C. W. DAVIS

WARRANDYTE - VICTORIA

RELINQUISHMENT REPORT

EXPLORATION LICENCE E.L. 30/86

CUPRONA DISTRICT - N.W. TASMANIA

author C H Whitehead

E.L. 30/86 - RELINQUISHMENT REPORT

440002

CONTENTS

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1. INTRODUCTION AND SUMMARY

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Exploration Licence 30/86 covers 43sqkms in the Cuprona-Natone district of N.W. Tasmania.

The licence was officially granted on 29th April, 1987 and a variety of exploration work and investigations have been completed during the three year period of tenancy since that date.

The nature and results of work during the first two year period were comprehensively documented in the E.L. Annual Reports for Year 1 (1987/88) and Year 2 (1988/89), and summaries of this work are included in this current report. A review of work completed during 1989/90 (Year 3) is likewise documented in this report.

Year 1 work objectives were to assess the areas potential for possible gold, platinum, tin, tungsten and iron mineralisation, and in this respect, efforts were concentrated over the Natone skarn and the old Copper King mine near Cuprona.

Year 2 work concentrated upon a geological assessment of the Blythe River hematite deposits, culminating in a detailed drilling programme and resource evaluation of the "Northern Quarries" hematite deposit.

During the final year of tenancy, detailed investigations were undertaken in assessing the utilisation of certain sections of the Blythe River hematite both in the industrial mineral field, and as a source of low silica (<3%) type hematite.

A number of interesting results were unearthed from the above work, and within the right economic climate some would warrant further investigations. One such project would include the possible use of hematite as a pigment in cement colouration. However, the development of such a project on a commercial scale was found to be beyond the financial constraints of the licence holder, and the decision was made to relinquish tenancy of the exploration licence.

2. GENERAL

2A. LOCATION - LAND TENURE

Exploration licence 30/86 was granted to Mr C. W. Davis, Warrandyte, Victoria, on the 29th April 1987, and originally covered an area of 35sqkms within the Cuprona - Natone region, district of Devon.

On 23rd May 1987, application was made to extend the licence area by an additional 8sqkms in the Natone district. Subsequent Department of Mines approval was given on the 22nd July 1987, and E.L. 30/86 eventually extended over a total of 43sqkms. Please refer to Figure No 1.

The entire area is within easy access of Burnie, the main townships of Cuprona (13kms), Camena (17kms) and Natone (12kms) being readily accessible by good sealed roads. The overall district is well populated, supporting a prime dairy farming and vegetable producing community.

Topographically the area could be described as undulating, reaching up to 350m above S.L., but is predominantly characterised by the deeply incised Blythe River which transgresses the E.L. in a NNE - SSW direction. Tertiary basalt cover masks most of the ground, and except for within the Blythe River valley itself, outcrops are poor.

2B. PREVIOUS EXPLORATION/INVESTIGATIONS

Following the discovery of the Blythe River iron deposits, the Cuprona district first received attention at the turn of the present century.

In subsequent years, during the late 1950's - early 1960's, the iron deposits were spasmodically investigated by both the Tasmanian Department of Mines, and the Bureau of Mineral Resources.

