							
150							
200							
250							
300							
400							
500							
600							
700							
800							
900							
1000							
1250							
1500							
2000							
2500							
3000							
4000							
5000							
6000							
7000							
8000							
9000							
10000							

052

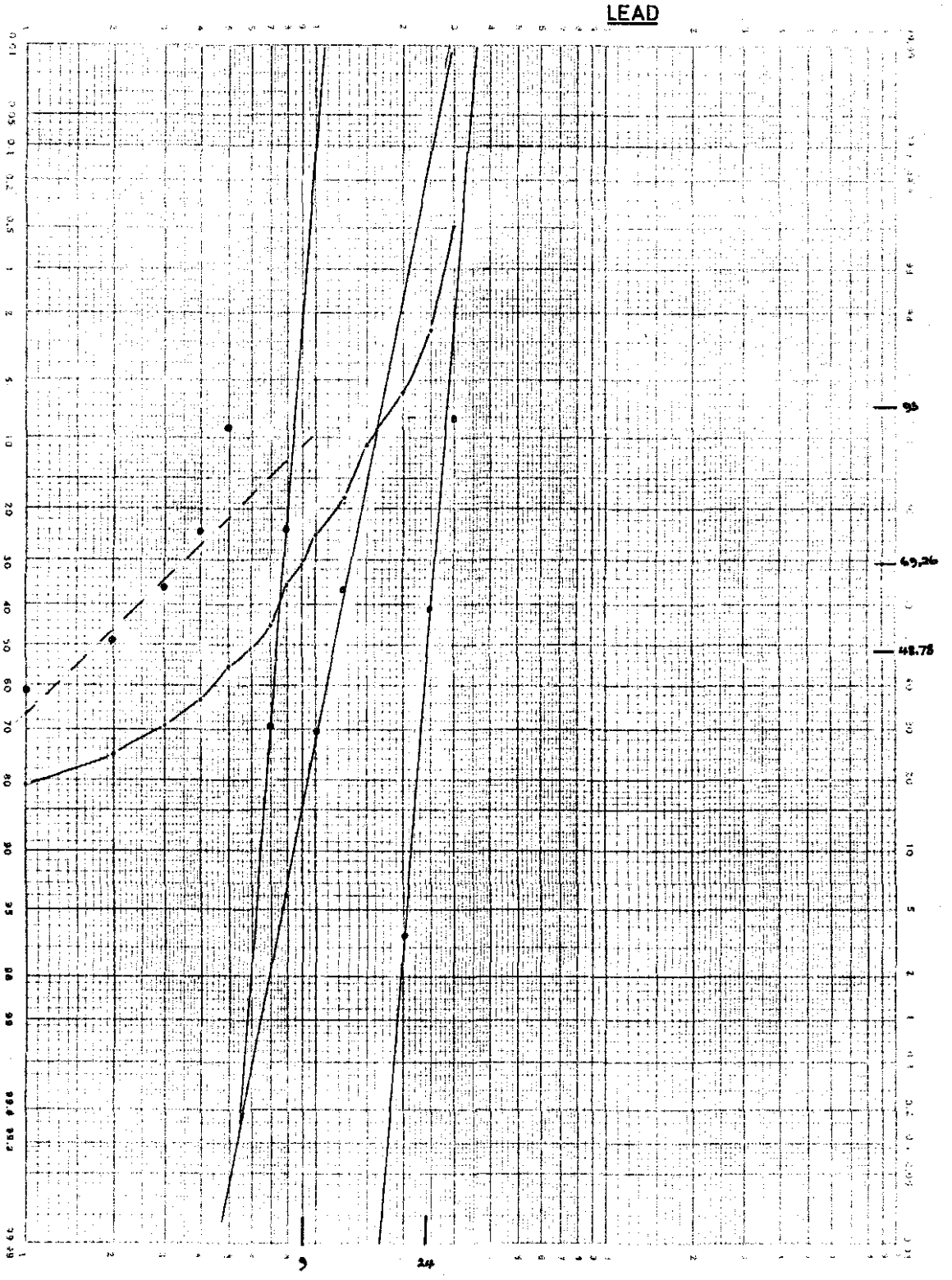
458053

GORMACK GRAPH PAPERS CHRISTCHURCH N Z



CUMULATIVE FREQUENCY CALCULATION Area: ROCKY CAPE EL 1/77 Element LEAD Name Date

ppm		Total	Cum. Tot	% Cum. Tot	Breaks	Remainder	Recalc. %
<5	27	27	13.17			13.17	26.99
1	12	39	19.02			19.02	39.0
1.5	0	39	19.02			19.02	39.0
2	12	51	24.87			24.87	50.98
2.5	0	51	24.87			24.87	50.98
3	13	64	31.2			31.20	63.96
4	12	76	37.07			37.07	76.0
5	15	91	44.39			44.39	91.0
6	9	100	48.78			48.78	
7	13	113	55.12		48.78	6.34	30.95
8	19	132	64.39			15.61	76.22
9	10	142	69.26			20.48	
10	12	154	75.12		69.26	5.86	29.39
12.5	14	168	81.95			12.69	63.64
15	15	183	89.2			19.94	
20	10	193	94.14		94	0.14	2.35
25	7	200	97.56			3.56	59.3
30	4	204	99.51			5.51	91.8
40	1	205	100			6	
50							
60							
70							
80							
90							
100							
125							
150							
200							
250							
300							
400							
500							
600							
700							
800							
900							
1000							
1250							
1500							
2000							
2500							
3000							
4000							
5000							
6000							
7000							
8000							
9000							
10000							


LEAD
95
49.26
48.78
9
24

458056 055

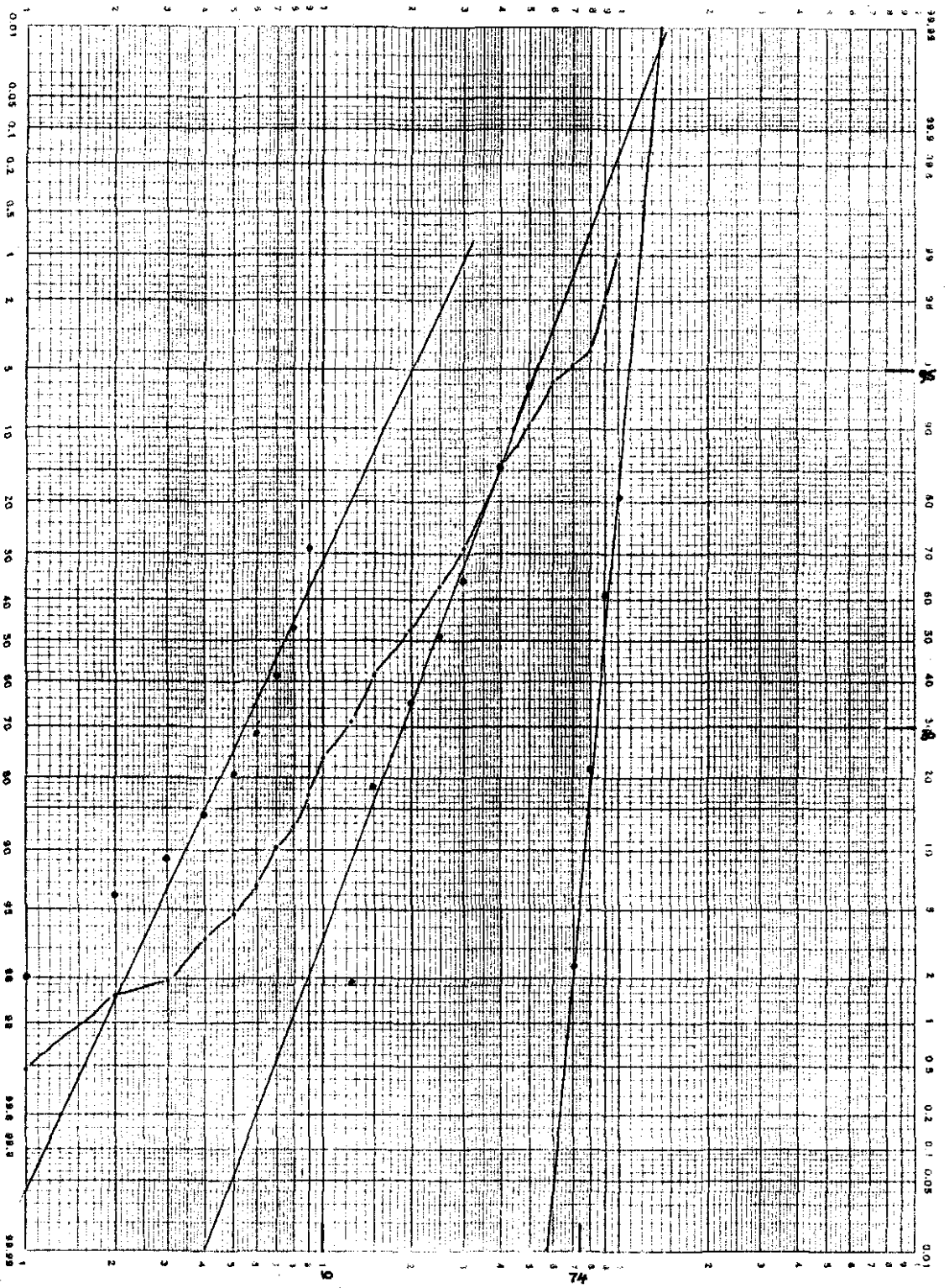
CUMULATIVE FREQUENCY CALCULATION Area: ROCKY CAPE EL 1/77 Element ZINC Name Date

ppm		Total	Cum. Tot	% Cum. Tot	Breaks	Remainder	Recalc. %
1	I	1	1	0.48		0.48	2.0
1.25		0	1	0.48			
1.5		0	1	0.48			
2	II	2	3	1.46		1.46	6.1
2.5		0	3	1.46			
3	I	1	4	1.95		1.95	8.16
4	III	3	7	3.41		3.41	14.26
5	III	3	10	4.87		4.87	20.38
6	IIII	4	14	6.82		6.82	28.54
7	++++ II	7	21	10.24		10.24	42.85
8	++++	5	26	12.68		12.68	53.05
9	++++ IIII	9	35	17.07		17.07	71.42
10	++++ ++++ IIII	14	49	23.90		23.9	
12.5	++++ ++++ +++	15	64	31.22	30	1.22	1.90
15	++++ ++++ ++++ ++++ II	22	86	41.95		11.95	18.62
20	++++ ++++ ++++ ++++ II	22	108	52.68		22.68	35.35
25	++++ ++++ ++++ ++++ I	21	129	62.92		32.92	51.32
30	++++ ++++ ++++ II	17	146	71.22		41.22	64.26
40	++++ ++++ ++++ ++++ ++++ IIII	29	175	85.36		55.36	86.30
50	++++ ++++	10	185	90.24		60.24	93.91
60	++++ III	8	193	94.15		64.15	
70	II	2	195	95.12	95	0.12	1.4
80	II	2	197	96.09		1.09	21.8
90	+++	5	201	98.05		3.05	61.0
100	II	2	203	99.02		4.02	80.4
125		0	203	99.02			
150		0	203	99.02			
200	I	1	204	99.51			
250	I	1	205	100			
300							
400							
500							
600							
700							
800							
900							
1000							
1250							
1500							
2000							
2500							
3000							
4000							
5000							
6000							
7000							
8000							
9000							

056

GORMACK GRAPH PAPER LTD. CHRISTCHURCH N.Z. P223Y Probability x 3 cycle log

ZINC



458058

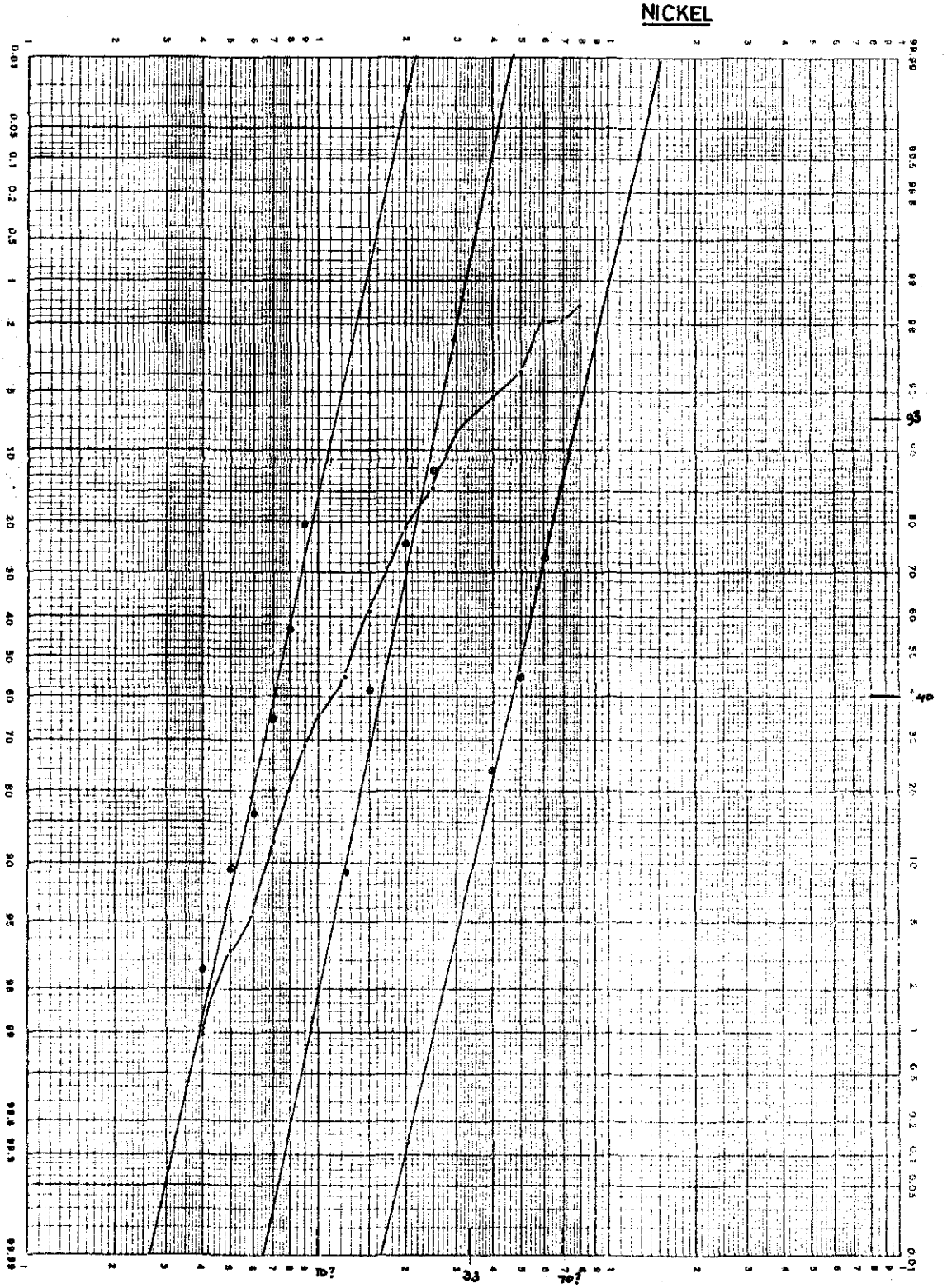
CUMULATIVE FREQUENCY CALCULATION Area: ROCKY CAPE EL 1/77 Element: NICKEL Name: Date:

ppm	Total	Cum. Tot	% Cum. Tot	Breaks	Remainder	Recalc. %
1						
1.25						
1.5						
2						
2.5						
3						
4	2	2	0.97		0.97	2.70
5	5	7	3.4		3.4	9.47
6	5	12	5.82		5.82	16.20
7	14	26	12.62		12.62	35.13
8	16	42	20.38		20.38	56.74
9	17	59	28.64		28.64	79.73
10	15	74	35.92		35.92	
12.5	18	92	44.66	40	4.66	90
15	35	127	61.65		21.65	41.84
20	36	163	79.12		39.12	75.59
25	13	176	85.44		45.44	87.81
30	13	189	91.75		51.75	
40	6	195	94.67	93	1.67	23.86
50	3	198	96.12		3.12	44.57
60	4	202	98.06		5.06	72.29
70	0	202	98.06		5.06	
80	1	203	98.54			
90	0	203	98.54			
100	0	203	98.54			
125	2	205	99.51			
150	0	205	99.51			
200	1	206	100		7	
250						
300						
400						
500						
600						
700						
800						
900						
1000						
1250						
1500						
2000						
2500						
3000						
4000						
5000						
6000						
7000						
8000						
9000						
10000						

058

458059

GORMACK GRAPH PAPERS : CHRISTCHURCH N.Z P223Y Probability x 3 cycle log



458060

059

CUMULATIVE FREQUENCY CALCULATION Area: ROCKY CAPE EL 1/77 Element COBALT Name Date

ppm		Total	Cum. Tot	% Cum. Tot	Breaks	Remainder	Recalc. %
B.D.	14	14	8.33			8.33	
1	10	24	14.28			14.28	
1.5	0	24	14.28			14.28	
2	34	58	34.52			34.52.	
2.5	0	58	34.52				
3	30	88	47.62	34.52		13.1	27.86
4	27	115	68.45			33.93	72.16
5	18	133	79.17			44.65	94.96.
6	4	137	81.54			47.02.	
7	5	142	84.52	84.52		0	
8	0	142	84.52			0	
9	0	142	84.52			0	
10	7	149	88.69			4.17	35.88
12.5	3	152	90.48			5.96	45.60
15	7	159	94.64			10.12	77.25.
20	5	164	97.62			13.1	
25	1	165	98.21	98.21			
30	0	165	98.21				
40	1	166	98.81				
50	2	168	100.				
60							
70							
80							
90							
100							
125							
150							
200							
250							
300							
400							
500							
600							
700							
800							
900							
1000							
1250							
1500							
2000							
2500							
3000							
4000							
5000							
6000							
7000							
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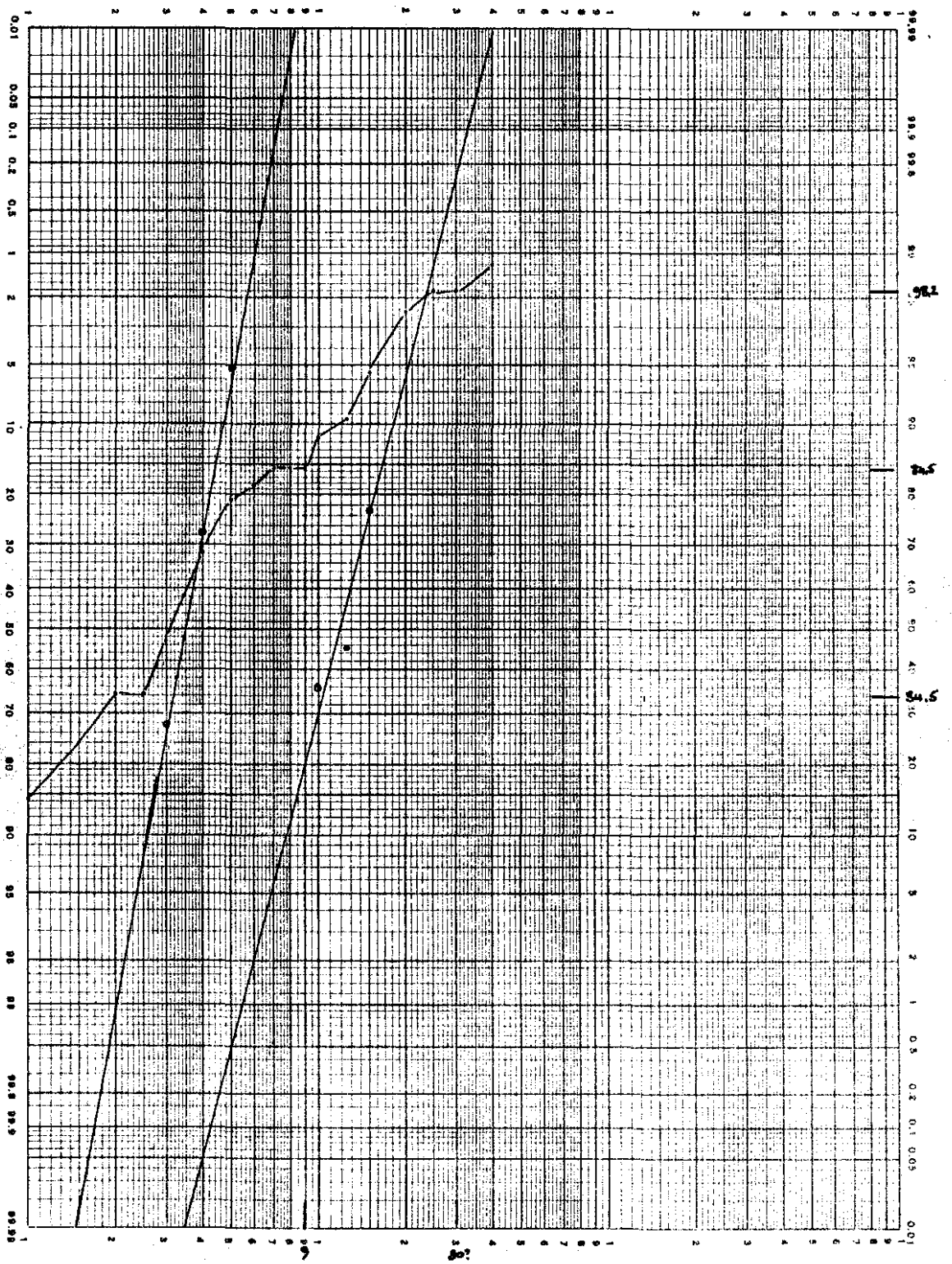
GORMACK GRAPH PAPERS : CHRISTCHURCH N.Z. P223Y Probability x 3 cycle log

