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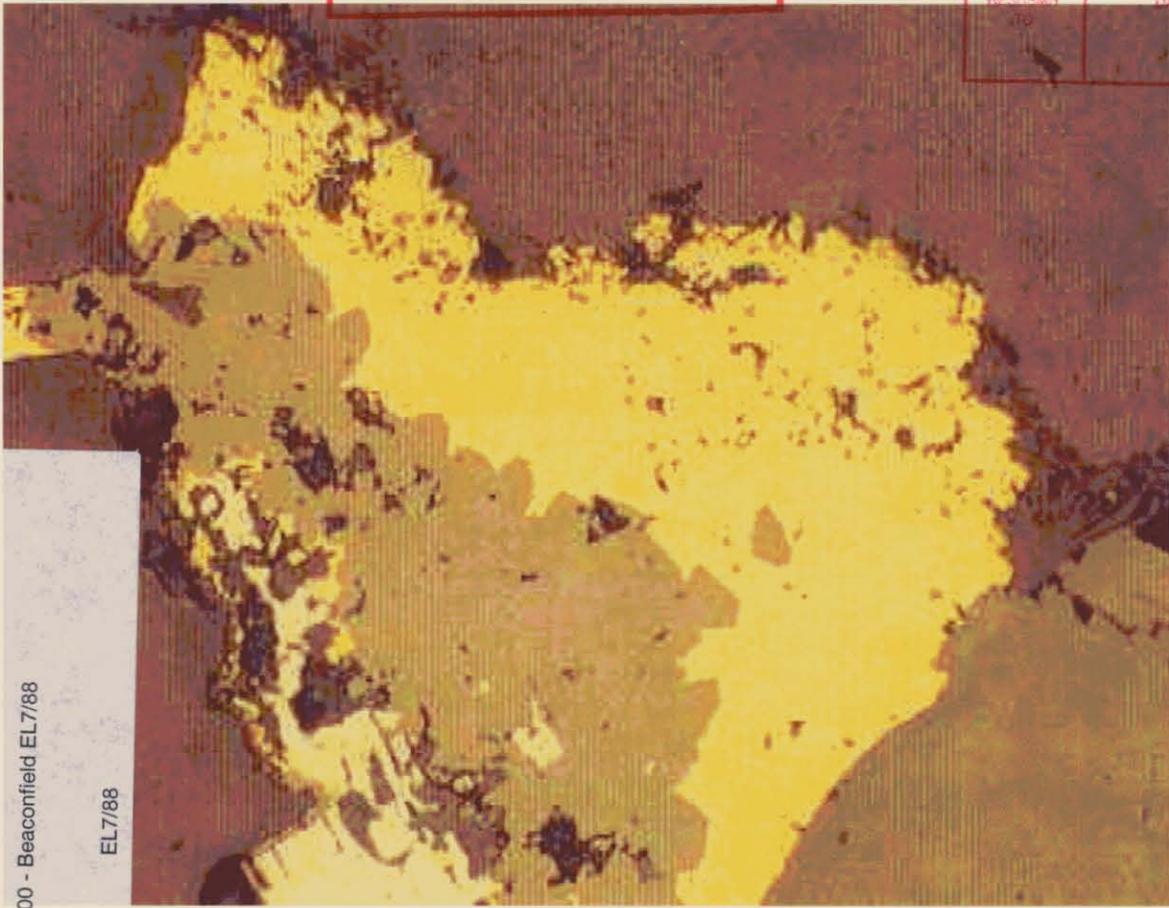
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Allstate
ALLSTATE EXPLORATIONS NL

**BEACONSFIELD EL 7/88
EXTENSION FINAL REPORT
2000**

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MINERAL RESOURCES		
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Extension Final Report 2000 - Beaconfield EL7/88

Allstate Explorations NL*
Hills, P.B.

EL7/88

**P.B. Hills
February 2000**

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1.0 INTRODUCTION

EL 7/88 covering 31 skm was granted to Beaconsfield Operations P/L on 14 October 1988. The licence was primarily sought to allow evaluation, rehabilitation and redevelopment of the Beaconsfield Gold Mine centred on the Tasmania Reef which produced 854, 000 ounces between 1877 and 1914. The licence replaced earlier licences held for the same purpose since the 1960's.

With the focus firmly set on the Beaconsfield Gold Mine during the early years of the licence, little exploration aside from regional reconnaissance occurred away from the centre of Beaconsfield. The exception was small scale investigation of other historical workings in the district at Salisbury Hill and North Tasmania. Both the latter are contained within current exploration and mining tenements held by the Beaconsfield Mine Joint Venture and are not discussed in this report.

In recent years, with the likelihood of successful redevelopment of the mine increasing, work on the surrounding tenements intensified, resulting in the discovery of the Pease Creek prospect in late 1997. When EL 7/88 expired in October 1998, an extension of tenure was sought and granted over an area of 5 skm to allow for further exploration of the Pease Creek discovery. Further work during 1999 (Hills and MacDonald, 1999a) led to the definition of a low grade resource at Pease Creek.

The defined resource was and currently remains uneconomic. Consequently, a Retention Licence was sought and granted over the immediate discovery and surrounding areas required for infrastructure development in the future. The Retention Licence covers an area of 2 skm and the remaining 3 skm of EL 7/88 is being relinquished through the instrument of this report.

This report is written as an extension of the Final Report for EL 7/88 (Hills, 1998a). *Parts of the current text are unchanged from the earlier work. The reader is referred to the latter for greater detail.*

2.0 TENEMENT DETAILS

EL 7/88 was granted to Beaconsfield Operations Pty Ltd in respect of an area of 31 skm centred on the township of Beaconsfield in northern Tasmania on 14 October 1988. The licence area covered 13 skm of mining leases and 2.6 skm of Crown Reserves as exclusions. It largely replaced an earlier licence EL 7/73 granted to Allstate Prospecting Pty Ltd.

At the time of expiry of EL 7/88 the licence had been reduced to 13 skm. Application was made for an extension of tenure over a 5 skm portion of EL 7/88 to allow exploration of the Pease Creek prospect to be completed and if successful, allow for contiguous extension of CML 1669P/M for mine development. The extension was granted and further exploration led to the definition of a small low grade currently uneconomic resource (Hills and MacDonald, 1999a). A Retention Licence, RL 99/01 of 2 skm, was sought and granted to allow for re-assessment of the Pease Creek prospect in the future. The remaining 3 skm of EL 7/88 is now being relinquished. Figure 1 illustrates the original tenement area of EL 7/88 and shows its evolution through to this final relinquishment.

3.0 GEOLOGY

The portion of EL 7/88 which is now being relinquished surrounds the Pease Creek prospect 3 km north of Beaconsfield. The geology of this area in a regional sense, is that of the district. The regional geology as it is currently understood was most recently described by Hills and MacDonald (1999b). This description is reiterated here in part. Aside from the work reported in Section 6, no assessment of the local geology of the area being relinquished has been undertaken and no comment is made.

The Anderson's Creek Ultramafic Complex and associated rocks forms the basement to the "Beaconsfield sedimentary package", considered to include the pre-Devonian rocks of the Beaconsfield block as defined by Elliot et. al. (1993). The "Beaconsfield sedimentary package" has been recognised as four parallel imbricate thrust slices within the Beaconsfield block at least since the work of Gee and Legge (1979). From west to east the four slices are now called the Anderson's Creek slice, Peaked Hill slice, Cabbage Tree Hill slice and Cobblestone Creek slice.

The base of the "Beaconsfield sedimentary package" is the Blyth's Creek Formation. It is an as yet poorly understood package of stylolitic limestone greywacke siltstone, sandstone and polymict conglomerate and intercalated rocks of igneous origin. The formation was originally described by Green (1959) as "the friable quartz sandstone formation conformably or disconformably overlying the Dally's Siltstone and conformably overlain by the Cabbage Tree Conglomerate". However, MacDonald (1999) has broadened the formation to include all pre-Denison Group rocks in the Beaconsfield Block not directly associated with the Anderson's Creek Ultramafic Complex within the Beaconsfield block. Thus the Blyth's Creek Formation is now considered to include the Blyth's Creek Formation and the Dally's Siltstone and intercalated volcanics of Green (1959). It also includes the so-called slates and greywacke sandstones described from south of Salisbury Hill by Gulline (1981), together with their associated igneous suite and so too the rocks described within the Cambrian Sequence from the western side of Peaked Hill by Gee and Legge (1979). The unit is most probably a correlate of the Dundas Group in western Tasmania. The Blyth's Creek formation is assigned a Cambrian age on the basis of fossils found by Green (1959) and MacDonald (1998) near the West Tamar Highway east of Salisbury Hill and by Gee and Legge (1979) west of Peaked Hill.

The Blyth's Creek Formation is only doubtfully recognised in outcrop west of Cabbage Tree Hill but is clearly present in drill core from the Beaconsfield Gold Mine and is probably cut out by the Cabbage Tree Thrust at surface.

The Blyth's Creek Formation is apparently conformably overlain by the Denison Group which consists sequentially of the Cabbage Tree Conglomerate, the Salisbury Hill Formation and the Eaglehawk Gully Formation.

Lewis (1998) described the Cabbage Tree Conglomerate as consisting of grey-light brown oligomictic pebble paraconglomerate interbedded with conglomeratic quartz arenite and fine quartz arenite. The conglomerate of the unit is very poorly sorted and has a composition dominated by sub-angular to sub-rounded quartz with minor chert and coarse siltstone. He also describes "minor detrital pyrite, chromite, olivine and detrital Fe oxide sand" in the sandstones. In the mine area the Cabbage Tree Conglomerate is approximately 50 metres thick.

The Tasmania Reef is hosted by the Salisbury Hill and Eaglehawk Gully Formations which collectively comprise the Transition beds in earlier literature. The Transition

beds were divided into the Upper and Lower Transition beds with the contact defined as the uppermost pebble bed in the Lower Transition beds (Hills, 1998b). Lewis (1998) formalised the stratigraphy of the Transition beds defining the Lower Transition beds and Upper Transition beds as the Salisbury Hill Formation and the Eaglehawk Gully Formation respectively although the original nomenclature is maintained within the operating Beaconsfield Gold Mine for convenience.

Lewis (1998) defined the Salisbury Hill Formation as a sequence of dark grey-black quartz arenite interbedded with oligomictic granule-pebble (para- and ortho-) conglomerate and granule conglomeratic quartz arenite. He divided it into five members based upon the abundance of conglomerate. Conglomerate of the Salisbury Hill Formation is poorly sorted and consists of sub-rounded to rounded quartz and minor chert, coarse siltstone, 'rip-up' mudstone and Fe oxidised mudstone/chert clasts. Lewis (1998) does not state the correlation but by his definition places the top of the quartz arenite and conglomerate bearing Salisbury Hill Formation at the uppermost pebble bed, the same position as Hills (1998b). In the mine the Salisbury Hill Formation is approximately 120m thick.