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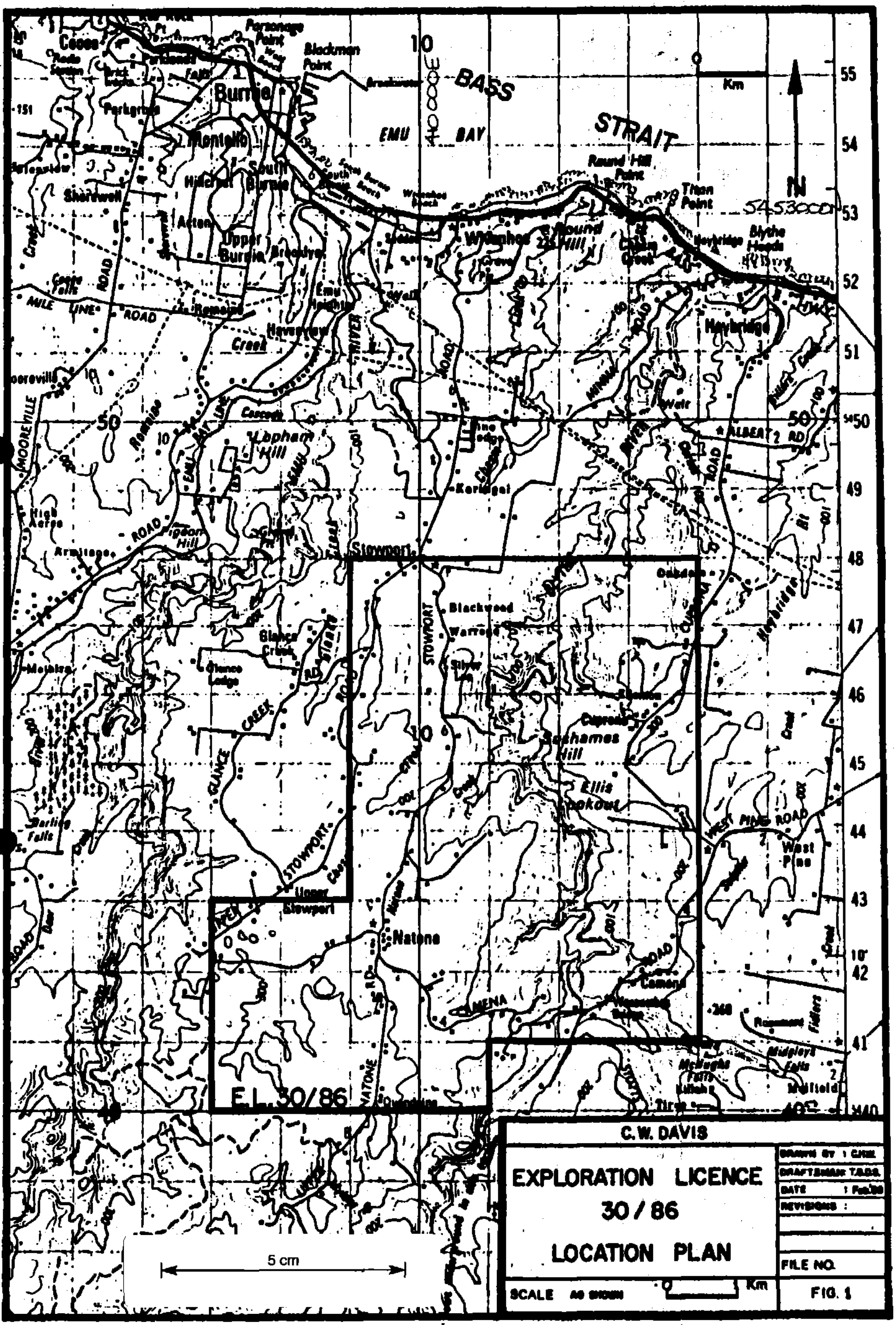
BASS
STRAIT
EMU BAY
Burnie
Montello
South Burnie
Hillcrest
Acton
Upper Burnie
Parkgrove
Shorewell
Cooee
Blackman Point
Parsonage Point
Round Hill Point
Titan Point
Blythe Heads
Heybridge
Wivenhoe
Round Hill
Camp Creek
Emu Heights
Havenview
MILE LINE ROAD
Romaine
Cascade
Upham Hill
Pigeon Hill
Stowport
Blackwood
Warrawee
Oakdene
Glance Creek
Glance Lodge
GLANCE CREEK
Cypress
Bashames Hill
Ellis Lookout
WEST PINE ROAD
West Pine
Upper Stowport
Natone
STOWPORT
NATONE
EMU BAY LINE
MOOREVILLE
High Acres
Armitage
Metaira
Darling Falls
Kerimgal
ALBERT RD
Weir
Camena
Wesconvale
Riverside
Midgleys Falls
McHughs Falls
Mellfield
Tirra
E.L. 30/86
5453000N
Km
N
55
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49
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45
44
43
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41
40
5 cm
C.W. DAVIS
EXPLORATION LICENCE
30 / 86
LOCATION PLAN
FILE NO.
SCALE AS SHOWN
Km
FIG. 1

Since 1966, a number of Companies actively involved in exploration work in N.W. Tasmania have investigated the Cuprona district, the most notable being Minops (1969), Tasminex (1970 - 72), Comalco (1977 - 80), Shell (1980 - 84) and Shell/C.R.A. (1985 - 86). Please refer to Table No 1

Mining in the area appears to have been restricted to small parcels of copper ore being won at the beginning of the century from the Copper King Mine, Cuprona (1,314 tonnes @ 16.7% Cu) and Rutherfords Copper Show, Natone (100 tonnes @ 10% Cu).

2C. REGIONAL GEOLOGY

The Cuprona - Natone district is embraced by the Housetop Devonian granite to the west, and the Proterozoic Ulverstone Metamorphics forming part of the Forth Nucleus to the east.

To the west of Dial Range are found the oldest rocks of the E.L. area, belonging to the Precambrian BURNIE FORMATION. This is essentially a flysch or turbidite sequence of sediments consisting of sandstones, siltstones and shales which contain conformable basic intrusives of dolerites and gabbros. The shales can often be graphitic and may contain syngenetic pyrite. They underwent multiple folding (five phases) during the Penguin Orogeny, resulting in a dominant regional NE - SW fold axial trend.

The above sequence in unconformably overlain by the Cambrian/Precambrian OONAH FORMATION, a series of ferruginous sandstones, siltstones, shales, dolomites, dolomitic limiestones, and ironstones. The formation is gentle dipping (to the S.E.) striking NE across the E.L. area from the Housetop Granite, across the Blythe River valley, to Cuprona before pinching out near the northern coastline.