COBALT



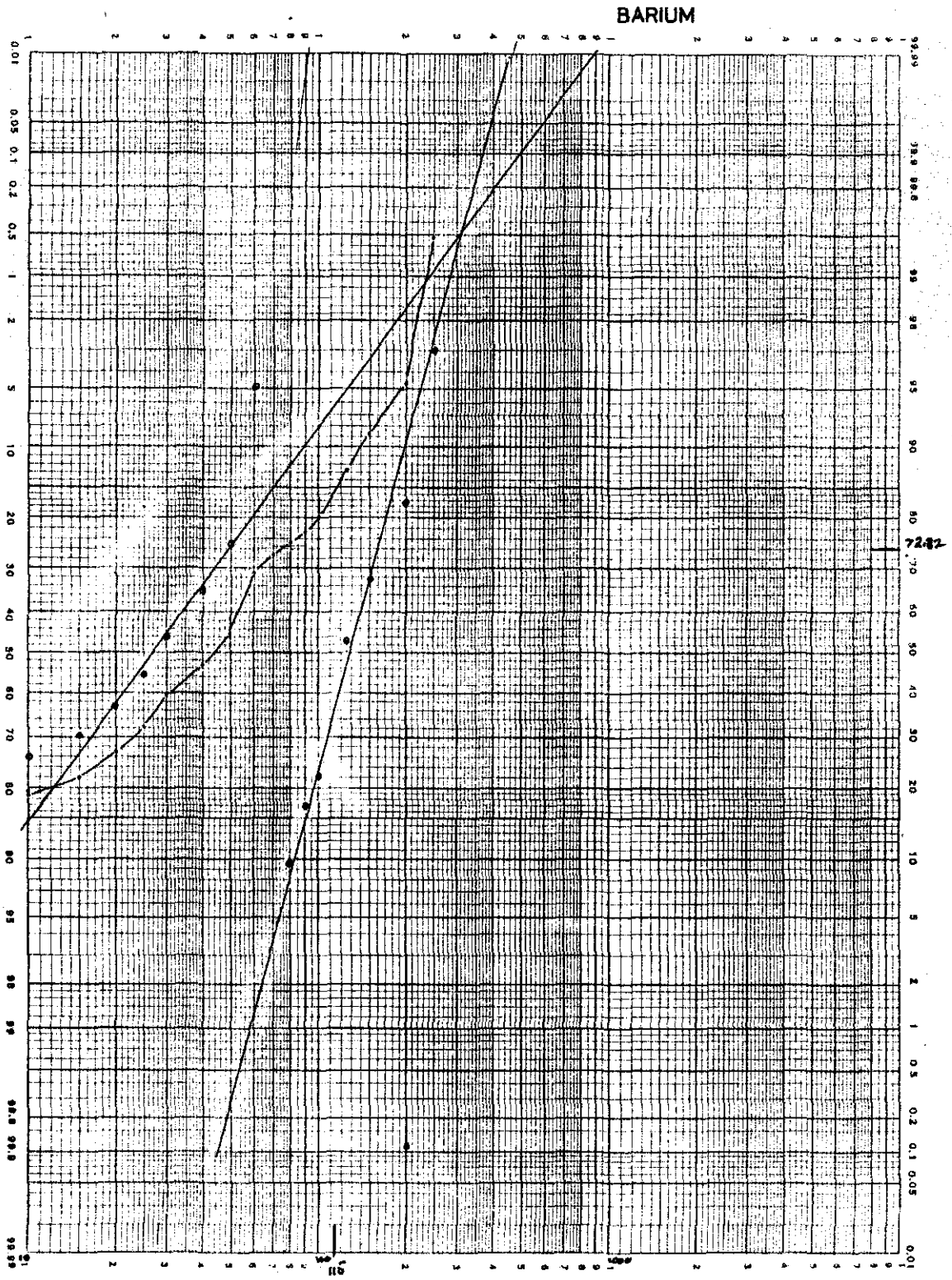
458062 061

CUMULATIVE FREQUENCY CALCULATION Area: ROCKY CAPE EL1/77 Element BARIUM Name Date

ppm		Total	Cum. Tot	% Cum. Tot	Breaks	Remainder	Recalc. %
b.d.	10	10	5.12				
1.25			10				
1.5			10				
2			10				
2.5			10				
3			10				
4			10				
5	1	1	19	5.64			
6			11				
7			11				
8			11				
9			11				
10	1	26	37	18.97		18.97	26.05
12.5		0	37	18.97		18.97	26.05
15	1	6	43	22.05		22.05	30.28
20		20	53	27.18		27.18	37.32
25		10	63	32.31		32.31	44.37
30		14	77	39.49		39.49	54.22
40		15	92	47.18		47.18	64.79
50		15	107	54.87		54.87	75.35
60		18	135	69.23		69.23	95.07
70	11	7	142	72.82		72.82	
80		5	147	75.38		2.56	9.4
90		4	151	77.44	72.82	4.62	16.99
100		5	156	80.0		7.18	26.42
125		14	170	87.18		14.36	52.85
150		8	178	91.28		18.46	67.92
200		8	186	95.38		22.56	83.0
250		5	194	99.49		26.67	98.1
300							
400							
500							
600							
700							
800							
900							
1000							
1250							
1500							
2000	1	1	195	100		87.18	
2500							
3000							
4000							
5000							
6000							
7000							
8000							
9000							
10000							

062

GORMACK GRAPH PAPERS · CHRISTCHURCH N.Z. P223Y Probability x 3 cycle log



CUMULATIVE FREQUENCY CALCULATION Area: ROCKY CAPE EL 1/77 Element: TIN Name: Date:

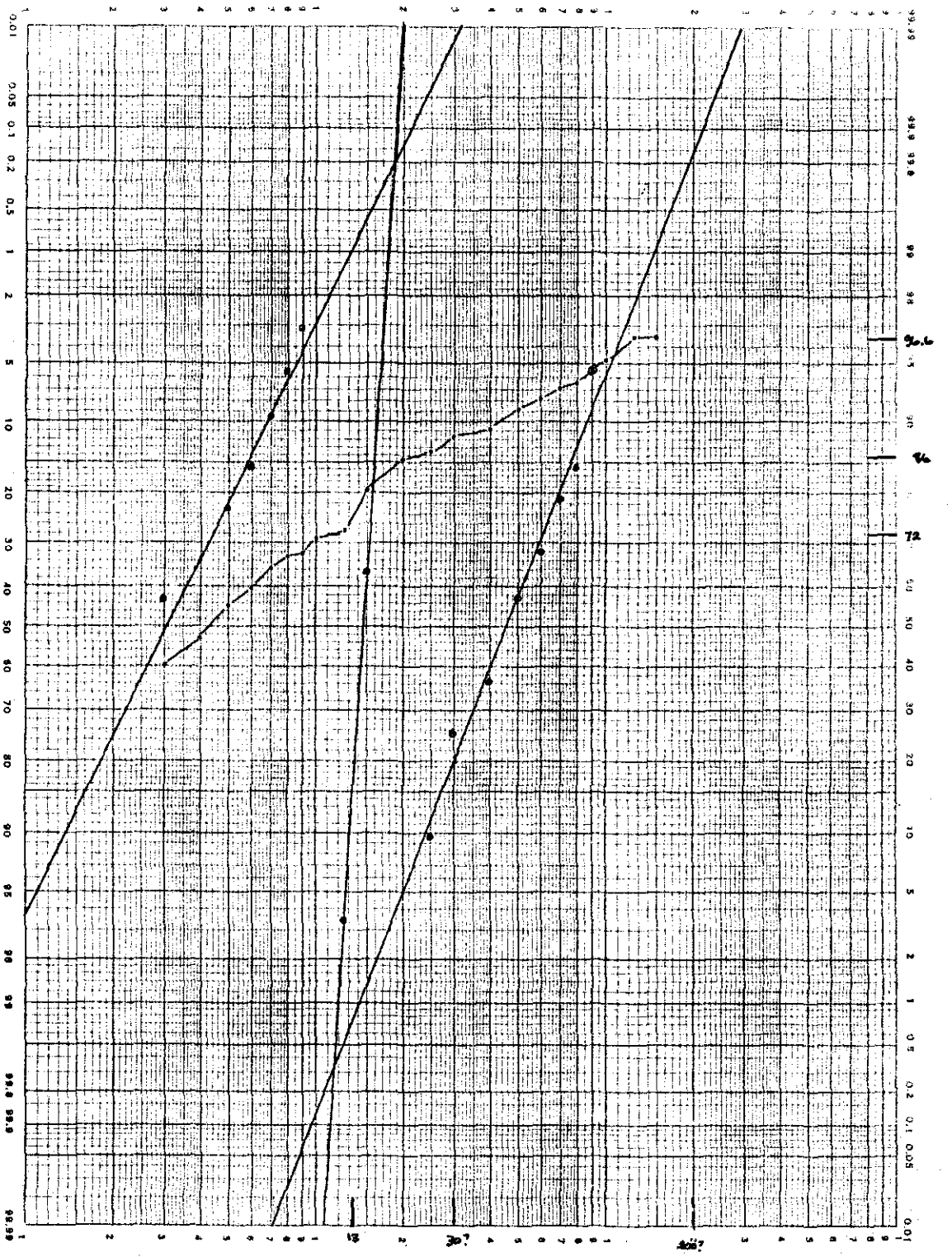
ppm		Total	Cum. Tot	% Cum. Tot	Breaks	Remainder	Recalc. %
B.D.	70	70	33.98				
1.25	0	70	33.98				
1.5	0	70	33.98				
2	0	70	33.98				
2.5	0	70	33.98				
3	13	83	40.29		40.29	56.85
4	14	97	47.09		47.09	66.45
5	19	115	55.82		55.82	78.76
6	8	123	59.71		59.71	84.25
7	9	132	64.07		64.07	90.40
8	6	138	66.99		66.99	94.53
9	2	140	67.96		67.96	95.89
10	6	146	70.87		70.87	
12.5	3	149	72.33	72	0.33	2.46
15	17	166	80.58		8.58	63.84
20	10	176	85.44		13.44	
25	3	179	86.89	86	0.89	9.73
30	3	182	88.34		2.34	25.57
40	2	184	89.32		3.32	36.28
50	4	188	91.26		5.26	57.49
60	2	190	92.23		6.23	68.09
70	2	192	93.20		7.20	78.69
80	1	193	93.69		7.69	84.04
90	2	195	94.66		8.66	94.65
100	1	196	95.15		9.15	
125	3	199	96.60	96.6		
150	0	199	96.60			
200	0	199	96.60			
250	0	199	96.60			
300	1	200	97.09			
400	0	200	97.09			
500	0	200	97.09			
600	2	202	98.06			
700	0	202	98.06			
800	2	204	99.03			
900	0	204	99.03			
1000	1	205	99.51			
1250	0	205	99.51			
1500	0	205	99.51			
2000	1	206	100.			
2500						
3000						
4000						
5000						
6000						
7000						
8000						
9000						
10000						

064

458065

GORMACK GRAPH PAPERS CHRISTCHURCH N.Z. P223Y Probability x 3 cycle log

TIN



065

APPENDIX IV

SALMON RIVER PROSPECT - ASSAY RESULTS

458067 066

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name ROCKY CAPE EL 1/77 No. ..... Sample numbers ..... Collected by A. CRICK. Sheet no. .....

Area / Prospect SALMON R. ROAD Date 26/1/83.

Map / Photo reference SANDY CAPE 1:100 000 TOPO SHEET. Analysed by ANALABS COOEE. DPO no. 30456

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	As	Ba	Sn	W				
		o/c sample type ***																	
		s sample type ****																	
1055392	ss								10	64	90	12	245	25	<4				Unnamed ck. LH trib Arthur R. oc Black Shale.
393	ss								11	30	52	11	190	85	<4				Unnamed ck. LH trib Arthur R. o/c Black Shale.
394	ss								70	156	84	200	125	1000	<4				Unnamed ck. LH trib Arthur R. o/c Black Shale.
395	Pc	Wt	45,	12g					4	4	22	12	10	160	<4				Unnamed ck. LH trib Arthur R. 100m upstream from junction.
396	Pc	Wt	41,	24g					5	4	25	6	10	90	<4				As above 500 m. upstream from junction
397	Pc	Wt	59,	04g.					3	4	24	<1	5	100	<4				As above 900m upstream from junction.
398	oc	Rc							13	15	65	66	120	50	<4				limonitic capping from Bl. Shale 868m above junction.
1055399	oc	Rc							12	28	64	17	230	1750	<4				Black Pyritic Shale 400 m above junction.
1055404	oc	Rc.							7	14	23	15	295	35	<4				Black Pyritic Shale 200 m above junction.

* 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 cc = crush sample cc = rock chip (state interval & length) cc = channel sample (state length)

Updated June 1983

458068 067

TASMANIA

CRA EXPLORATION PTY. LTD.

SS

Sample Number	LOCATION AMG Co-ordinates East	North	SAMPLE DESC. S. Type	Mesh	% Gravel	% Sand	% Silt	Organic	SITE DESCRIPTION Width	Flow	Bank	Catchment	Vegetation	Staining	Contam.	Sit. Rating	ROCK TYPE Outcrop	Maj. Float	Min. Float	LOOK	METAL CONTENT ppm / % Cu	Pb	Zn	Ni	Co	Bi	As	Ag	Sn / W	Ba	Geological Observations
1142044			1	4	-1	-1	-1	-1	1.0	4	2	6	3	-1	-1	1	-1	8	11		10	10	20	5	<5	<5	4	<1	10/20	270	
1142045			1	4	-1	-1	-1	-1	1.0	4	2	7	3	-1	-1	1	8	8	120		10	5	15	5	<5	<5	3	<1	15/30	260	
1142047			1	4	-1	-1	-1	-1	0.5	3	3	8	3	-1	-1	1	-1	8	-1		5	5	10	<5	<5	5	3	<1	<5/30	260	
1142048			1	4	-1	-1	-1	3	0.5	3	1	8	3	-1	-1	3	-1	-1	-1		5	5	15	<5	<5	10	4	<1	<5/30	260	
1142050			1	4	-1	-1	-1	-1	1.0	3	3		3	-1	-1	1	-1	-1	-1		5	5	10	<5	<5	<5	2	<1	<5/30	220	
1142051			1	4	-1	-1	-1	-1	0.5	3	1		3	-1	-1	3	-1	-1	11		5	5	35	5	<5	<5	3	<1	<5/20	240	
1142052			1	4	40	30	30	1	1.0	3	2		3	-1	-1	1	-1	-1	11		10	5	20	<5	<5	5	3	<1	10/10	220	
1142053			1	4	30	40	30	-1	1.0	3	2		3	-1	-1	1	-1	5	-1		10	5	20	<5	<5	5	2	<1	15/20	260	
1142055			1	4	20	40	40	-1	1.0	2	3		3	-1	-1	1	-1	8	11		5	5	15	5	<5	10	3	<1	<5/10	240	
1142056			1	4	30	40	30	-1	1.5	4	2		3	-1	-1	1	10	10	-1		5	5	15	<5	<5	5	4	<1	5/<10	210	
1142058			1	4	30	30	40	1	3.0	3	2		3	-1	-1	1	-1	10	-1		5	5	15	<5	<5	10	4	<1	<5/<10	280	
1142059			1	4	30	40	30	-1	2.0	3	2		3	-1	-1	1	-1	8	-1		5	10	15	5	5	<5	5	<1	5/<10	290	
1142062			1	4	20	40	40	-1	1.5	3	3		3	-1	-1	1	10	10	120		5	15	15	10	5	5	5	<1	15/20	150	
1142064			1	4	50	25	25	-1	0.5	4	1		3	-1	-1	1	5	5	-1		10	15	15	15	5	10	5	<1	30/20	200	
1142066			1	4	20	40	40	-1	2.0	3	2		3	-1	-1	1	-1	8	-1		10	20	25	15	5	<5	12	<1	115/40	190	
1142070			1	4	50	25	25	-1	1.0	3	2		3	-1	-1	1	10	10	120		5	15	10	5	5	<5	6	<1	<5/10	200	
1142073			1	4	40	30	30	-1	1.0	3	3		3	-1	-1	1	5	5	11		5	10	15	10	5	5	3	<1	5/20	230	
1142076			1	4	30	40	30	1	2.0	3	2		3	-1	-1	1	10	10	-1		5	15	15	10	5	<5	6	1	5/40	260	
1142077			1	4	60	20	20	-1	2.5	4	2		3	-1	-1	1	5	5	11	1	2	5	10	5	<5	5	3	<1	10/30	80	+. lam. grey. bl Slst → g'wacke 5% Euhedral py along bedding.
1142079			1	4	10	60	20	-1	3.0	4	2		3	-1	-1	2	8	8	-1	1	2	5	10	5	<5	5	2	<1	10/30	70	Bl. lam Slst/Shale Coarse white Sand → 3° gravels/Sd.
																				DETECTION LIMIT										
																				ANALYTICAL METHOD										

GEOCHEMICAL STREAM SEDIMENT SAMPLING LEDGER

Tenement Name: ROCKY CAPE EL 1/77

Area / Prospect: SALMON RIVER PROSPECT.

Map / Photo Ref.: SANDY CAPE 1:100 000 TOPOGRAPHIC SHEET.

Project:

AMG Zone: 55.

DPO's: 30474 30475

Sample No's:

Sheet No.:

Laboratory: ALS Brisbane.

Collected By: PJW

Date: 12/83.

Updated June 1983

458069 068

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CRA EXPLORATION PTY. LTD.

