PASMINCO EXPLORATION

BULGOBAC HILL EL37/89
ANNUAL REPORT
FOR THE PERIOD ENDING AUGUST 1997

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SUMMARY

An intensive geological and geochemical review of data available on Bulgobac EL 37/89 was undertaken during the last financial year, with a view of identifying any outstanding targets remaining on the licence and gaps within the data. Several anomalies were identified that will require further investigation.

As part of exploration on neighbouring Bulgobac River EL 19/94, a minor amount of grid cutting was conducted on the northern section of the licence.

RECOMMENDATIONS

1. Stream sediment surveys should be carried out over the tenement, especially the southern part of the licence, to complete coverage of the area.

2. Existing stream sediment anomalies located on the southern section of EL 37/89 should be followed up. Further stream sediment surveys should be undertaken to re-define the extent of anomalies, upon which reconnaissance mapping and rock chip sampling should be undertaken to outline any anomalous regions. Grids should be established over anomalous areas, where mapping, soil sampling, ground magnetics and gravity surveys should be undertaken. Any coincident and unexplained anomalous features should be drill tested.

3. Stream sediment, soil and rock chip anomalies located in the northern section of the licence should be ground truthed by mapping and further sampling, to determine if any warrant detailed investigative follow up.

4. Undertake reconnaissance mapping and rock chip sampling in the region of the junction of the Mt Charter and South Henty faults, as previously mentioned by Purvis (1995a) and McGunnigle (1996).

1 INTRODUCTION

Work conducted on Bulgobac Hill EL 37/89 (Figure 1) in the period 2nd August 1996 to 2nd August 1997 has been mainly of a review nature. Some minor grid cutting was carried out on the northern section of the licence in conjunction with work conducted on Bulgobac River EL 19/94

EL 37/89 covers Cambrian Mt Read Volcanics SW of Hellyer Mine in Western Tasmania (Figure 3). A Hellyer-type volcanogenic Pb-Zn-Cu-Ag-Au massive sulphide deposit is the main target of the exploration programme. The terrain is rugged and vehicular access limited.

Although the old prospectors found no mineralised showings on the EL area, near-continuous exploration over the past 30 years has discovered three zinc occurrences in the volcanics:

- High Point (found by BHP in 1988 during drilling of an EM anomaly. BHP drilled 4 holes 1988-89).
- Sock Creek (detected 1973 by drainage survey by Comstaff, who drilled 14 holes prior to 1978).
- Sock Creek South (found by BHP in 1988 during drilling of an EM anomaly. They put in 4 holes 1988-89).

In addition, BHP drilled 9 shallow diamond drill holes (each less than 50m) at Tullabardine Gorge, without encountering mineralisation. They also covered almost the entire EL with UTEM.

Pasminco's involvement in the area commenced in 1990 and has concentrated on testing the mineralised Que-Hellyer Volcanics at High Point. A further five diamond drill holes (BHD1, 2,3, 5 & 6), totalling 4374m, have been drilled in this area. A deep hole (BHD4, 617m) was also completed at Sock Creek in 1993.

The EL has also been covered with detailed aeromagnetics and photogrammetry, and regional-scale gravity surveys extended over the majority of the EL area.

The palaeovolcanic history and stratigraphy correlations of the Que-Hellyer Volcanics at High Point was studied in detail by Pasminco supported by Honours student Sam Watkins of Monash University.

The planned programme for 1997-98 is outlined in the recommendations.

2 TENURE

The Bulgobac Hill Exploration Licence 37/89, covering 32sq km, was granted to Pasminco Mining Rosebery in March 1990. In August 1990 the licence was transferred to Pasminco Exploration.

In May 1992 and October 1993, EL 37/89 was increased to 49sq km by the addition of 7sq km in the Lake Mackintosh area (EL 17/92) and 10sq km in the South Mt Charter area (EL 7/93).

On 2nd September 1995, EL 37/89 was reduced to 28sq km (Purvis, 1995b). The reduced EL is comprised of almost entirely Unallocated Crown Land (Figure 2).

3 GEOLOGY

3.1 Stratigraphy & Structure

The geology of EL 37/89 is shown in Figures 3, 4 & 5.

The EL covers two main groups of the Cambrian Mt Read Volcanics - the Central Volcanic Complex (CVC), and correlates of the Dundas Group. A small sliver of the Farrell Slates east of the Henty Fault occurs in the SE part of the EL.

The Central Volcanic Complex covers the southern part of the EL and comprises rhyodacitic lavas, porphyries and volcaniclastics (mostly pyroclastics with minor epiclastics). These rocks are known as the Mt Block Volcanics.

Dundas Group and correlates cover the northern half of the EL. They comprise the Que-Hellyer Volcanics (a mafic volcanic complex), sediments (including the Animal Creek Greywacke, Que River Shale and Southwell SubGroup), quartz-feldspar porphyry bodies, and rhyodacitic volcanics (mainly lavas). The relationship between the various units is shown in Figure 5.

The boundary between the Central Volcanic Complex and the Dundas Group within the EL area is gradational, facing and dipping to the west, with the Dundas Group apparently conformably overlying the CVC.

Major structures on the EL include the NE-trending Henty Fault and the N-S trending Mt Charter Fault. However, the magnetics and gravity highlight the presence of several major, apparently deep-seated, unmapped or poorly-mapped structures trending broadly E-W.

3.2 Mineralisation

Three zinc-dominated and gold/silver-poor sulphide occurrences are known on the EL. These comprise:

1) Disseminated sphalerite-pyrite in altered Que-Hellyer Volcanics adjacent to the Mt Charter Fault at High Point.

2) Sphalerite with lesser pyrite-galena-chalcopyrite in net-veins on the contact between quartz-feldspar porphyry and black shale at Sock Creek.

3) Weak disseminated sphalerite in black shale at Sock Creek South (best intersection of 1m @ 2.5% Zn).

High Point is by far the most significant occurrence, although the tenor of Zn values intersected to date is not as high as at Sock Creek. Mineralisation occurs at High Point at several stratigraphic levels within the Que-Hellyer Volcanics. At the top of the Hangingwall Volcanics (Hellyer Basalt equivalents), there is an extensive stratiform zone of disseminated sphalerite-pyrite up to 200m thick and averaging 0.2-0.5% Zn. Recent hole BHD6 at High Point has shown there is also disseminated sphalerite mineralisation in the underlying altered "footwall volcanics". The mineralisation in BHD6 indicates the potential for massive sulphide development in the Mixed Sequence in this area (Purvis, 1995).

At Sock Creek the mineralisation attains grades up to 10% Zn over 1.7m, with a general tenor around 2-5% Zn over 5-10m. There is untested potential at this prospect for an open-cuttable body of mineralisation in the order of 100-200,000t @ 5-10% Zn (Purvis, 1994). An ML was taken out by JG Purvis in 1996 to investigate the potential of this resource, however, drilling appears to have been unsuccessful in increasing the resource base. Subsequently, the ML has been withdrawn and the area again comes under the Bulgobac Hill EL.

No other sulphide occurrences of note are known anywhere on the EL.

4 WORK COMPLETED

4.1 Data Compilation and Review

During the last twelve months Pasminco Exploration has undertaken a data review of Bulgobac Hill EL 37/89, as part of a regional GIS based assessment of the Mt Read Belt. Both Pasminco Exploration proprietary and open-file data were used in the review.

An indication of the activity on the two sections of the licence is apparent from the Historical Grid Map compilation (Fig. 6), which indicates the lack of data over the southern part of the tenement.

4.1.1 Geochemistry

The most significant component of the data review involved the analysis of stream sediment, soil and rock chip geochemistry. The distribution and patterns in metal geochemistry were analysed through statistical analysis. This analysis was carried out on the entire Mt Read data base, by geochemical consultant Alf Eggo. Results relating to the Bulgobac Hill EL 37/89 will be presented here.

Geochemical data sets from the same sampling media can not be directly compared, as the background values relating to geology, sampling media and type of analysis varies, controlling the assay values returned. Therefore all data had to be standardised to allow for a regional, statistically correct, analysis.

The stream sediment, soil and rock chip data were assessed separately using standardisation procedures. The analysis has been performed for Zn, Pb and Cu as these provide the only regional coverage of element abundances.

Soil Samples

Standardisation of soil samples is performed on the basis of the soil profile and the geological unit. The standardisation was conducted on the entire Pasminco Exploration data set (proprietary and open file information) as part of the Mt Read Belt Review.

Standardisation of soil profiles was necessary to allow the data to be analysed on a regional basis. Four different categories of soil profiles were determined, A, B, C and "unknown". The statistics used to 'combine' the data sets is through analysis of the mean and standard deviation of each data category, then 'levelling' each individual data set to a common mean. The standardisation procedure, run on 'SPSS' statistical software and Statview 4.5, calculates the standardised values based on the equation x-mean(x)/st dev(x) for each distribution, making corrections and producing the 'levelled' distributions.

Standardisation according to geology codes utilised the same statistical procedure, where the soil profile was replaced by the geology codes (Outlined in Table 1). The samples were geocoded with the primary Group code only. The procedure involves selecting soil samples that fall within the respective group polygons and undertaking statistical analysis according to each group. The unlevelled data gives an appreciation of the relative abundance of these elements in the various groups.

Some general observations generated from the statistical analysis are

- Cu distribution in terms of 'background' geochemistry is relatively elevated in the CVC and Owen Conglomerate (EO) relative to the ECC (Crimson Creek Formation) although the ECC has quite a few extreme values.

- Pb distribution is higher in DGE (Dundas Group and lithotype equivalents, see Table 1) and TB (Tertiary Basalt), closely followed by the CVC.

- Zn distribution is elevated in the CVC and to a lesser extent in the DGE and TB.

Stream Sediment Samples

These were levelled according to the geocoded geology polygon that each sample plots within. The data analysis does not take account of catchment areas but, given the density of samples, the analysis is a reasonable approximation for small catchment sizes. Catchment analysis was deemed too hard as the majority of samples do not plot precisely on the digital stream outlines and would involve subjective moving of each data point to lie on the stream.

Initial levelling and geocoding was done according to the original MRT codes (Table 1) which proved unwieldy given the large number of polygon codes. The statistical analysis provides an indication of the metal abundance of different rock units, for example high mean Zn in streams is associated with "fiame tuffs", "tuffs", "lithicwacke", "siltstone" and "alluvium" geology polygons. This suggests a high Zn content of the CVC and DGE related rocks. Pb and Cu show broadly similar associations, with Cu also associated with conglomeratic rocks (Owen Conglomerate). Serpentinites and pyroxenites have elevated means for all three elements.

The second and probably more meaningful levelling for regional analysis of the stream data was performed according to the geology Group codes (Table 1). Concentrations of Cu, Pb and Zn are clearly quite different for each of the major lithological groups. The standardised data display no systematic differences, thus minimising any regional geochemical variations due to geology. Interestingly, the Crimson Creek Formation (ECC) and Dundas Group (DGE) have higher mean Zn values than the CVC. Pb and Cu abundances are all high in the Dundas Group (DGE) and Siluro-Devonian (SD) polygons, with an elevated Cu response in the Crimson Creek Formation (ECC).

Rock Chip and Drill Holes

These data were used as "stand alone" samples, not levelled against background geology polygons, but log distributions were derived and values calculated for each population (Cu, Pb, Zn). The drill hole data was simply used in the same way as point located rock chips, with the best intercepts (thickness, grade, depth of Cu, Pb, Zn, Au) attributed to collar locations.

4.1.2 Geochemical Imaging

The standardised soil, stream sediment and rock chip data were gridded and image processed to highlight geochemical anomalism and trends in the data. For the soils, the statistically derived value of each sample point was given a search radius of 100m and the data was gridded at a 50m cell size. For the streams, the search radius was increased to 500m and then gridded at 50m. Percentile images were then produced for each element at a scale of 1:50000. These plots are "hot to cold" colour coded according to the 99th, 98th, 95th, 90th, 80th, 60th and 40th percentiles.

Zn Distribution

The Zn in streams (Fig. 7) shows a number of "anomalous hot-spots", especially in the southern section of the licence. It should be noted that the anomalies relate to undersampled locations.

There are also anomalies in the SW corner and NE corner of the northern section of the EL, both of which are probably undersampled.

There appears to have been no soil sampling in the southern section of the licence (Fig. 8), however, there is a minor soil anomaly in the centre of the northern section of the EL, due south of the Sock Creek mineralisation.