ORDOVICIAN conglomerates, sandstones and limestones overlay the Cambrian sequences, and again strike NE - SW with a SE dip. They suboutcrop beneath the Tertiary basalt in the Camena area of the E.L. (south eastern section).

The above succession is intruded by the DEVONIAN HOUSETOP GRANITE INTRUSIVE, predominantly a pink, medium to coarse grained biotite granite, although both porphyritic and fine grained varieties can occur. Geophysical gravity work (Shell, Oakes 1983) would suggest the intrusive is laccolith shaped with possible feeder stones located towards its SE and E margin.

During TERTIARY times, valleys infilled with sequences of sediments and basalt flows, the depth of cover being entirely variable.

2D. MINERALISATION

On a stratigraphical basis, mineralisation in the Cuprona district could be classified as follows:-

i. Chalcopyrite copper mineralisation occurring in quartz veins and shear zones hosted by the Precambrian Burnie Formation, slates and quartzites close to the interface between the Precambrian - Cambrian border. This type of mineralisation can be found at the Cuprona Copper King Mine, and the Rutherfords Copper Prospect near Natone.

ii. Siliceous hematitic ironstone zones associated with an interformational breccia along the unconformity between Precambrian quartzites and lower members of the Cambrian succession. The hematite deposits located SW of Cuprona on both flanks of the Blythe River valley, plus minor surface deposits at Natone, are examples of this mineralisation.

iii. Dolomites and/or calcareous sequences of the Oonah Formation were recently confirmed (Shell Metals 1981 - 83) to be host to a large scale skarn zone at Natone in the south western extremity of the E.L. The skarn is extensively developed and portrays both calc-silicate assemblages and magnetite-pyrrhotite varieties.

Outside the E.L. 30/86 area, but within the immediate surrounding region, the following are also found:-

- The Devonian Housetop granite intrusive contains associated tin bearing greisen veins (Cranes tin deposit, Upper Natone) and is intimately associated with magnetite/scheelite bearing skarn zones at Kara, near Hampshire, representing metasomatised metamorphic calcareous Ordovician sequences.

- Acid and basic volcanics of Cambrian age in the Penguin area of the Dial Range Trough show associated iron, copper and cobalt mineralisation.

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TABLE NO 1

CUPRONA DISTRICT PAST EXPLORATION ACTIVITIES/INVESTIGATIONS

Period Involved	Companies/Government Agencies	Commodities Sought Area Of Interst
1903-1909	Dept. of Mines, Tasmania	Iron, Blythe River, Cuprona
1958-1962	Bureau of Mineral Resources	Iron Potential
1958	Rio Rinto Australian Exp. P/L	Iron Potential
1960's	Dept. of Mines, Tasmania	Fe, Mn, Cu
1966	Quest Exploration	Cu, Copper King Mine
1967	Picklands Mather, E.L. 16/67	Copper & General Exploration
1968	B.H.P. Ltd	Iron Potential
1969	Minops Pty. Ltd. E.L. 13/68 & 14/68	Fe Potential & Sulphides
1970-1972	Tasminex N.L. (E.L. 1.69) Hall Relph & Assoc. P/L	Copper
1972	C.R.A.E.	General Exploration
1972-1974	Anzeco, Union Carbide (E.L. 1.69)	Tungsten
1977-1980	Comalco (E.L. 1/69)	General
1980-1984	Shell/Billiton (E.L. 8/77)	Replacement Sulphides in Carb. Rich Rocks
1985-1986	Shell/CRAE (E.L. 8/77)	Base Metal Pb/Zn Potential in Mt. Read Volcanic Equivalents

3. EXPLORATION OBJECTIVES/PROPOSED PROGRAMME

Although the prime aim of the proposed exploration programme within E.L. 30/86 was to thoroughly assess the overall economic potential of the 43sqkm area, emphasis was to be placed upon a full evaluation of the GOLD, PLATINUM, IRON, TIN and TUNGSTEN potential within the licence area.

The preliminary literature review and field assessment of the area had, prior to E.L. application, shown prospective targets and delineated favourable geologic environments which were considered to justify investigation for the above specific commodities.

The nature of exploration work proposed for the E.L. area was a combination of the following:-

- Detailed literature review, data assessment, photogeologic interpretation, relogging/sampling of previous drill samples, geochemical sampling (bulk stream sediment, pan concentrate sampling, rock, soil) ground magnetic surveys and geological examinations.

- The possibility of initiating drilling programmes would depend upon the results of the previously mentioned exploration.

A work programme, anticipated to be completed within a one to two year time-frame, was originally categorised into the following phases:-

Phase 1 - Literature review
Phase 2 - Natone Skarn Zone
Phase 3 - Cuprona and Rutherfords Copper shear zones
Phase 4 - Regional appraisals
Phase 5 - Blythe River iron deposits
Phase 6 - Final review.