SS

Sample Number	LOCATION AMG Co-ordinates East	North	SAMPLE DESC. S. Type	Mesh	% Gravel	% Sand	% Silt	Organic	SITE DESCRIPTION Width	Flow	Bank	Catchment	Vegetation	Staining	Contam.	Sit. Rating	ROCK TYPE Outcrop	Maj. Float	Min. Float	LOOK	METAL CONTENT ppm / % Cu	Pb	Zn	Ni	Co	Bi	As	Ag	Sn/W	Ba	Geological Observations
1142083			1	4	30	40	30	-1	2.0	4	2		3	-1	-1	2	10	10	-1		5	5	10	10	<5	<5	2	<1	5/40	90	~Black lam Shale ± 5% Py.
1142088			1	4	60	30	10	-1	3.0	4	2		3	-1	-1	1	10	10	11		2	10	10	10	<5	<5	4	<1	5/20	80	qc + Fl. Black Shale minor quartz gravels.
1142089			1	4	40	30	30	-1	1.5	4	2		3	-1	-1	1	10	10	-1		5	5	10	5	<5	<5	2	<1	<5/20	110	qc + Fl. Black lam Shale/Slst.
1142091			1	4	40	30	30	-1	2.0	4	2		3	-1	-1	1	10	10	-1		5	10	15	10	5	<5	5	<1	5/30	150	qc + Fl. Bl. Shale/Slst.
1142094			1	4	60	20	20	-1	2.5	4	2		3	-1	-1	1	-1	10	11		5	10	15	10	5	5	4	<1	5/30	180	No qc Fl. Black shale minor quartz gravel.
1142097			1	4	70	20	10	-1	3.0	4	2		3	-1	-1	2	10	10	11		5	10	10	10	5	10	3	<1	5/40	170	qc + Fl. Black Shale/Slst. minor qtz gravels.
*1142127			1	4	30	40	30	-1	1.5	3	2		3	1	-1	1	5	5	120		10	15	15	10	5	<5	8	<1	5/20	220	qc + Fl pale grey greywacke quite qtzose.
1142120			1	4	20	40	40	-1	1.0	3	3		3	-1	-1	1	-1	10	120		10	15	10	10	5	10	7	<1	<5/20	190	No qc Fl. Bl. Shale/Slst + Massive Quartz.
1142122			1	4	40	30	30	-1	0.5	3	3		3	1	-1	1	8	8	120		10	15	15	10	5	<5	9	<1	10/10	260	qc + Fl. grey-bl. lam Slst + massive Fe Stnd. Quartz.

GEOCHEMICAL STREAM SEDIMENT SAMPLING LEDGER

DETECTION LIMIT

ANALYTICAL METHOD

Tenement Name: LOCKY CAPE EL 1/77

Project:

AMG Zone: 55

Sheet No.:

Area / Prospect: SALMON RIVER PROSPECT.

DPO's: 30475

Laboratory: ALS Brisbane.

Map / Photo Ref.: SANDY CAPE 1:100 000 SHEET.

Sample No's:

Collected By: DJW.

Date: 12/83.

Updated June 1983

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CRA EXPLORATION PTY. LTD.

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Sample Number	LOCATION							ROCK TYPE			MINERALISATION							METAL CONTENT ppm / %										Geological Observations
	Co-ordinates AMG / Grid		Exposure	S Type	Width (m)	Interval		Major Rock	Minor Rock	Alteration	Visible	Style	Major	Minor	Minor	Gangue	LOOK	Cu	Pb	Zn	Ni	Co	Bi	As	Ag	Sn / W	Ba / Au (ppb)	
	East	North				From	To																					
1142041			1	4	-1	-1	-1	10	-1	10	-1	-1	-1	-1	-1	-1		10	15	105	20	10	5	6	<1	10 / <10	770 / n.d	Black shale, siliceous + sl. ferruginous.
1142042			1	4	-1	-1	-1	100	-1	-1	-1	-1	-1	-1	-1	-1		5	5	20	10	5	<5	4	<1	<5 / 10	390 / n.d	Quartzite. - massive.
1142043			1	4	-1	-1	-1	8	120	-1	-1	-1	-1	-1	-1	-1	1	60	10	10	<5	<5	<5	4	<1	<5 / <10	430 / n.d	Pale grey - bl. Siltstone → greywacke ± quartz veining
1142046			1	4	-1	-1	-1	8	-1	-1	-1	-1	-1	-1	-1	-1		5	<5	5	<5	<5	<5	1	<1	10 / <10	270 / n.d	Grey Siltstone.
1142049			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		5	<5	10	<5	<5	10	3	<1	<5 / <10	1100 / n.d	Black lam. spotted Shale.
1142054			3	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1	1	20	10	25	<5	<5	10	5	<1	<5 / <10	820 / n.d	whitish v. friable spotted Slst → Highly Weath. Bl. Shale?
1142057			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		5	<5	15	<5	<5	<5	2	<1	<5 / <10	210 / n.d	Black laminated Shale Sl. spotted.
1142060			2	3	-1	-1	-1	10	-1	-1	3	-1	10	-1	-1	-1		20	25	65	10	10	<5	22	<1	<5 / <10	430 / n.d.	Black Shale float ± 15% Py.
1142061			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		10	5	15	10	5	5	3	<1	5 / 10	830 / 5	± lam. Black shale.
1142063			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1	1	2	5	5	5	<5	5	3	<1	<5 / <10	1100 / <3	grey-bl sl. spotted Shale → greywacke?
1142065			1	4	-1	-1	-1	10	-1	12	1	8	10	-1	-1	-1		20	20	35	15	5	5	10	<1	5 / <10	690 / <3	Bl. Shale minor limonite Stng ± 5% py along bedding.
1142067			1	4	-1	-1	-1	10	-1	-1	1	8	10	-1	-1	-1		15	30	170	25	20	<5	16	<1	10 / <10	640 / <3	Bl. Shale ± 10% Py.
*1142069			1	4	-1	-1	-1	122	-1	-1	-1	-1	-1	-1	-1	-1	1	10	145	20	15	430	5	48	1	<5 / <10	620 / <3	limonite — weap. Mn rich. after Bl. Shale
*1142068			1	4	-1	-1	-1	10	-1	-1	1	-1	10	-1	-1	-1		10	10	15	15	10	<5	9	<1	<5 / <10	260 / <3	Bl. Shale ± 5% Py.
1142071			1	4	-1	-1	-1	10	-1	12	-1	-1	-1	-1	-1	-1		15	15	35	15	10	5	12	<1	<5 / <10	540 / 3	Bl. Shale sl. limonitic.
1142072			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		20	15	10	5	5	<5	4	<1	<5 / <10	670 / 3	Black. Shale.
1142074			1	4	-1	-1	-1	5	-1	-1	-1	-1	-1	-1	-1	-1		2	5	5	10	5	<5	3	<1	<5 / 10	440 / <3	pale grey sl. spotted greywacke
1142075			1	4	-1	-1	-1	122	-1	-1	-1	-1	-1	-1	-1	-1		10	20	20	15	5	<5	9	1	<5 / 10	350 / 10	limonite weap after black v. org. Shale.
1142078			1	2	10	-1	-1	10	-1	-1	1	8	10	-1	-1	-1		15	20	40	40	10	<5	16	1	<5 / <10	630 / <3	Bl. lam Slst / Shale ± 5% Py along bedding
1142080			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		10	15	20	10	5	5	9	1	<5 / <10	660 / 3	Bl. lam Slst / Shale.
GEOCHEMICAL ROCK SAMPLING LEDGER								DETECTION LIMIT										2	5	2.	5	5	5	1	1	5 / 10	5 / 3	
								ANALYTICAL METHOD										IC 580	IC 580	IC 580	IC 580	IC 580	IC 580	IC 580	IC 580	XRF 10A / XRF 10B	XRF 10A / PM200	

Tenement Name: ROCKY CAPE EL 1/77

Project: SALMON R. PROSPECT AMG Zone: 55

Sheet No.:

Area / Prospect: SALMON R. PROSPECT.

DPO's: 30474, 30475

Laboratory: ALS Brisbane.

Map / Photo Ref: SANDY CAPE 1:100 000

Sample No's:

Collected By: DJ WEIR. Date: 11/83.

Updated June 1983

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CRA EXPLORATION PTY. LTD.

Sample Number	LOCATION						ROCK TYPE			MINERALISATION							METAL CONTENT ppm / %										Geological Observations
	Co-ordinates AMG / Grid		Exposure	S Type	Width (m)	Interval	Major Rock	Minor Rock	Alteration	Visible	Style	Major	Minor	Minor	Gangue	LOOK	Cu	Pb	Zn	Ni	Co	Bi	As	Ag	Sn / W	Ba / Au	
	East	North				From / To																					
1142080			1	4	-1	-1 / -1	10	-1	-1	-1	-1	-1	-1	-1	-1		10	15	20	10	5	5	9	1	<5 / <10	660 / 3	Black lam. Siltstone/Shale.
1142081			1	4	-1	-1 / -1	10	-1	-1	1	-1	10	-1	-1	-1		10	15	20	25	5	<5	14	1	<5 / <10	710 / 5	Black lam Slst/Shale ± 5% Py.
1142082			1	4	-1	-1 / -1	10	-1	-1	1	-1	10	-1	-1	-1		10	15	25	25	5	<5	12	1	<5 / <10	580 / <3	Black lam Shale/Slst ± 5% Py.
1142084			2	3	-1	-1 / -1	10	-1	-1	4	7	10	-1	-1	-1	1	35	25	20	55	15	<5	30	1	<5 / <10	520 / 3	Sheared? Black Shale float ± 30% Py.
1142085			1	4	-1	-1 / -1	10	-1	-1	1	8	10	82	-1	-1		10	15	35	35	10	<5	34	1	<5 / <10	490 / <3	Black Shale/Slst. ± 10% Py - graphitic.
1142086			1	4	-1	-1 / -1	10	-1	-1	1	8	10	-1	-1	-1		15	15	20	10	5	<5	16	1	<5 / 10	710 / <3	Bl. lam. Carb. Shale ± 5% Py.
1142087			1	4	-1	-1 / -1	122	-1	-1	-1	-1	-1	-1	-1	-1		15	65	20	15	10	<5	140	1	<5 / <10	330 / <3	limonitic Weep after black Shale.
1142090			1	4	-1	-1 / -1	10	-1	-1	1	8	10	-1	-1	-1		10	80	15	15	5	<5	22	1	<5 / <10	680 / 3	Black Shale ± 5% Py.
1142092			1	4	-1	-1 / -1	10	-1	-1	1	8	10	-1	-1	-1		15	25	20	20	5	<5	22	1	<5 / 10	670 / <3	Black Carb Shale/Slst ± 5% Py.
1142093			1	4	-1	-1 / -1	10	-1	-1	1	8	10	-1	-1	-1		15	25	35	30	10	<5	16	1	<5 / 10	780 / 3	Bl. Shale sl. laminated ± 5% Py.
1142095			1	4	-1	-1 / -1	10	-1	-1	-1	-1	-1	-1	-1	-1		5	10	10	5	<5	<5	6	<1	<5 / <10	830 / <3	Bl. lam Carb Slst/Shale.
1142096			1	4	-1	-1 / -1	8	-1	-1	-1	-1	-1	-1	-1	-1		2	10	15	10	5	<5	3	<1	<5 / <10	810 / <3	grey spotted Siltstone.
1142098			1	2	25	-1 / -1	5	-1	-1	1	8	10	-1	-1	-1		10	15	20	15	5	<5	4	<1	<5 / <10	750 / <3	greywacke to Bl. lam Shale 1-2% py.
1142099			1	4	-1	-1 / -1	10	-1	-1	1	8	10	-1	-1	-1		20	55	20	15	5	<5	105	<1	5 / <10	460 / 3	Bl. Shale 5-10% Euhedral py along bedding mod. Carb.
1142100			1	4	-1	-1 / -1	10	-1	-1	1	8	10	-1	-1	-1		15	20	20	15	5	<5	18	<1	<5 / 10	560 / <3	Bl. Carb. Shale/Slst ± 5% Py.
*1142128			1	4	-1	-1 / -1	122	9	-1	-1	-1	-1	-1	-1	-1		5	30	15	15	35	<5	18	<1	<5 / <10	460 / 3	limonite weep developed on Bl-grey Shale.
*1142129			1	4	-1	-1 / -1	122	10	-1	1	8	10	-1	-1	-1		10	40	25	15	85	<5	18	1	<5 / <10	600 / 3	limonitic Weep on Bl. lam Shale 5% Euhedral Py.
1142121			1	4	-1	-1 / -1	10	-1	-1	-1	-1	-1	-1	-1	-1		2	10	20	10	5	5	3	<1	<5 / <10	700 / <3	Bl. lam Shale/Slst.
1142123			1	2	20	-1 / -1	10	-1	-1	1	8	10	-1	-1	-1		15	25	30	15	5	10	12	<1	<5 / <10	560 / <3	Black Carb Shale/Slst minor Py.
1142124			1	2	15	-1 / -1	10	-1	-1	-1	-1	-1	-1	-1	-1		25	30	80	25	10	10	8	<1	10 / <10	710 / <3	Black Shale.
GEOCHEMICAL ROCK SAMPLING LEDGER							DETECTION LIMIT																				
							ANALYTICAL METHOD																				

Tenement Name: ROCKY CAPE EL 1/77

Area / Prospect: SALMON RIVER PROSPECT

Map / Photo Ref: SANDY CAPE 1:100 000 TOPO SHEET.

Project:

DPO's: 30475

Sample No's:

AMG Zone: 55

Sheet No.:

Laboratory: ALS Brisbane.

Collected By: DJW

Date: 12/83

Updated June 1983

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CRA EXPLORATION PTY. LTD.

Sample Number	LOCATION							ROCK TYPE			MINERALISATION						LOOK	METAL CONTENT ppm / %										Geological Observations
	Co-ordinates AMG / Grid		Exposure	S. Type	Width (m)	Interval		Major Rock	Minor Rock	Alteration	Visible	Style	Major	Minor	Minor	Gangue		Cu	Pb	Zn	Ni	Co	Bi	As	Ag	Sn / W	Ba / Au	
	East	North				From	To																					
1142125			1	2	60	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		20	40	55	20	10	5	14	<1	5 / <10	750 / <3	Black Shale.
1142126			1	2	16	-1	-1	10	-1	-1	1	-1	10	-1	-1	-1		15	30	85	20	15	5	12	<1	<5 / <10	440 / <3	grey-bl. Slate. v. minor py.

GEOCHEMICAL ROCK SAMPLING LEDGER

DETECTION LIMIT

ANALYTICAL METHOD

Tenement Name: ROCKY CAPE EL 1/77

Project:

AMG Zone: 55

Sheet No.:

Area / Prospect: SALMON RIVER PROSPECT

DPO's: 30475

Laboratory: ALS Brisbane.

Map / Photo Ref: SANDY CAPE 1:100 000.

Sample No's:

Collected By: DJW

Date: 12/83

APPENDIX V

SALMON RIVER PROSPECT

GROUND MAGNETIC PROFILES

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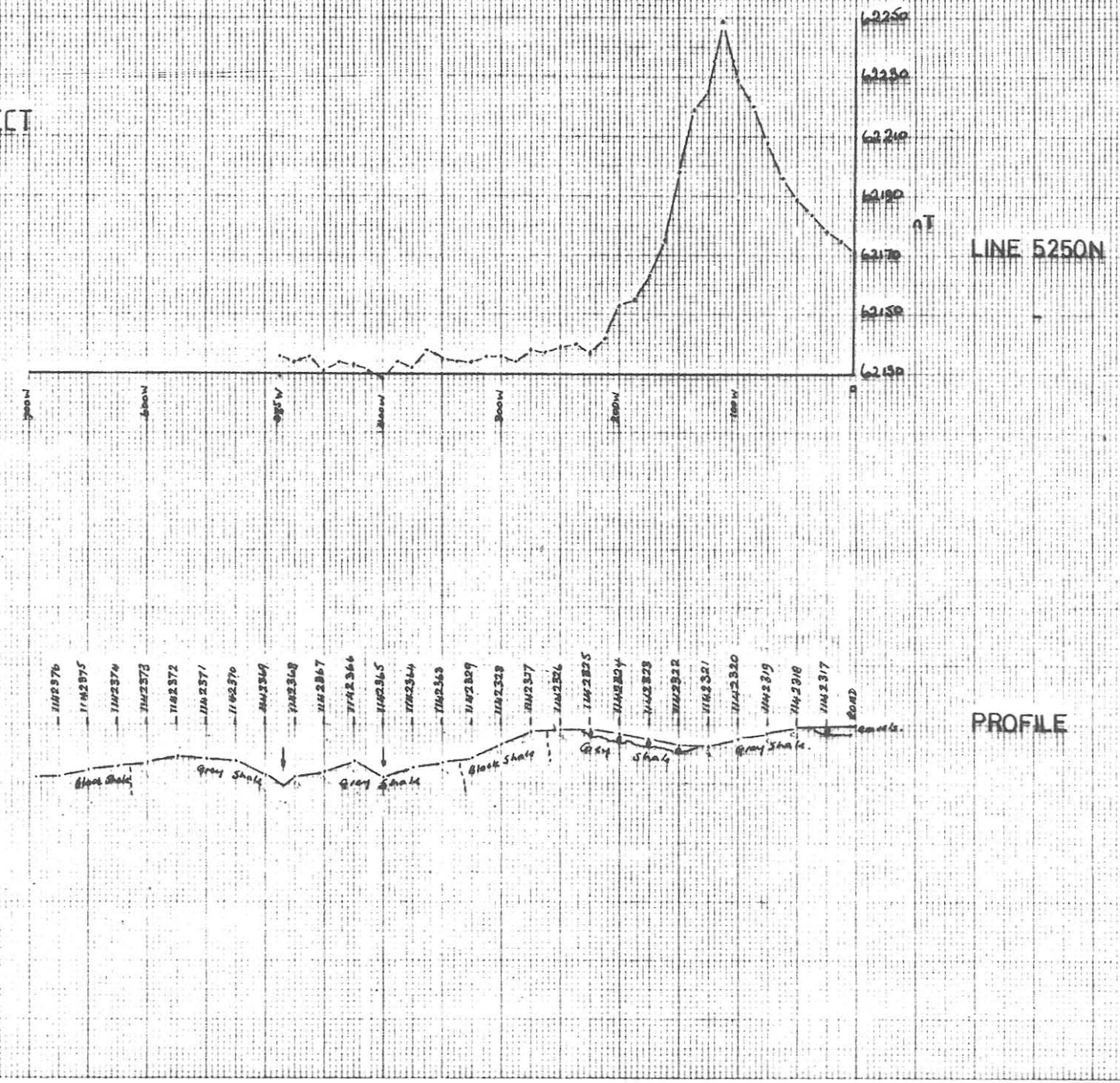
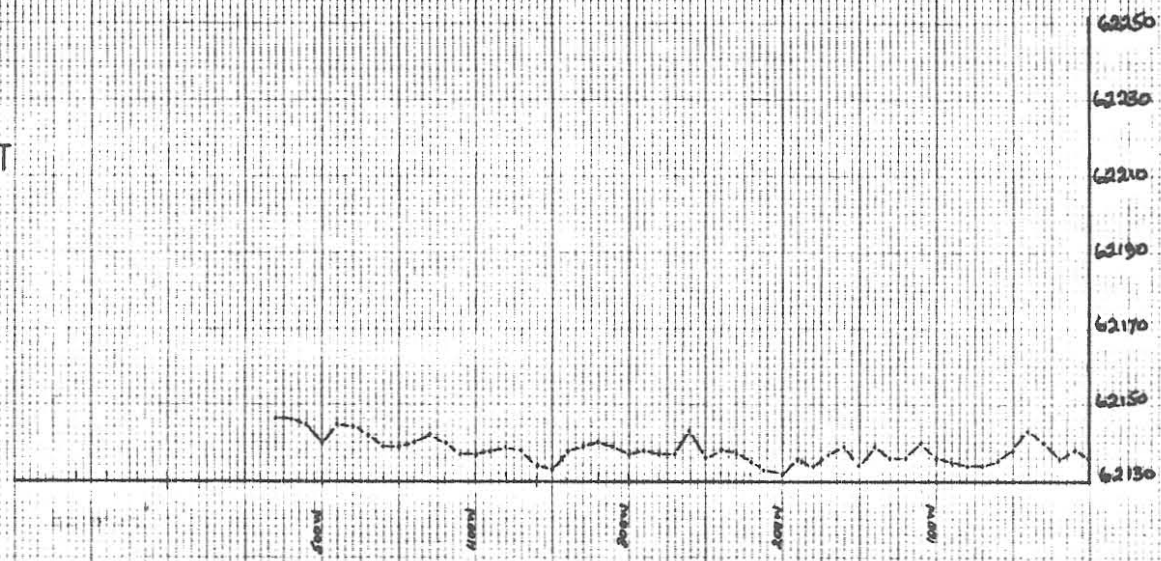
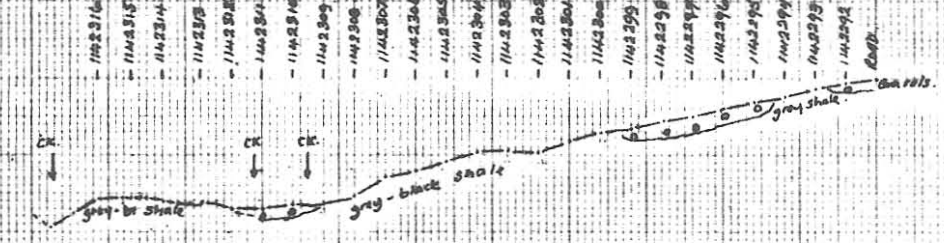
073