Distribution of Zn in rock chip/drill holes (Fig. 9) indicates a lack of sampling. Several 'spot' anomalies are evident in the northern section of the licence, including the drilling at High Point, however, none appear to correlate with the stream or soil features. There appears to have been some minor rock chip sampling along one of the creeks in the southern section of the tenement. This creek contains two stream sediment anomalies, however, the rock chip sampling does not adequately cover the region, nor does it indicate any major anomalism.

Pb Distribution

The Pb distribution in streams (Fig. 10) contains some anomalous regions, several of which are coincident with the Zn anomalies. There appears to be a large Pb anomaly close to the Sock Creek mineralisation.

The Pb distribution in soils (Fig. 11) is patchy in the northern section of the tenement, however, three distinct local anomalies are apparent. There is no data available in the south.

The Pb distribution in rock chips/drill holes (Fig. 12) is limited in both sections of the EL. Some minor anomalies are evident in the northern section (Sock Creek, High Point) including one on the southern edge of the section area.

In the southern section of the tenement, there is an elevated Pb rock chip value located south of the large centrally located Zn-Pb stream sediment anomaly.

Cu Distribution

Cu anomalism in stream sediments (Fig. 13) is low, with only one significant anomaly evident in the southern section of the EL. A minor Cu anomaly is located coincident with a Zn-Pb stream sediment feature, located on the SW corner of the northern section.

The Cu distribution in soils (Fig. 14) is weak in the northern section, and no data is available for the southern section.

The Cu in rock chips/drill holes (Fig. 15) is very dispersed, with only minor anomalism evident.

Multi-element Distributions

The anomaly patterns in stream and soil datasets has been imaged as RGB composites. These derive from binary grey scale threshold images of each element where the maximum areas of anomalism are extracted for each element and then combined together as a composite image where :

Red = Pb, Green = Cu, Blue = Zn, Yellow = Pb & Cu, Cyan = Cu & Zn,
Magenta = Pb & Zn, White = Cu, Pb & Zn

The stream data show several areas of coincident anomalies (Fig. 16), mostly Pb or combinations of Zn and Pb. There is a combined Zn-Pb-Cu anomaly on the SW corner of the northern section of the tenement.

The soil data (Fig. 17) contains minor single element features in the north. No data exists in the southern section of the tenement.

The rock chips/drill holes data (Fig. 18) show the High Point mineralisation in the northern section of the licence, plus some other minor Zn-Pb anomalism. No anomalism occurs in the south.

4.2 Sampling program on Bulgobac River Grid

As part of an exploration program on the adjoining Bulgobac River EL 19/94, some minor grid cutting was carried out on the northern section of EL 37/94 (Figure 19). Results of all work conducted on this grid will be reported with Bulgobac River EL 19/94.

5 ENVIRONMENTAL DISTURBANCE AND REHABILITATION

A minor amount of grid cutting (4.4 km, including baselines and access lines) was undertaken on EL 37/89 as part of the exploration program undertaken on the adjoining licence Bulgobac River EL 19/94. All work was conducted in accordance with MRT guidelines.

All Pasminco Exploration drill sites on EL 37/89 have been rehabilitated in accordance with MRT guidelines.

6 EXPENDITURE

Expenditure statement for the 12 month period ending June 1997.

	$
Personnel & Oncosts	20 522
Travel & Accommodation	857
Geological Consultants	0
Geochemical Consultants & Analytical Costs	0
Geophysical Surveys & Consultants	(2)
Drilling (including access & core processing/storage)	82
Other Consultants	242
Stores & Supplies	700
Vehicles & Equipment	867
Computing	2 065
Tenement Costs	276
Office Running Costs	5 037
Administration Fee	3 065
TOTAL EXPENDITURE	**$33 711**

This brings total expenditure on EL 37/89 since its inception to **$1 211 371**

7 REFERENCES

Purvis, J.G., 1994. EL 37/89 Bulgobac Hill, Annual Report, August 1993 - August 1994. Unpublished Pasminco Exploration Rep, August 1994.

Purvis, J.G., 1995a. EL 37/89 Bulgobac Hill, Annual Report, August 1994 - August 1995. Unpublished Pasminco Exploration Rep, August 1995.

Purvis, J.G., 1995b. EL 37/89 Bulgobac Hill, Relinquishment Report. Unpublished Pasminco Exploration Rep, August 1995.

Purvis, J.G., 1996. ML Application 4M/96, Sock Creek. Report for period 1st January - 31st March 1996. Quarterly Report to Pasminco Exploration.

McGunnigle, N.K., 1996. Bulgobac EL 37/89 Annual Report For The Period Ending July 1996. Unpublished Pasminco Exploration Report, August 1996.

8 KEYWORDS & LOCALITY

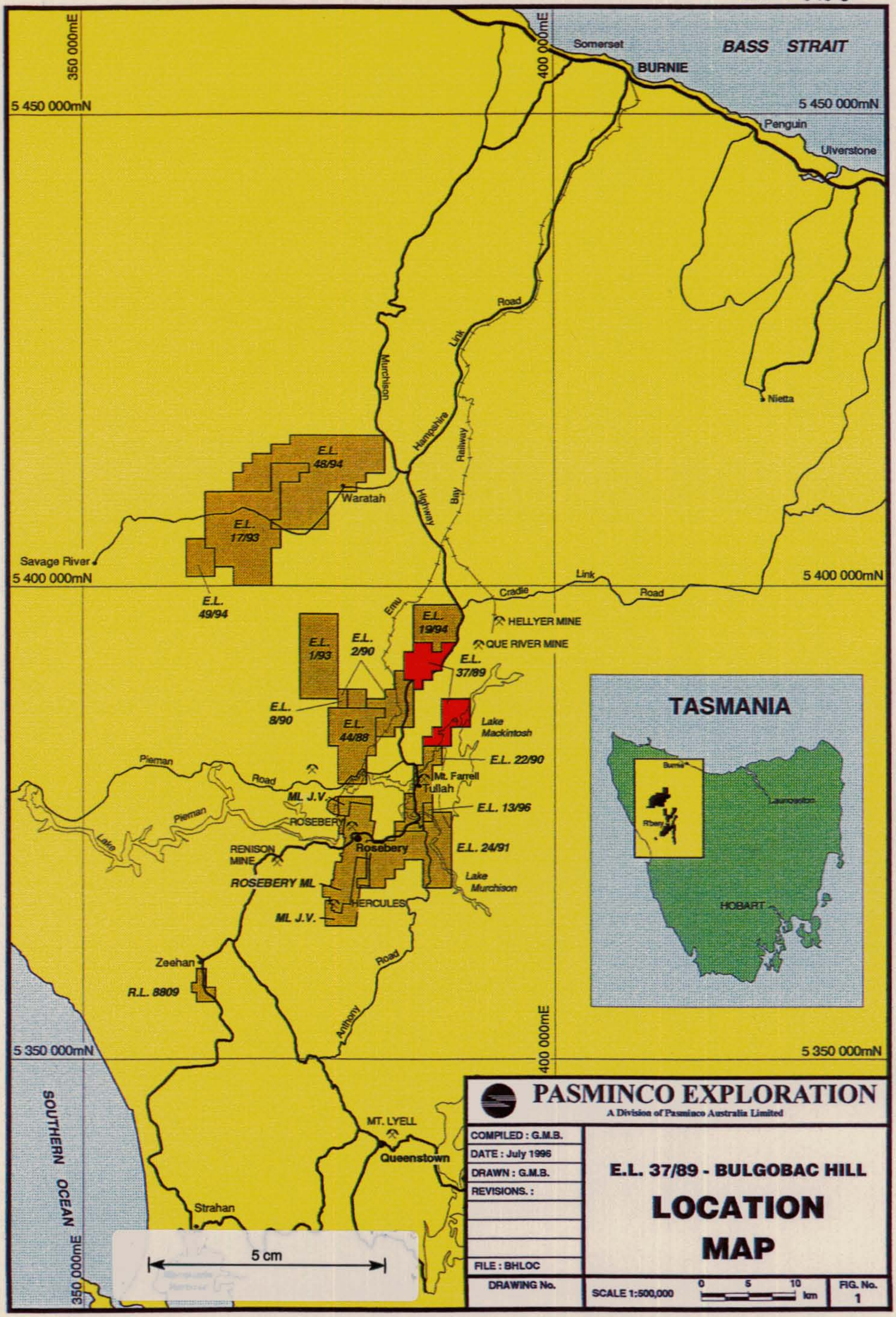
ZINC, MAFIC VOLCANICS, STRATIGRAPHY, STRUCTURE, VOLCANOGENIC, RIFT, GEOCHEMISTRY, BURNIE SK55-3: BULGOBAC HILL, QUE RIVER, HELLYER

1 : 25 K LITHOSTRATIGRAPHIC CODES

GROUP NAME	GROUP CODE	LITHOCODE 1	LITHOCODE 2	LITHOCODE 3
Alteration	Alt	MS (Masive sulphide)		
		BA (Barite)		
		ALSi (Argillic)		
		FeSi (Silicic)		
		FeRED (Pyritic)		
		FeOx (Hematitic)		
INTRUSIVES	I	MI	JDC	
			KL	
		DI	DQP (Porphyry)	
			DDL (Dolarite)	
			DG (Granite)	
			DL (Lamprophyre)	
		OI	OP (Porphyry)	
		EI	Ep (Porphyry)	
			Eps (Felsic Intrusive)	
			Eg (Gabbro)	
			Eb (Basalt)	
			Eus (Ultramafic)	
			Egr (Granite)	
Quaternary	Qu	Qc (Cultural)		
		Qt (Talus)		
		Qa (Alluvium)		
		Qg (Glacial)		
Tertiary Basalt	Tb	Tb (Basalt)		
Upper Palaeozoic	Pu	Pu (Sediments)		
Siluro Devonian	S - D	Sd (Sediments)		
Gordon Limestone	OGL	Ogl (Limestone)		
Owen Conglomerate & Equivalents	EO	EOo (Sediments)	EOoM (Siltstone)	
			EOoC (Chert)	
			EOoS (Siliciclastic cong.)	
			EOoVC (Volcaniclastic cong.)	
Dundas Group & Equivalents	DGE	DGES (Sediments)	DGEQW (Quartzwacke)	DGEOC (Quarzite Cong.)
			DGESI (Siltstone)	DGESM (Micaceous Siltstone)
				DGESD (Dolomitic Siltstone)
			DGELW (Lithic Wacke)	
			DGECG (Conglomerate)	
		DGEL (Lavas)	DGEM (Mafic Lavas)	DGEB (Basaltic)
				DGEA (Andesitic)
			DGEF (Felsic Lavas)	
		DGET (Tuffs)	DGEVT (Vitric Tuffs)	
			DGEVC (Conglomeratic Tuffs)	
Central Volcanic Sequence	CVC	CVCT (Tuffs)		
		CVCL (Lavas)	CVCA (Felsic)	
			CVCB (Basic)	
		CVCS (Sediments)		
Sticht Range Beds	ESRB	ESRB (Sandstone Cong.)		
		ESRV (Conglomerate)		
		ESRV (Volcaniclastic)		
Crimson Creek Fm.	ECC	ECC (Siltstone/sandstone)		
Proterozoic	P	Pm	Pp	
			Phs	
			Phq	
		Po		