4. E.L. 30/86 - EXPLORATION COMPLETED AND RESULTS

4A. PERIOD 1987/88

During the first term of E.L. 30/86 the following work was completed. Please refer to E.L. 30/86 Annual Report 1987/88 for comprehensive details.

- A detailed review of literature and open file Department of Mines reports applicable to previous geological/exploration activities in the E.L. area was completed (i.e. Minops, C.R.A., Shell Metals, Anzeco, Pickands Mather, Tasminex N.L.).

- Examination of the NATONE PYRRHOTITE MAGNETITE SKARN, S.W. of E.L. area.

  - Core samples from 6 drill holes previously drilled at the skarn area by Shell Metals and Minops were examined, logged.
  - Potentially prospective units within the skarn area were resampled and reassayed for Au and Pt - 240 samples.
  - No significant Au anomalism was recorded, max values obtained were in order of 0.005 - 0.10g/tonne Au. Two samples recorded values above 0.005ppm Pt - Hole PDDH N.T.3, 181.50m (1.80m) @ 0.036ppm Pt.
  - Surface geologic examinations, geochemical pan concentrate sampling and appraisal of past geophysical surveys were completed in skarn region and bordering Housetop granite intrusive.

- COPPER KING MINE AREA and surrounding CUPRONA district.

  - Geologic mapping, surveying, surface and underground sampling of the mine area was completed. Analysis - Au, Pt and Cu.

- Examination, logging and re-sampling of previous (1968/69) Dept. of Mines 4 dril holes at mine site. 55 samples representing 112.99m of core were selected and submitted for Au, Pt and Cu analyses. Assays were disappointing and non-anomalous.
- A previously delineated Pickands Mather arsenic geochemical anomaly was resampled (soil samples) and reassayed. The anomaly was not reconfirmed.
- Drainage from the Copper King mine and region to the north was sampled - bulk stream sediments - and investigated by cyanide leach tests.

- Regional Appraisals

  - Drainage within the Burnie Fm "window", west of Cuprona was bulk stream sediment sampled and assayed for Au (cyanide leach). Results were disappointing.
  - The Sn/WO_3 potential was regionaly examined from pan concentrate sampling of drainage in the Burnie Fm "window", the Camena district, and the Housetop Granite intrusive.

- Iron/Hematite Blythe River Deposits

A geologic - economic appraisal of the hematite zones was commenced.