SALMON RIVER PROSPECT



SALMON RIVER PROSPECT





APPENDIX VI

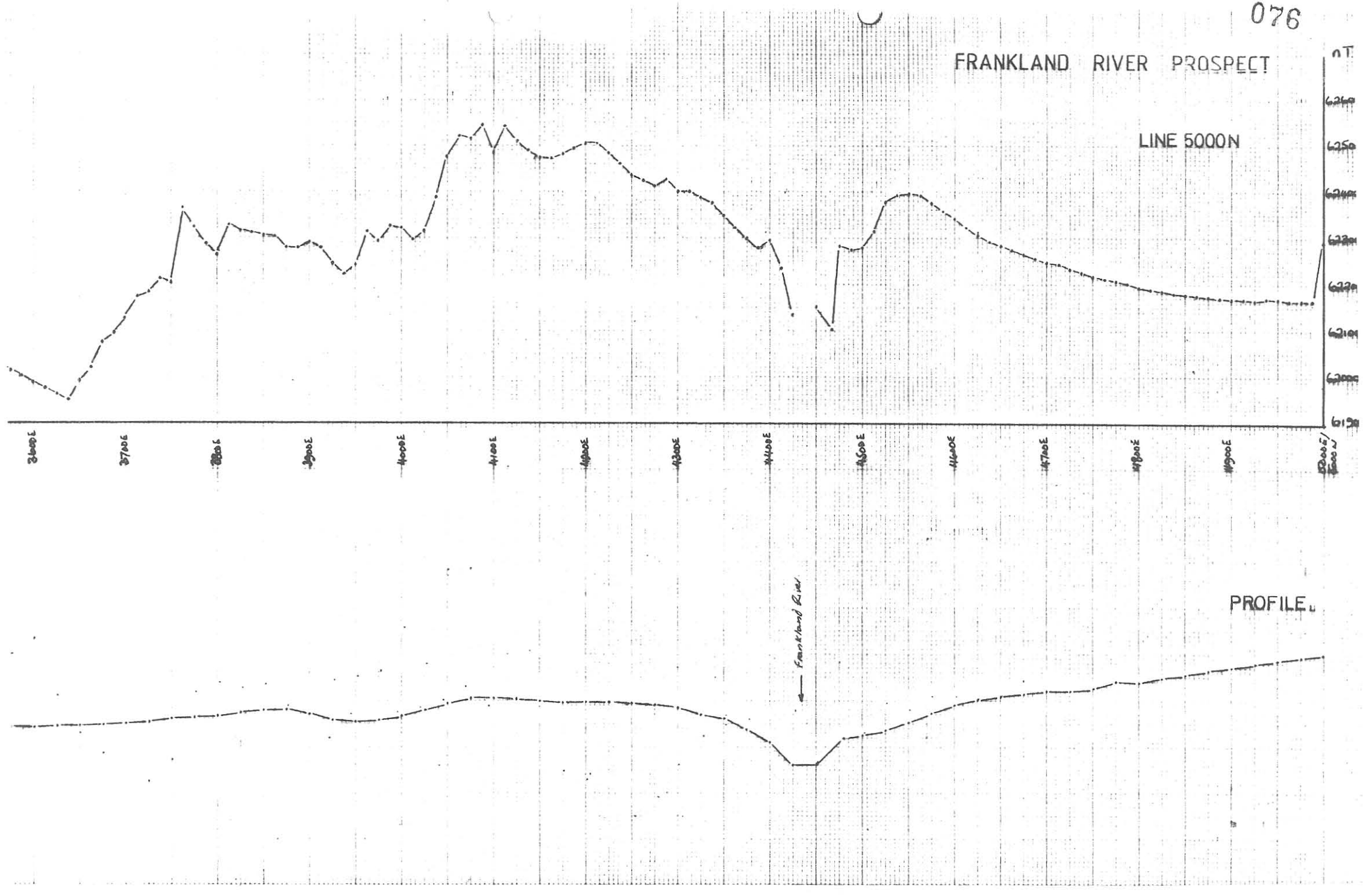
FRANKLAND RIVER PROSPECT

GROUND MAGNETIC PROFILE

LINE 5000N

458077

076


FRANKLAND RIVER PROSPECT
LINE 5000N
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6250
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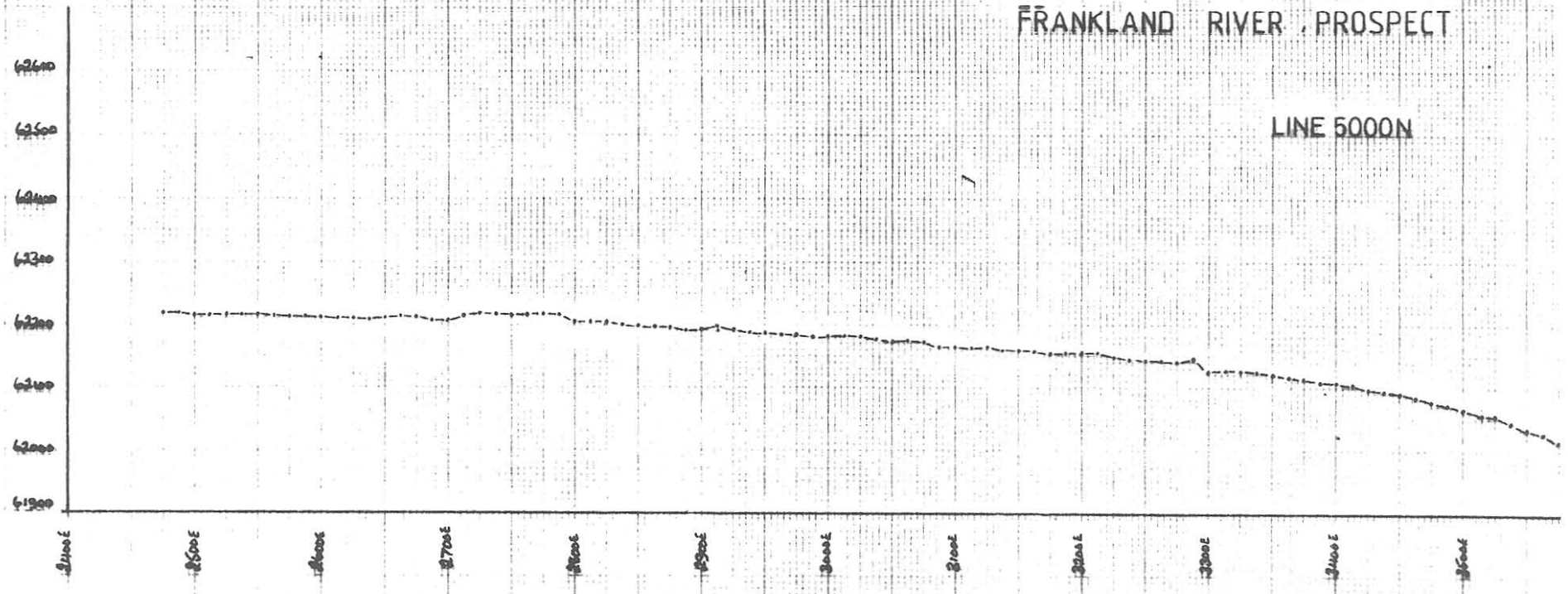
3600E
3700E
3800E
3900E
4000E
4100E
4200E
4300E
4400E
4500E
4600E
4700E
4800E
4900E
5000E
PROFILE
Frankland River

FRANKLAND RIVER PROSPECT

LINE 5000N



PROFILE

APPENDIX VII

PETROLOGICAL REPORT

079

Central Mineralogical Services

39 Beulah Road
Norwood, S.A. 5067
Telephone 42 5659

Mr. J. Weir
Geologist
C.R.A. Exploration Pty. Ltd.
P.O. Box 138
ROSNY PARK / TAS. 7018

20th January, 1984

REPORT CMS 83/12/24

YOUR REFERENCE:	D.P.O. No. 30476
DATE RECEIVED:	16th December, 1983
SAMPLE NOS.:	9 Samples
SUBMITTED BY:	D.J. Weir
WORK REQUESTED:	Petrology

Copy to:
The Chief Geologist
C.R.A. Exploration Pty. Ltd.
G.P.O. Box 384D
MELBOURNE / VIC. 3001

Copy & Invoice to:
Administration Officer
C.R.A. Exploration Pty. Ltd.
P.O. Box 138
ROSNY PARK / TAS. 7018

H.W. Fander, M. Sc.

REPORT CMS 83/12/24

Rocky Cape Basin - N.W. Tasmania

Nine rock samples were received for petrographic study; thin-sections were prepared and examined together with the offcuts. The results are presented in the accompanying table.

Summary

All the rocks except 149 are incipiently metamorphosed fine-grained sediments; the metamorphic grade is very low and may be barely outside burial metamorphism, especially considering the sensitive mineral assemblage which is easily recrystallized. Even though rocks like 147 are classified as phyllites, their preferred fabric is mainly due to inherited sedimentary features accentuated by the growth of micaceous minerals.

Most of the rocks are (meta-) siltstones, some of them carbonaceous and ranging into shale or with inclusions of shale; lithologically, they are all quite similar except for 149 and 179. Sample 149 is a pyrite-chalcedony rock with distinct layering which has been interpreted as a type of sinter deposit, but this needs to be considered in the light of field data. Sample 179, though a siltstone, differs considerably from the others and is believed to be tuffaceous, perhaps strongly so, though alteration (in itself supporting the interpretation) has obscured or destroyed many features; the main evidence for a partly sedimentary origin is the presence of shale shreds and detrital heavy minerals. However in view of the possible importance of this lithology, taken in conjunction with a "black shale" facies, this unit should receive further attention.

H.W. Fander, M. Sc.

CENTRAL MINERALOGICAL SERVICES

Sample No.	Rock Type - Composition	Fabric	Minor Minerals	Comments
1142-147 (T.S. 48408)	Sericite-Chlorite Phyllite. Bands of fine matted-parallel sericite flakes, alternating with sericite-quartz, and with chloritic bands. Fine chlorite aggregates scattered throughout.	Relict sedimentary features including poorly preserved grading. Banding is inherited. Fine-grained.	Relatively conspicuous leucoxene grains throughout. Cross-cutting quartz-chlorite veins.	Low-grade regional(?) metamorphism of a laminated argillaceous siltstone with younger chloritisation - ?low-grade thermal effect.
1142-148	Metasiltstone. Fairly uniform mass of fine random matted sericite, irregular small chlorite patches; scattered silt-size detrital quartz and muscovite flakes.	Weak preferred orientation, ?inherited. No banding or sedimentary structures	Randomly scattered leucoxene grains. Quartz veinlets with goethite after sulphides.	Incipient metamorphism only, thermal rather than regional. Could be related to 147 - leucoxene is distinctive, probably detrital.
1142-149	Pyrite-Chalcedony Rock. Subparallel thin lenses, discontinuous bands of massive pyrite, interbanded and veined with finely fibrous, water-clear chalcedony.	Distinc layering, with most fibres at right angles, but also radiating. Cross-fractures, no movement.	Coarser quartz in cross-fractures is re-crystallized in-situ material, of dia-genetic formation.	Thought to be a pyritic, siliceous sinter or similar deposit, possibly related to volcanic activity, rather than a chemical sediment.
1142-159	Pyritic Metasiltstone. Uniform mass of silt-size angular quartz, muscovite flakes, matted fine sericite and chlorite representing recrystallized clays. Porphyroblastic pyrite with host rock inclusions.	Weak preferred orient-ation is inherited; subsequent re-crystallization was random.	Small parallel shreds of dark carbonaceous shale. Goethite grains after finer pyrite.	Very similar to 148, but with late-stage pyrite which postdates very mild metamorphism (barely beyond load metamorphism).
1142-165	Banded Metasiltstone. Alternating bands of fine matted-parallel sericite, and sericite-quartz in various proportions; fine dark chlorite in discontinuous bands. Detrital muscovite.	Bedding, scouring, grading all preserved. Relict crystal out-lines and voids.	Leucoxene grains throughout. Pseudo-morphs of cherty quartz after ?evaporite minerals.	Well-preserved sedimentary features indicate minimal metamorphism. Possibly evaporite minerals may have been halite, gypsum. Cp. 147.
1142-173	Carbonaceous Siltstone. Small angular quartz grains, bedded muscovite flakes, interstitial sericite and carbonaceous matter; chert cement. Fine fresh/oxidised pyrite.	Streaky lensoid fabric of coarser/ finer material. Angular voids of leached ?carbonate.	Parallel wisps and filament-like bodies of chert may represent fossils. Leucoxene grains. Algal filaments?	No evidence of any significant metamorphism. Typical "black shale" facies lithology of partly clastic, partly chemical origin.
1142-179	Siltstone (?Tuffaceous). Small angular/ splintery quartz, plagioclase, K-feldspar fragments, small shreds of dark carbonaceous shale, in matrix of ultrafine quartz-sericite, possibly devitrified glass in part.	Uniform, weakly bedded. Vague textures are possibly altered volcanic material.	Interstitial films, wisps of pale chlorite. Detrital zircon and leucoxene.	Much of the rock is altered and is inferred as having been glassy volcanic material, quite possibly reworked. Probably of mixed clastic-pyroclastic origin.
1142-194	Carbonaceous Siltstone. Fine bands and thin lenses of fine sericite, silt-size quartz, accentuated by carbonaceous films. Slaty cleavage emphasized by subgraphitic veinlets.	Slaty cleavage at 60° to well-defined bedding. Minor stretching (boudinage) in some beds.	Scattered euhedral pyrite crystals with coarse chlorite pressure-shadows.	Quite similar to 173, perhaps finer-grained with sericitic laminations; also, incipient slaty cleavage developed, with remobilisation of carbon.

Sample No.	Rock Type - Composition	Fabric	Minor Minerals	CENTRAL MINERALOGICAL SERVICES Comments
1142-358 (T.S. 48516)	Brecciated Carbonaceous Shale. Small ovoid patches of intergrown fine quartz/sericite in a mass of carbonaceous fine sericite (= clay); zones of shale fragments cemented by quartz veins.	Shale is well-bedded, almost phyllitic, with incipient development of "knots".	Ultrafine syngenetic pyrite in rock; coarser pyrite in breccia zones (?remobilised).	No comparison with 149. Probably belongs to same lithological unit as 173, 194. Brecciation zones are concordant with bedding.
		→ Possible Metamorphic eg Cordierite or precursor pellets of clay rich material		

083

APPENDIX VIII

SUNDOWN CHERT PROSPECT - ASSAY RESULTS

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: ROCKY CAPE   No 1/77   Sample numbers: 975859 – 867   Collected by: GBW   Sheet no. 1 of 1

Area / Prospect: ....   Date: 30-9-82

Map / Photo reference: ....   Analysed by: ANALABS (CODE E)   DPO no. 30211

A 02143

Sample No.	Type (ss * / oc / f / s)	ss channel ** fl	wi	al	co	ca	pH	Carbon	Cu	Pb	Zn	Ag	Co	As	Ba	W	Sn		Grid ref	Geological Observations
		o/c sample type ***																		
		s sample type ****																		SUNDOWNER CK. TRAVERSE
975859	F							✓	25	305	420	1.0	x	x	440	x	4			Black siliceous carbonaceous chert
975860 ✓	SS	<0.1 m^3	20cm	✓	✓				10	100	130	1.0	10	x	170	x	8			Seeping – dk gy brn muds and sands
975861	SS	1.0	3m	✓	✓				15	85	130	1.0	5	x	340	x	x			Sundowner Ck sampled from front edge of gravel/rockbank inside corner – float qtzites + black cherts (975859)
975862	F								10	200	440	x	15	x	700	10	9			Spotted siltstone – sl red gossanous rock minor py.
975863	SS	<0.1 m^3	0.5m	✓	✓				10	35	60	0.5	10	x	590	10	7			25m downstream from last site – bedrock ditto
975864 ✓	SS	<0.1 m^3	0.5m	✓	✓				5	15	40	0.5	10	x	160	20	15			Small ck. flowing N into Sundowner Ck.
975865 ✓	SS	<0.1 m^3	0.5m	✓	✓				5	15	55	0.5	10	x	240	10	30			Small ck flowing N into Sundowner Ck
975866 ✓	SS	<0.1 m^3	0.5m	✓	✓				10	25	50	0.5	5	x	480	10	6			Small ck flowing N 80% gravel 20% silt.
975867 ✓	SS	<0.1 m^3	0.5m	✓	✓				15	50	64	0.5	10	x	650	x	7			Small trib flowing N
975868 ✓	SS	1.0	3m	✓	✓				10	20	60	x	x	x	430	x	4			Sundowner Ck – gravelly sample

Metal content ppm or %

* 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

Updated June 1983

085

458086

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CRA EXPLORATION PTY. LTD.