The Cabbage Tree Conglomerate and Salisbury Hill Formation thin markedly to the south with pebbly conglomerate units becoming thinner and better sorted. Mapping along the road cut in Middle Arm Gorge, approximately 2.5 km south along strike from the Beaconsfield Gold Mine shows the Cabbage Tree Conglomerate to be approximately 20 metres thick. Adits mapped in Eaglehawk Gully approximately 600 metres further to the south show the pebbly conglomerates of the Salisbury Hill Formation to be better sorted than in drill core in the mine area. Similar old workings and recent diamond drilling provides a full section across the southern end of Salisbury Hill 2.5 km further south. Here the Cabbage Tree Conglomerate appears to have pinched out completely with only minor pebble conglomerate bands from the Salisbury Hill Formation exposed in the Powerline Adit. The thickness of the Salisbury Hill Formation here is only approximately 50 metres. This thinning explains the lack of significant conglomeratic units along Bulls Road further south again.

Lewis (1998) defines the Eaglehawk Gully Formation as a sequence of grey/grey-green quartz arenite interbedded with light grey, stylolitic bioclastic grainstone. It has been divided into six members mainly on the basis variations in limestone abundance. The quartz arenite decreases in grain size with decreasing depth and is calcareous in the upper two and lower two members. The limestone contains bioclasts of *Nuia*, echinoderms and brachiopods and minor grapestone within sparry calcite cement. The fossils indicate a lowermost Ordovician age (Laurie, 1996).

Two kilometres south of the mine along strike from the Tasmania Reef, the Middle Arm Gorge road cut on Flowery Gully Road exposes a basalt unit with brecciated and peperitic textures indicating that it was a very shallow sill which intruded wet unconsolidated sediments (MacDonald, 1998). The basalt unit is 30 – 40m thick. It is immediately underlain by a localised unit of green sandstone, clearly derived from the basalt which must have been exposed and shedding fine material, probably hyaloclastically. The basalt is intercalated with sediments from the lower part of the Eaglehawk Gully Formation approximately one third of the way up from the base of the Formation. Lithochemically the basalt is apparently a transitional alkali-tholeiite from an intraplate setting. The basalt exhibits a particularly high Ti content which is not reflected in the sediments of the Eaglehawk Gully Formation.

The entire package described here above, overlying the Blyth's Creek Formation, is correlated with the Denison Group elsewhere in Tasmania.

Overlying the Eaglehawk Gully Formation, the Flowery Gully Limestone is the primary unit of the Gordon Group in the Beaconsfield block. The unit is a pure stylolitic limestone of deep water origin. It is particularly significant at Flowery Gully where it is exploited commercially but it also occurs in widespread outcrop and is prominent in drill core at the Beaconsfield Gold Mine. Overlying this unit is the Grubb Shale (Grubb beds of Green (1959)). This unit was also included within the Gordon Group by Hills (1998b) and Lewis (1998) but the correlation is now questioned.

Hills (1982) defined the Corn Hill Beds east of Flowery Gully as a sequence of turbiditic sediments with Mathinna Beds characteristics. A varied fauna located at 485840E 5431800N supported a strong correlation with the Mathinna Beds at Scamander on the East Coast. This work strengthened the earlier suggestion of Kennedy (1971) who likened the sediments immediately east of Flowery Gully to the Grubb Beds and also the Mathinna Beds. Green (1959), working with sparse outcrop within the township of Beaconsfield noted that "the sediments above the ...Flowery Gully... Limestone resemble the Mathinna ...Group".

Gee and Legge (1979), noting the occurrence of limestone east of the Grubb Beds in drill core from the Beaconsfield Gold Mine, suggested that the Grubb Beds are merely silty intervals within the Flowery Gully Limestone. However, their interpretation lacked the benefit of diamond drill core from the Beaconsfield Gold Mine. The latter intersects the Cobblestone Creek Thrust which overprints a cobble conglomerate between the Grubb Beds and the eastern limestone. The latter two strata are now interpreted as units within the Blyth's Creek Formation.

Recent drilling and underground development has allowed detailed examination of the Grubb Beds at the type locality. Lithologically they are very similar to rocks from the Corn Hill Beds of Hills (1982). The latter nomenclature is preferred as it has never been linked to the Gordon Group and because the fauna at the Flowery Gully type locality allows timing of deposition to be fixed and makes direct correlation possible. Also, the unit remains mappable in the field. (Recent exposure in the Beaconsfield Gold Mine is now covered by concrete). Elsewhere in the district, the Corn Hill Beds outcrops to the west of the Cabbage Tree Hill – Salisbury Hill strike ridge and particularly at Leviathan Hill where Green (1959) defined the unit as the Leonardsburgh Siltstone and suggested Grubb Beds equivalence. Gee and Legge (1979) are not correct in assigning the Leonardsburgh Siltstone at the type locality to the Cambrian Sequence. However, the current authors support their correlation with respect to the rocks on the western side of Peaked Hill. The Corn Hill Beds have now been recognised as far south as Winkleigh (Morrison, 1999).

The stratigraphy of the "Beaconsfield sedimentary package" is summarised as illustrated in table 1. The regional geology is illustrated in figure 2.

Group	Formation
Mathinna Group	Corn Hill Beds
Gordon Group	Flowery Gully Limestone
Denison Group	Eaglehawk Gully Formation (including associated volcanics)
	Salisbury Hill Formation
	Cabbage Tree Conglomerate
Dundas Group	Blyth's Creek Formation (including associated volcanics)

Table 1. Simplified stratigraphy and correlation of the "Beaconsfield sedimentary package".

4.0 *PREVIOUS MINING AND EXPLORATION*

Broad details of mining history are presented by Hills (1998). Prior exploration in the area currently being relinquished was confined to regional reconnaissance work by Bates (1979) and Hicks (1989).

5.0 *EXPLORATION PHILOSOPHY*

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The Tasmania Reef has been and remains the primary deposit model for exploration in the Beaconsfield District. Exploration based on this model led to discovery of the Pease Creek prospect, now the centre of RL 99/01. The reader is referred to the earlier Final Report for EL 7/88 (Hills, 1998) for further details.

6.1 Introduction

No work was undertaken on the remaining portion of EL 7/88 which is now being relinquished since the expiry of the original licence term. The extension of the term of the licence was specifically to allow for further exploration of the defined Pease Creek prospect which was subsequently reported by Hills and MacDonald (1999a)

Prior work by McKeown (1995) resulted in RC drilling within the current area of relinquishment in addition to that reported by Hills (1998a). So too, a portion of the helimag survey interpreted by White (1998) and appended herewith also covered the current relinquishment area.

Apart from the above, no work of a material nature has taken place in the relinquishment area. The reader is referred to Hills (1998a) for a precis of completed work of a more regional nature.

6.2 RC Drilling Programme

A further 8 holes from the RC drilling programme undertaken by McKeown (1995) were drilled within the area currently being relinquished. Details of these holes which were all drilled vertically are included in table 2.

Hole	Northing	Easting	Depth (m)
BRC5	5 440 597	482 016	36
BRC6	5 440 631	482 112	36
BRC7	5 440 712	482 166	36
BRC8	5 440 777	482 204	30
BRC9	5 440 795	482 248	42
BRC22	5 441 299	483 128	73
BRC23	5 441 395	483 157	74
BRC24	5 441 503	483 197	123

Table 2. RC drill hole details, Pease Creek.

McKeown (1995) considered that each of these holes except BRC23 and BRC24 penetrated the Tertiary cover and then intersected Ordovician siltstones east of the Cabbage Tree Thrust, which is thus interpreted to occur between BRC5 and BRC4 further to the west. Ongoing work by MacDonald (1999) has given weight to the suggestion that the Palaeozoic rocks immediately west of the Cabbage Tree Thrust are appropriately correlated with the Devonian Corn Hill Beds of Hills (1982). All holes except BRC23 and BRC24 were assayed in part over 2m intervals from the base of the Tertiary cover. Analyses were completed for Au (fire) and As in each case at Analabs facility in Cooe, Tasmania. McKeown (1995) considered 0.022 ppm Au and 1.0 ppm As from 14-16m and 0.020 ppm Au and 44.5 ppm As from 32-36m in BRC5 and 0.011 ppm Au from 26-30m and 0.012 ppm Au from

32-34m with 18.7 ppm As from 12-32m in BRC6 to be slightly anomalous. The highest value obtained was half that of the anomalous mineralisation in BRC15 which led to the discovery of the Pease Creek prospect 1km further east and may be slightly significant.

BRC23 and BRC24 both intersected mudstones of Permian age at the base of the Tertiary cover as evidenced by the presence of bryozoan fossils in chips. An attempt was made to penetrate beneath the Permian in BRC24 and the hole was diamond drilled from 78.0 – 123.0m with that intention. The hole was stopped short of the goal of reaching the Ordovician.

Copies of the original RC logs and assay report sheets are included in appendix 1. Core from BRC24 is stored at Beaconsfield. Samples were collected from the core for an unsponsored research project in 1998. The work was never finished but assay results are at hand and these are tabulated in appendix 2 for completeness.

6.6 Magnetic Surveys

A low altitude helimag survey flown in 1998 and interpreted by White (1998) was appended in edited form to the earlier report of Hills (1998a). The images from the original interpretation have been upgraded to include the area covered by the current report. These and the report are contained in appendix 3.

7.0 CONCLUSIONS

Little material exploration has occurred within the area being relinquished. The apparent positioning of the Cabbage Tree Thrust between BRC4 and BRC5 is significant in tying down the local Palaeozoic geology beneath the Tertiary cover.

The occurrence of low grade gold values in the holes close to the thrust may point to the latter being a conduit for gold bearing fluid migration either at the time of initial mineralisation or subsequently and therefore may also be a significant result. Further work is required to pursue such a model.