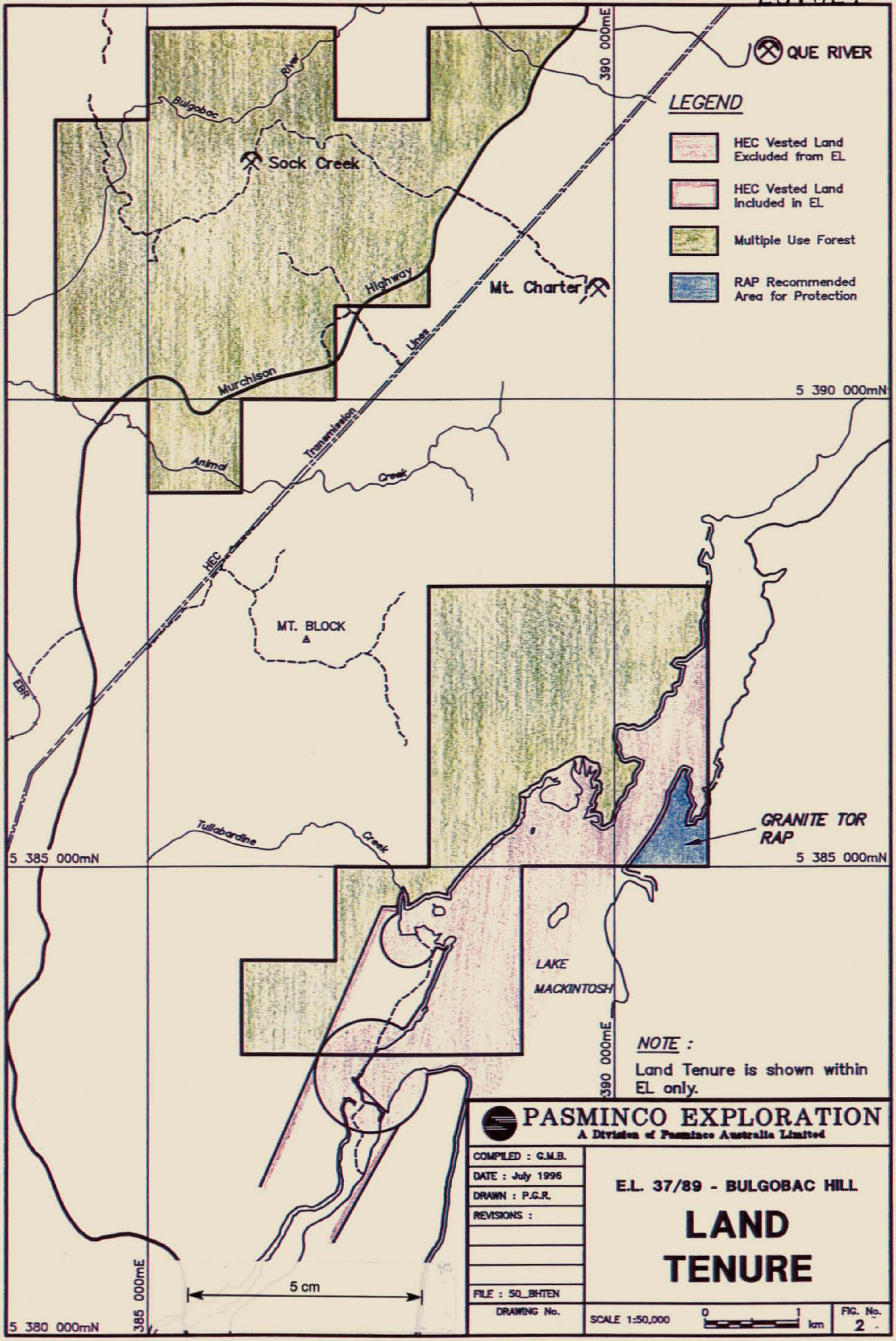
Table 1

287020



BASS STRAIT
Somerset
BURNIE
Penguin
Ulverstone
Nietta
350 000mE
400 000mE
5 450 000mN
5 400 000mN
5 350 000mN
Road
Link
Murchison
Hampshire
Railway
Highway
Bay
Emu
Cradle
Link
Road
E.L. 48/94
Waratah
E.L. 17/93
Savage River
E.L. 49/94
E.L. 19/94
HELLYER MINE
QUE RIVER MINE
E.L. 1/93
E.L. 2/90
E.L. 37/89
E.L. 8/90
E.L. 44/88
Lake Mackintosh
E.L. 22/90
Pieman
Road
Mt. Farrell
Tullah
ML J.V.
E.L. 13/96
Pieman
Lake
ROSEBERY
RENISON MINE
Rosebery
E.L. 24/91
ROSEBERY ML
Lake Murchison
HERCULES
ML J.V.
Road
Zeehan
R.L. 8809
Anthony
SOUTHERN OCEAN
MT. LYELL
Queenstown
Strahan
5 cm
TASMANIA
Burnie
Launceston
R'bery
HOBART
PASMINCO EXPLORATION
A Division of Pasminco Australia Limited
COMPILED : G.M.B.
DATE : July 1996
DRAWN : G.M.B.
REVISIONS. :
FILE : BHLOC
DRAWING No.
E.L. 37/89 - BULGOBAC HILL
LOCATION MAP
SCALE 1:500,000
0 5 10 km
FIG. No. 1

287021



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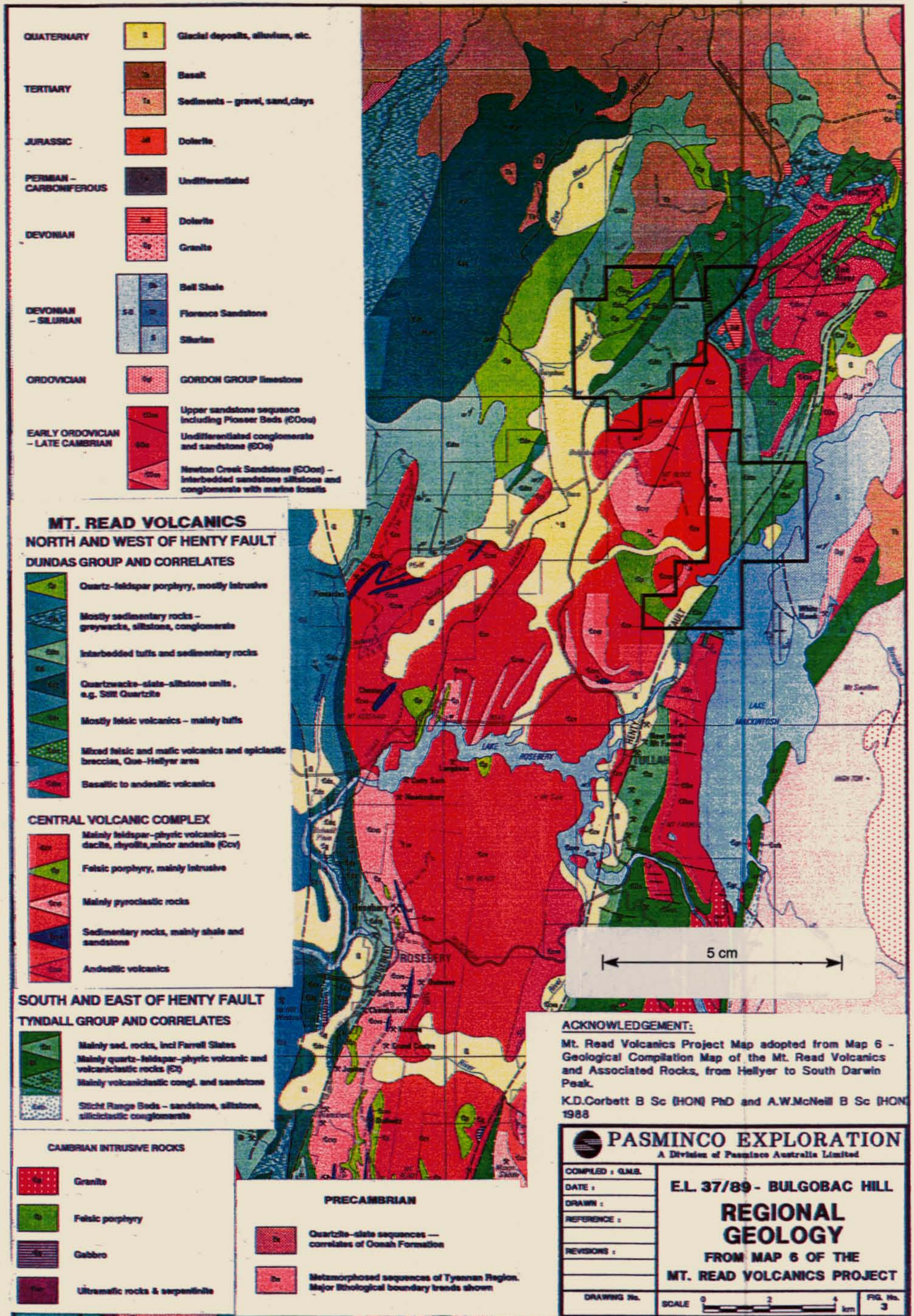
COMPILED : G.M.B.	E.L. 37/89 - BULGOBAC HILL
DATE : July 1996	**LAND TENURE**
DRAWN : P.G.R.	
REVISIONS :	
FILE : 50_BHTEN	
DRAWING No.	SCALE 1:50,000
FIG. No. 2	

287022


QUATERNARY
Glacial deposits, alluvium, etc.
TERTIARY
Basalt
Sediments – gravel, sand,clays
JURASSIC
Dolerite
PERMIAN – CARBONIFEROUS
Undifferentiated
DEVONIAN
Dolerite
Granite
DEVONIAN – SILURIAN
Bell Shale
Florence Sandstone
Silurian
ORDOVICIAN
GORDON GROUP limestone
EARLY ORDOVICIAN – LATE CAMBRIAN
Upper sandstone sequence including Pioneer Beds (€Oou)
Undifferentiated conglomerate and sandstone (€Oo)
Newton Creek Sandstone (€Oon) – interbedded sandstone siltstone and conglomerate with marine fossils
MT. READ VOLCANICS
NORTH AND WEST OF HENTY FAULT
DUNDAS GROUP AND CORRELATES
Quartz-feldspar porphyry, mostly intrusive
Mostly sedimentary rocks – greywacke, siltstone, conglomerate
Interbedded tuffs and sedimentary rocks
Quartzwacke-slate-siltstone units, e.g. Stitt Quartzite
Mostly felsic volcanics – mainly tuffs
Mixed felsic and mafic volcanics and epiclastic breccias, Que–Hellyer area
Basaltic to andesitic volcanics
CENTRAL VOLCANIC COMPLEX
Mainly feldspar-phyric volcanics — dacite, rhyolite,minor andesite (€cv)
Felsic porphyry, mainly intrusive
Mainly pyroclastic rocks
Sedimentary rocks, mainly shale and sandstone
Andesitic volcanics
SOUTH AND EAST OF HENTY FAULT
TYNDALL GROUP AND CORRELATES
Mainly sed. rocks, incl Farrell Slates
Mainly quartz–feldspar–phyric volcanic and volcaniclastic rocks (€t)
Mainly volcaniclastic congl. and sandstone
Sticht Range Beds – sandstone, siltstone, siliciclastic conglomerate
CAMBRIAN INTRUSIVE ROCKS
Granite
Felsic porphyry
Gabbro
Ultramafic rocks & serpentinite
PRECAMBRIAN
Quartzite–slate sequences — correlates of Oonah Formation
Metamorphosed sequences of Tyennan Region. Major lithological boundary trends shown
LAKE ROSEBERY
LAKE MACKINTOSH
ROSEBERY
TULLAH
HENTY
FAULT
River
5 cm
ACKNOWLEDGEMENT:
Mt. Read Volcanics Project Map adopted from Map 6 - Geological Compilation Map of the Mt. Read Volcanics and Associated Rocks, from Hellyer to South Darwin Peak.
K.D.Corbett B Sc (HON) PhD and A.W.McNeill B Sc (HON) 1988
PASMINCO EXPLORATION
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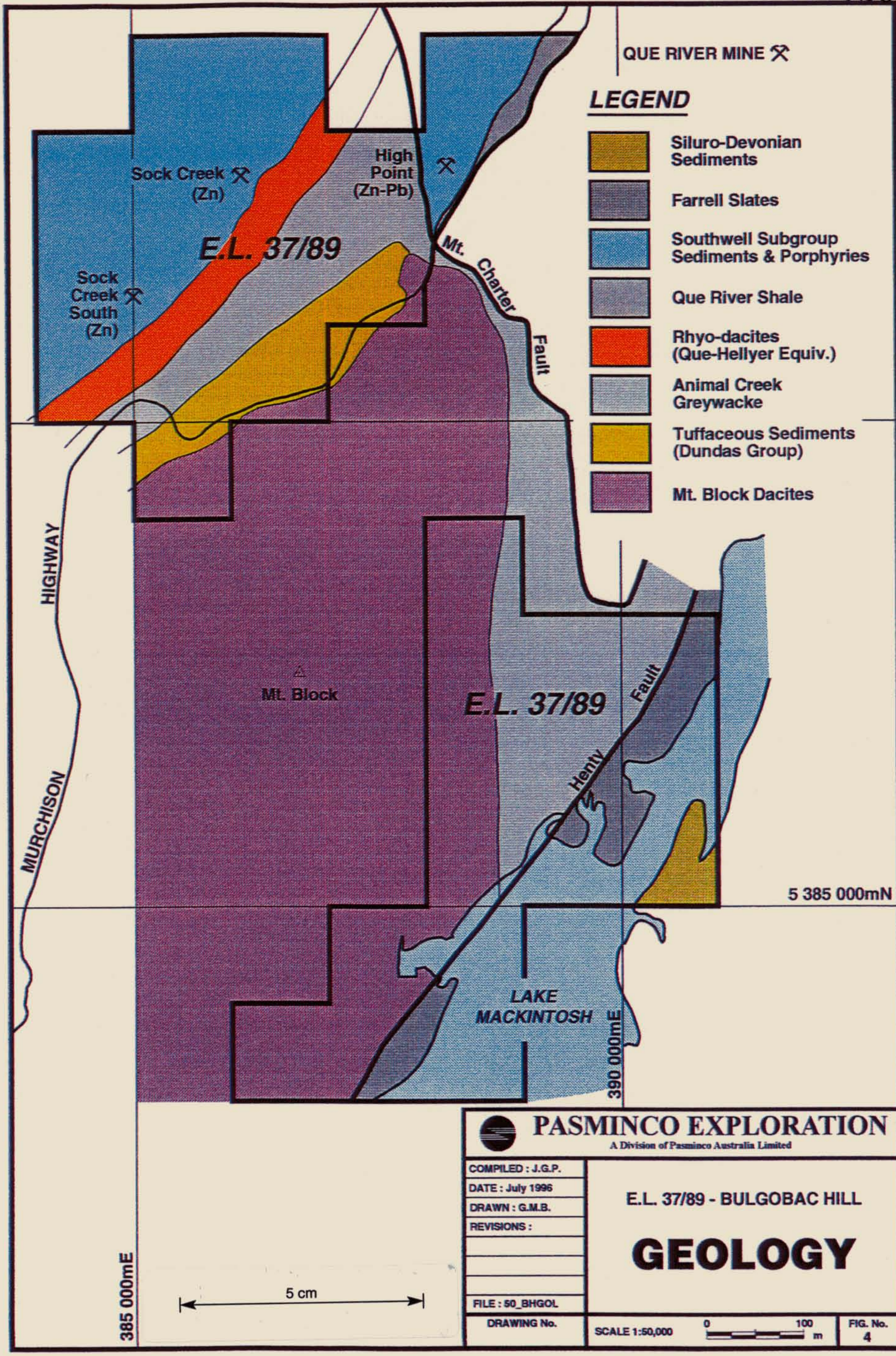
COMPILED : G.M.B.
DATE :
DRAWN :
REFERENCE :
REVISIONS :
DRAWING No.
E.L. 37/89 - BULGOBAC HILL
REGIONAL GEOLOGY
FROM MAP 6 OF THE MT. READ VOLCANICS PROJECT
SCALE 0 2 4 km
FIG. No. 3