SS

Sample Number	LOCATION AMG Co-ordinates East	North	SAMPLE DESC. S. Type	Mesh	% Gravel	% Sand	% Silt	Organic	SITE DESCRIPTION Width	Flow	Bank	Catchment	Vegetation	Staining	Contam.	Sit. Rating	ROCK TYPE Outcrop	Maj. Float	Min. Float	LOOK	METAL CONTENT ppm / % Cu	Pb	Zn	Ni	Co	Bi	As	Ag	Sn / W	Ba.	Geological Observations
1142152.			1	4	30	40	30	-1	1.5	3	3		4	-1	-1	1	-1	100	11		10	5	25	20	<5	<5	1	<1	80 / 10	190	Sou LH trib Sundown clc. 1226m. No % Fl. Qtzite.
1142153			1	4	60	30	10	-1	5.0	3	3		4	-1	-1	1	-1	8	100		10	10	30	20	5	<5	1	<1	20 / 20	160	Sundown Ck. No %. Fl: bl. Sil Shale/Slist? grey chert/Qtzite?
1142159			1	4	30	40	30	-1	6.0	3	2		4	-1	-1	1	10	-1	-1		20	10	25	30	15	12	1	<5	<5 / <10	n.d.	1984m. Sundown Ck. % Bl. Shale ± 2% Py.
																															LITTLE SUNDOWN CK.
1142161			1	4	30	60	10	-1	2.0	3	3		1	-1	-1	1	-1	11	8		5	<5	45	25	15	<5	1	<1	195 / 10	80	714m. No % Fl.: gravels + Minor grey-bl S/Slst.
1142164			1	4	30	60	10	-1	1.5	3	3		1	-1	-1	1	8	11	-1		10	5	55	20	5	<5	1	<1	105 / 10	100	1520m. % green chlor lam spotted S/Slst.
1142168			1	4	20	60	20	-1	1.5	3	3		1	-1	-1	1	-1	8	100		10	5	30	20	5	<5	1	<1	65 / 10	100	2124m. No % Fl. grey-bl Shale/Slst, Qtzite, Qtz gravel
1142169			1	4	-1	50	50	3	10.0	1	4		1	-1	-1	3	-1	-1	-1		20	<5	40	30	6	5	2	<1	10 / <10	70	2124m. RH trib No % No fl.
1142171			1	4	30	50	20	-1	1.5	3	3		1	-1	-1	1	-1	25	10	1	20	<5	25	20	5	5	<1	<1	50 / 10	130	No % Fl: Spotted grey Weath rock, Semi Cellular —
1142172			1	4	-1	60	40	1	3.0	1	4		1	-1	-1	2	-1	-1	-1		10	<5	15	20	10	<5	<1	<1	20 / <10	100	black Shale? core. LH trib. No % No float.
																															2466/0 metres.
1142176			1	4	-1	70	30	1	0.5	3	3		1	-1	-1	3	-1	-1	-1		10	<5	20	20	10	<5	<1	<1	30 / <10	40	497m RH trib. No % No float.
1142177			1	4	30	60	10	1	1.0	3	3		1	-1	-1	1	-1	100	85	1	10	<5	15	20	<5	<5	<1	<1	20 / 20	100	497m. No % Fl: Spotty Qtzite + Tuff - Shale?
1142178			1	4	-1	60	40	2	-1	1	4		1	-1	-1	3	-1	-1	-1		10	<5	5	20	10	<5	<1	<1	<5 / <10	10	545m. RH trib. No % No float.
1142182			1	4	10	60	30	1	1.5	3	3		1	-1	-1	1	-1	-1	-1		10	10	20	20	5	<5	<1	<1	30 / 20	160	1387m. No % No float
1142183			1	4	10	60	30	-1	1.0	3	3		1	-1	-1	1	-1	-1	-1		15	5	20	20	<5	<5	<1	<1	40 / 20	180	2046m. No % No float.
1142185			1	4	40	40	20	-1	1.0	2	3		1	-1	-1	1	-1	120	-1		15	5	20	20	5	<5	<1	<1	80 / 30	170	2414 No % Float Quartz Vein?

GEOCHEMICAL STREAM SEDIMENT SAMPLING LEDGER

DETECTION LIMIT / ANALYTICAL METHOD											XRF 1A	XRF 1A.	
	Ic 580	→											

Tenement Name: ROCKY CAPE EL 1/77

Project: SUNDOWN CHERT AMG Zone: 55.

Sheet No.:

Area / Prospect: SUNDOWN CHERT

DPO's: 30477, 30479

Laboratory: ALS BRISBANE.

Map / Photo Ref.: SANDY CAPE 1:100 000.

Sample No's:

Collected By: DJW. Date: 12/83.

Updated June 1983

458087 086

TASMANIA

CRA EXPLORATION PTY. LTD.

SS

Sample Number	LOCATION AMG Co-ordinates East	North	SAMPLE DESC. S. Type	Mesh	% Gravel	% Sand	% Silt	Organic	SITE DESCRIPTION Width	Flow	Bank	Catchment	Vegetation	Staining	Contam.	Sit. Rating	ROCK TYPE Outcrop	Maj. Float	Min. Float	LOOK	METAL CONTENT ppm / % Cu	Pb	Zn	Ni	Co	Bi	As	Ag	Sn / W	Ba	Geological Observations
																														Bottle Creek.
1142196			1	4	10	70	20	-1	1.5	3	3		1	-1	-1	1	-1	8	11		5	5	15	15	<5	<5	<1	<1	90/<10	70	696. No % Fl: grey Slst + qtz gravel.
1142199			1	4	-1	40	60	3	-1	1	4		1	-1	-1	2	-1	-1	-1		5	5	15	20	5	5	<1	<1	15/<10	60	1361 RH trib No %, No float.
1142200			1	4	70	20	10	-1	1.5	3	3		1	-1	-1	1	11	8	100		2	10	25	20	<5	<5	<1	<1	190/10	90	1361 % 5° gravels/fluvio? float Slst + qtzite.
1142331			1	4	-1	60	40	1	0.5	1	3		1	-1	-1	1	8	8	-1		10	<5	25	30	<5	5	<1	<1	25/<10	140	1636m. % grey sheared RH trib. Slst. Fl: Same.
1142332			1	4	30	50	20	-1	1.5	3	3		1	-1	-1	1	8	8	11		5	<5	20	15	<5	5	<1	<1	155/10	70	1636. % grey-bl sheared lam Slst. Fl: Same + qtz grav.
1142336			1	4	50	40	10	-1	1.5	3	3		1	-1	-1	1	-1	100	11		10	<5	20	20	<5	10	1	<1	145/10	90	2719m No % Fl Qtzite + Qtz gravel.
1142337			1	4	-1	40	60	3	0.5	1	3		3	-1	-1	2	-1	-1	8		10	10	10	20	<5	<5	1	<1	20/10	200	LH trib = Seepage No % No Fl. % on ridge grey lam Slst.
1142338			1	4	10	60	30	-1	2.0	3	3		3	-1	-1	1	-1	-1	-1		2	10	10	15	5	<5	<1	<1	45/10	120	Bottle Ck. No % No fl.
1142339			1	4	10	60	30	-1	1.0	3	3		4	-1	-1	1	-1	100	8		10	10	20	25	<5	<5	<1	<1	165/20	160	Bottle Ck. No % Fl. <1 Qtz → Qtzite, Qtz Gravels
1142340			1	4	20	60	20	-1	1.0	3	3		1	-1	-1	1	-1	100	5		15	5	40	20	5	<5	<1	<1	5/10/20	100	LH trib No % Fl. Qtzite, Greywacke
1142342			1	4	-1	20	80	3	15.0	1	4		1	-1	-1	2	-1	-1	-1		10	15	15	30	<5	<5	1	<1	10/20	180	LH trib No % No Fl.
1142343			1	4	-1	50	50	1	1.0	3	3		4	-1	-1	1	-1	-1	-1		2	5	15	10	<5	<5	1	<1	25/20	160	Bottle Ck No % No Float.
1142344			1	4	-1	40	60	1	1.0	3	3		4	-1	-1	1	-1	-1	-1		10	5	15	15	<5	5	30	<1	15/20	210	Bottle Ck. No % No float.

GEOCHEMICAL STREAM SEDIMENT SAMPLING LEDGER

DETECTION LIMIT

ANALYTICAL METHOD

Tenement Name: ROCKY CAPE EL 1/77.

Area / Prospect: SUNDOWN CHERT.

Map / Photo Ref.: SANDY CAPE 1: 100 000

Project: SUNDOWN CHERT. AMG Zone: 55

DPO's: 30477, 30479.

Sample No's:

Sheet No.:

Laboratory: ALS Brisbane.

Collected By: JJW, BM Date: 12/83.

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Sample Number	Location: Co-ordinates AMG / Grid East	North	Exposure	S. Type	Width (m)	Interval From	To	Rock Type: Major Rock	Minor Rock	Alteration	Mineralisation: Visible	Style	Major	Minor	Minor	Gangue	LOOK	Metal Content ppm / %: Cu	Pb	Zn	Ni	Co	As	Ag	Bi	Sn / W	Au / Ba	Geological Observations
																												Bottle Ck (ctd).
1142333			1	4	-1	-1	-1	8	-1	10	-1	-1	-1	-1	-1	-1		5	10	10	10	5	<1	1	<5	<5 / <10		1748 brecc. sl. Silic. grey-bl siltstone.
1142334			1	4	-1	-1	-1	9	-1	-1	-1	-1	-1	-1	-1	-1		5	10	10	10	5	1	1	<5	<5 / <10		2320 Sheared grey shale / Sltst
1142335			1	4	-1	-1	-1	5	-1	-1	3	-1	10	-1	-1	-1	1	2	5	20	15	<5	1	1	<5	<5 / <10		2416 grey psammitic poorly lam Sltst → Greywacke.
1142341			2	3	-1	-1	-1	8	-1	-1	-1	-1	-1	-1	-1	-1		10	10	10	10	10	<1	<1	<5	<5 / 20		See as per 1142340 grey Sltst.
																												Quarry, N. of Alert CK.
1142358			2	3	-1	-1	-1	9	25	-1	2	-1	10	-1	-1	-1	1	20	10	5	20	10	3	<1	<5	<5 / 10		float: Sheared grey shale c chert nodules, sl boudinaged. Minor quartz veining. 1-2% dissem py in chert.
1142359			2	4	-1	-1	-1	9	25	10	3	-1	10	-1	-1	-1	1	50	10	2	65	15	14	<1	<5	<5 / 10		Silicified grey shale c chert / qtz veins? c 20% py
1142360			2	3	-1	-1	-1	25	-1	10	-1	-1	-1	-1	-1	-1	1	<2	5	5	10	10	1	<1	<5	<5 / <10		barren, black highly Silic. shale → chert.
1142361			1	4	-1	-1	-1	9	25	10	-1	-1	-1	-1	-1	-1	1	45	10	2	25	10	65	<1	<5	<5 / 20		Sheared grey shale c narrow chert bands + nodules.

GEOCHEMICAL ROCK SAMPLING LEDGER

DETECTION LIMIT

ANALYTICAL METHOD

Tenement Name: ROCKY CAPE EL 1/77

Project: SUNDOWN CHERT

AMG Zone: 55.

Sheet No.:

Area / Prospect: SUNDOWN CHERT

DPO's: 30479

Laboratory: ALS Brisbane.

Map / Photo Ref

Sample No's:

Collected By: DJW + BM

Date: 12/83

Updated June 1983

458089 088

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R

Sample Number	LOCATION							ROCK TYPE			MINERALISATION							METAL CONTENT ppm / %										Geological Observations
	Co-ordinates AMG / Grid		Exposure	S. Type	Width (m)	Interval		Major Rock	Minor Rock	Alteration	Visible	Style	Major	Minor	Minor	Gangue	LOOK	Cu	Pb	Zn	Ni	Co	As	Ag	Bi	Sn / W	Au / Ba.	LITTLE SUNDOWN CK (Ctd)
	East	North				From	To																					
1142167			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		20	15	45	20	<5	5	1	<5	5 / <10		2028m. Black Shale / S/1St.
1142170			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		290	25	10	20	<5	2	<1	<5	15 / 10		2447m. Black Shale
1142173			2	4	-1	-1	-1	25	10	-1	-1	-1	-1	-1	-1	-1	1	<2	<5	10	10	<5	<1	<1	<5	<5 / <10		2466m. Chert? Cellular Spotty cherty looking rock Black Shale Sh Core ???
																												2466m / 0m
1142174			2	3	-1	-1	-1	8	-1	-1	-1	-1	-1	-1	-1	-1		10	<5	40	20	<5	2	1	<5	<5 / <10		47m. grey Siltstone sl. arkosic
1142175			2	3	-1	-1	-1	8	-1	-1	-1	-1	-1	-1	-1	-1	1	2	10	40	20	<5	2	<1	<5	<5 / <10		mod gr. maroon Siltstone — arkose float. sl. fuffaceous? 387m.
1142179			1	4	-1	-1	-1	8	-1	-1	-1	-1	-1	-1	-1	-1	1	<2	<5	10	10	<5	3	<1	<5	<5 / <10		555. Spotted sil rock — ± mud clasts. 2-3mm.
1142180			2	4	-1	-1	-1	25	-1	-1	-1	-1	-1	-1	-1	-1		5	30	30	10	<5	20	<1	<5	<5 / 10		599 grey-bl Chert float in Outcropping sil Slst → Argillite.
1142181			1	4	-1	-1	-1	100	-1	-1	3	-1	10	-1	-1	-1		10	<5	15	10	<5	1	<1	<5	<5 / <10		935. Spotted pyritic Quartzite.
1142184			2	3	-1	-1	-1	8	-1	-1	-	9	10	-1	-1	-1	1	10	<5	50	20	<5	10	<1	<5	<5 / <10		1092m. Tan, Spott. grey-grn Siltst. Spots after Py?
																												BOTTLE CREEK.
1142194			1	4	-1	-1	-1	8	-1	-1	3	-1	10	-1	-1	-1		370	20	20	15	5	20	<1	<5	20 / <10		Black laun Shale / S/1St ± 5% Euhedral py. 162m
1142195			1	4	-1	-1	-1	5	-1	-1	-1	-1	-1	-1	-1	-1		10	10	70	15	10	2	<1	<5	<5 / <10		Sheared greywacke, bl ferruginous. Spotted. 441m
1142197			1	4	-1	-1	-1	8	-1	-1	-1	-1	-1	-1	-1	-1		2	<5	30	30	10	1	1	<5	<5 / <10		73% Black S/1St.
1142198			1	4	-1	-1	-1	8	-1	-1	-1	-1	-1	-1	-1	-1		5	5	10	10	5	1	1	<5	<5 / 10		1189 Sheared grey-bl. S/1St
1142330			1	4	-1	-1	-1	8	-1	-1	3	-1	10	-1	-1	-1		5	15	10	20	5	10	1	<5	<5 / <10		1420 grey-bl. laun S/1St ± 10% Py.

GEOCHEMICAL ROCK SAMPLING LEDGER

DETECTION LIMIT

ANALYTICAL METHOD

Tenement Name: ROCKY CAPE E21/77

Area / Prospect: SUNDOWN CHERT.

Map / Photo Ref: SANDY CAPE 1:100 000

Project: SUNDOWN CHERT AMG Zone: 55

DPO's: 30479

Sample No's:

Sheet No.:

Laboratory: ALS Brisbane.

Collected By: DJW Date: 12/83.

Updated June 1983

089

458090

TASMANIA

CRA EXPLORATION PTY. LTD.

R

Sample Number	Co-ordinates AMG / Grid East	North	Exposure	S Type	Width (m)	Interval From	To	Rock Type Major Rock	Minor Rock	Alteration	Mineralisation Visible	Style	Major	Minor	Minor	Gangue	LOOK	Cu	Pb	Zn	Ni	Co	As	Ag	Bi	Sn / W	Au / ba	Geological Observations
																												Sundown Ck.
1142147			1	4	-1	-1	-1	8	-1	4	-1	-1	-1	-1	-1	-1	1	<2	<5	100	30	5	3	2	<5	<5 / 10		laminated, spotted green chloritic Sltst. → Acid V???
1142148			1	4	-1	-1	-1	13	-1	-1	-1	-1	-1	-1	-1	-1		2	<5	45	20	<5	8	1	<5	<5 / 10		Grey f.g. mudstone. 96m.
1142149			2	3	-1	-1	-1	25	-1	-1	4	3	10	-1	-1	1	1	80	340	10	120	145	680	2	<5	<5 / 30		highly siliceous well bedded float. microbrecciated Chert? / quartz Vein? ± 60% py - bedded. 9c green chlor. lam Sltst. 568m.
1142150			2	4	-1	-1	-1	8	-1	10	-1	-1	-1	-1	-1	-1	1	10	15	5	10	10	9	<1	<5	<5 / 30		FLOAT. Black Sul. Sltst? whitish weath. on bedding. 736m.
1142151			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		5	15	15	10	5	18	1	<5	<5 / 20		1040m. Black Shale.
1142154			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		310	20	30	20	10	2	1	<5	15 / <10		1331m. Black Shale.
1142156			2	3	-1	-1	-1	25?	100?	-1	-1	-1	-1	-1	-1	-1		10	5	10	10	10	1	<1	<5	<5 / 30		1331m. grey Chert / Quartzite?
1142156			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		2	<5	45	20	10	1	1	<5	<5 / <10		1543m Black Shale.
1142157			1	4	-1	-1	-1	9	-1	-1	-1	-1	-1	-1	-1	-1		5	<5	20	20	15	5	1	<5	<5 / <10		1734m. Purple brown / black Shale / Slate.
1142159			1	4	-1	-1	-1	10	-1	-1	1	-1	10	-1	-1	-1		15	5	50	20	5	1	<1	<5	5 / 20		1984m. Bl. Shale ± 2% Py sl. hematitic in places.
																												LITTLE SUNDOWN CK.
1142160			1	4	-1	-1	-1	10	-1	-1	-1	-1	-1	-1	-1	-1		10	15	70	30	<5	3	1	<5	<5 / 10		425m. Black Shale.
1142162			1	3	-1	-1	-1	8	-1	4	-1	-1	-1	-1	-1	-1		55	5	70	20	5	7	1	<5	5 / <10		839m. green chlor. lam. spotted Sltst. Spots Ferrug.
1142163			1	4	-1	-1	-1	8	-1	4	-1	-1	-1	-1	-1	-1		2	<5	60	25	<5	1	1	<5	5 / <10		1240 m green chloritic lam Sltst.
1142165			1	4	-1	-1	-1	8	-1	4	-1	-1	-1	-1	-1	-1		10	<5	15	15	<5	1	<1	5	<5 / 10		1530m. green chlor lam Sltst.
1142166			1	4	-1	-1	-1	8	-1	-1	-1	-1	-1	-1	-1	-1	1	210	<5	45	15	5	1	<1	<5	<5 / 10		1911m. V. weath. spotted lam Sltst → Greywacke.

METAL CONTENT ppm / %

GEOCHEMICAL ROCK SAMPLING LEDGER

DETECTION LIMIT

ANALYTICAL METHOD

Tenement Name: ROCKY CAPE EL 1/77

Project: SUNDOWN CHERT.

AMG Zone: 55.

Sheet No.:

Area / Prospect: SUNDOWN CHERT.

DPO's: 30477 30479 (1142159)

Laboratory:

Map / Photo Ref: SANDY CAPE 1:100 000 Sheet.

Sample No's:

Collected By:

Date:

APPENDIX IX

SALMON RIVER CHROMITE - ASSAY RESULTS

458092 091

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LOGGER

Tenement name: ROCKY CAPE EL 1/77. No. ..... Sample numbers ..... Collected by: D.J. WEIR / I. HALL Sheet no. .....

Area / Prospect: SALMON R. Area. Date: 30457

Map / Photo reference: SANDY CAPE 1:100 000 Topo Sheet. Analysed by: ANALABS CODEE. DPO no: 9/2/83

Sample No.	Type ss * / oc / f / s	ss channel ** fl	wi	al	co	ca	pH	o/c sample type *** / s sample type ****	Carbon Tot/10	Cu	Pb	Zn	Ni	Cr	As	Sn	W			Grid ref	Geological Observations
										Metal content ppm or %											
1055415	SS.	S	1		✓				2	15	12	100	120	7400	2	15	<10			320650 5453150	LH trib Salmon R. No Qc No Float. V. Silted up.
1055416	P.C.									8	4	340	108	7,30%	1	140	<10				Above locality.
1055417	Bulk	Sample Panned down.								12	4	470	164	12,5%	<1	340	<10			320500 5453750	Basal Part of gravels from Chromite Rd gravel Quarry.
1055418	SS.	S	1/5		✓				2	4	1	16	14	1000	<1	20	<10			319300 5451500	Lovells Ck No Qc No float.
1055419	P.C.									4	2	210	62	4,15%	<1	230	<10				Above locality.
1055420	SS.	S	1/5		✓				2	5	4	40	24	3000	<1	15	<10			322400 5449100	RH trib Hankes Ck. Qc Dolomite.
1055421	P.C.									63	3	200	73	4,00%	8	200	<10				Above locality.
1055422	SS	S	1/5	✓	✓				2	13	3	85	59	3900	2	25	<10			323200 5449400	RH trib Hankes Ck. Qc Dolomite.
1055423	P.C.									10	3	220	101	4,90%	1	180	<10				Above locality
1055424	OC	Rc	/GS.							3	6	23	31	75	1	<3	<10.				Dolomite – above locality.

* 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)

458093 092

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name ROCKY CAPE EL 1/77 No. .... Sample numbers .... Collected by D.J. WEIR Sheet no. ....

Area / Prospect CHROMITE GRAVELS. Date 13/5/83.