- Bates, T.E., 1979. EL 17/73. Summary report on auger and rotary drilling on lines 1 to 4, EL 17/73. [TRC79-1403].
- Elliot, C.G., Woodward, N.B. and Gray, D.R., 1993. Complex regional fault history of the Badger Head region, northern Tasmania, *Australian Journal of Earth Sciences*, 40: 155-168.
- Gee, R.D. and Legge, P.J., 1979. Geological atlas 1 mile series. Zone 7 Sheet 30 (8215N). *Beaconsfield* (2nd edn.). Explan. Rept. Geol. Surv. of Tasm.
- Green, D.H., 1959. Geology of the Beaconsfield region, including the Anderson's Creek Ultrabasic Complex, *Records of the Queen Victoria Museum, Launceston*, New Series No 10.
- Hicks, J.D., 1989. EL 7/88. Exploration report for the period October 1987 to January 1989. Beaconsfield Gold Mines Limited. [TCR 89-3011].
- Hills, P.B., 1982. The geology of the Lower and Middle Palaeozoic rocks of Flowery Gully, Northern Tasmania, BSc (Hons) thesis. University of Tasmania.
- Hills, P.B. 1998a. Beaconsfield EL 7/88 Final Report. Beaconsfield Mine JV.
- Hills, P.B., 1998b. Tasmania gold deposit, Beaconsfield, in *Geology of Australian and Papua New Guinean Mineral Deposits* (Eds. D.A. Berkman and D.H. MacKenzie), pp 467-472 (The Australasian Institute of Mining and Metallurgy: Melbourne).
- Hills, P.B. and MacDonald, G., 1999a. EL7/88 Annual Report 1998/99. Beaconsfield Mine JV.
- Hills, P.B. and MacDonald, G., 1999b. Salisbury Hill EL 20/94 Mid-Term Relinquishment Report. Beaconsfield Mine JV.
- Kennedy, D.J., 1971. Geology of Flowery Gully (Northern Tasmania) and conodonts from the lowermost Gordon Limestone (Ordovician). BSc (Hons) thesis. University of Tasmania.
- Lewis, D., 1998. Lithostratigraphy, sedimentology and palaeontology of the Dension Group, Beaconsfield, Tasmania, BSc (Hons) thesis. University of Tasmania.
- MacDonald, G., 1998a. Beaconsfield EL7/88. Annual Report 1997/98. Beaconsfield Mine JV.
- MacDonald, G. 1998b. Salisbury Hill EL 20/94. Annual Report 1997/98. Beaconsfield Mine JV.
- MacDonald, G., 1999. Salisbury Hill EL 20/94. Annual Report 1997/98. Beaconsfield Mine JV.
- McKeown, M.V., 1995. Beaconsfield Mine Joint Venture - EL 7/88 Drilling Programme.
- Morrison, K.C., 1999. Beaconsfield Gold NL EL 19/97 - Winkleigh. Year 2 Annual Report.

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APPENDIX 1

RC DRILL LOGS (McKEOWN, 1995)

BEACONSFIELD MINE JOINT VENTURE

HOLE NUMBER : BRC5

NORTHING : 5 440 597

EASTING : 482 016

RL : -

COORDINATE SYSTEM: Universal Transverse Mercator

SURVEY METHOD : GPS

SURVEYOR : Ian Green (Campbell Smith, Phelps, Pedley Pty Ltd)

DATE COMMENCED : 29APR95

DATE COMPLETED : 29APR95

DRILLED BY : Diamond Drilling Tasmania

LOGGED BY : Mick McKeown (McKeown Mining Pty Ltd)

COMMENTS

The collar of this hole was located using GPS equipment. Northings and eastings should be considered as +/- 5 to 10m. Elevations were reported by the surveyor but cannot be relied upon: the elevation for this hole was reported as 71m.

Water struck at 12m.

Analyses were performed by Analabs (Burnie), gold by fire assay.

SIGNIFICANT INTERSECTIONS

FROM metres	TO metres	DOWN HOLE LENGTH m	TRUE THICKNESS m	Au ppM	As ppM
32.0	36.0	2.0	?	0.020	44.5

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BEACONSFIELD MINE JOINT VENTURE

SAMPLE NO	FROM m	TO m	DESCRIPTION	STRAT	CHIP RECOVERY	ASSAYS	
						Au ppm	As ppm
BRC5-1	0	2	dark cream gravel and topsoil	T	-		
BRC5-2	2	4	cream sand and gravel	T	-		
BRC5-3	4	6	yellow sand and gravel	T	-		
BRC5-4	6	8	yellow sand and gravel	T	-		
BRC5-5	8	10	cream sand and gravel	T	-		
BRC5-6	10	12	cream sand and gravel	T	-	<0.008	1.5
BRC5-7	12	14	quartz gravel and light grey siltstone	O	1	<0.008	0.7
BRC5-8	14	16	dark grey siltstone	O	0	<0.008	1.0
BRC5-9	16	18	dark grey siltstone	O	0	<0.008	2.0
BRC5-10	18	20	dark grey siltstone	O	0	<0.008	5.9
BRC5-11	20	22	dark grey siltstone	O	0	<0.008	12.0
BRC5-12	22	24	dark grey siltstone	O	0	<0.008	12.0
BRC5-13	24	26	dark grey siltstone	O	0	<0.008	11.0
BRC5-14	26	28	dark grey siltstone	O	0	<0.008	13.0
BRC5-15	28	30	dark grey siltstone	O	0	<0.008	13.0
BRC5-16	30	32	dark grey siltstone	O	0	<0.008	10.0
BRC5-17	32	34	black shale	O	0	0.020	48.0
BRC5-18	34	36	black shale	O	1	0.020	41.0

EOH AT 36m

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BEACONSFIELD MINE JOINT VENTURE

HOLE NUMBER : BRC6

NORTHING : 5 440 631

EASTING : 482 112

RL : -

COORDINATE SYSTEM: Universal Transverse Mercator

SURVEY METHOD : GPS

SURVEYOR : Ian Green (Campbell Smith, Phelps, Pedley Pty Ltd)

DATE COMMENCED : 29APR95

DATE COMPLETED : 29APR95

DRILLED BY : Diamond Drilling Tasmania

LOGGED BY : Mick McKeown (McKeown Mining Pty Ltd)

COMMENTS

The collar of this hole was located using GPS equipment. Northings and eastings should be considered as +/- 5 to 10m. Elevations were reported by the surveyor but cannot be relied upon: the elevation for this hole was reported as 79m.

Water struck at 24m.

Analyses were performed by Analabs (Burnie), gold by fire assay.

SIGNIFICANT INTERSECTIONS

FROM metres	TO metres	DOWN HOLE LENGTH m	TRUE THICKNESS m	Au ppM	As ppM
26.0	30.0	4.0	?	0.011	16.0
32.0	34.0	2.0	?	0.012	13.0

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BEACONSFIELD MINE JOINT VENTURE

SAMPLE NO	FROM m	TO m	DESCRIPTION	STRAT	CHIP RECOVERY	ASSAYS	
						Au ppm	As ppm
BRC6-1	0	2	orange to yellow gravel and sand	T	-		
BRC6-2	2	4	cream gravel and sand	T	-		
BRC6-3	4	6	cream gravel and sand	T	-		
BRC6-4	6	8	light brown gravel and sand	T	-		
BRC6-5	8	10	light brown gravel and sand	T	0		
BRC6-6	10	12	orange gravel & sand and dark grey siltstone	O	0		
BRC6-7	12	14	dark grey siltstone	O	0	<0.008	16.0
BRC6-8	14	16	dark grey siltstone	O	0	<0.008	20.0
BRC6-9	16	18	dark grey siltstone	O	0	<0.008	23.0
BRC6-10	18	20	dark grey siltstone	O	0	<0.008	16.0
BRC6-11	20	22	dark grey siltstone	O	0	<0.008	17.0
BRC6-12	22	24	dark grey siltstone	O	0	<0.008	28.0
BRC6-13	24	26	black shale	O	0	<0.008	20.0
BRC6-14	26	28	black shale	O	0	0.014	16.0
BRC6-15	28	30	black shale	O	0	0.008	16.0
BRC6-16	30	32	black shale	O	0	<0.008	15.0
BRC6-17	32	34	black shale	O	0	0.012	13.0
BRC6-18	34	36	black shale	O	0	<0.008	12.0

EOH AT 36m

BEACONSFIELD MINE JOINT VENTURE

HOLE NUMBER : BRC7

NORTHING : 5 440 712

EASTING : 482 166

RL : -

COORDINATE SYSTEM: Universal Transverse Mercator

SURVEY METHOD : GPS

SURVEYOR : Ian Green (Campbell Smith, Phelps, Pedley Pty Ltd)

DATE COMMENCED : 29APR95

DATE COMPLETED : 29APR95

DRILLED BY : Diamond Drilling Tasmania

LOGGED BY : Mick McKeown (McKeown Mining Pty Ltd)

COMMENTS

The collar of this hole was located using GPS equipment. Northings and eastings should be considered as +/- 5 to 10m. Elevations were reported by the surveyor but cannot be relied upon: the elevation for this hole was reported as 80m.

Hole recorded as damp at 8m.

Analyses were performed by Analabs (Burnie), gold by fire assay.

SIGNIFICANT INTERSECTIONS

FROM	TO	DOWN HOLE	TRUE	Au	As
metres	metres	LENGTH	THICKNESS	ppM	ppM

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BEACONSFIELD MINE JOINT VENTURE

SAMPLE NO	FROM m	TO m	DESCRIPTION	STRAT	CHIP RECOVERY	ASSAYS	
						Au ppm	As ppm
BRC7-1	0	2	orange to brown sand and gravel	T	-		
BRC7-2	2	4	buff brown sand and gravel	T	-		
BRC7-3	4	6	light buff brown to cream sand and gravel	T	-		
BRC7-4	6	8	light grey to buff brown sand and gravel	T	-		
BRC7-5	8	10	off white clayey sand and gravel	T	-		
BRC7-6	10	12	off white sandy clay	T	-		
BRC7-7	12	14	off white sandy clay	T	-		
BRC7-8	14	16	off white clay and minor sand and gravel	T	-		
BRC7-9	16	18	buff brown sandy clay and light grey siltstone	O	-		
BRC7-10	18	20	mid grey siltstone	O	0	<0.008	1.2
BRC7-11	20	22	light to mid grey siltstone	O	0	<0.008	0.6
BRC7-12	22	24	light to mid grey siltstone	O	0	<0.008	2.5
BRC7-13	24	26	mid grey siltstone	O	0	<0.008	7.1
BRC7-14	26	28	mid grey siltstone	O	0	<0.008	8.0
BRC7-15	28	30	mid grey siltstone	O	0	<0.008	6.7
BRC7-16	30	32	mid grey siltstone	O	0	<0.008	9.3
BRC7-17	32	34	mid grey siltstone	O	0	<0.008	7.8
BRC7-18	34	36	mid grey siltstone	O	0	<0.008	6.4

EOH AT 36m

HOLE NUMBER : BRC8

NORTHING : 5 440 777

EASTING : 482 204

RL : -

COORDINATE SYSTEM: Universal Transverse Mercator

SURVEY METHOD : GPS

SURVEYOR : Ian Green (Campbell Smith, Phelps, Pedley Pty Ltd)

DATE COMMENCED : 30APR95

DATE COMPLETED : 30APR95

DRILLED BY : Diamond Drilling Tasmania

LOGGED BY : Mick McKeown (McKeown Mining Pty Ltd)

COMMENTS

The collar of this hole was located using GPS equipment. Northings and eastings should be considered as +/- 5 to 10m. Elevations were reported by the surveyor but cannot be relied upon: the elevation for this hole was reported as 88m.

Dampness struck at 16m.

Analyses were performed by Analabs (Burnie), gold by fire assay.