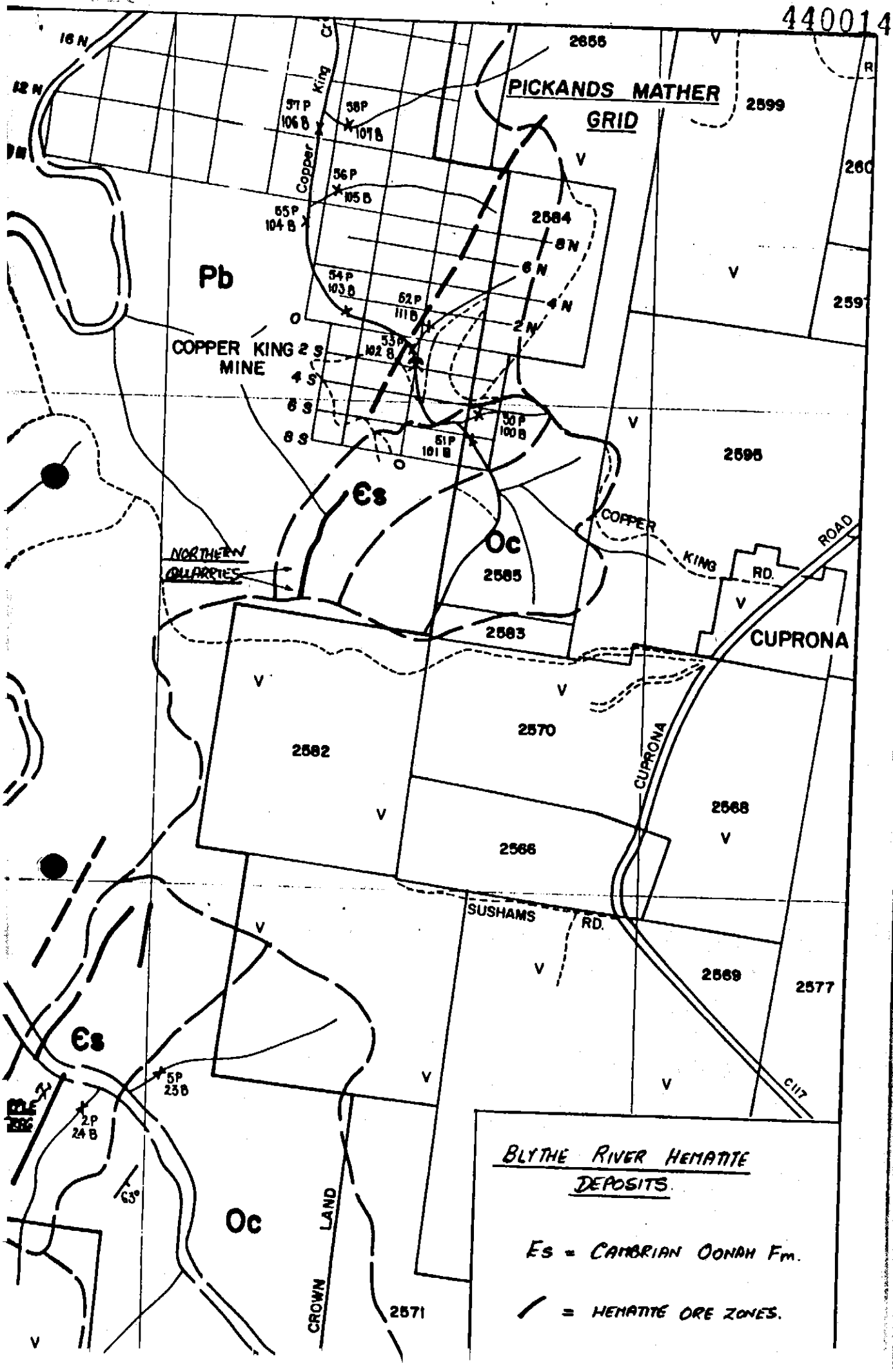
4B. PERIOD 1988/89

The priority objective of the 1988/89 exploration work, was to investigate the potential of the Blythe River Hematite Deposits, in particular the identification of a Fe deposit of low siiceous content, and one favourable to extraction by open pit methods.

The Blythe River Fe occurrences consist of seven known surface exposed occurrences of iron extending over a stike distance of 2.2kms and straddling the Blythe River (Figure No 2).

Exploration and evaluation work completed to date has included the following:-

- Review of all past literature applicable to these Fe deposits (namely, Dept, of Mines, Rio Tinto, B.H.P., B.M.R.).
- Field orientation/indentification of, and geologic reconnaissance of the hematite deposits both to the north and south of the Blythe River.
- Relocation, and on-site examination of old adits, trenches and pits at individual hematite bodies.
- Geologic examination, surveying, and preliminary potential reserve estimates of both the Purple Crag iron deposit (SW of the Blythe River) and the Northern Quarries hematite deposits at Cuprona (N of the Blythe River).
- Preliminary surface sampling and analyses of the two previously mentioned hematite deposits, in particular for orientation on Fe grade variability and range of SiO_2 content (Please refer to Appendix C for assays of the Purple Crag hematite deposit).
- The decision was made to concentrate upon a detailed geologic examination of the Cuprona "Northern Quarries" hematite deposit. A drilling programme consisting of 28 shallow airtrack holes (252m drilled) permitted a successful demarcation and compiation of hematite reserves over a total strike distance of 180 metres at the deposit. A market potential study of the hematite was initiated. The report below summarises details of the investigation of this particular deposit.


PICKANDS MATHER GRID
COPPER KING MINE
NORTHERN QUARRIES
COPPER KING ROAD
CUPRONA
SUSHAMS RD.
CROWN LAND
Pb
Es
Oc
2655
2599
2584
2598
2585
2583
2570
2582
2568
2566
2569
2577
2571
BLYTHE RIVER HEMATITE DEPOSITS.
Es = CAMBRIAN OONAH Fm.
= HEMATITE ORE ZONES.

CUPRONA HEMATITE DEPOSIT

DRILLING PROGRAMME - RESERVE EVALUATION

A percussion drilling programme was completed in November 1988 at the "Northern Quarries" hematite deposit near Cuprona (E.L. 30/86).

The prime objectives of the programme were to ascertain the near surface continuity and grade of hematite ore, and whether reserves would be sufficient to sustain a small scale mining operation producing at the rate of approximately 10,000 to 15,000 tonnes per annum.

A total of 28 shallow holes, of between 6 to 15m depth, were drilled with a total drill depth of 252m. Samples were collected over 3m drill intervals, and a total of 83 samples have been subsequently assayed for Fe_2O_3 and Sio_2.

The results of drilling, combined with a detailed geologic survey, have permitted a successful demarcation and compilation of ore reserves over a total strike distance of 180m. A classification of reserves has been made to use the following categories:

- Measured Minable Reserves, totalling 74,989 tonnes with an average grade of 78.92% Fe_2O_3. These reserves were compiled in the oreblock recently drilled and down to a mining depth of 20 metres.

- Indicated Geologic Reserves, totalling an additional 172,645 tonnes of hematite ore. These reserves include the geologically interpretated ore blockdown to a mining level incorporating existing adit data (approximately 30m mine depth).

- Potential Geologic Reserves. Incorporating data from past exploratory diamond drilling (mines Dept.), potential reserves of the oreblock over 180m strike length down to a drilled depth of 65m, a total 1,170,000 tonnes.