Map / Photo reference SANDY CAPE 1:100 000 SHEET. Re analysis for Cr. Analysed by ANALABS, CONEE. DPO no. 30464

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	Au	Cr				
		o/c sample type ***																		
		s sample type ****																		
934610	SS															550				
611	SS															1820				
612	SS															167				
613	SS															250				
614	SS															2070				
615	SS															1000				
616	SS															340				
617	SS															410				
618	SS															270				
619	SS															670				
620	SS															880				
621	SS															2800				
622	SS															1900				
623	SS															590				
624	SS															210				
625	SS															470				
626	SS															1460				
629	SS															145				
630	SS															165				
631	SS															680				
934 632	SS															290				

* 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 (length) cs = channel sample

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name ROCKY CAPE EL 1/77 No. .... Sample numbers .... Collected by D.J. WEIR Sheet no. ....

Area / Prospect CHROMITE GRAVELS Date ....

Map / Photo reference SANDY CAPE 1:100 000 Reanalysis for Cr. Analysed by ANALABS COBEE DPO no 30464

Sample No.	Type (ss * / oc / f / s)	ss channel ** fl	wi	al	co	ca	pH	Carbon	Cu	Pb	Zn	Ag	Mo	Mn	Au	Cr			Grid ref	Geological Observations
1055118																37				
1055 121																136				
1055123																1180				
124																192				
125																70				
126																210				
127																62				
1055 132																320				
133																111				
134																11				
135																106				
136																290				
137																720				
138																970				
139																1000				
140																860				
141																125				
142																134				
143																127				
144																137				
1055 145																177				
1055 152																80				

(Header sub-rows under ss channel: o/c sample type ***; s sample type ****. Metal content ppm or %.)

* 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)

458095

094

AUSTRALIAN LABORATORY SERVICES PTY. LTD.

CONSULTING CHEMISTS & ANALYSTS

OFFICE & LABORATORY
P.O. BOX 66
EVERTON PARK QLD 4053

Ph 07 3525577
TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: J167 Client: CRA EXPLORATION PTY. LIMITED Area Contact: MR. J. WEIR
Address: G.P.O. BOX 384D Address: P.O. BOX 138
Date Received 26/09/83 MELBOURNE ROSNY PARK. TAS. 7018
Date Completed 04/10/83 VIC 3001

Order No.: DPO 30472 Sample Type: ROCK CHIP&P.CONC No. of Samples: 6

SAMPLE NO.	Pt	Pd	Au	
	b	b	m	ELEMENTS
	PM218	PM218	PM209	UNITS / METHODS
I142118	<50	10	<0.1	x
I142119	<50	10	<0.1	x

Faces all Cl.

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature

AUSTRALIAN LABORATORY SERVICES PTY. LTD.

CONSULTING CHEMISTS & ANALYSTS

OFFICE & LABORATORY
P.O. BOX 66
EVERTON PARK QLD 4053

Ph 07 3525577
TELEX ALSEV 42344

LABORATORY REPORT

Batch No.: J167-1 Client: CRA EXPLORATION PTY. LIMITED Area Contact: MR. J. WEIR
Address: G.P.O. BOX 384D Address: P.O. BOX 138
Date Received 26/09/83 MELBOURNE ROSNY PARK. TAS. 7018
Date Completed 10/10/83 VIC 3001

Order No.: DPO 30472 Sample Type: ROCK CHIP&P.CONC No. of Samples: 60

SAMPLE NO.	*XRF*								ELEMENTS
	SCAN								UNITS
									METHODS
41 * XRF SCAN 5*									
42 ** 1142118 **									
43 Major >5%	Cr								
44 Minor 0.5-5%	Fe	Ti							
45 Trc 0.05-0.5%	Zn	Mn							
46 S/Trc 50-500m	V	Ce	La	Co	Ni	Y	Zr	Sn	Ba
47 Detected <50m	Cu	Rb	Sr	Nb					
48 Detected <50m									
49 Detected <50m									
50									
51 * XRF SCAN 6*									
52 ** 1142119 **									
53 Major >5%	Cr								
54 Minor 0.5-5%	Fe								
55 Trc 0.05-0.5%	Ti	Zn	Mn						
56 S/Trc 50-500m	Co	Ni	Y	Zr	Sn	Ba			
57 Detected <50m	V	Ce	La	Cu	Ga	Rb	Sr	Nb	
58 Detected <50m									
59 Detected <50m									
60									

UNITS LEGEND ----- m - Parts per million b - Parts per billion % - percent
g - Grams a - Absorbance

Signature P.J. Kluste

APPENDIX X

BALFOUR COPPER TREND - ASSAY RESULTS

458098 097

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: Rocky Cape. EL 1/77. No. ..... Sample numbers ..... Collected by: D.J. Weis ..... Sheet no. .....

Area / Prospect: Balfour Cu trend. Date: 23 March 83.

Map / Photo reference: Sandy Cape 1:100 000 topo Sheet. Analysed by: Analabs, Coorp ..... DPO no: 30459

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	Ni	Co	As	Ba	Sn	W			
		o/c sample type ***																		
		s sample type ****																		
																				Clump Prospect - Shaft.
1055473	f	GS.							5200	17	22	360	106	790	10	8	<10			White Quartzite - leached + Cavernous ± 40% Py, ± 1% Cpy.
1055474	f	GS							7100	12	11	350	240	930	10	10	<10			As above + yellow Stng.
1055475	f	GS.							41	3	20	75	11	88	130	8	<10			Black laminated mudstone + quartz Veining - Sweat out. - graphitic?
1055476	f	GS.							370	3	25	81	13	89	110	7	15			Sheared grey laminated mudstone.
1055477	f	GS.							1300	4	13	137	22	670	30	9	<10			limonitic gossan.
																				Pierpont Morgan mine.
1055478	f	GS.							2050	6	8	320	12	32	10	4	<10			leached quartzite + blebs Py + Cpy ± 0.5% Cpy.
1055479	f	GS							1850	2	5	320	14	19	10	4	<10			As above.
1055480	OC	CS	100m. - along road.						33	22	11	57	9	6	80	6	<10			Pyjama Siltstones H/W. weathered brown. almost ochreous.
1055481	OC	CS	15m.						33	8	85	54	12	6	30	10	<10			Creamy-brown clay, sl. ferruginous. ± qtzite - Dolomite horizon?
																				Waratah adit.
1055484	f	GS.							6950	12	15	350	80	1440	10	5	<10			Pyritic Quartzite 1-2% Cpy.
1055485	f	GS.							52	47	33	37	10	21	110	5	<10			hematitic pyj. siltst. minor py. deformed.
1055486.	f	GS.							2050	3	60	54	15	27	20	4	<10			grey f.g. quartzite Py/Cpy.

* 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

458099 098

C.R.A. EXPLORATION . GEOCHEMICAL SAMPLE LEDGER

Tenement name: Rocky Cape EL 1/77 No. ..... Sample numbers ..... Collected by: D.J. Weis Sheet no. .....

Area / Prospect: Balfour Cu trend Date: 6/5/83

Map / Photo reference: Sandy Cape 1:100 000 Sheet. Analysed by: Analabs, Cooee. DPO no: 30463

Sample No.	Type (ss * / oc / f / s)	ss channel ** fl	wi	al	co	ca	pH	Carbon	Metal content ppm or % Cu	Pb	Zn	Ni	Co	As	Ba	Sn	W	Grid ref	Geological Observations
																			Nelson Bay Quarry.
1055720	OC	CS	10m						4	5	8	32	6	2	100	14	<10		grey-bl interbedded Shale and quartzite
721	OC	CS	10m						4	3	15	36	11	4	100	5	<10		minor Pyrite.
722	OC	CS	10m						4	2	9	32	7	4	90	3	<10		" " " " "
723	OC	CS	10m						4	3	14	42	11	17	90	<3	11		" " " " "
724	f	Gs							470	14	28	45	21	40	10	<3	<10		black Carbonaceous Shale, limonitic.
																			I 20% Py, CPy? Slight greenish
																			tinge.
725	OC	GS.							78	6	28	33	22	56	20	<3	<10		Weath. bl. Carb Shale, minor interbed. Qtzite.

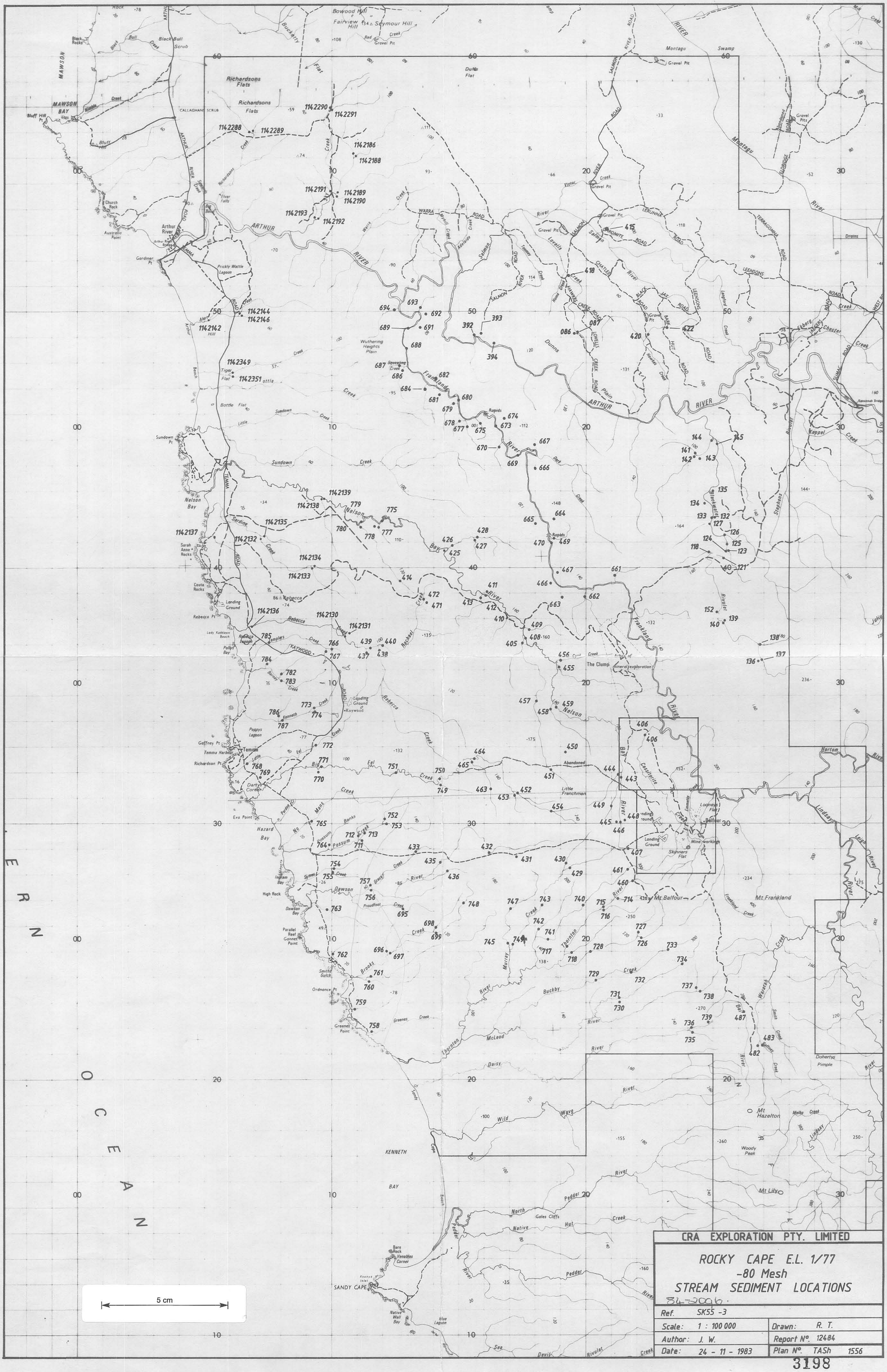
* Sample type ss = stream sediment oc = outcrop f = float s = soil

** 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

458100



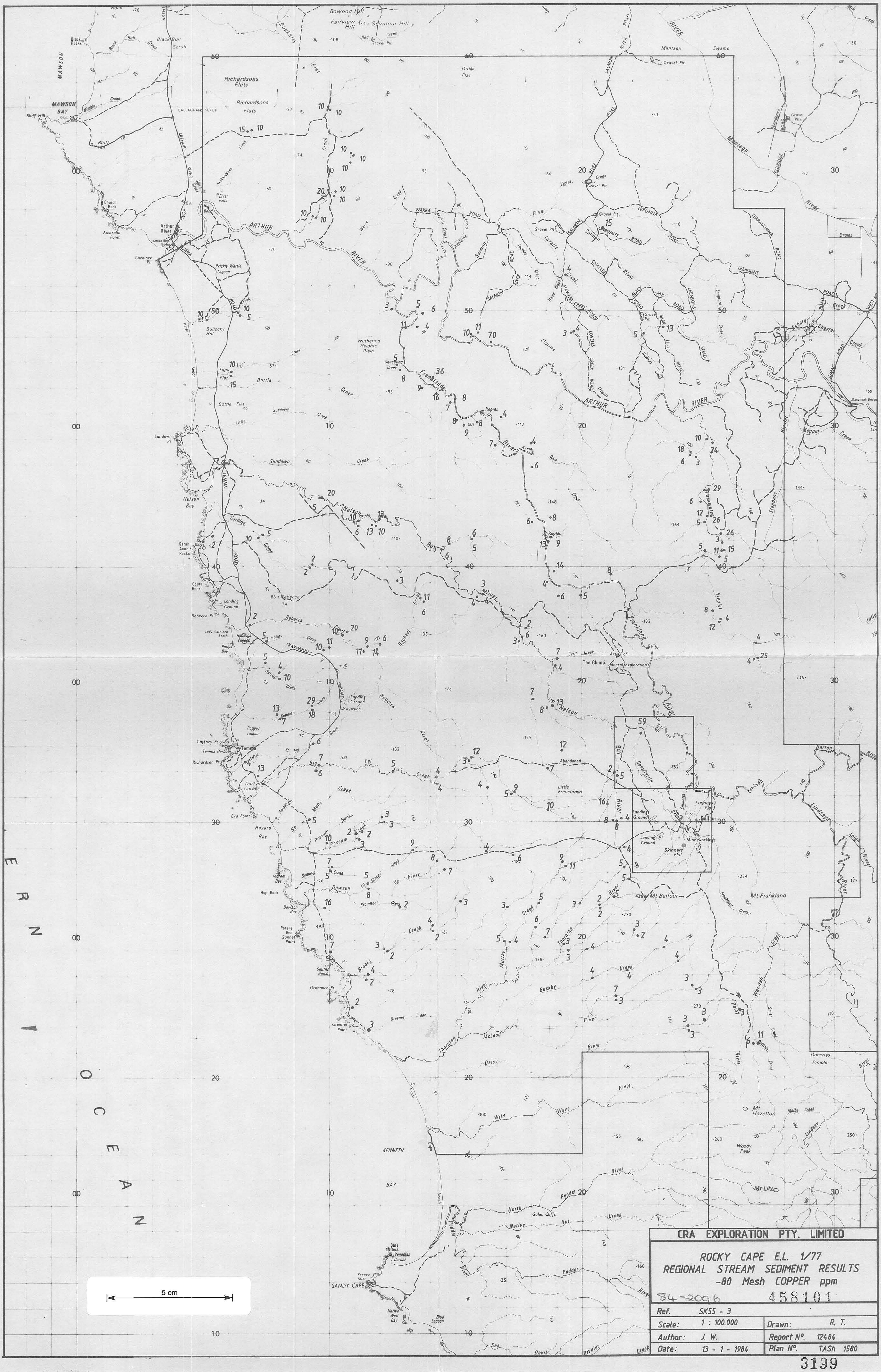
CRA EXPLORATION PTY. LIMITED

ROCKY CAPE E.L. 1/77
-80 Mesh
STREAM SEDIMENT LOCATIONS

84-2096.

Ref.	SK55 -3		
Scale:	1 : 100 000	Drawn:	R. T.
Author:	J. W.	Report No.	12484
Date:	24 - 11 - 1983	Plan No.	TASh 1556

3198



CRA EXPLORATION PTY. LIMITED

ROCKY CAPE E.L. 1/77
REGIONAL STREAM SEDIMENT RESULTS
-80 Mesh COPPER ppm

84-2096 458101

Ref.	SK55 - 3		
Scale:	1 : 100.000	Drawn:	R. T.
Author:	J. W.	Report N°.	12484
Date:	13 - 1 - 1984	Plan N°.	TASh 1580

3199

CRA EXPLORATION PTY. LIMITED

458102

ROCKY CAPE E.L. 1/77

REGIONAL STREAM SEDIMENT RESULTS

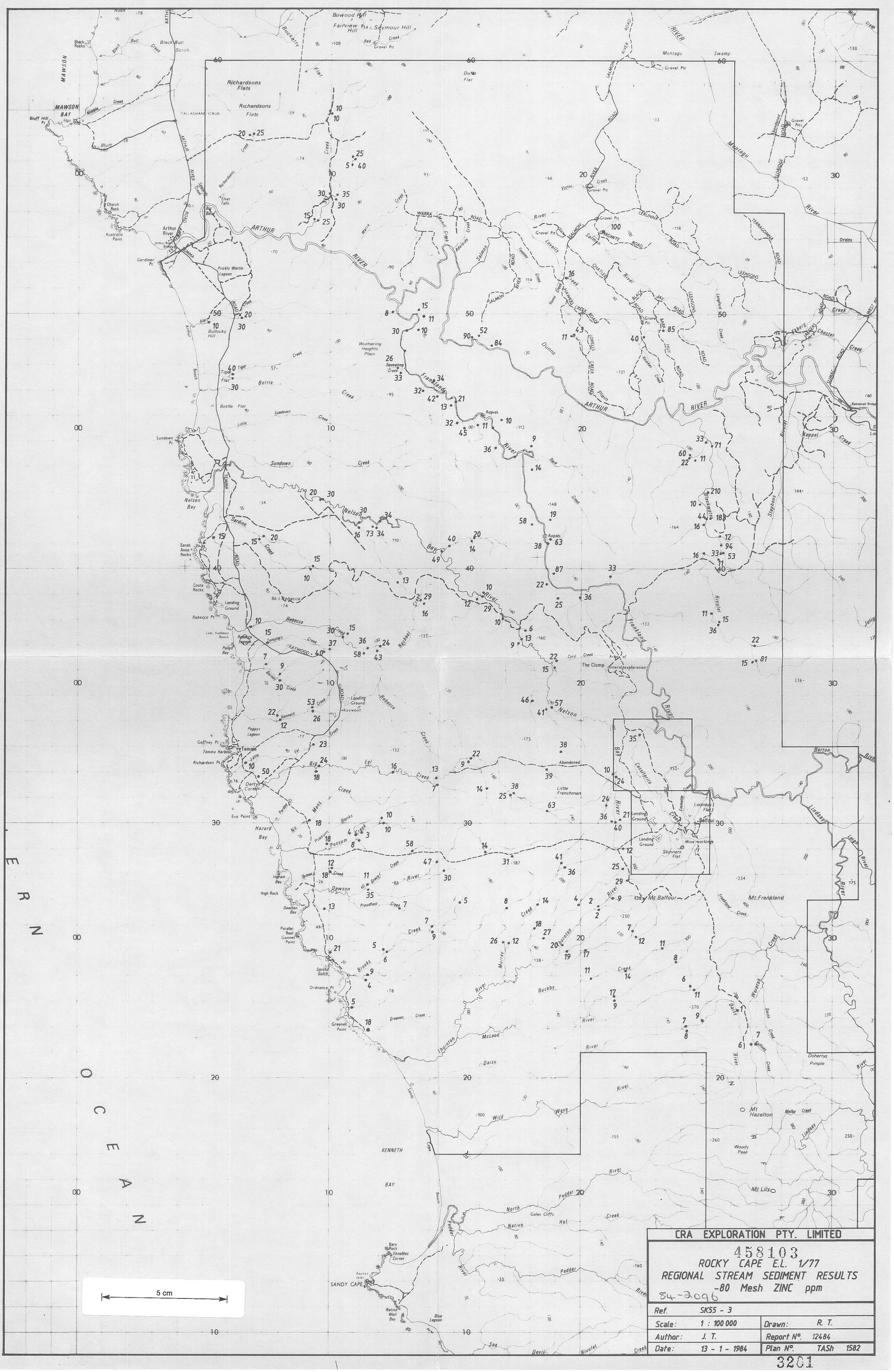
-80 Mesh LEAD ppm

84-2096

Ref.	SK55 - 3		
Scale:	1 : 100 000	Drawn:	R. T.
Author:	J. W.	Report N°.	12484
Date:	13 - 1 - 1984	Plan N°.	TASh 1581