SIGNIFICANT INTERSECTIONS

FROM	TO	DOWN HOLE	TRUE	Au	As
metres	metres	LENGTH	THICKNESS	ppM	ppM

167022

BEACONSFIELD MINE JOINT VENTURE

SAMPLE NO	FROM m	TO m	DESCRIPTION	STRAT	CHIP RECOVERY	ASSAYS	
						Au ppm	As ppm
BRC8-1	0	2	orange, yellow and grey gravel and clay	T	-		
BRC8-2	2	4	yellow cream gravel and clay	T	-		
BRC8-3	4	6	orange clay and brown sandy gravel	T	-		
BRC8-4	6	8	buff to dark brown sand and gravel	T	-		
BRC8-5	8	10	buff brown gravel	T	-		
BRC8-6	10	12	buff to dark brown sand and gravel	T	-		
BRC8-7	12	14	buff to light brown sand and gravel	T	-		
BRC8-8	14	16	light brown to grey gravel and orange white clay	T	-		
BRC8-9	16	18	pale grey to brown clay	T	-		
BRC8-10	18	20	brown gravel and grey clay	T	-		
BRC8-11	20	22	brown sand	T	-		
BRC8-12	22	24	brown sand	T	-		
BRC8-13	24	26	grey siltstone?	O	1	<0.008	1.4
BRC8-14	26	28	black grey shale	O	1	<0.008	2.9
BRC8-15	28	30	black shale	O	1	<0.008	3.6

EOH AT 30m

167023

BEACONSFIELD MINE JOINT VENTURE

HOLE NUMBER : BRC9

NORTHING : 5 440 795

EASTING : 482 248

RL : -

COORDINATE SYSTEM: Universal Transverse Mercator

SURVEY METHOD : GPS

SURVEYOR : Ian Green (Campbell Smith, Phelps, Pedley Pty Ltd)

DATE COMMENCED : 30APR95

DATE COMPLETED : 30APR95

DRILLED BY : Diamond Drilling Tasmania

LOGGED BY : Mick McKeown (McKeown Mining Pty Ltd)

COMMENTS

The collar of this hole was located using GPS equipment. Northings and eastings should be considered as +/- 5 to 10m. Elevations were reported by the surveyor but cannot be relied upon: the elevation for this hole was reported as 63m.

Dampness struck at 28m.

Analyses were performed by Analabs (Burnie), gold by fire assay.

SIGNIFICANT INTERSECTIONS

FROM metres	TO metres	DOWN HOLE LENGTH	TRUE THICKNESS	Au ppM	As ppM
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167024

BEACONSFIELD MINE JOINT VENTURE

SAMPLE NO	FROM m	TO m	DESCRIPTION	STRAT	CHIP RECOVERY	ASSAYS	
						Au ppm	As ppm
BRC9-1	0	2	yellow gray sandy gravel and clay	T	-		
BRC9-2	2	4	yellow grey clay and orange sandy gravel	T	-		
BRC9-3	4	6	orange sandy gravel	T	-		
BRC9-4	6	8	yellow clay and orange sandy gravel	T	-		
BRC9-5	8	10	buff to dark brown sand and gravel	T	-		
BRC9-6	10	12	light to dark brown sand and gravel	T	-		
BRC9-7	12	14	light to dark brown sand and gravel	T	-		
BRC9-8	14	16	grey brown clay	T	-		
BRC9-9	16	18	grey brown clay	T	-		
BRC9-10	18	20	grey brown clay	T	-		
BRC9-11	20	22	grey brown clay	T	-		
BRC9-12	22	24	grey brown clay	T	-		
BRC9-13	24	26	grey clay and grey siltstone	O	-		
BRC9-14	26	28	grey siliceous siltstone	O	1	<0.008	6.2
BRC9-15	28	30	grey siliceous siltstone	O	1	<0.008	3.9
BRC9-16	30	32	dark grey siltstone and mudstone	O	1	<0.008	3.8
BRC9-17	32	34	dark to light grey siltstone and mudstone	O	1	<0.008	2.3
BRC9-18	34	36	grey siltstone and mudstone	O	1	<0.008	3.0
BRC9-19	36	38	grey siltstone	O	1	<0.008	5.0
BRC9-20	38	40	grey siltstone and brown mudstone	O	1	<0.008	7.6
BRC9-21	40	42	grey siltstone	O	1	<0.008	<0.5

EOH AT 42m

167025

BEACONSFIELD MINE JOINT VENTURE

HOLE NUMBER : BRC22

NORTHING : 5 441 298

EASTING : 483 128

RL : -

COORDINATE SYSTEM: Universal Transverse Mercator

SURVEY METHOD : GPS

SURVEYOR : Ian Green (Campbell Smith, Phelps, Pedley Pty Ltd)

DATE COMMENCED : 11MAY95

DATE COMPLETED : 11MAY95

DRILLED BY : Diamond Drilling Tasmania

LOGGED BY : Mick McKeown (McKeown Mining Pty Ltd)

COMMENTS

The collar of this hole was located using GPS equipment. Northings and eastings should be considered as +/- 5 to 10m. Elevations were reported by the surveyor but cannot be relied upon: the elevation for this hole was reported as 68m.

Water struck at 18m.

Analyses were performed by Analabs (Burnie), gold by fire assay.

SIGNIFICANT INTERSECTIONS

FROM	TO	DOWN HOLE	TRUE	Au	As
metres	metres	LENGTH	THICKNESS	ppM	ppM

167020

BEACONSFIELD MINE JOINT VENTURE

SAMPLE NO	FROM m	TO m	DESCRIPTION	STRAT	CHIP RECOVERY	ASSAYS	
						Au ppm	As ppm
BRC22-1	0	2	light brown to orange sand, gravel and topsoil	T	-		
BRC22-2	2	4	cream sand and gravel	T	-		
BRC22-3	4	6	cream sand and gravel	T	-		
BRC22-4	6	8	light brown sand and gravel	T	-		
BRC22-5	8	10	off white to orange sand and gravel	T	-		
BRC22-6	10	12	light brown clayey sand and gravel	T	-		
BRC22-7	12	14	off white to light brown clayey sand and gravel	T	-		
BRC22-8	14	16	off white sand and gravel	T	-		
BRC22-9	16	18	off white clay, sand and gravel	T	-		
BRC22-10	18	20	light brown to light grey clay	T	-		
BRC22-11	20	22	grey to brown lignitic clay	T	-		
BRC22-12	22	24	grey clay	T	-		
BRC22-13	24	26	grey, slightly gravelly clay	T	-		
BRC22-14	26	28	grey, slightly lignitic gravelly clay	T	-		
BRC22-15	28	30	light grey and brown, slightly gravelly clay	T	-		
BRC22-16	30	32	dark brown lignitic clay	T	-		
BRC22-17	32	34	dark brown to grey clay	T	-		
BRC22-18	34	36	grey clay	T	-		
BRC22-19	36	38	grey clay	T	-		
BRC22-20	38	40	grey, slightly lignitic clay	T	-		
BRC22-21	40	42	grey clay	T	-		
BRC22-22	42	44	grey clay	T	-		
BRC22-23	44	46	grey clay	T	-		
BRC22-24	46	48	grey, very slightly gravelly clay	T	-		
BRC22-25	48	50	grey, very slightly lignitic gravel and clay	T	-		
BRC22-26	50	52	grey gravel and clay and sparse brown clay	T	-		
BRC22-27	52	54	grey gravel and clay, dark brown lignitic clay and grey clay	T	-		
BRC22-28	54	56	grey gravelly clay	T	-		
BRC22-29	56	58	grey gravelly clay	T	-		

167027

BEACONSFIELD MINE JOINT VENTURE

BRC22-30	58	60	grey gravelly clay	T	-		
BRC22-31	60	62	grey to brown gravelly clay	T	-		
BRC22-32	62	64	mid brown lignitic, slightly gravelly clay	T	-		
BRC22-33	64	66	mid brown lignitic, slightly gravelly clay	T	-		
BRC22-34	66	68	mid brown lignitic, slightly gravelly clay	T	-		
BRC22-35	68	70	mid brown lignitic, slightly gravelly clay	T	-		
BRC22-36	70	72	grey to black, slightly fossiliferous siltstone	P	2		
BRC22-37	72	72.8	grey to black, slightly fossiliferous siltstone	P	2		
BRC22-38	72.8	73	grey quartzite recovered in last 20 cm of hole	O	2	<0.008	5.2

EOH AT 73m

167028

BEACONSFIELD MINE JOINT VENTURE

HOLE NUMBER : BRC23

NORTHING : 5 441 395

EASTING : 483 157

RL : -

COORDINATE SYSTEM: Universal Transverse Mercator

SURVEY METHOD : GPS

SURVEYOR : Ian Green (Campbell Smith, Phelps, Pedley Pty Ltd)

DATE COMMENCED : 11MAY95

DATE COMPLETED : 11MAY95

DRILLED BY : Diamond Drilling Tasmania

LOGGED BY : Mick McKeown (McKeown Mining Pty Ltd)

COMMENTS

The collar of this hole was located using GPS equipment. Northings and eastings should be considered as +/- 5 to 10m. Elevations were reported by the surveyor but cannot be relied upon: the elevation for this hole was reported as 73m.

Water struck at 24m and 54m.

SIGNIFICANT INTERSECTIONS

FROM metres	TO metres	DOWN HOLE LENGTH	TRUE THICKNESS	Au ppM	As ppM
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167029

BEACONSFIELD MINE JOINT VENTURE

SAMPLE NO	FROM m	TO m	DESCRIPTION	STRAT	CHIP RECOVERY	Au ppm
BRC23-1	0	2	orange sand, gravel and topsoil	T	-	
BRC23-2	2	4	light brown to tan sand and gravel	T	-	
BRC23-3	4	6	off white sand and gravel	T	-	
BRC23-4	6	8	pale brown sand and gravel	T	-	
BRC23-5	8	10	off white sand and gravel	T	-	
BRC23-6	10	12	off white sand and gravel	T	-	
BRC23-7	12	14	off white and orange brown sand and gravel	T	-	
BRC23-8	14	16	off white and orange brown sand and gravel	T	-	
BRC23-9	16	18	cream to grey clay	T	-	
BRC23-10	18	20	grey and sparse brown lignitic clay	T	-	
BRC23-11	20	22	brown lignitic clay and grey clay	T	-	
BRC23-12	22	24	grey and brown lignitic clay	T	-	
BRC23-13	24	26	grey and dark brown lignitic clay	T	-	
BRC23-14	26	28	grey gravelly clay	T	-	
BRC23-15	28	30	grey to dark brown black lignitic clay	T	-	
BRC23-16	30	32	brown lignitic clay	T	-	
BRC23-17	32	34	brown black to light grey clay	T	-	
BRC23-18	34	36	light to mid grey clay	T	-	
BRC23-19	36	38	grey clay	T	-	
BRC23-20	38	40	light to mid grey clay	T	-	
BRC23-21	40	42	light to mid grey clay	T	-	
BRC23-22	42	44	grey brown lignitic clay	T	-	
BRC23-23	44	46	grey clay	T	-	
BRC23-24	46	48	grey gravelly clay	T	-	
BRC23-25	48	50	grey gravelly clay	T	-	
BRC23-26	50	52	grey gravelly clay	T	-	
BRC23-27	52	54	grey gravelly clay	T	-	
BRC23-28	54	56	grey gravelly clay	T	-	
BRC23-29	56	58	grey gravelly clay	T	-	
BRC23-30	58	60	grey gravelly clay	T	-	
BRC23-31	60	62	brown lignitic clay	T	-	
BRC23-32	62	64	brown lignitic clay	T	-	
BRC23-33	64	66	brown lignitic clay	T	-	

167030

BEACONSFIELD MINE JOINT VENTURE

BRC23-34	66	68	brown lignitic clay	T	-
BRC23-35	68	70	brown lignitic clay and grey and brown fossiliferous siltstone	T/P	1
BRC23-36	70	72	grey and brown fossiliferous siltstone	P	1
BRC23-37	72	74	grey and brown fossiliferous siltstone	P	1

EOH AT 74m

167031

BEACONSFIELD MINE JOINT VENTURE

HOLE NUMBER : BRC24

NORTHING : 5 441 503

EASTING : 483 197

RL : -

COORDINATE SYSTEM: Universal Transverse Mercator

SURVEY METHOD : GPS

SURVEYOR : Ian Green (Campbell Smith, Phelps, Pedley Pty Ltd)

DATE COMMENCED : 12MAY95

DATE COMPLETED : 15MAY95

DRILLED BY : Diamond Drilling Tasmania

LOGGED BY : Mick McKeown (McKeown Mining Pty Ltd)

COMMENTS

The collar of this hole was located using GPS equipment. Northings and eastings should be considered as +/- 5 to 10m. Elevations were reported by the surveyor but cannot be relied upon: the elevation for this hole was reported as 72m.