4C. PERIOD 1989/90

E.L. 30/86 work during the 3rd year term was centred around assessing the use of hematite for use as a pigment in the industrial mineral field, and also to investigate the availability and tonnage potential of low silica (minus 3% SiO_2) hematite ore from the Blythe River iron deposits.

Preamble

Further to the establishment of positive reserves of Hematite at the Northern Quarries and potential reserves of low silica Hematite at the Purple Crag area south of the Blythe Rivers, continuing investigation of specialised use of Hematite was carried out.

It was established that the Northern Quarry material is suitable for the following:-

(a) An additive to provide non shrink properties to cement.

(b) As a low cost pigment for the colouring of cement.

Should there prove to be consistent quantities of low silica material at Purple Crag then the material would be suitable for a low silica Hematite to act as a catalyst in the recovery of caustic soda from paper manufacturing pulp liquors.

Samples were prepared and supplies to potential users of both the Northern Quarry and Purple Crag material.

It was established that:-

(a) Cement manufacturers were able to purchase either crushed Magnetite or Steel Mill scale better than competitive rates.

(b) By adding a small quantity of synthetic oxides to the Northern Quarry Hematite a satisfactory low cost cement colouring pigment could be competitively produced.

(c) Low silica Hematite could only be produced from Purple Crag Hematite by extremely fine grinding and gravity separation.

The cost of this process prohibits the use of this material.

1. Hematite - Re Cement Pigment Project

This project was based upon the availability of hematite from the Northern Quarry location, near Cuprona.

The project has been developed to the stage where, although a viable operation could be set up, due to the failure to raise necessary funds, a decision was made to abandon both the project and the Exploration Licence.

The following report sets out a proposal to develop the only likey potential of the area, that of producing organic iron oxides for pigmenting cement.

General

Previous geological investigations indicate that the greastest proportion of iron present in the Blythe River deposit is too siliceous for use in iron production. However, it was ascertained that a considerable tonnage (plus 75,000 tonnes) of selected hematite ore would be of uniform grade to be suitable as use as a pigment.

Selected ore (Fe_2O_3) when finely ground provides inorganic pigment, which, when mixed in accepted proportion with concrete mixes, imparts an acceptable red colour to the concrete. The mix used being 7% by weight of pigment to the cement content of concrete or 4% by weight in cement paste.

Given that the aim is to commercially produce pigment, then a basic colour range is desirable i.e. red, black and brown. Supplies are thus required of other iron oxides.

Resources have now been indentified for the production of both black and brown pigment. Magnetite (Fe_3O_4) - black can be produced in adequate quantity. The small quantity of yellow required is available as a buy-in item.

Using accepted mixes, samples of red, black, brown have been produced.

From the two basic pigment colours plus synthetic yellow, a further range of mixed colours can be developed if required.

It is to be noted that the depth of colour is, in simple terms, a function of the fineness of the oxide particle size subject to the maintenance of the minerals' crystalline structure. Fine grinding is required to give an adequate dispersion of colouring material.

Inorganic pigments thus produced can reasonably be said to be of uniform colour and are light-fast and durable. They differ from those synthetic oxides commercially available, i.e. Bayer, Pfizer, Ferro, etc. only in precise control of colour. The colours produced are to be regarded as natural colours differing from the nore artificial colours of synthetics. It is to be noted that variation in the colour of cement and sand can influence the final concrete colour, any colour variation may not be due entirely to lack of uniformity of the pigment.

Should a higher colour be required, then a mixture of the available natura oxide and synthetic oxide in the proportion of 80.20 produces, in our opinion, an acceptable colour range, competitive with, and in the case of some important colours, closely matching the colour of synthetic oxides.

It is suggested that on a production basis, pre-crushed, say minus 3mm, raw materials be transported to a pilot plant situated in an industrial area of Burnie for processing. A bagged and palleted product being then shipped from Burnie to Melbourne for blending and packaging.

Preliminary samples have been produced and the following notes are intended to form a basis for decision on the future of the project.

Plant Requirement

Set up for production of marketable product.
Equipment required at say 1,000 tpa
Product part Burnie, part Melbourne

Prepare Mine Site/Access roads/other works	$ 50,000
Plant requirement at 5 tpd. Ore mined and crushed to -3mm at mine by contractor	
- Load in 25t hopper with feeder	6,000
- Conveyor (mech)	3,000
- Grinding mill incl. replacement parts	100,000
- Conveyor (air) and classifier (air)	50,000
- Recycling and dust collection/bulk storage	20,000
- Bagging/palleted bulk bags (1.5t)	5,000
- Blending and bagging plant (Melbourne)	125,000
- Storage/pallet racks (Melbourne)	30,000
- Handling and sundry equipment	60,000
- Bags/printing/office equipment	30,000
- Contingency	21,000
Total Cost	$500,000

Production

Further to discussions with synthetic pigment retailers, it is recommended that initially three colours only be produced. Consider 4 colours:-

1. Equivalent to Bayer Red (15% market)
2. Equivalent to Bayer Brown (40% market)
3. Equivalent to Bayer Black (30% market)
4. Equivalent to Bayer Yellow (8% market)

(Note: Yellow is needed to make brown)

To produce near to these four colours, two minerals are required - hematite and magnetite. With a synthetic oxide yellow mix, brown can be produced. It is proposed to produce pigment being a mix of natural and synthetic oxides.