237023



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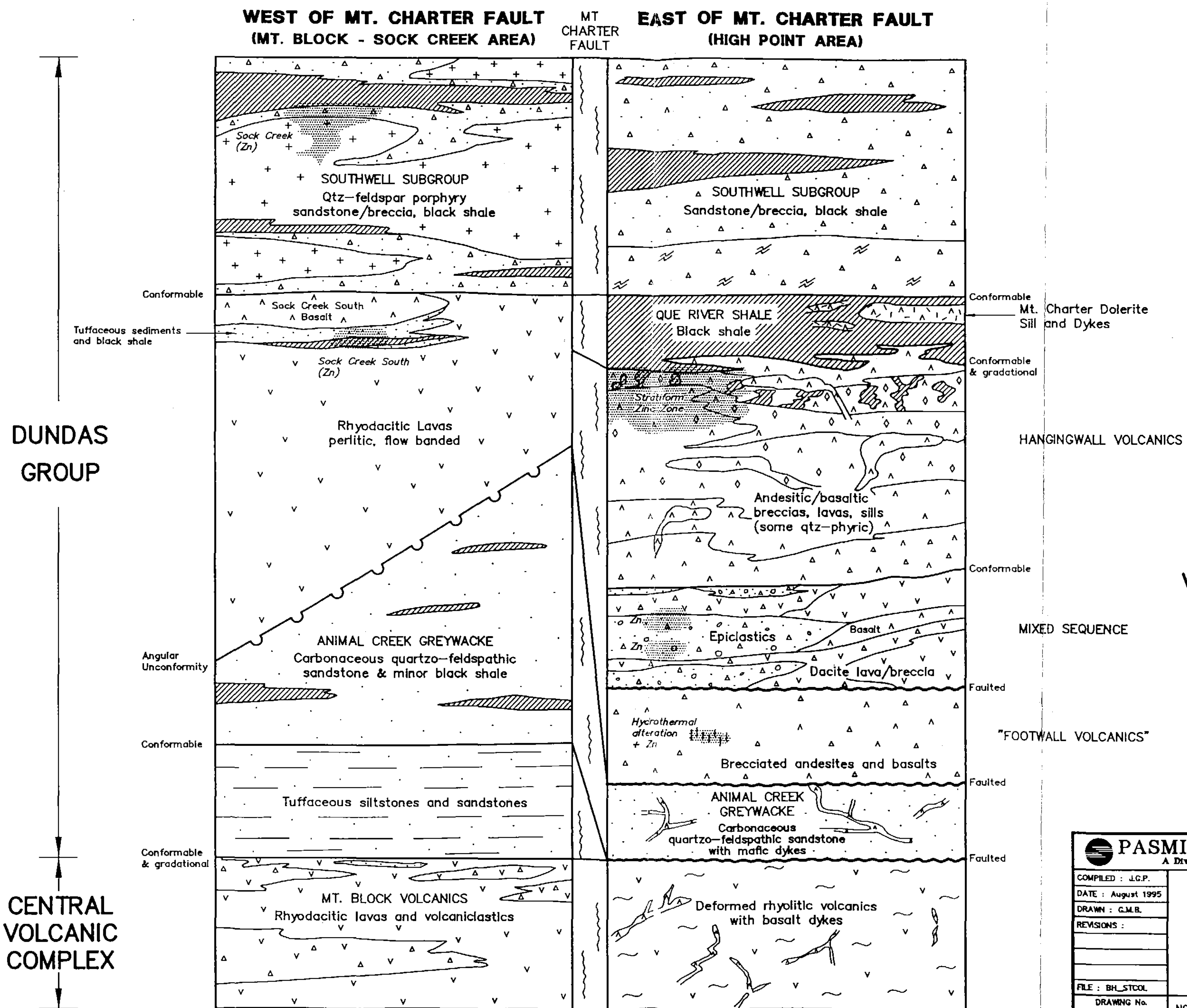
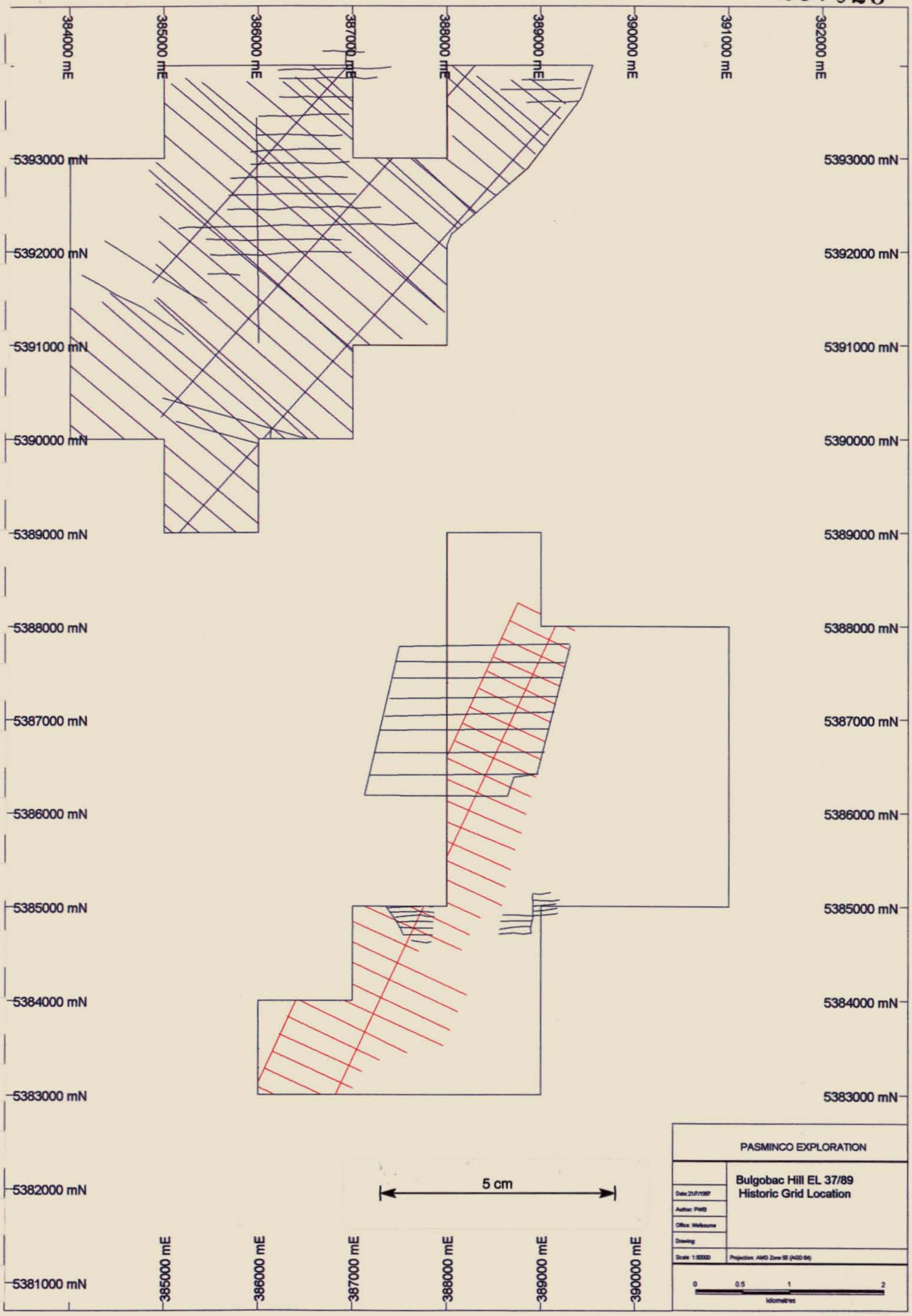
COMPILED : J.G.P.	E.L. 37/89 - BULGOBAC HILL
DATE : July 1996	
DRAWN : G.M.B.	**GEOLOGY**
REVISIONS :	
FILE : 50_BHGOL	
DRAWING No.	SCALE 1:50,000 (0 – 100 m)
	FIG. No. 4

287024



PASMINCO EXPLORATION A Division of Pasminco Australia Limited	
COMPILED : J.G.P.	E.L. 37/89 — BULGOBAC HILL
DATE : August 1995	**STRATIGRAPHIC COLUMN**
DRAWN : G.M.B.	
REVISIONS :	
FILE : BH_STCOL	
DRAWING No.	NOT TO SCALE — FIG. No. 5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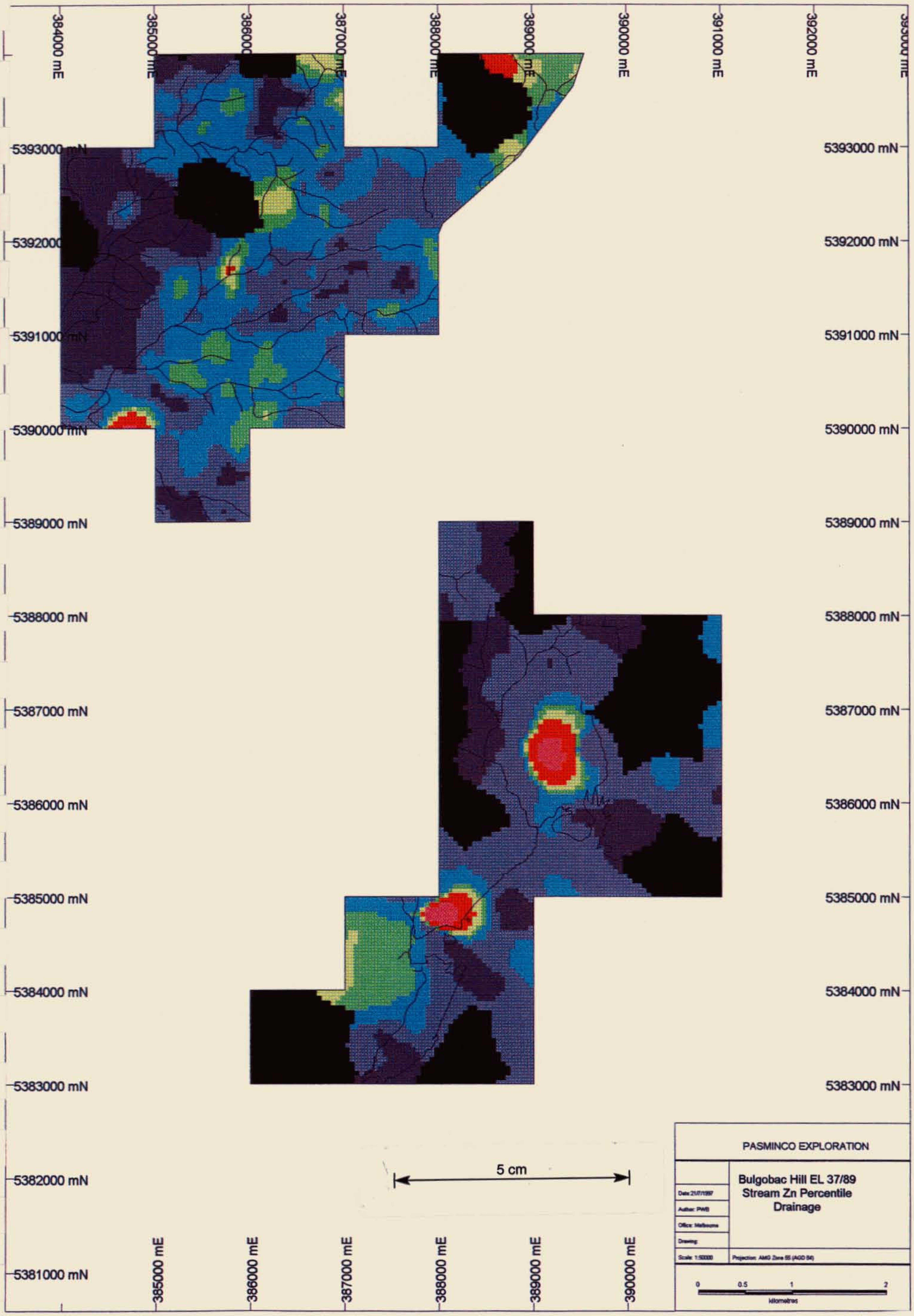
5391000 mN
5390000 mN
5389000 mN
5388000 mN
5387000 mN
5386000 mN
5385000 mN
5384000 mN
5383000 mN
5382000 mN
5381000 mN
5 cm
PASMINCO EXPLORATION
Bulgobac Hill EL 37/89
Historic Grid Location
Author: PWB
Office: Melbourne
Drawing:
0
0.5
1
2
kilometres