Water struck at 14m.

Hole cored from 78m to 123m.

SIGNIFICANT INTERSECTIONS

FROM	TO	DOWN HOLE	TRUE	Au	As
metres	metres	LENGTH	THICKNESS	ppM	ppM

167032

BEACONSFIELD MINE JOINT VENTURE

SAMPLE NO	FROM m	TO m	DESCRIPTION	STRAT	CHIP RECOVERY	A Au ppm
BRC24-1	0	2	tan and brown sand, gravel and topsoil	T	-	
BRC24-2	2	4	tan and orange sand and gravel	T	-	
BRC24-3	4	6	cream sand and gravel	T	-	
BRC24-4	6	8	off white sand and gravel	T	-	
BRC24-5	8	10	off white and tan sand and gravel	T	-	
BRC24-6	10	12	off white sand and gravel	T	-	
BRC24-7	12	14	cream sand and gravel	T	-	
BRC24-8	14	16	cream clay	T	-	
BRC24-9	16	18	mustard sand and gravel and cream clayey sand and gravel	T	-	
BRC24-10	18	20	light brown and tan sand and gravel	T	-	
BRC24-11	20	22	brown and tan lignitic clay	T	-	
BRC24-12	22	24	grey to brown lignitic clay	T	-	
BRC24-13	24	26	grey to brown lignitic clay	T	-	
BRC24-14	26	28	light grey to brown lignitic clay	T	-	
BRC24-15	28	30	light grey and grey brown lignitic clay	T	-	
BRC24-16	30	32	grey clay	T	-	
BRC24-17	32	34	grey clay and dark brown lignitic clay	T	-	
BRC24-18	34	36	grey clay	T	-	
BRC24-19	36	38	grey clay and brown lignitic clay	T	-	
BRC24-20	38	40	light grey, slightly gravelly clay	T	-	
BRC24-21	40	42	light and dark grey, slightly gravelly clay	T	-	
BRC24-22	42	44	grey clay	T	-	
BRC24-23	44	46	grey, slightly gravelly clay	T	-	
BRC24-24	46	48	light grey, slightly gravelly clay	T	-	
BRC24-25	48	50	grey gravelly, slightly lignitic clay	T	-	
BRC24-26	50	52	grey gravelly, slightly lignitic clay	T	-	
BRC24-27	52	54	grey gravelly, slightly lignitic clay	T	-	
BRC24-28	54	56	grey gravelly, slightly lignitic clay	T	-	
BRC24-29	56	58	grey gravelly, slightly lignitic clay	T	-	
BRC24-30	58	60	grey gravelly, slightly lignitic clay	T	-	
BRC24-31	60	62	grey gravelly, slightly lignitic clay	T	-	
BRC24-32	62	64	brown lignitic clay	T	-	

167033

BEACONSFIELD MINE JOINT VENTURE

BRC24-33	64	66	brown lignitic clay	T	-
BRC24-34	66	68	brown lignitic clay	T	-
BRC24-35	68	70	brown lignitic clay	T	-
BRC24-36	70	72	brown lignitic and light grey clay	T	-
BRC24-37	72	74	green, brown, white and grey gravel	T	-
BRC24-38	74	76	green, brown, white and grey gravel	T	-
BRC24-39	76	78	grey mudstone	P	0

CORE
RECOVERY

78.0 97.0 BROWN AND BLACK MUDSTONE AND SHALE P 100%

Very fossiliferous black and brown mudstone and shale with rare bands of interbedded quartzite; the mudstone and shale beds occasionally include pebbles of green, white and grey quartzite; fossils include Fenestella and brachiopods.

BCA is high, averaging 90 degrees.

Contact with the next interval is gradational.

97.0 123.0 BROWN AND BLACK MUDSTONE AND SHALE P 100%

As between 78.0m and 97.0m but with fewer fossils present as sparse fossil fragments ; occasional included pebbles of grey, white and green quartzite are present rarely accumulating to abundance e.g. between 112.2m and 112.3m.

BCA is high, averaging 90 degrees.

The mudstone has completely disaggregated

167034

BEACONSFIELD MINE JOINT VENTURE

since it has been exposed.

EOH AT 123.0m.

EL 7/88 RC DRILL HOLE NUMBER BRC24

167035

167036

APPENDIX 2
ANALYTICAL RESULTS BRC24

Element	DL	BRC24 Core Sample Intervals												
		82.0-82.2	84.2-84.4	84.2-84.4	114.2-114.5	89.4-89.7	90.6-90.7	99.0-99.3	101.7-101.9	107.6-107.9	113.4-113.6	114.2-114.5	117.6-118.0	118.6-118.9
Sb	0.2	0.54	0.51	0.82	0.62	0.31	0.28	0.67	0.64	0.65	0.65	0.33	0.75	0.72
As	1.0	7.00	5.32	4.85	5.84	8.21	7.53	8.71	8.54	7.26	7.58	5.09	17.20	10.30
Ba	100.0	490.0	444.0	494.0	418.0	196.0	338.0	542.0	504.0	783.0	337.0	422.0	519.0	631.0
Br	1.0	<1.00	<1.00	<1.00	<1.00	<1.00	1.06	1.22	<1.00	<1.00	1.30	<1.00	<1.00	<1.00
Ca %	0.5	8.96	2.76	2.6	3.87	26.10	22.00	1.35	2.50	1.66	4.31	5.42	2.52	2.51
Ce	2.0	51.70	48.70	59.90	59.90	30.10	32.70	62.40	57.30	51.90	50.40	50.80	62.90	64.70
Cs	1.0	6.33	8.76	9.60	6.77	3.67	6.11	11.80	8.92	6.45	6.75	4.93	6.88	10.90
Cr	5.0	83.1	67.2	78.9	71.4	32.6	44.6	82.2	69.5	60.7	70.7	60.6	67.7	90.0
Co	1.0	5.96	7.65	12.6	14.00	6.33	4.60	8.80	7.01	4.55	12.50	7.88	6.28	8.29
Eu	0.50	1.22	0.84	0.63	0.84	<0.50	<0.50	0.89	0.69	0.78	1.29	0.84	0.68	1.18
Au ppb	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Hf	0.5	4.84	4.8	6.84	5.46	1.68	2.11	3.58	3.29	4.56	3.84	4.48	4.13	3.74
Ir ppb	20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0	<20.0
Fe %	0.02	1.88	1.83	2.14	2.08	1.39	1.47	2.89	2.55	2.03	2.44	1.75	3.45	2.99
La	0.50	26.00	23.6	27.70	28.90	15.90	16.60	31.40	27.90	26.3	25.80	24.90	38.10	33.8
Lu	0.20	0.27	0.27	0.32	0.35	<0.20	<0.20	0.33	0.29	0.29	0.35	0.31	0.32	0.34
Mo	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
K %	0.2	1.79	1.94	2.06	1.70	0.85	1.21	2.00	1.69	1.53	1.88	1.49	1.72	2.24
Rb	20.0	93.2	86.0	103.0	91.4	52.4	65.6	115.0	93.6	90.0	87.1	75.5	97.7	112.0
Sm	0.20	4.66	4.34	5.24	5.48	2.91	2.99	5.37	4.88	4.76	5.04	4.61	5.02	5.75
Sc	0.1	7.17	6.69	7.57	9.12	4.45	5.61	10.80	9.47	7.72	10.60	8.27	8.91	11.00
Se	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Ag	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Na %	0.010	0.536	0.680	0.746	0.797	0.368	0.403	0.684	0.640	0.712	0.574	0.664	0.985	0.854
Ta	1.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Te	5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Th	0.5	7.92	8.53	10.3	10.20	4.97	6.80	13.30	11.2	9.23	9.46	9.02	10.00	13.30
W	2.0	24.5	52.70	133.00	80.70	15.30	7.81	7.77	4.27	18.60	23.60	26.60	11.40	3.01
U	2.0	2.31	<2.00	2.17	<2.00	<2.00	<2.00	<2.00	<2.00	<2.00	2.01	<2.00	<2.00	<2.00
Yb	0.50	1.89	2.05	2.33	2.58	1.22	1.30	2.29	2.05	1.95	2.47	2.16	2.22	2.47
Zn	100.0	117.0	<100.0	128.0	145.0	<100.0	<100.0	136.0	118.0	<100.0	2700.0	105.0	159.0	557.0
Zr	500.0	<500.0	<500.0	<500.0	<500.0	<500.0	<500.0	<500.0	<500.0	<500.0	<500.0	<500.0	<500.0	<500.0

NB. Assays expressed as ppm unless otherwise indicated. Analyses were completed by Becquerel Laboratories, Sydney.

167037

APPENDIX 3

**WHITE (Interpretation of a helicopter magnetic survey near
Beaconsfield Mine Tasmania)(Abridged Images Only)**



TOORONGA RESOURCES PTY LTD

**Notes on Interpretation
of
Helicopter Magnetic Survey
Near Beaconsfield Mine
Tasmania**

R.M.S. WHITE

**TOORONGA RESOURCES PTY LTD.
207 Tooronga Road,
Terrey Hills N.S.W 2084**

16 July 1998

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FIGURES

- Figure 1 Fixed wing and Heli mag Image.
Figure 5.1 Profiles of RTP and enhanced data.
Figure 5.2 Magnetic Trends and Structures.

1. INTRODUCTION

In June 1998, UTS Geophysical surveys, on behalf of the Beaconsfield Joint Venture, flew a Helicopter airborne magnetic survey in the vicinity of the mine in order to better define the geology and structures.

The area has been previously been flown with a fixed wing magnetic and radiometric survey flown east west.

2. SUMMARY

The recent Helicopter magnetic survey allowed the detection and definition of much finer structural features than the previous fixed wing survey, especially west of the current mining operations. This area is traversed by a series of north east faults which offset the local geology and may be host to mineralisation.