3200

5 cm



CRA EXPLORATION PTY. LIMITED

458103

ROCKY CAPE E.L. 1/77

REGIONAL STREAM SEDIMENT RESULTS

-80 Mesh ZINC ppm

84-2096

Ref.	SK55 - 3		
Scale:	1 : 100 000	Drawn:	R. T.
Author:	J. T.	Report No.	12484
Date:	13 - 1 - 1984	Plan No.	TASh 1582

3201

CRA EXPLORATION PTY. LIMITED

458104

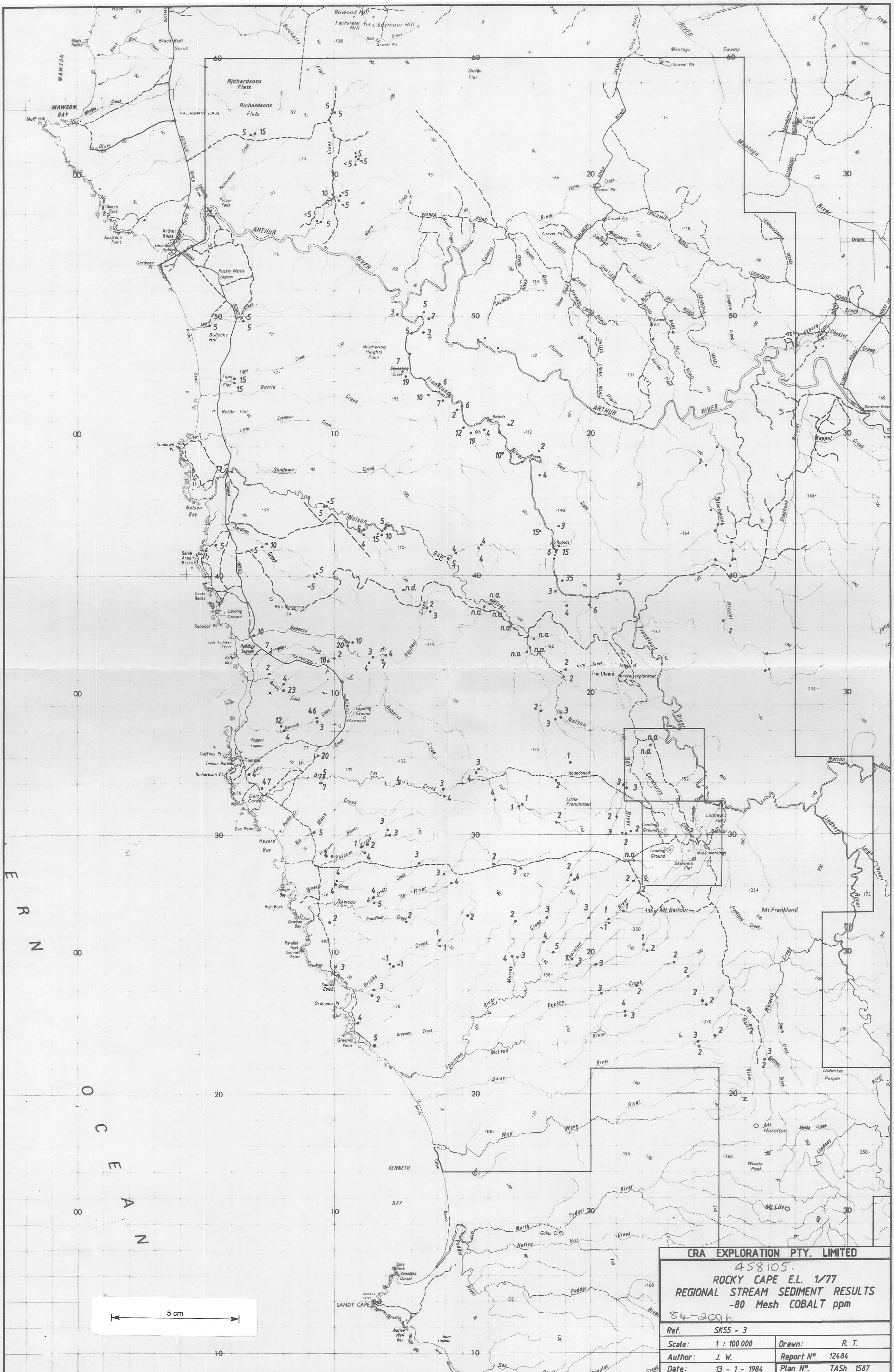
ROCKY CAPE E.L. 1/77
REGIONAL STREAM SEDIMENT RESULTS
-80 Mesh NICKEL ppm

84-2096.

Ref.	SK 55 - 3		
Scale:	1 : 100 000	Drawn:	R. T.
Author:	J. W.	Report N°.	12484
Date:	13 - 1 - 1984	Plan N°.	TASh 1588

3202

5 cm



CRA EXPLORATION PTY. LIMITED

458105.

ROCKY CAPE E.L. 1/77
REGIONAL STREAM SEDIMENT RESULTS
-80 Mesh COBALT ppm

84-2006

Ref.	SK55 - 3		
Scale:	1 : 100 000	Drawn:	R. T.
Author:	J. W.	Report N°.	12484
Date:	13 - 1 - 1984	Plan N°.	TASh 1587

3203

CRA EXPLORATION PTY. LIMITED

458106

ROCKY CAPE E.L. 1/77

REGIONAL STREAM SEDIMENT RESULTS

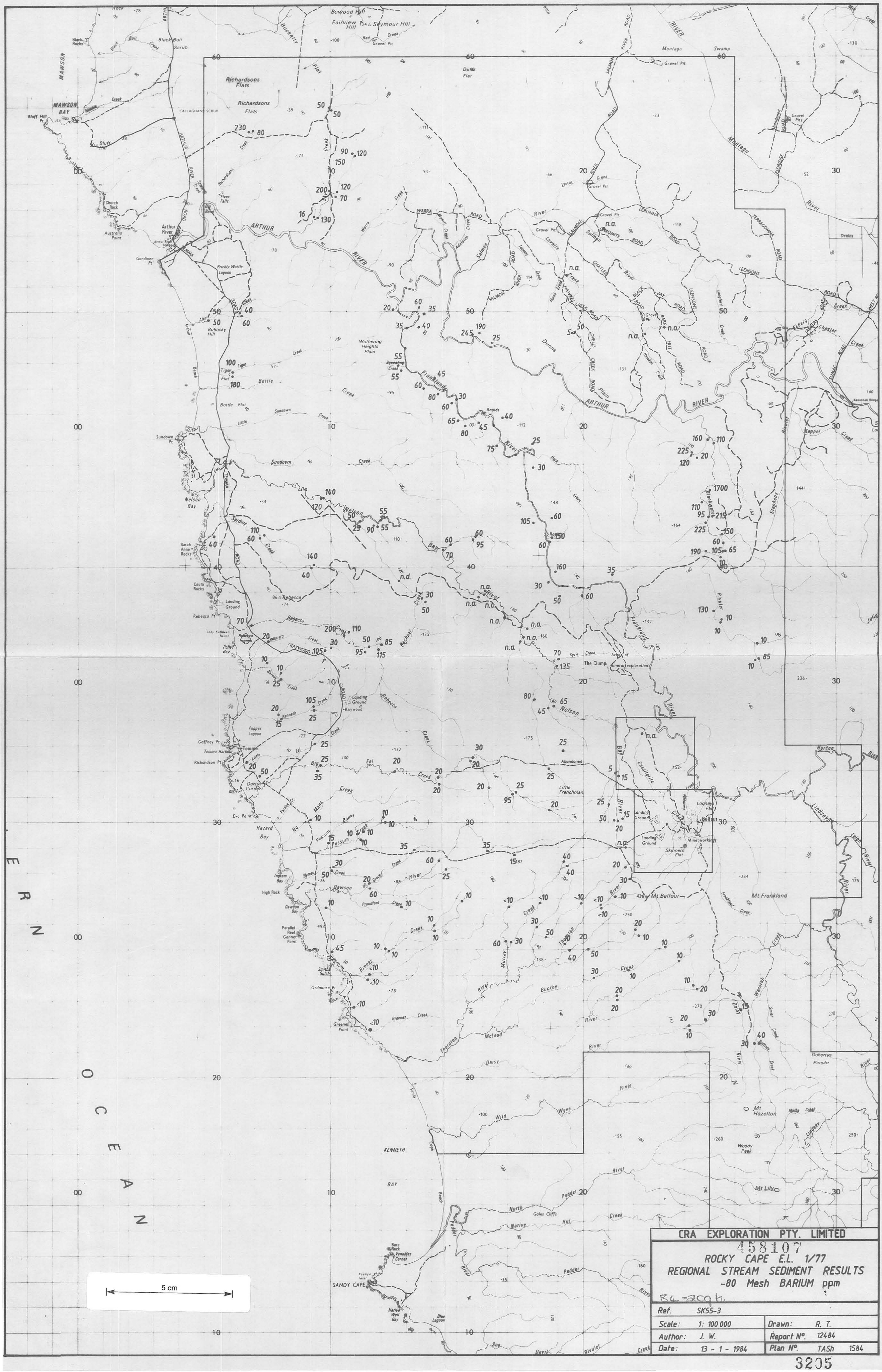
-80 Mesh ARSENIC ppm

84-2096.

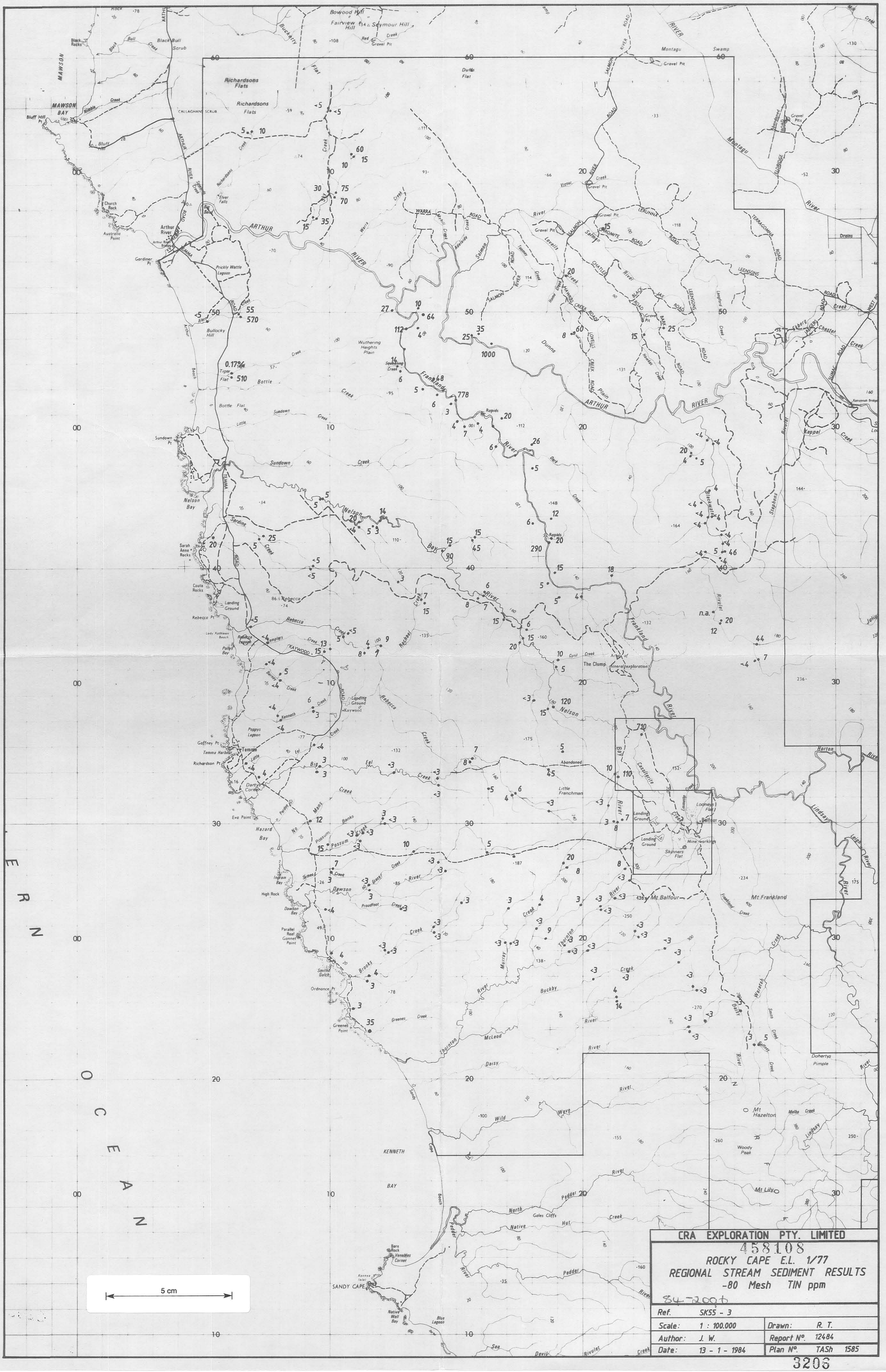
Ref.	SK55 - 3		
Scale:	1 : 100 000	Drawn:	R. T.
Author:	J. W.	Report No.	12484
Date:	13 - 1 - 1984	Plan No.	TASh 1583

3204

5 cm



CRA EXPLORATION PTY. LIMITED			
458107			
ROCKY CAPE E.L. 1/77 REGIONAL STREAM SEDIMENT RESULTS -80 Mesh BARIUM ppm			
84-2096.			
Ref.	SK55-3		
Scale:	1: 100 000	Drawn:	R. T.
Author:	J. W.	Report Nº.	12484
Date:	13 - 1 - 1984	Plan Nº.	TASh 1584



CRA EXPLORATION PTY. LIMITED

458108

ROCKY CAPE E.L. 1/77

REGIONAL STREAM SEDIMENT RESULTS

-80 Mesh TIN ppm

84-2096

Ref.	SK55 - 3		
Scale:	1 : 100.000	Drawn:	R. T.
Author:	J. W.	Report No.	12484
Date:	13 - 1 - 1984	Plan No.	TASh 1585

3206

CRA EXPLORATION PTY. LIMITED

458109

ROCKY CAPE E.L. 1/77

REGIONAL STREAM SEDIMENT RESULTS

-80 Mesh TUNGSTEN ppm

84-2016

Ref.	SK55-3		
Scale:	1 : 100 000	Drawn:	R. T.
Author:	J. W.	Report No.	12484
Date:	13 - 1 - 1984	Plan No.	TASh 1586

3207

5 cm

SALMON RIVER ANOMALY
Most coherent and strongest anomaly. Black shale host. Possible contamination from Arthur River floodplains.

SUNDOWN CHERT
Approximate Location of Chert horizon

NELSON BAY RIVER
Weak Pb-Zn anomalies probably related to NBR aeromag anomaly and Fe lodes.

KENNETH CREEK
Weak Cu, Pb, Zn anomalies probably related to Strickland aeromag anomaly.

NELSON BAY RIVER
Moderate Sn anomaly
Possible alluvial Sn source or perhaps contamination -- Balfour tramway???

FRANKLAND RIVER ANOMALY
Elevated Pb values due to Black shales. ±200ppm Pb in rock chips.
Sn contamination derived from Balfour.

BLACKWATER RIVULET
191 ppm Ni.
1700 ppm Ba.
210 ppm Zn
25 ppm Pb.

V. weak Pb/Zn anomalies
Source unknown.
Predominant quartzite outcrop.

64 ppm Sn,
112 ppm Sn.
245 ppm Ba.
90 ppm Zn.
70 ppm Cu.
156 ppm Pb.
200 ppm As.
1000 ppm Sn.
36 ppm Cu.
21 ppm Pb.
27 ppm Pb.
77 ppm Sn.
100 ppm Zn,
120 ppm Ni,
85 ppmZn.
50 ppm Pb.
Chert Float
Max. 305 ppm Pb.
420 ppm Zn.
100 ppm Pb.
22 ppm Pb.
73 ppm Zn.
15 ppm Pb.
14 ppm Pb.
105 ppm Ba.
290 ppm Sn.
30 ppm Pb.
150 ppm Ba.
90 ppm Sn.
87 ppm Zn.
49 ppm As.
58 ppm Zn
29 ppm Cu.
53 ppm Zn.
105 ppm Ba.
20 ppm Pb.
50 ppm Zn
57 ppm Zn.
120 ppm Sn.
59 ppm Cu.
39 ppm As.
710 ppm Sn.
110 ppm Sn.
63 ppm Zn.
26 ppm Pb.
58 ppm Zn.
23 ppm Pb.
47 ppm Zn.
28 ppm Pb.
23 ppm Pb.
64 ppm As.
0.71% Cu.
0.21% Cu.
0.69%Cu.

Pierpont Morgan Mine
Waratah Adit
Balfour S.P.L.s

5 460 000mN.
5 450 000 mN.
5 440 000 mN.
5 430 000 mN.
5 420 000 mN.
5 410 000 mN.
300 000 mE.
310 000 mE.
320 000 mE.
330 000 mE.

5 cm

LEGEND
- SAMPLE LOCATION WITH PERTINENT ASSAY RESULTS.
- MINE WORKINGS
- AEROMAGNETIC HIGHS
- BALFOUR COPPER TREND

CRA EXPLORATION PTY. LIMITED

458110

ROCKY CAPE E.L. 1/77
TARGETS WARRANTING FURTHER EXPLORATION

64-2096.