Of course, less strong toned, earthy, red, brown, black and yellow can be very simply produced using total Foxmin oxides but market acceptance of these natural oxides may be low except as a very low cost alternative for use in colouring paths and driveways.

Assume plant capacity 1,000 tonnes per annum total al colours.

Indicative Production - Blended product

		S/Tonne
a)	Mine and stockpile ROM ore) Transport to Burnie/Crush to 3mm) Deliver to Plant (all oxides))	20.50
b)	Load feed hoppers	0.50
c)	Feed Ball Mill/Classifier (app. 30 mesh)	6.00
d)	Bulk pack/store (1.5t bulk bags on pallets)	8.00
e)	Transport to Melbourne	46.00
f)	Blend Ferro/bag and store (5kg-35kg bags)	10.00
g)	Distribution	5.50
h)	Labour say 3m x $15H x 8-5 tpd	72.00
i)	Rent 500m^2 x $45 - 365 - 2.75 ptd	22.50
k)	Contingency	5.00
		196.00
	Say Admin 5%	10.00
	Plant Redemption 250,000 - 10 - 1,000	25.00
	Production Cost/t	$231.00

Say 23c kg.

2. Low Silica Hematite

Investigations were completed to assess the availibility of low silica hematite being available from the Blythe River deposits, and possible subsequent local usage by A.P.P.M. Burnie as a catalyst in the recovery of caustic soda from paper manufacturing pulp liquors.

This work included:-

- Collection of 50kg samples from selective zones of both the Northern Quarry and Purple Crag hematite deposits, and submitted to A.P.P.M. Burnie to undertake chemical/physical test work and assess suitability as catalyst.

  Table No 2 overleaf showed that only the basal outcrop zone (Sample B) of the Purple Crag deposit was sufficiently low in silica content (i.e. minus 3% SiO_2) to warrant further interest.

- Preliminary (shallow 3-6m) airtrack drilling at the location of the above sample location Purple Crag 162m were drilled over a strike length of 20 metres at the N extremity of the Purple Crag - Grid co-ordinates 344572m N, 411780m E - and the area prepared for blasting and acquisition of an approximately 100 tonne bulk sample. However, analysis of resultant drill samples showed a greater variation of silica content. Table No 2 and the bulk sample collection was aborted.

Table No 2

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SAMPLES - HEMATITE E.L. 30/86

ASSAYED FOR SiO_2 - A.P.P.M. BURNIE

Northern Quarries		SiO_2%	
Sample A - Basal Road Float	A1 (coarse)	2.57%	
	A2 "	3.71%	
	A3 "	3.68%	3.32%
	A4 (fine)	4.28%	
Sample B - Top Crag outcrop	B1 (coarse)	4.03%	
	B2 "	3.76%	
	B3 "	3.98%	3.92%
	B4 (fine)	6.04%	

Purple Crag		SiO_2%	
Sample A - Top Outcrop	A1 (coarse)	3.75%	
	A2 "	4.18%	
	A3 "	3.75%	3.89%
	A4 (fine)	3.99%	
Sample B - Basal Outcrop	B1 (coarse)	0.48%	
	B2 "	0.75%	
	B3 "	1.41%	0.88%
	B4 (fine)	1.09%	

Size Fractions

Sample A1 = +1/8"
A2 -1/8" +1/16"
A3 = -1/16" +850u
A4 = -850u

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020

406 000m E. 408 000m E. 410 000m E. 412 000m E. 414 000m E.

34 48 000m N. 34 46 000m N. 34 44 000m N. 34 42 000m N. 34 40 000m N. 34 38 000m N.

STOWPORT
RIVER
EMU
STOWPORT ROAD
C102
C114
C117
C116
ROAD
BLYTHE
CUPRONA
COPPER KING MINE
CUPRONA
BLYTHE IRON
BLYTHE RIVER
UPPER STOWPORT
UPPER STOWPORT ROAD
RUTHERFORDS Cu Prospect
NATONE
LOTTAH ROAD
NATONE SKARN ZONE
CAMENA
CAMENA ROAD
STOTTS ROAD
C192
E.L. 30/86

LEGEND

- Exploration Licence Boundary
- River
- Creeks
- Road
- Track
- Crown Land
- Old Mine

5 cm

90-3182.