3. SURVEY

The flying and processing specifications are listed in Appendix 1. The survey was flown at 40m terrain clearance on lines 50m apart. The lines were flown at 060 degrees, approximately at right angles to the geology. Unfortunately this flying direction is parallel to the structures carrying mineralisation. This makes it difficult to be certain if features seen in the data are due to structures or small pulls in the data. If the area is ever reflight the flying direction should be east west so that critical features do not lie parallel to flight lines. The town should be flown separately, at a higher altitude, and the data downward continued then merged with the rest of the survey.

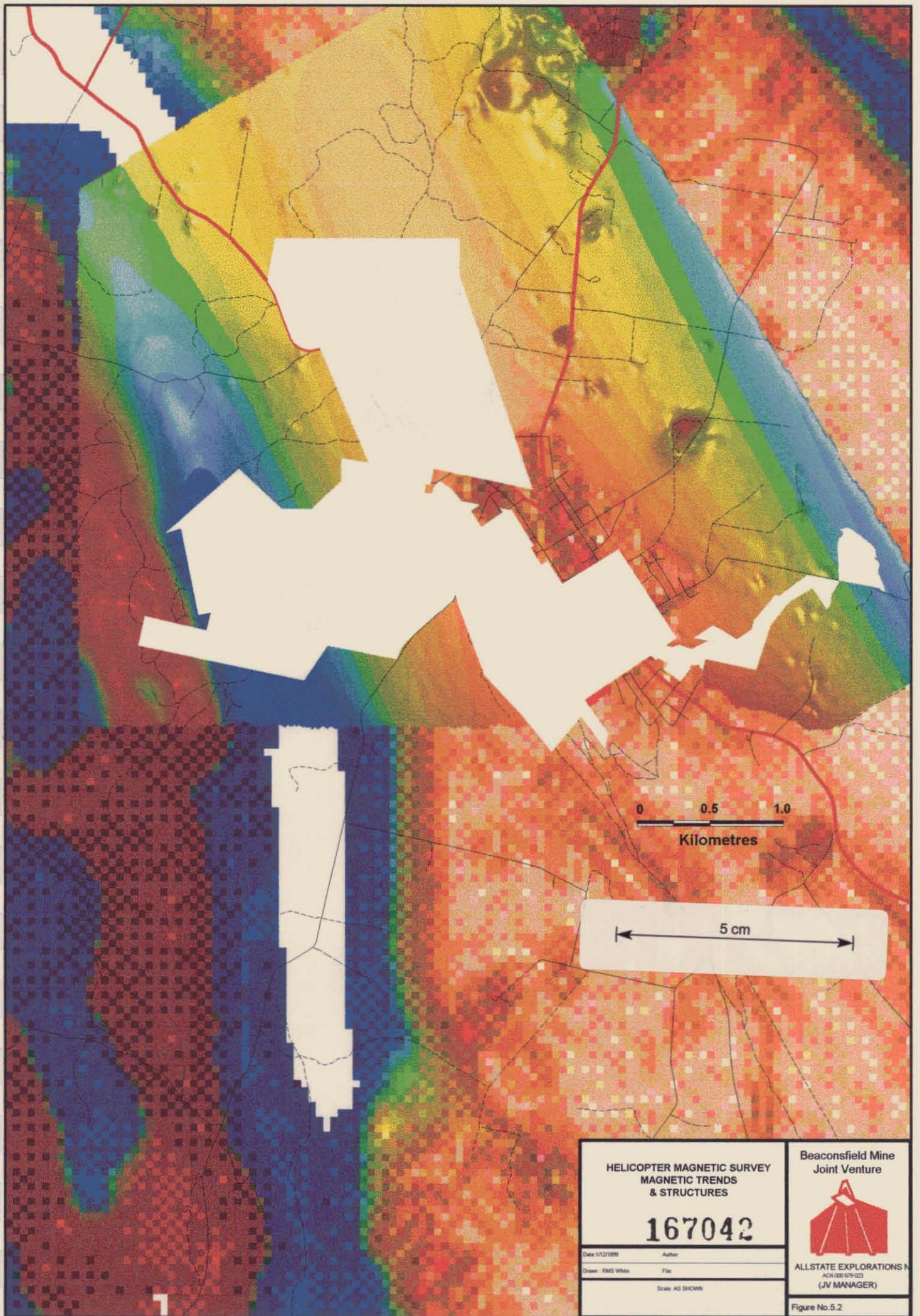
The magnetic data in the survey is generally of good quality. It suffers from cultural noise, houses, sheds etc.

DTM data over water with the UTS system has a problem with the radar altimeter. This may account for the area in the image that reports as below sea level.

4. DATA PROCESSING

Figure 1 show a Reduced To the Pole, RTP, image of the helicopter magnetic data superimposed on an image of the residual data from the fixed wing survey. The image is dominated by the large magnetic feature to the west of the current mine. This ultra mafic body dips east towards the mine and the magnetic gradient caused by this feature masks more subtle features.

In order to enhance the subtle features, the heli mag data was subjected to



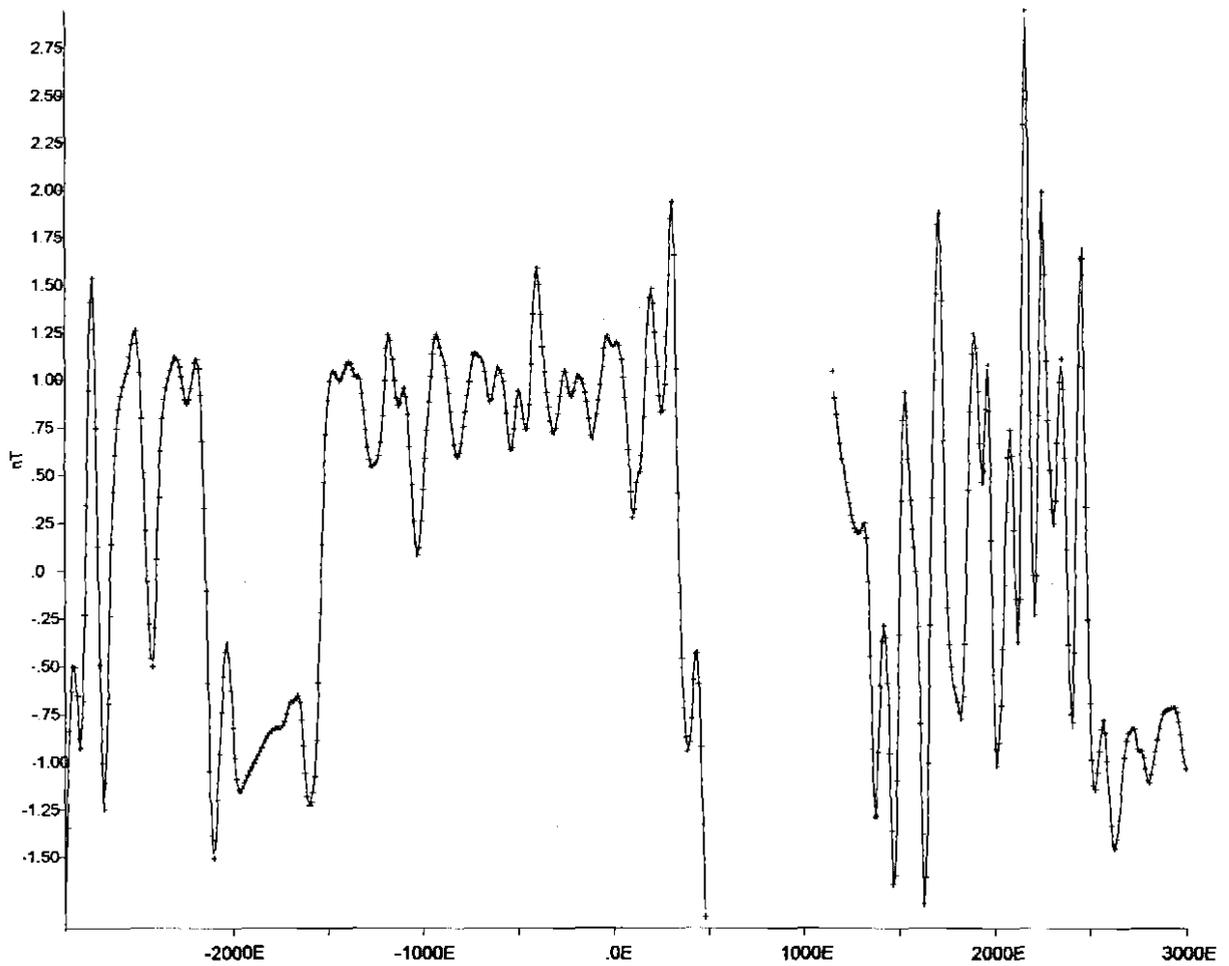
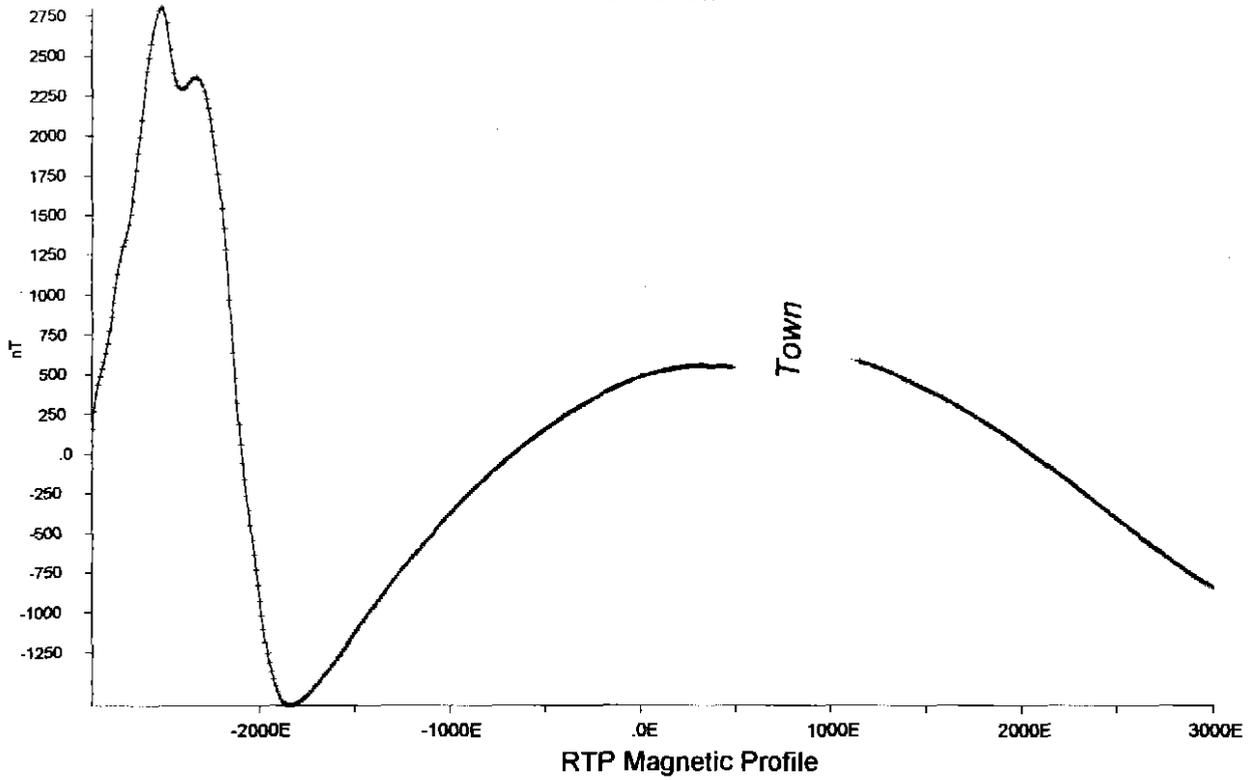
0 0.5 1.0
Kilometres