Ref.	SK55-3		
Scale:	1:100,000	Drawn:	M.A.C.
Author:	J.W.	Report N°.	12484
Date:	25-1-84	Plan N°.	1593

3208

LEGEND

- SURVEY STATION
- LOGGING TRACK
- CUT OR FLAGGED LINE
- CREEK
- CREEK CONTINUATION
- 1142050 STREAM SEDIMENT SAMPLE
- 1142060 ROCK CHIP - GRAB SAMPLE
- 1142126 ROCK CHIP - CHIP SAMPLE

Cu | Pb | Zn | As
Sn | W | Au

All assay results in ppm except Au, (ppb)

1055 Series numbers sampled January 1983
Remainder sampled December 1983.

MAG NORTH

0 50 100 m

1142077 2|5|10|3 / 10|30
1142078 15|20|40|16 / <5|10|3
1142079 2|5|10|2 / 10|30
1142080 10|15|20|9 / <5|10|3
1142081 10|15|20|14 / <5|10|5
1055397(pan con) 3|4|24|1 / 100|4
1142082 10|15|25|12 / <5|10|3
1142083 5|5|10|2 / 5|40
1142084(float) 35|25|20|30 / <5|10|3
1142085 10|15|35|36 / <5|10|3
1055398 13|15|65|66 / 50|4
1142086 15|15|20|16 / <5|10|3
1142087 15|65|20|140 / <5|10|3
1142088 2|10|10|4 / 5|20
1142089 5|5|10|2 / <5|20
1142090 10|20|15|22 / <5|10|3
1055396(pan con) 5|4|25|6 / 90|4
1142091 5|10|15|5 / 5|30
1142092 15|25|20|22 / <5|10|3
1142093 15|25|35|16 / <5|10|3
1055399 12|20|64|17 / 1750|4
1142094 5|10|15|6 / 5|30
1142095 5|5|10|6 / <5|10|3
1142096 2|10|15|3 / <5|10|3
1055404 7|14|23|15 / 35|4
1055395(pan con) 4|4|22|12 / 160|4
1142097 5|10|10|3 / 5|40
1142098 10|15|20|4 / <5|10|3
1142099 20|55|20|105 / 5|10|3
1142100 15|20|20|18 / <5|10|3
1142121 2|10|20|3 / <5|10|3
1142122 10|15|15|9 / 10|10
1142123 15|25|30|8 / 10|10|3
1142124 25|30|80|8 / 10|10|3
1142125 20|40|55|14 / 5|10|3
1142126 15|30|85|12 / <5|10|3
1142127 10|15|15|8 / 5|20
1055394 70|156|84|200 / 1000|4
1142128 5|30|15|18 / <5|10|3
1142129 10|40|25|18 / <5|10|3
1142041 10|15|105|6 / 10|10
1142042 5|5|20|4 / 5|10
1142043 60|10|10|4 / <5|10
1055392 10|64|90|12 / 25|4
1142044 10|10|20|4 / 10|20
1142045 10|5|13|3 / 15|30
1142046 5|5|5|1 / 10|10
1142047 5|5|10|3 / <5|30
1142048 5|5|15|4 / <5|30
1142049 5|<5|10|3 / <5|10
1142050 5|5|10|2 / 5|30
1142051 5|5|35|3 / <5|20
1142052 10|5|20|3 / 10|10
1142053 10|5|20|2 / 15|20
1142054 20|10|25|5 / <5|10
1142055 5|5|15|3 / <5|10
1142056 5|5|15|4 / 5|10
1142057 5|<5|10|2 / <5|10
1142058 5|5|15|4 / <5|10
1142059 5|10|15|5 / 5|10
1142060 20|25|65|22 / <5|10
1142061 10|15|5|3 / 5|10|5
1142062 5|15|15|5 / 15|20
1142063 2|5|5|3 / <5|10|3
1142064 10|15|15|5 / 30|20
1142065 20|20|35|10 / 5|10|3
1142066 15|30|170|16 / 10|10|3
1055393 11|30|52|11 / 85|4
1142067 10|20|25|12 / 115|40
1142068 10|10|15|9 / <5|10|3
1142069 10|10|5|20|3 / 10|10
1142070 5|15|10|6 / <5|10
1142071 15|15|35|12 / <5|10|3
1142072 20|15|10|4 / <5|10|3
1142073 5|10|15|3 / 5|20
1142074 2|5|5|3 / <5|10|3
1142075 10|20|20|9 / <5|10|10
1142076 5|15|15|6 / 5|40
1142077 2|5|10|3 / 10|30
1142078 15|20|40|16 / <5|10|3
1142079 2|5|10|2 / 10|30
1142080 10|15|20|9 / <5|10|3
1142081 10|15|20|14 / <5|10|5
1055397(pan con) 3|4|24|1 / 100|4
1142082 10|15|25|12 / <5|10|3
1142083 5|5|10|2 / 5|40
1142084(float) 35|25|20|30 / <5|10|3
1142085 10|15|35|36 / <5|10|3
1055398 13|15|65|66 / 50|4
1142086 15|15|20|16 / <5|10|3
1142087 15|65|20|140 / <5|10|3
1142088 2|10|10|4 / 5|20
1142089 5|5|10|2 / <5|20
1142090 10|20|15|22 / <5|10|3
1055396(pan con) 5|4|25|6 / 90|4
1142091 5|10|15|5 / 5|30
1142092 15|25|20|22 / <5|10|3
1142093 15|25|35|16 / <5|10|3
1055399 12|20|64|17 / 1750|4
1142094 5|10|15|6 / 5|30
1142095 5|5|10|6 / <5|10|3
1142096 2|10|15|3 / <5|10|3
1055404 7|14|23|15 / 35|4
1055395(pan con) 4|4|22|12 / 160|4
1142097 5|10|10|3 / 5|40
1142098 10|15|20|4 / <5|10|3
1142099 20|55|20|105 / 5|10|3
1142100 15|20|20|18 / <5|10|3
1142121 2|10|20|3 / <5|10|3
1142122 10|15|15|9 / 10|10
1142123 15|25|30|8 / 10|10|3
1142124 25|30|80|8 / 10|10|3
1142125 20|40|55|14 / 5|10|3
1142126 15|30|85|12 / <5|10|3
1142127 10|15|15|8 / 5|20
1055394 70|156|84|200 / 1000|4
1142128 5|30|15|18 / <5|10|3
1142129 10|40|25|18 / <5|10|3

ARTHUR RIVER

ARTHUR RIVER

5 cm

CRA EXPLORATION PTY. LIMITED

458111

ROCKY CAPE E.L. 1/77
SALMON RIVER PROSPECT
GEOCHEMICAL RESULTS

54-20 Cp

REF.	SK55 - 3		
SCALE	1 : 2000	DRAWN	R. T.
AUTHOR	J. W.	REPORT No.	12484
DATE	10 - 1 - 1984	PLAN No. TASm	1577

LEGEND

- SURVEY STATION
- LOGGING TRACK
- CUT OR FLAGGED LINE
- CREEK
- CREEK CONTINUATION
- / 50 DIP AND STRIKE OF BEDDING

MAG. NORTH

0 50 100 m

40 f. lam. grey-bl. siltst
50 bl. lam. siltst/shale
bl. lam. siltst/shale
bl. lam. siltst/shale
45 40 40
bl. lam siltst
40 bl. lam. siltst/shale
bl. lam. shale/siltst
60 black shale
limonite
60 black shale
50 black lam. shale
limonite
black shale
60 black lam. shale
black shale
55
50 bl. shale/siltst
50 bl. shale
80 bl. shale lam. sheared?
40 bl. shale/siltst
50 bl. lam. siltst/shale
bl. lam. shale/siltst
grey spotted siltst
bl. shale/siltst
50 grey-bl. siltst
bl. siltst/ shale
50 greywacke → bl. shale
bl. siltst 45
bl.shale 60 /siltst
ARTHUR RIVER

grey-bl. shale/siltst float
greywacke/grey-bl shale float

50 grey-bl. spotted shale, laminated
60 black shale
whitish friable spotted siltst.
grey shale/siltst. black shale
black shale
65 black lam. shale
75 black lam. shale
grey lam. siltst. greywacke
grey-bl lam. siltst
60 grey lam. siltst
black shale lam & sl. spotted
black shale
60
grey siltst
grey-bl siltst
grey-bl siltst minor qtz. veining
60
black sil. lam. shale
ARTHUR RIVER
bl. shale 60
70 bl. shale
bl. shale
60 bl. shale
50 bl. shale
conglomerate
bl. shale
50 bl. shale
bl. shale
50 bl. shale/siltst

greywacke
limonite
greywacke
limonite
45
grey sl. spotted greywacke
grey-bl. shale
greywacke
50
bl. shale
grey siltst. float greywacke
50 bl. shale minor limonite
bl shale & limonite stng.
grey siltst greywacke
bl. shale
limonite
50
bl. shale
minor qtz. gravels
bl. spotted shale

60 grey-bl. lal. siltst
75 bl. lam. shale/siltst
bl. shale
70 grey-bl. lam. siltst
70 bl. shale
limonite
50 bl. shale
limonite on bl. shale
greywacke
bl. shale
limonite

1 km

Centre of plan approximately CQ 160492

5 cm

CRA EXPLORATION PTY. LIMITED

458112

ROCKY CAPE E.L. 1/77
SALMON RIVER PROSPECT
GEOLOGY PLAN

84-2696.

REF.	SK55 - 3		
SCALE	1 : 2000	DRAWN	R. T.
AUTHOR	J. W.	REPORT No.	12484
DATE	11 - 1 - 1984	PLAN No. TASh	1578

3210

5 460 000mE.

5 450 000 mE.

5 440 000mE.

5 430 000 mE.

5 420 000 mE.

300 000 mE.

310 000 mE.

320 000 mE.

330 000mE.

NELSON BAY

SALMON RIVER

NELSON RIVER

FRANKLAND RIVER

TEMMA

FRANKLAND

BALFOUR

HAZELTON

144°45'

41°00'

41°15'

47

5 cm

CRA EXPLORATION PTY. LIMITED

458113

ROCKY CAPE E.L. 1/77

NORTHERN PARTS

TOTAL MAG. INTENSITY CONTOURS

84-299 b.

REF. SK55-3	
SCALE 1:100,000	DRAWN M.A.C.
AUTHOR J.W.	REPORT No. 12484
DATE 25-1-84	PLAN No. TASh 1594

3211

5 cm

318 000 mE
319 000 mE
320 000 mE
321 000 mE
322 000 mE

GN
TN
MN
1.5°
10.7°

5 443 000 mN
5 442 000 mN
5 441 000 mN
5 440 000 mN
5 439 000 mN

9000 N
5000 E
BEARING 225° MAGNETIC

6500 N
5000 E

5000 N
5000 E

DARK CREEK

FRANKLAND RIVER

Rapids

60
80
100
120
140
160
180

CRA EXPLORATION PTY. LIMITED

458114

ROCKY CAPE E.L. 1/77
FRANKLAND RIVER PROSPECT
GRID LINE LOCATION (APPROX.)

84-209b

REF.	SK55 - 3		
SCALE	1 : 10 000	DRAWN	R. T.
AUTHOR	J. W.	REPORT No.	12484
DATE	13 - 1 - 1984	PLAN No. TASh	1595

3212

LEGEND

- FAULT
- GEOLOGICAL CONTACTS INFERRED
- SYNCLINAL AXIS
- SHEAR ZONES
- /40 DIP & STRIKE OF BEDDING
- FACING DIRECTION
- 40 CLEAVAGE DIRECTION
- x ROCK CHIP LOCATION
- OUTCROP

458115

CRA EXPLORATION PTY. LIMITED

ROCKY CAPE E.L. 1/77
SUNDOWN CHERT PROSPECT
GEOLOGY PLAN

86-3096.

REF.	SK55 - 3		
SCALE	1 : 10000	DRAWN	M.A.C.
AUTHOR	J.W.	REPORT No.	12484
DATE	24 - 1 - 1983	PLAN No. TASh	1590

3213

1142362
1142358-361
1142357
1142144
1142146
1142143
1142145
1142141
1142141
1142356
1142348
1142349
1142350
1142351
1142352
1142355
1142345
1142346
1142160
1142161
1142163
1142164
1142165
1142166
1142167
1142168
1142169
1142170
1142171
1142172
1142173
1142174
1142175
1142176
1142177
1142178
1142179
1142180
1142181
1142182
1142183
1142184
1142185
1142347
1142194
1142195
1142197
1142196
1142198
1142199
1142200
1142330
1142331
1142332
1142333
1142335
1142384
1142336
1142337
1142338
11142340
1142339
1142342
1142343
1142344
1142345
1142346
1142353
1142354
1142152
1142154/55
1142156
1142153
1142151
1142157
1142158
1142159
1142150
1142149
975868
975867
1142148
1142147
975866
975860
975864
975865
1142362
1142358-361
1142357
1142144
1142146
1142143
1142145
1142141
1142141
1142356
1142348
1142349
1142350
1142351
1142352
1142355
1142345
1142346
1142160
1142161
1142163
1142164
1142165
1142166
1142167
1142168
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1142174
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1142179
1142180
1142181
1142182
1142183
1142184
1142185
1142347
1142194
1142195
1142197
1142196
1142198
1142199
1142200
1142330
1142331
1142332
1142333
1142335
1142384
1142336
1142337
1142338
11142340
1142339
1142342
1142343
1142344
1142345
1142346
1142353
1142354
1142152
1142154/55
1142156
1142153
1142151
1142157
1142158
1142159
1142150
1142149
975868
975867
1142148
1142147
975866
975860
975864
975865

ALERT CREEK
TIGER CREEK
BOTTLE CREEK
TEMMA ROAD
LITTLE SUNDOWN CREEK
SUNDOWN CREEK
NELSON BAY RIVER

5 451 000 mN
5 450 000 mN
5 449 000 mN
5 448 000 mN
5 447 000 mN
5 446 000 mN
5 445 000mN
5 444 000 mN
5 443 000 mN

305 000 mE
306 000 mE
307 000 mE
308 000 mE
309 000 mE

LEGEND
× ROCK CHIP LOCATION
• STREAM SEDIMENTS
■ PANNED CONCENTRATES

5 cm

GN
TN
MN
1.5°
10.7°

458116

CRA EXPLORATION PTY. LIMITED

ROCKY CAPE E.L. 1/77
SUNDOWN CHERT PROSPECT
SAMPLE LOCATIONS

54-250 6.

REF.	SK55 - 3		
SCALE	1 : 10000	DRAWN	M.A.C.
AUTHOR	J.W.	REPORT No.	12484
DATE	24 - 1 - 1983	PLAN No. TASh	1591

3214

5 cm

5 451 000 mN
5 450 000 mN
5 449 000 mN
5 448 000 mN
5 447 000 mN
5 446 000 mN
5 445 000mN
5 444 000 mN
5 443 000 mN

305 000 mE
306 000 mE
307 000 mE
308 000 mE
309 000 mE

ALERT CREEK
TIGER CREEK
ROAD
TEMMA
BOTTLE CREEK
LITTLE SUNDOWN CREEK
SUNDOWN CREEK
NELSON BAY RIVER

65ppm As.
55ppm Sn.
570ppm Sn.
< 5ppm Sn.
0.17% Sn.
510ppm Sn.
370ppm Cu.
90ppm Sn.
190ppm Sn.
155ppm Sn.
145ppm Sn.
510 ppm Sn.
165ppm Sn.
195ppm Sn.
105ppm Sn.
210ppm Cu.
65ppm Sn.
290ppm Cu.
50ppm Sn.
310ppm Cu.
340ppm Pb.
680ppm As.
650ppm Ba.
Float 305ppm Pb.
420ppm Zn.
100ppm Pb.
130ppm Zn.

GN
TN
MN
1.5°
10.7°

458117

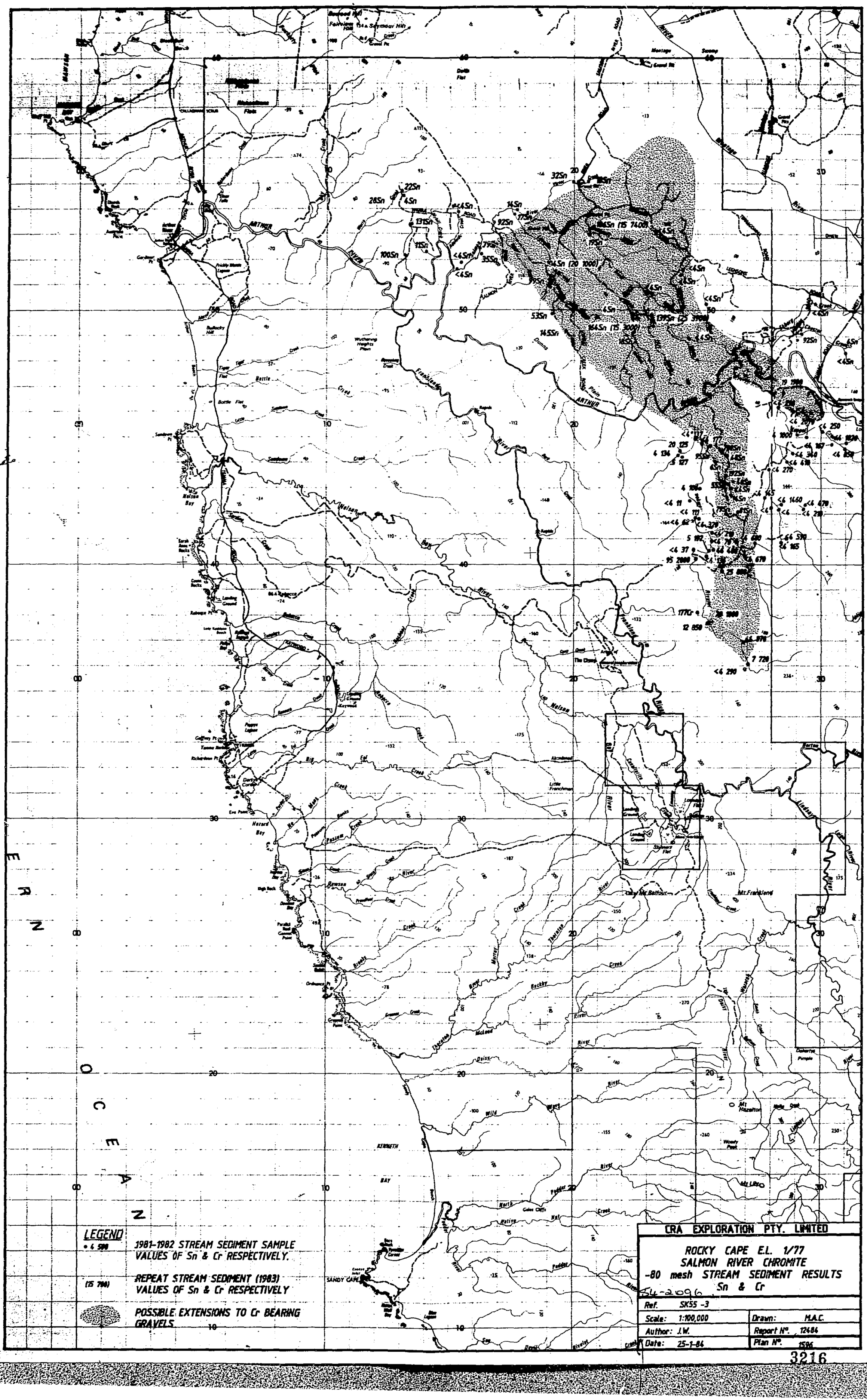
CRA EXPLORATION PTY. LIMITED

ROCKY CAPE E.L. 1/77
SUNDOWN CHERT PROSPECT
PERTINENT ASSAY RESULTS

84-3096.

REF.	SK55 - 3		
SCALE	1 : 10000	DRAWN	M.A.C.
AUTHOR	J.W.	REPORT No.	12484
DATE	24 - 1 - 1983	PLAN No. TASh	1592

3215



CRA EXPLORATION PTY. LIMITED

ROCKY CAPE E.L. 1/77
SALMON RIVER CHROMITE
-80 mesh STREAM SEDIMENT RESULTS
Sn & Cr

54-2096

Ref. SK55 -3	
Scale: 1:100,000	Drawn: M.A.C.
Author: J.W.	Report N°. 12484
Date: 25-1-84	Plan N°. 1596

3216

BEST
A.W. 0.5 5ft or .56lbs of mag. conc per cu yd.
A.W. 0.6 6ft or 70.1lbs of mag. conc per cu yd.

No values

Bulk samples of basal gravels panned down

240 12.5%

240 7.3%

6.8 – 24.5lbs of mag. conc per cu yd.

1.6 – 12.5lbs of mag. conc per cu yd.

230 4.15%

200 4%

280 4.9%

1.6 – 12.9lbs mag. conc per cu yd.

Max. 11.0lbs mag. conc per cu yd.

N E R N O C E A N

LEGEND

180 4.9% PANNED CONCENTRATE (1983)
VALUES OF Sn & Cr RESPECTIVELY

DRILLING PROGRAMME EXECUTED BY
QUEST EXPLORATION 1969
73 HOLES TOTALLING 854ft.
ASSAY VALUES UP TO 50.4% Cr_2O_3
APPROX. AV. HOLE DEPTH 5-6ft.

CRA EXPLORATION PTY. LIMITED

ROCKY CAPE E.L. 1/77
SALMON RIVER CHROMITE
OUTLINE OF PREVIOUS DRILLING
AND RESULTS

Ref. SK55-3	
Scale: 1:100 000	Drawn: M.A.C.
Author: J.W.	Report N°. 12684
Date: 25.1.84.	Plan N°. 1597