Fig. 6

287026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386000 mE
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392000 mE
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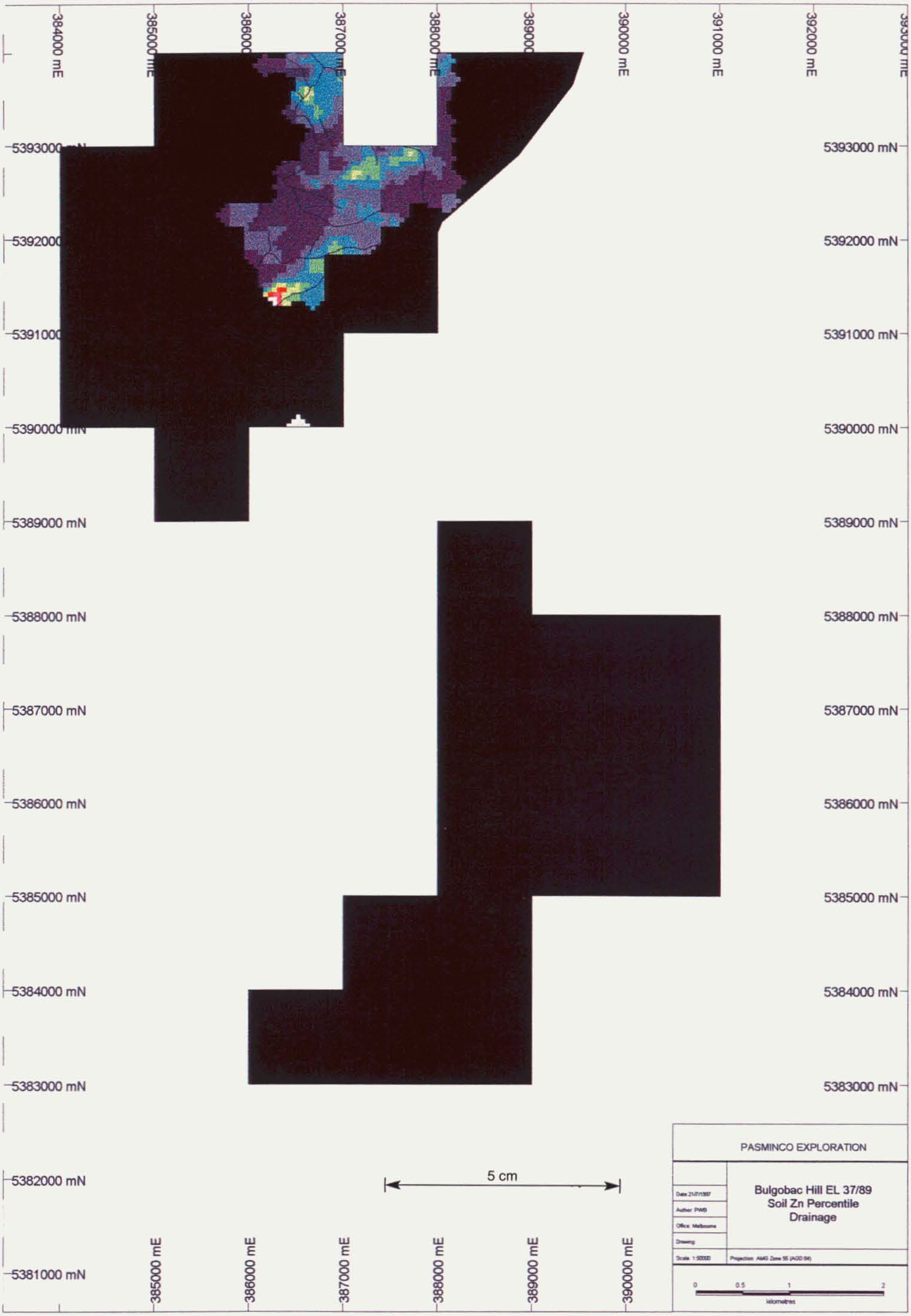
5392000 mN
5391000 mN
5390000 mN
5389000 mN
5388000 mN
5387000 mN
5386000 mN
5385000 mN
5384000 mN
5383000 mN
5382000 mN
5381000 mN
5 cm
PASMINCO EXPLORATION
Bulgobac Hill EL 37/89
Stream Zn Percentile
Drainage
Office: Melbourne
Drawing:
0
0.5
1
2
kilometres

Fig. 7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389000
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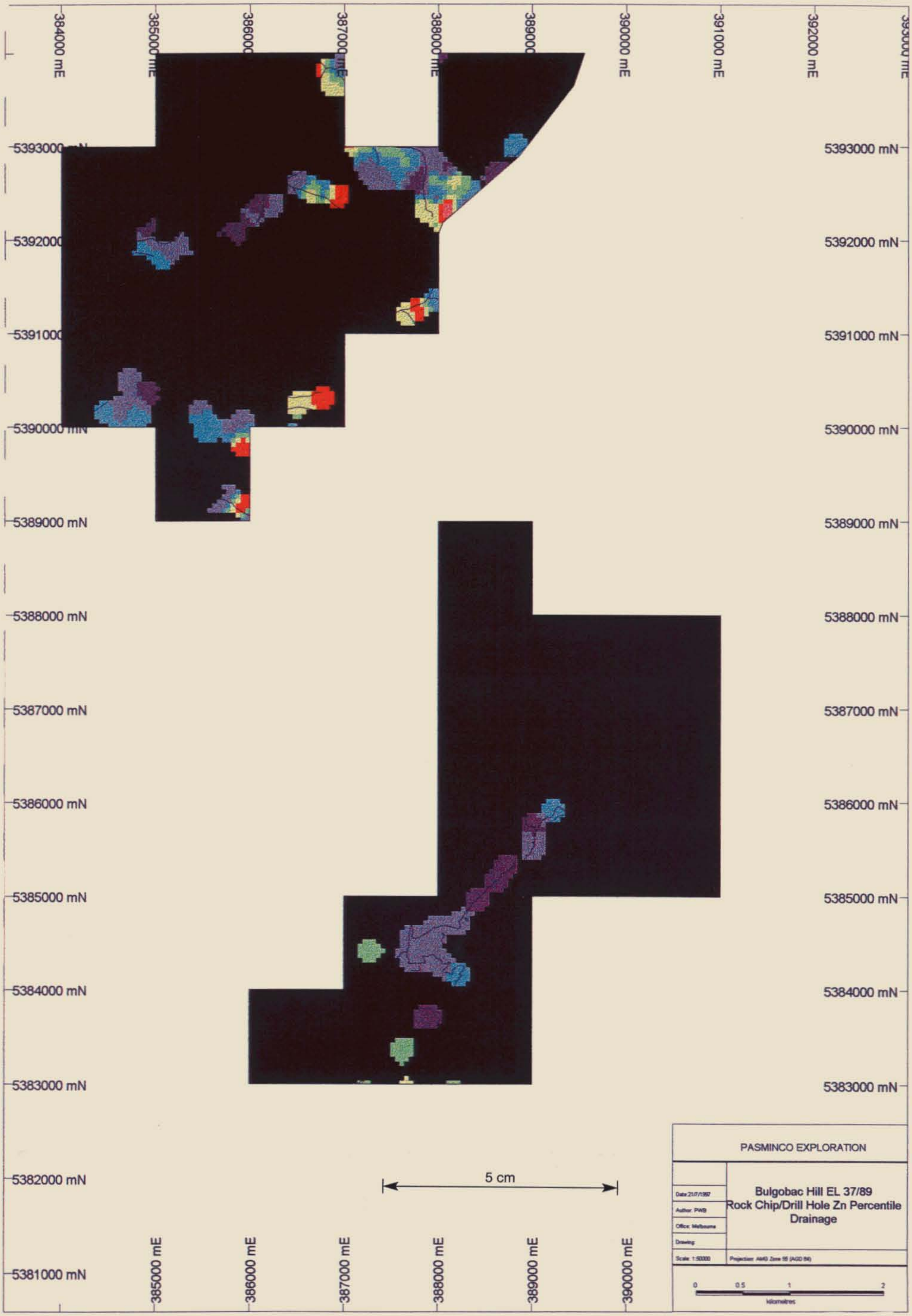
5390000 mN
5389000 mN
5388000 mN
5387000 mN
5386000 mN
5385000 mN
5384000 mN
5383000 mN
5382000 mN
5381000 mN
385000 mE
386000 mE
387000 mE
388000 mE
389000 mE
390000 mE
5 cm
PASMINCO EXPLORATION
Bulgobac Hill EL 37/89
Soil Zn Percentile
Drainage
Office: Melbourne
Drawing
0
0.5
1
2