5 cm

<p>HELICOPTER MAGNETIC SURVEY MAGNETIC TRENDS & STRUCTURES</p> <p>167042</p>		<p>Beaconsfield Mine Joint Venture</p> 
<p>Date: 1/12/89</p>	<p>Author:</p>	<p>ALLSTATE EXPLORATIONS N ACN 000 575 023 (JV MANAGER)</p>
<p>Drawn: RMS White</p>	<p>File:</p>	
<p>Scale: AS SHOWN</p>		<p>Figure No.5.2</p>

Magnetic Data Before and after Enhancement

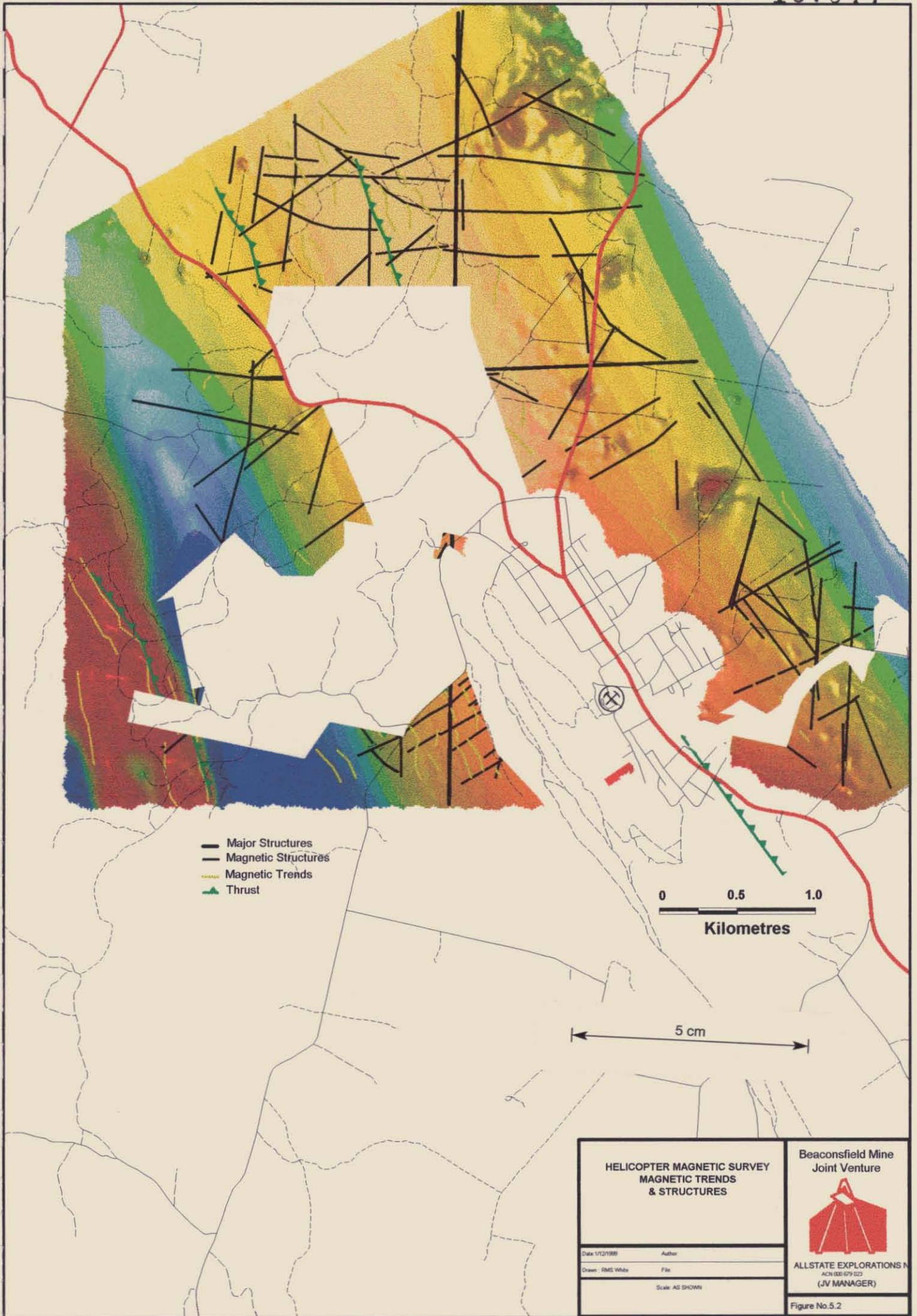
LINE 5438500 N



AGC 50m of 50m Residual of RTP data

0E(Profile) = 463800E(AMG)

Figure 5.1



- Major Structures
- Magnetic Structures
- Magnetic Trends
- ▲ Thrust

0 0.5 1.0
Kilometres

5 cm

HELICOPTER MAGNETIC SURVEY MAGNETIC TRENDS & STRUCTURES		Beaconsfield Mine Joint Venture  ALLSTATE EXPLORATIONS N.A. <small>ACN 001 079 022</small> (JV MANAGER)
<small>Date: 1/2/1988</small>	<small>Author:</small>	
<small>Drawn: RMS White</small>	<small>File:</small>	
<small>Scale: AS SHOWN</small>		Figure No.5.2

TOORONGA RESOURCES

167045

numerous processes. The data was first filtered to remove deep seated features and then the residual magnetic features enhanced.

Two filtering methods were used. The first was a first vertical derivative (1vd). The second method was a gaussian filter of various widths. The results of these operations can be seen in the images in Appendix 2.

The data was further enhanced by the application of a Automatic Gain Control (AGC) operator. This has the effect of enhancing low order features and suppressing larger features. The result of the various operations can be seen in the images in Appendix 2.

Various colour images and sun angle images were produced as an aid to extracting geological and structural information.

5. INTERPRETATION

The area of interest consists of rocks of low magnetic susceptibility so that any features seen, both geological and structural, will be very small and down in the noise level of the survey. Cultural features such as sheds and houses produce much larger responses than the geology. If aerial photography is available then the photos should be scanned in and corrected for distortion. These will make a good base for geological and geophysical interpretation and also the location of cultural noise.

The geological responses are typically less than 1 nT while the houses/sheds are typically 10nT. Figure 2 shows profiles of the RTP data along a line and the data after 50m filter and AGC. The geological signal is within the noise level of the survey and care has to be taken extracting information from these images.

The main geological features noted in the data include the ultramafic, seen on the western side of the data and basalts?, seen in the north east of the data.

The sediments near the mine are magnetically very quiet and are only just discernible in the enhanced data. They strike north west and are locally off set by orthogonal structures (Figure 5.2). The geology is mapped out by the digital terrain data better than in the magnetic data in some instances.

The major structures (Figure 5.2). noted in the data are an east west set and a north south structure. The north south structure is late and does not appear to be off set by later movement. This feature is most notable in the DTM data.

The east west structure has a possible off set of 1Km, the north block west.

The area around the mine shows a series of parallel structures, approximately 060 degrees. They off set the local geology but it is difficult to determine the



**HELICOPTER MAGNETIC SURVEY
INTERPRETATION**

167046

Date: 27/6/98 Author: _____
 Drawn: RMS White File: _____
 Scale: As shown

**Beaconsfield Mine
Joint Venture**

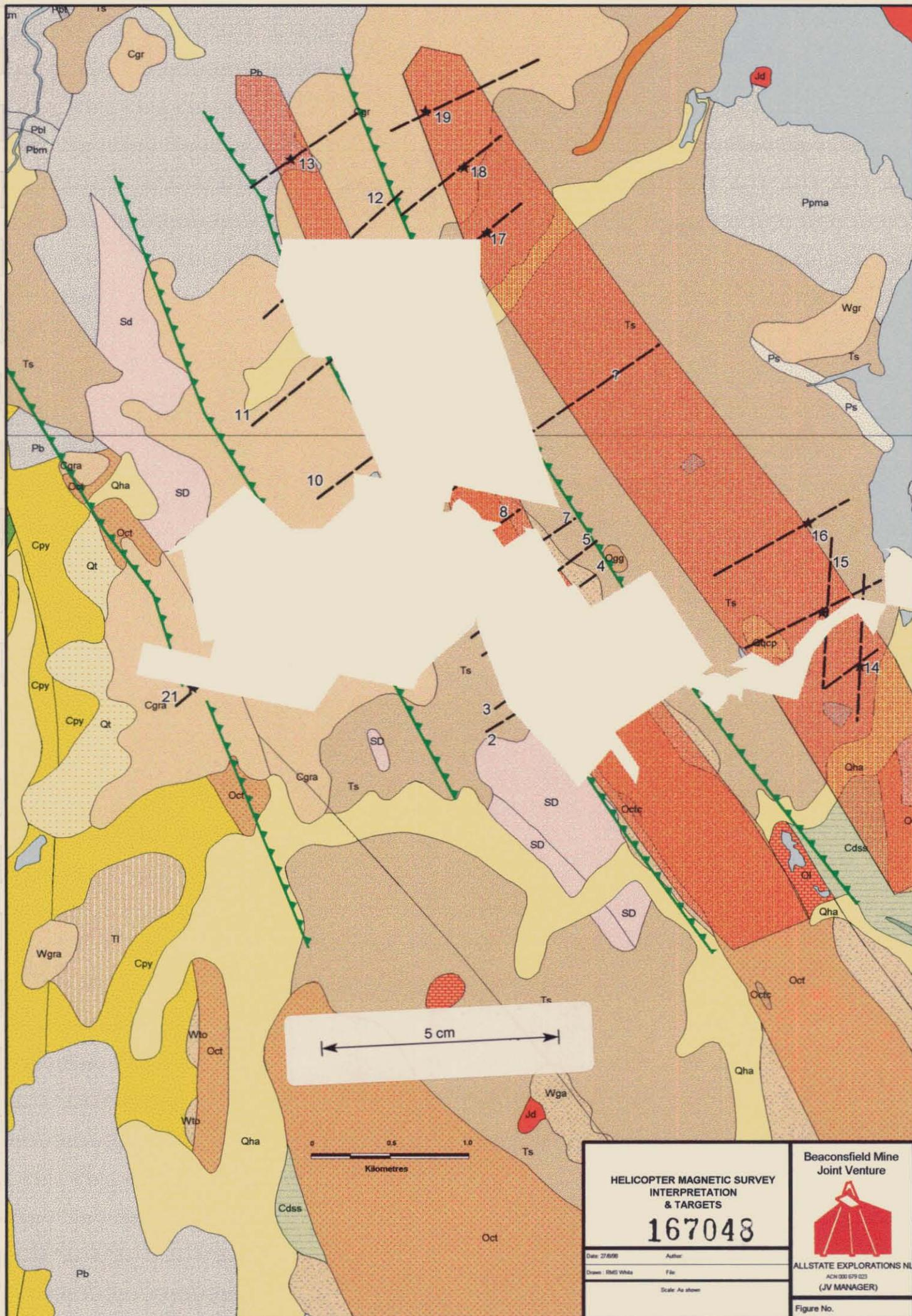
ALLSTATE EXPLORATIONS NL
 ACN 000 679 023
 (JV MANAGER)

Figure No. _____

167647

TOORONGA RESOURCES

amount of displacement. The possible direction of displacement is shown on Figure 5.2. These results need to be calibrated with known outcrop geology.