C. W. DAVIS

EXPLORATION LICENCE 30/86

LOCATION PLAN

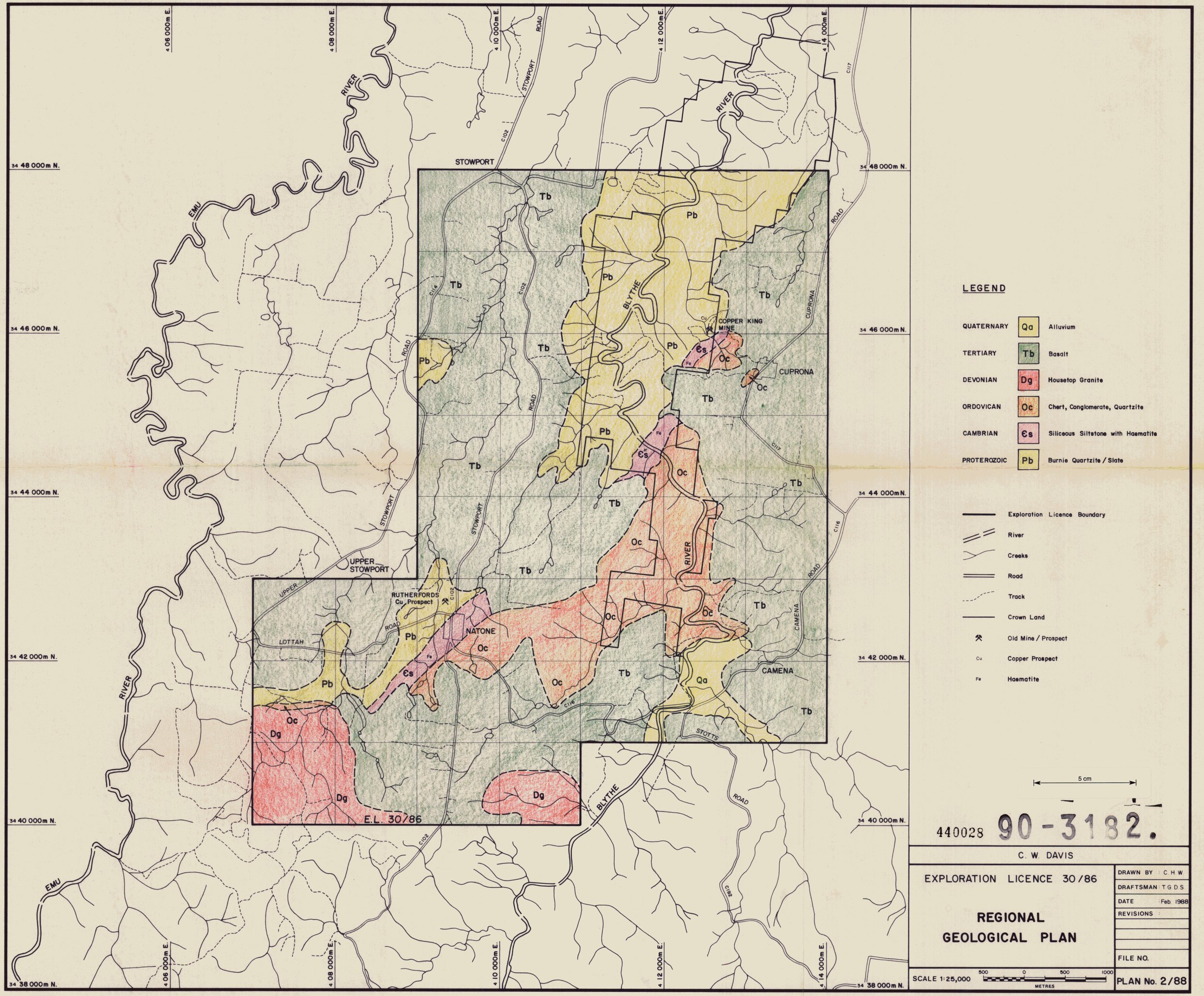
440027

DRAWN BY : C.H.W.
DRAFTSMAN : T.G.D.S
DATE : Feb 1988
REVISIONS :
FILE NO.

SCALE 1:25,000 500 0 500 1000 METRES

PLAN No. 1/88

027



LEGEND

QUATERNARY	Qa	Alluvium
TERTIARY	Tb	Basalt
DEVONIAN	Dg	Housetop Granite
ORDOVICAN	Oc	Chert, Conglomerate, Quartzite
CAMBRIAN	Cs	Siliceous Siltstone with Haematite
PROTEROZOIC	Pb	Burnie Quartzite / Slate

- Exploration Licence Boundary
- River
- Creeks
- Road
- Track
- Crown Land
- Old Mine / Prospect
- Cu — Copper Prospect
- Fe — Haematite

5 cm

440028 90-3182.

C. W. DAVIS

EXPLORATION LICENCE 30/86

REGIONAL GEOLOGICAL PLAN

DRAWN BY : C.H.W.
DRAFTSMAN : T.G.D.S.
DATE : Feb. 1988
REVISIONS :
FILE NO.

SCALE 1:25,000 (500 0 500 1000 METRES)

PLAN No. 2/88