Fig. 8

287028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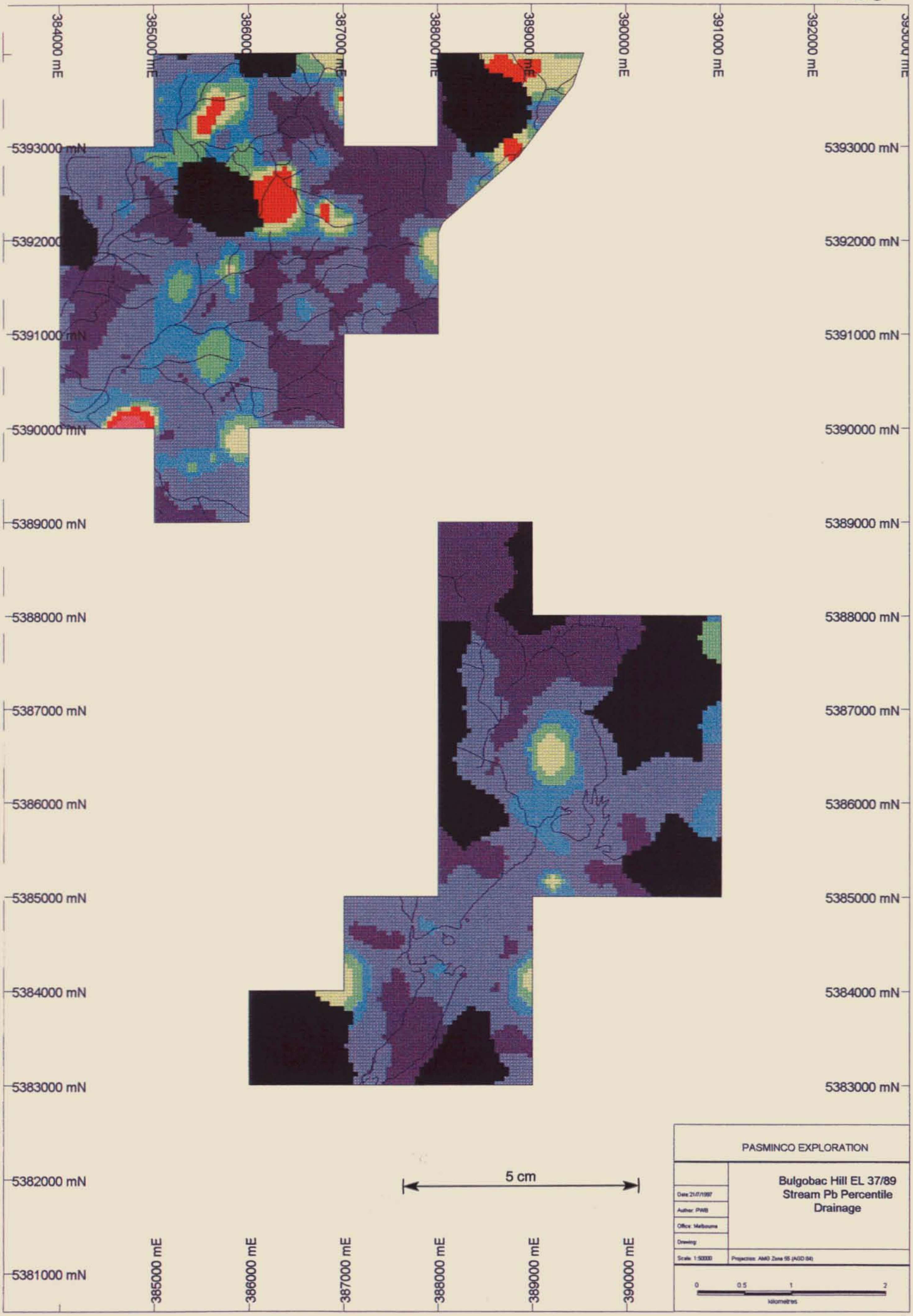
5391000 mN
5390000 mN
5389000 mN
5388000 mN
5387000 mN
5386000 mN
5385000 mN
5384000 mN
5383000 mN
5382000 mN
5381000 mN
5 cm
PASMINCO EXPLORATION
Bulgobac Hill EL 37/89
Rock Chip/Drill Hole Zn Percentile
Drainage
Date:21/7/1997
Author: PWB
Office: Melbourne
Drawing:
Scale: 1:50000
Projection: AMG Zone 55 (AGD 66)
0 0.5 1 2
kilometres

Fig. 9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5391000 mN
5390000 mN
5389000 mN
5388000 mN
5387000 mN
5386000 mN
5385000 mN
5384000 mN
5383000 mN
5382000 mN
5381000 mN
5 cm
PASMINCO EXPLORATION
Bulgobac Hill EL 37/89
Stream Pb Percentile
Drainage
Date: 21/7/1997
Author: PWB
Office: Melbourne
Drawing:
Scale: 1:50000
Projection: AMG Zone 55 (AGD 84)
0
0.5
1
2
kilometres

Fig. 10

237030

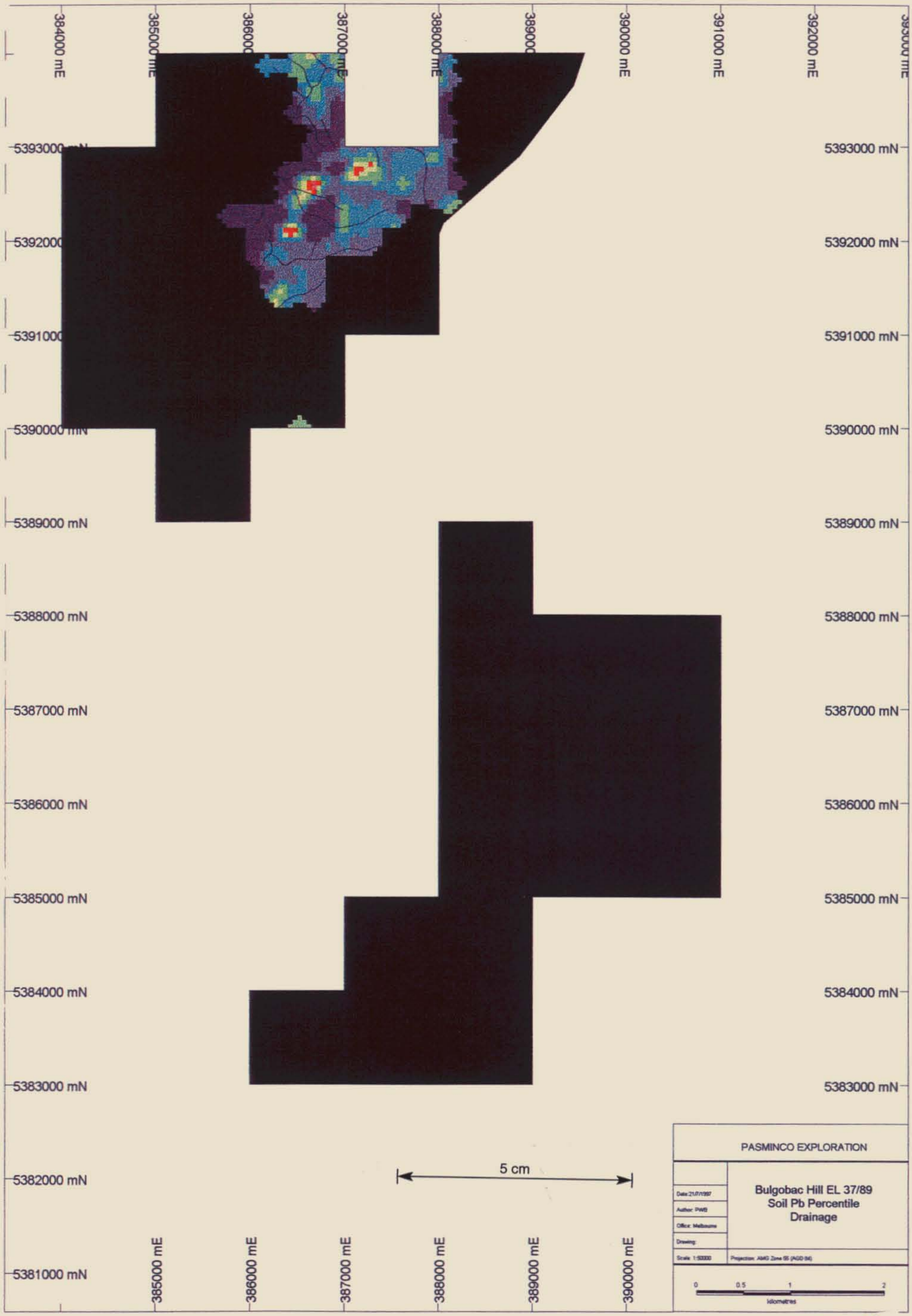

Fig. 11

237031

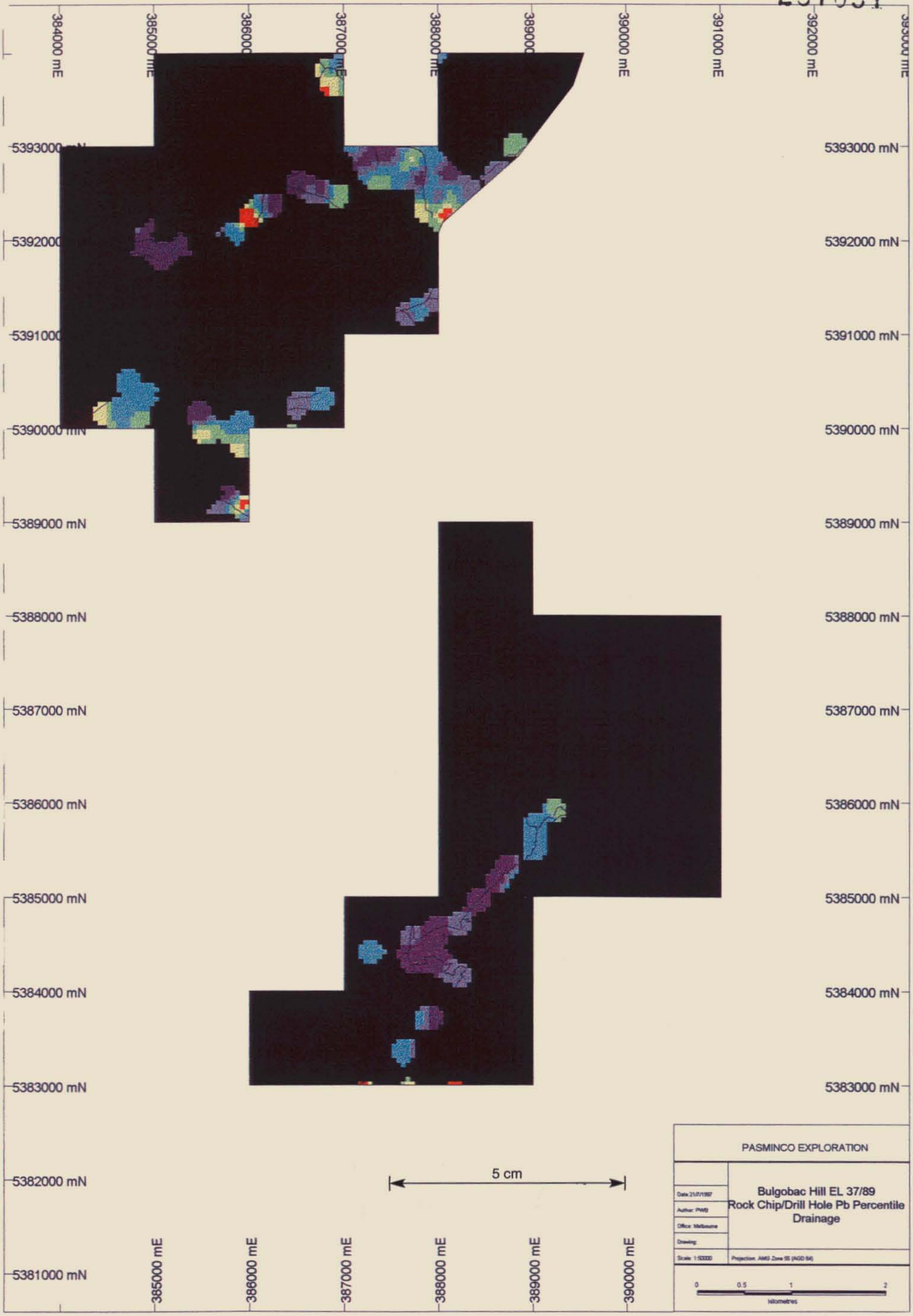

Fig. 12

237032

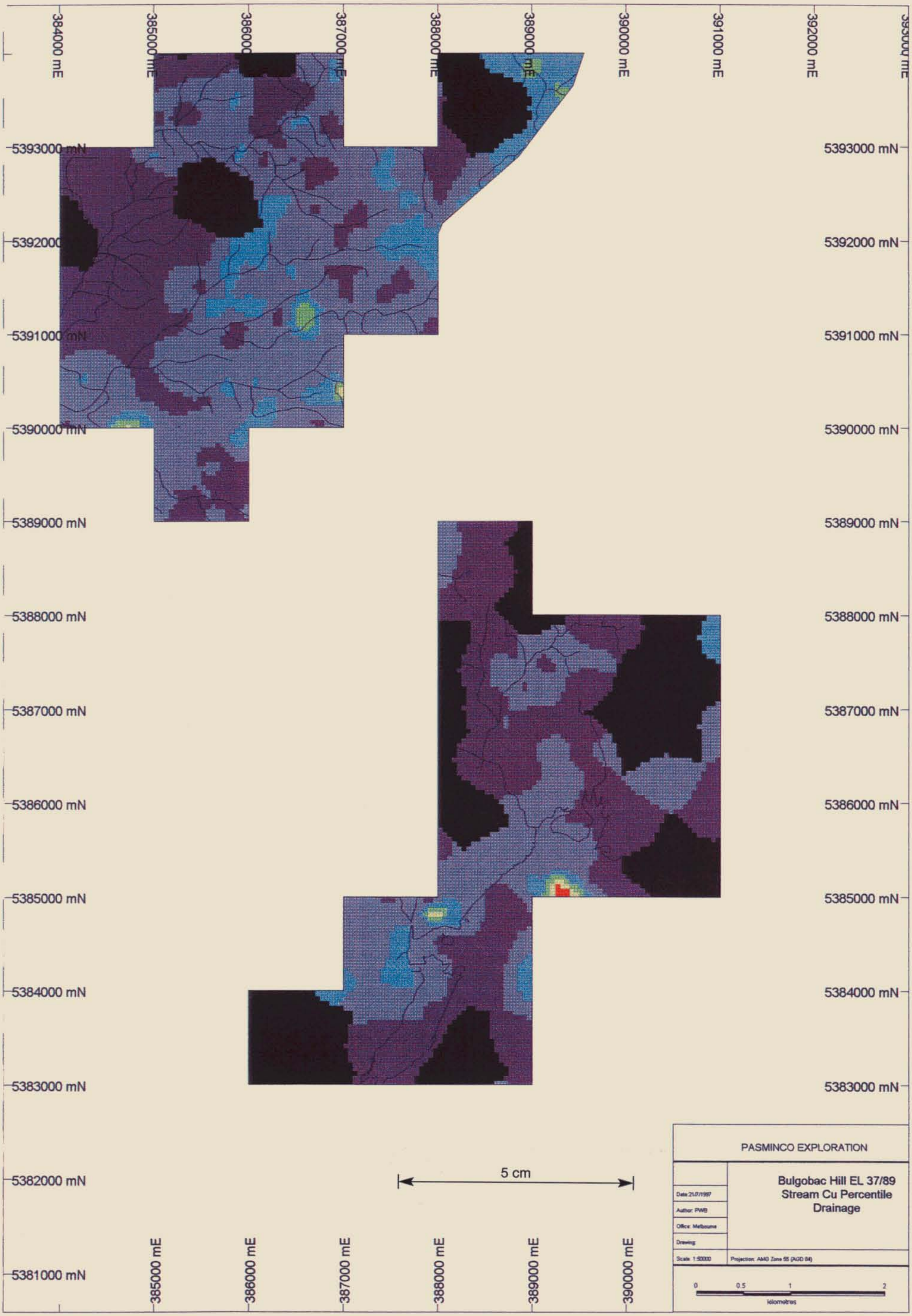

Fig. 13

237033

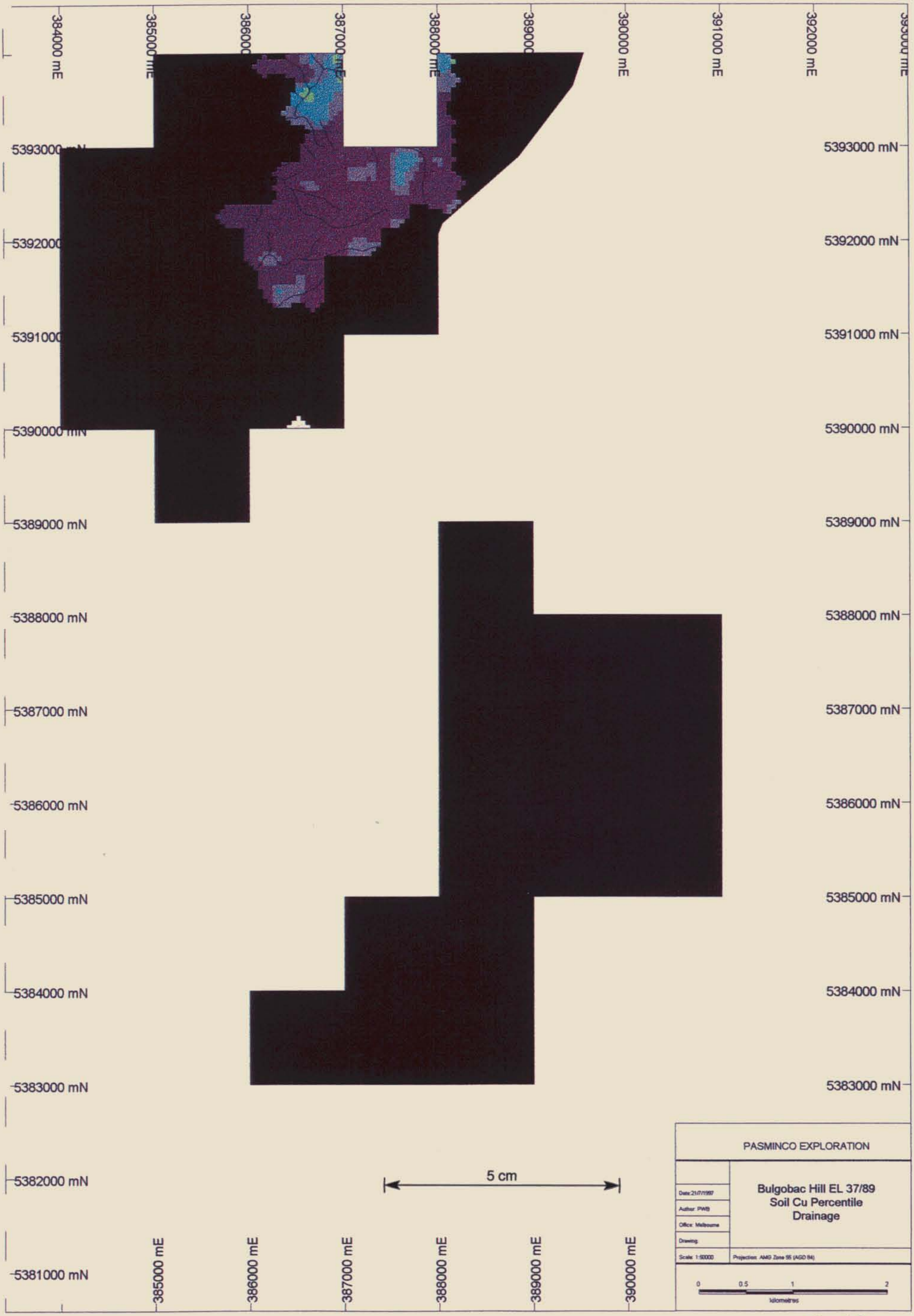

Fig. 14

237034

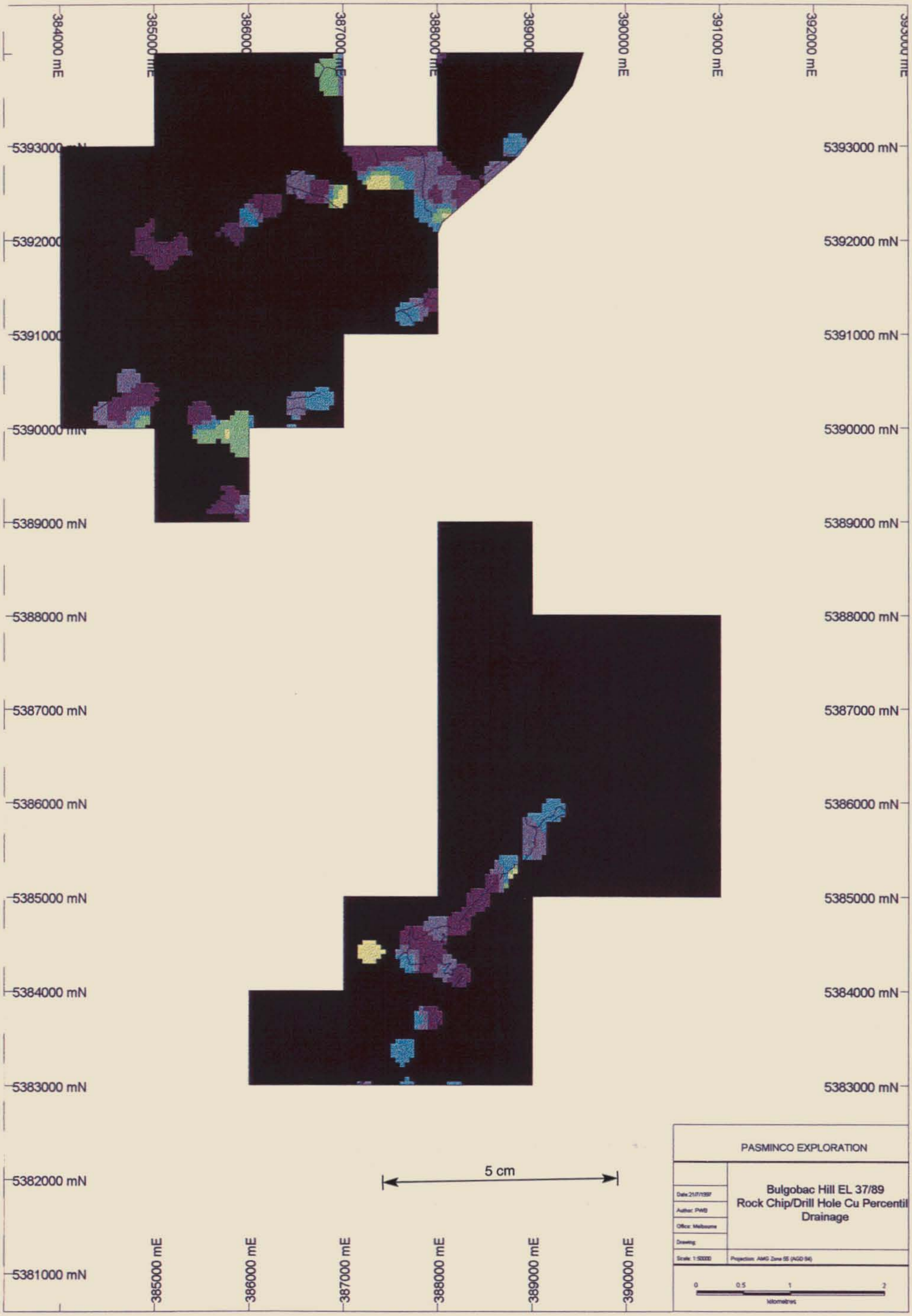

Fig. 15

237035

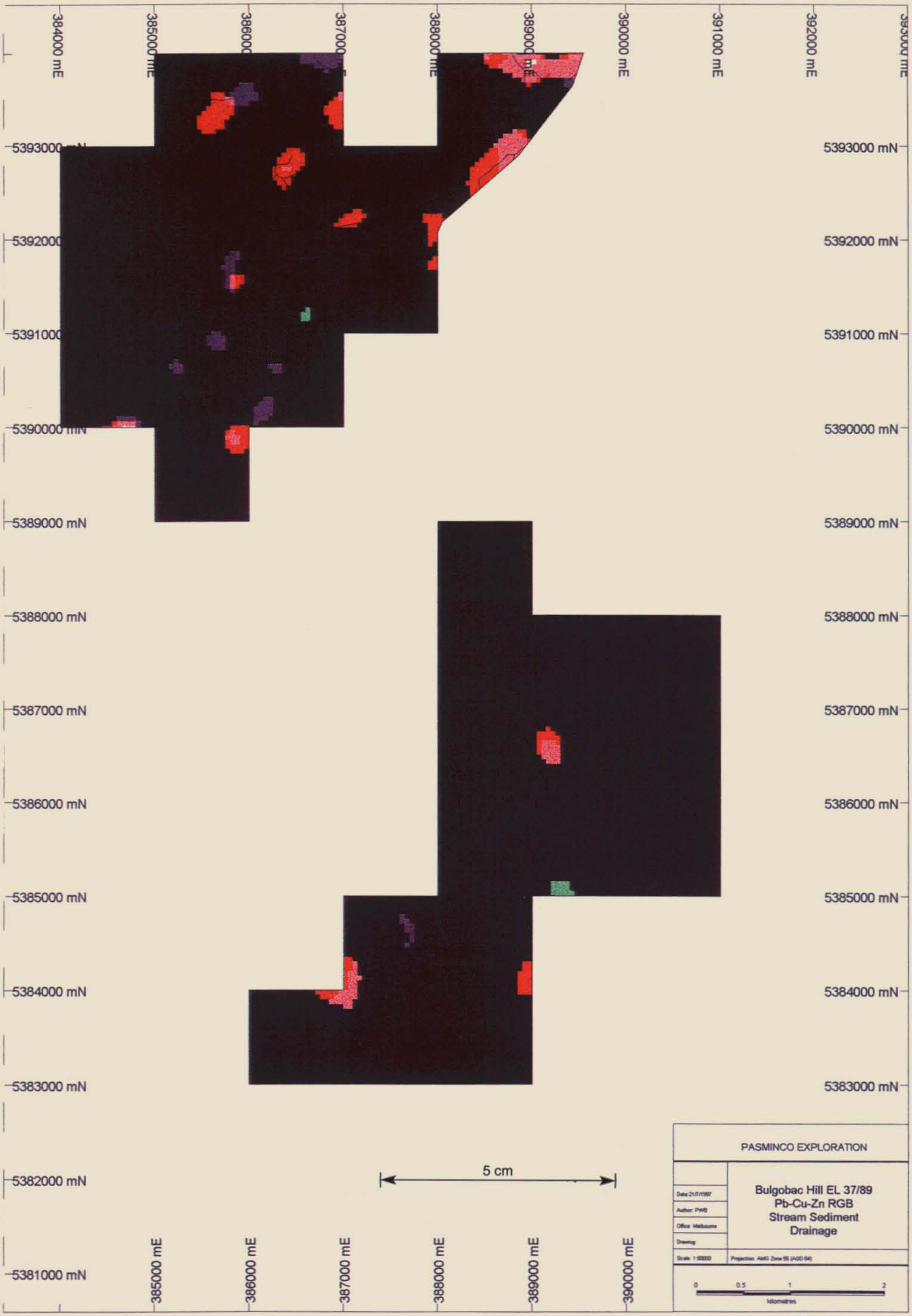

Fig. 16

237036

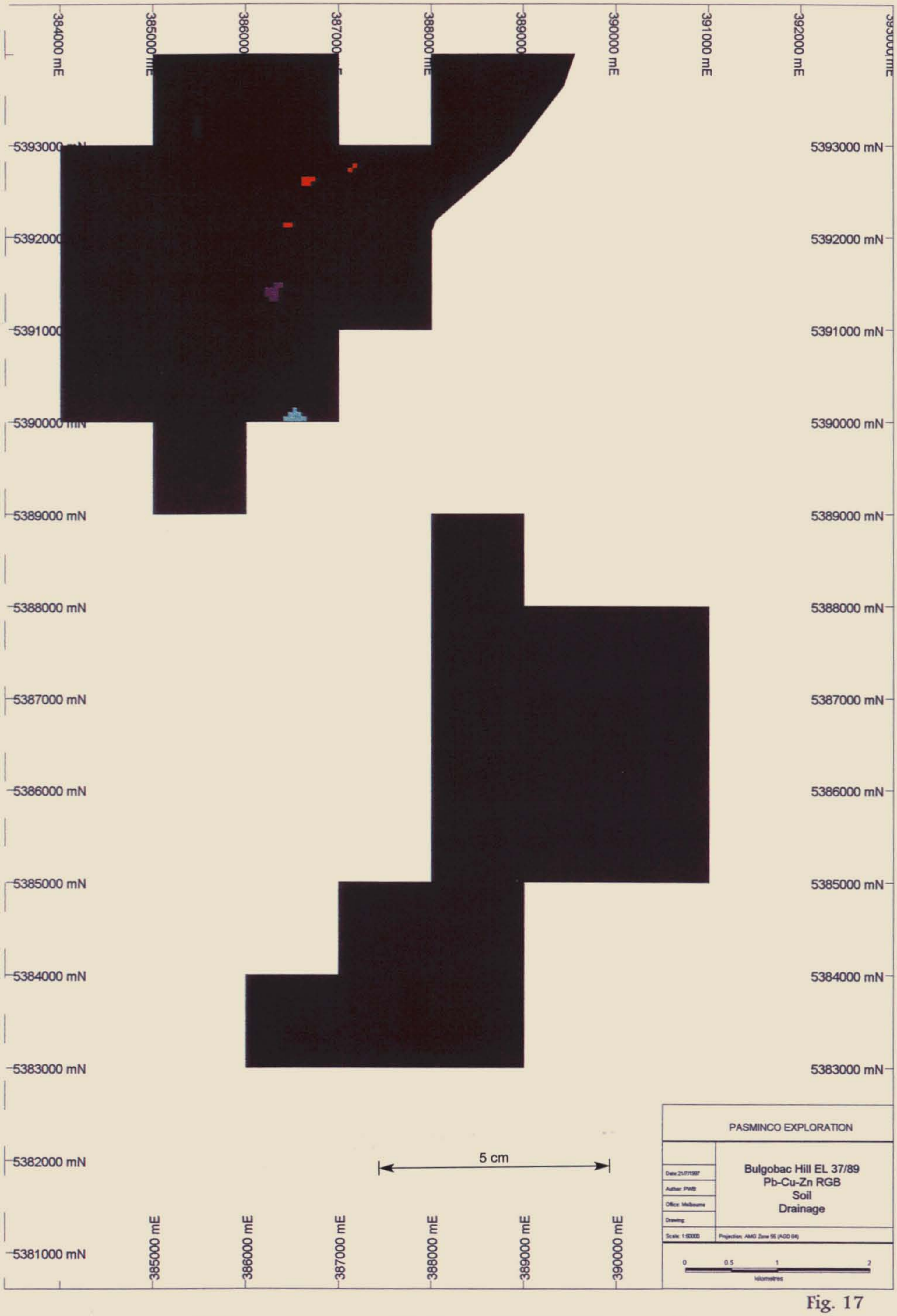

Fig. 17

237037

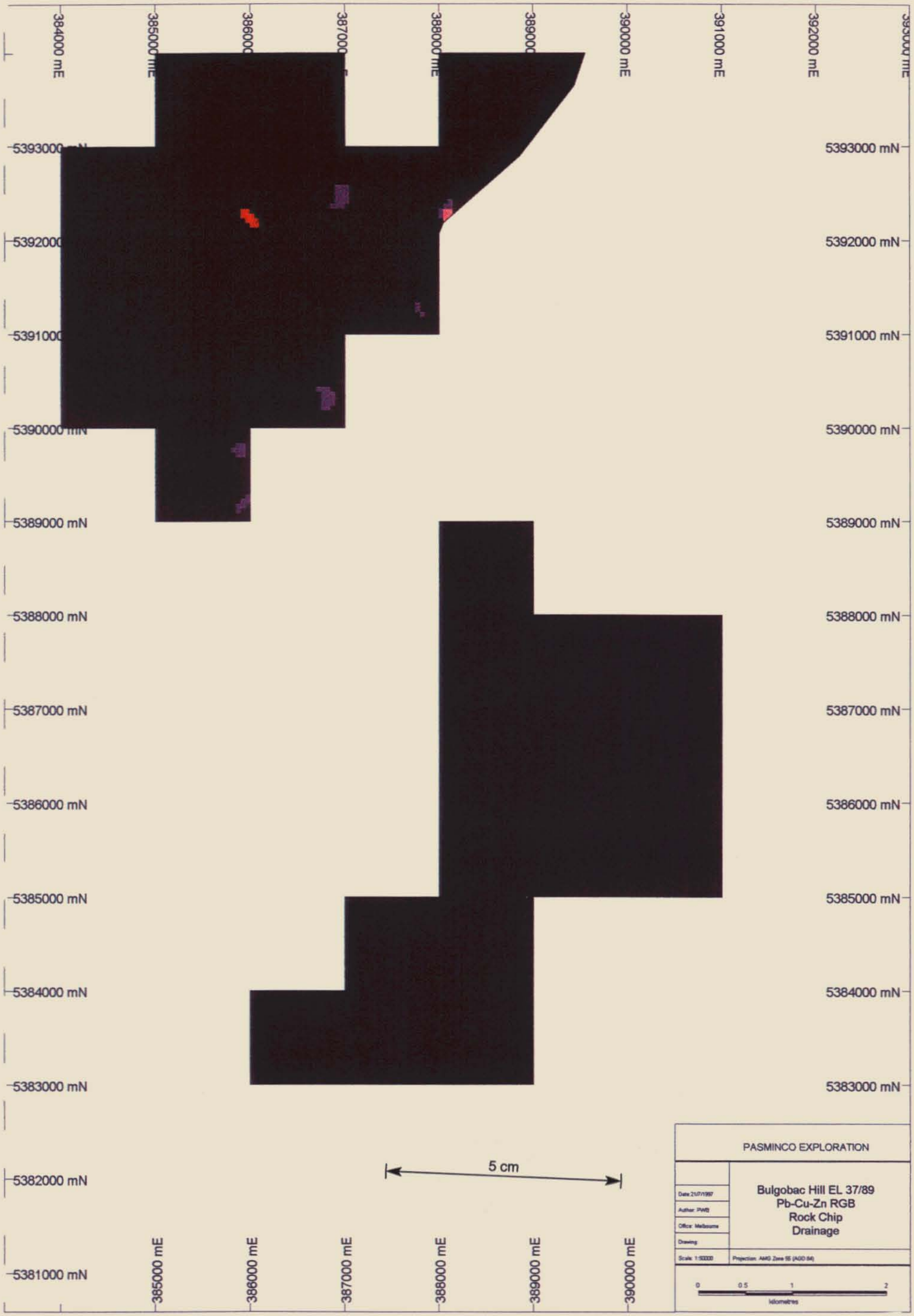

Fig. 18

237038

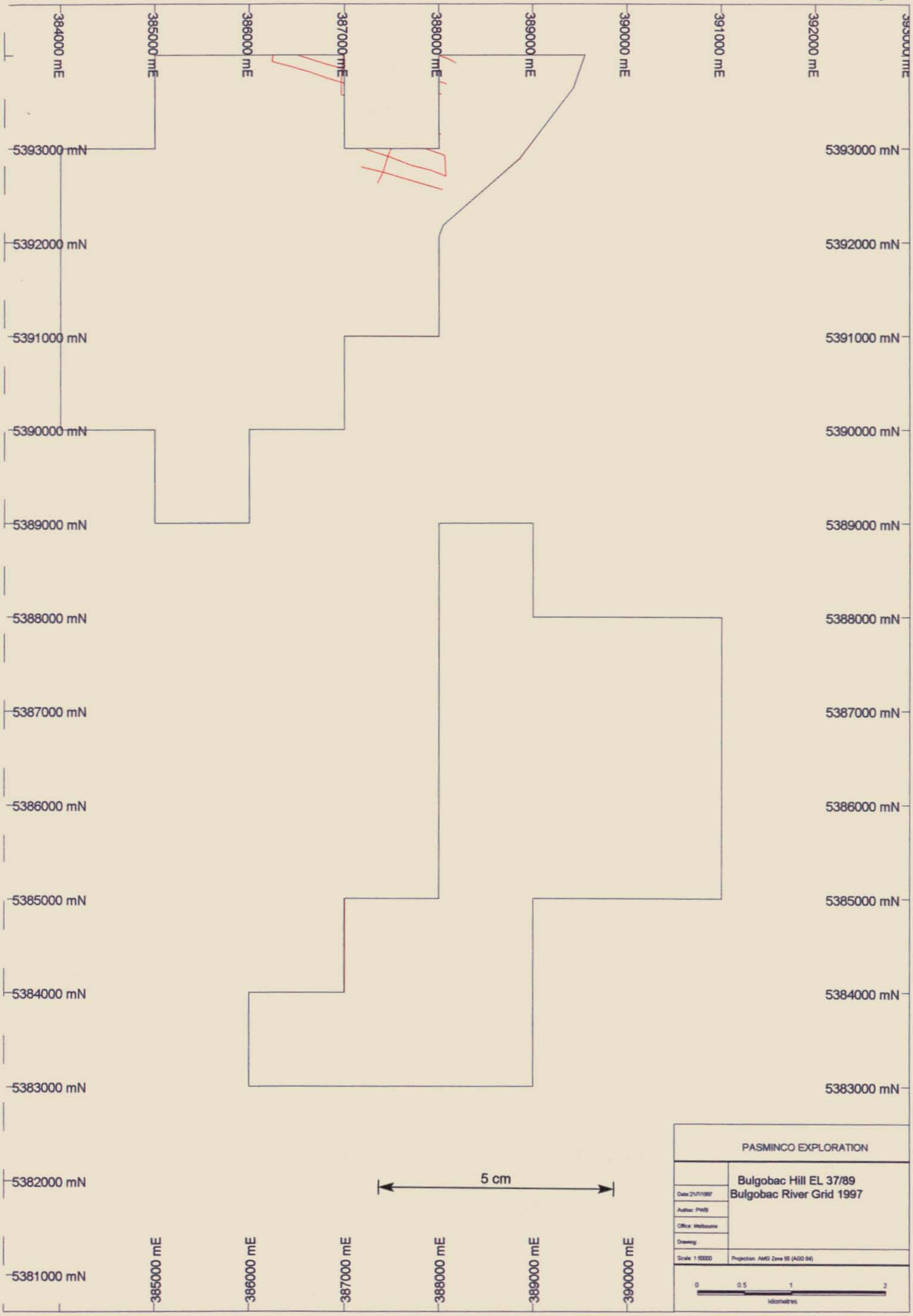

Fig. 19