5 cm

0 0.5 1.0
Kilometres

HELICOPTER MAGNETIC SURVEY
INTERPRETATION
& TARGETS
167048

Date: 27/6/98 Author:
Drawn: RMS White File:
Scale: As shown

Beaconsfield Mine
Joint Venture

ALLSTATE EXPLORATIONS NL
ACN 000 079 023
(JV MANAGER)

Figure No.

6. RECOMMENDATIONS

That the air photos be scanned in to the computer and corrected for distortion so that they can be used to check cultural problems and enhance the interpretation.

That the preliminary magnetic interpretation be merged with the known geology. This will reveal if the features interpreted from the magnetic data are factual.

The helicopter magnetic data interpretation needs to be merged into the previous fixed wing magnetic interpretation to produce a more regional picture. Also the ground magnetic data collected around the town needs to be processed and merged.

That a structural geologist reviews the interpretations and geology in order to develop a new? structural model.

If future magnetic surveys are planed care should be taken selecting the flight direction in order to maximise the resolution of critical features.

167050

7. APPENDIX 1 Flying and Processing Specifications.

Company Flown by: UTS Geophysical Surveys
Company Processed: Baigent Geosciences Pty. Ltd.

AIRBORNE SURVEY EQUIPMENT:

Aircraft	Bell 206
Magnetometer	Scintrex CS-2 Caesium Vapour
Magnetometer Resolution	0.001 nT
Magnetometer Compensation	RMS AADC operating in real time
Magnetometer Sample Interval	0.1 seconds (approx 4.5 metres)
Data Acquisition	UTS
Data Recording	1 Gbyte Hard Disk
GPS Navigation System	Novatel

with Racal real time differential correction

AIRBORNE SURVEY SPECIFICATIONS:

Flight Line Direction	060 degrees
Flight Line Separation	50 metres
Tie Line Direction	150 degrees
Tie Line Separation	500 metres
Terrain Clearance	40 metres (MTC)

Survey flown	June 1998
UTS Geophysics Survey job number	A268

Data are in UTM Grid Zone	55
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MAGNETIC DATA CORRECTIONS:

Diurnal variations removed
IGRF(1995) updated to 1998.5 removed.

TOORONGA RESOURCES

167051

MAGNETIC DATA FORMAT:

Flight Number	i7	
space	x	
line number	a8	
date	a8	
fiducial	f10.0	-9999999.
zone number	f4.0	-99.
easting	f11.2	-9999999.00
northing	f11.2	-9999999.00
raw magnetics	f10.3	-9999.000
diurnal variation	f10.3	-9999.000
IGRF value	f10.3	-9999.000
levelled magnetics	f10.3	-9999.000
radar altimeter	f6.1	-999.0
gps height	f6.1	-999.0
dtm	f6.1	-99.0
local time	f9.5	-99.00
linefeed character		

logical record length of 128 bytes

8. APPENDIX 2 IMAGES.

Various Images and files created from the Heli Mag Survey Flown in June 1998

1VDCOL.TAB	1vd of RTP Colour.
1VDSUN.TAB	1vd of RTP SUN.
50RCOL.TAB	50r of RTP Colour.
AGC1.TAB	100m AGC of 50r of RTP Sun.
AGC10.TAB	50m AGC of 50R of regridded masked RTP Colour.
AGC11.TAB	50m AGC of 50R of (100R - 25r) of RTP Colour.
AGC12.TAB	100m AGC of 100r of RTP Colour clipped -10 to 10.
AGC2.TAB	100m AGC of 75r of RTP Sun.
AGC3.TAB	50m AGC of 75r of RTP Sun.
AGC4.TAB	50m AGC of 50r of RTP Sun.
AGC5.TAB	75m AGC of 75r of RTP Sun.
AGC50R.TAB	50m AGC of 50r of RTP Colour.
AGC6.TAB	75m AGC of 75r of RTP Colour.
AGC7.TAB	100m AGC of 1vd of RTP Sun.
AGC8.TAB	50m AGC of 50r with sun Dec 330 inc 30.
AGC9COL.TAB	50 AGC of 50r masked RTP Colour.
AGG07174.TAB	50m AGC of 50r of RTP with sun Dec 071, inc 74.
AGG26261.TAB	50m AGC of 50r of RTP with sun Dec 262, inc 61.
AGG28658.TAB	50m AGC of 50r of RTP with sun Dec 286, inc 58.
AGG34684.TAB	50m AGC of 50r of RTP with sun Dec 346, inc 84.
AXIS.TAB	Grid to go around plots.
CLP1COL.TAB	50m AGC of 50r of RTP colours clipped -10 to 10.
DTM25F.TAB	25m filtered DTM Colour.
DTMBAR.TAB	Bar Scale for Contour DTM.
DTMCOL.TAB	Colour DTM.
DTMCONT.TAB	Colour Contours of DTM.
DTMSUN.TAB	DTM Sun.
INIERP1.TAB	Magnetic Faults.
MASK.TAB	Mask used to remove magnetic spikes (houses etc.)
MINES.TAB	Location of Mines.
RTP1VD.TAB	RTP colour with 1vd intensity.
RTPAGC50.TAB	RTP Colour with 50m AGC of 50r of RTP intensity.
RTPCOL.TAB	RTP Colour Image.
RTPSUN.TAB	RTP Sun.
TEMPORA.TAB	50m AGC of 50r of masked RTP Colour clipped -10 to 10.
TRENDS.TAB	Magnetic Trends.

Terms used.

RTP = Reduced To the Pole magnetic image.

1vd = first vertical derivative.

50r = 50m residual of a Gaussian filter of the RTP data.

AGC = Automatic Gain Control.

TOORONGA RESOURCES

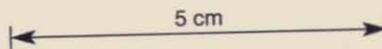
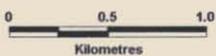
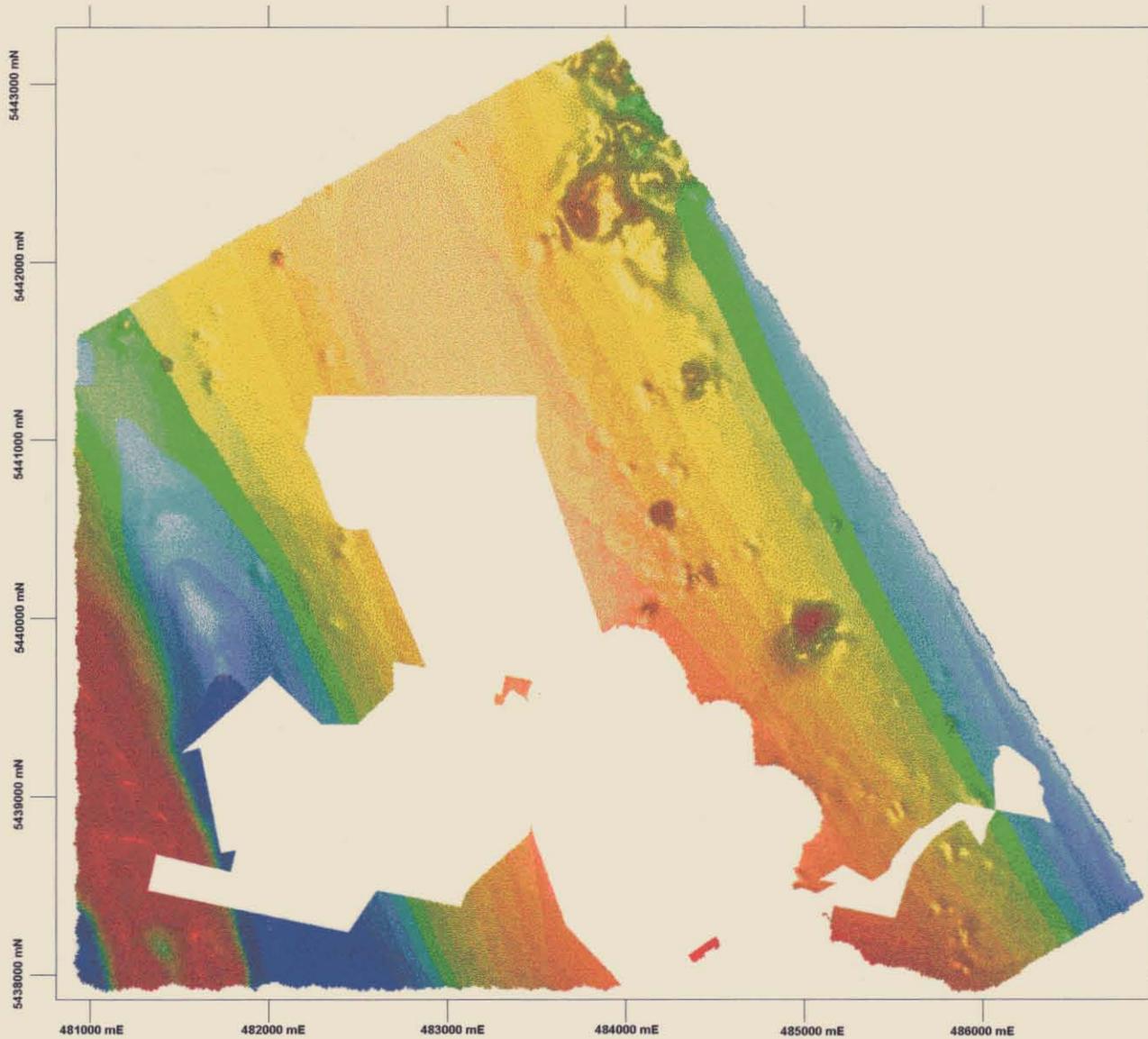
167053

DTM = Digital Terrain Model.

COL = Colour Image.

SUN = Composite Sun Angle Images made up of 3 sun angles 0,45 and 90 degrees. The Inclination is 30 degrees.

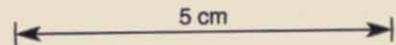
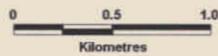
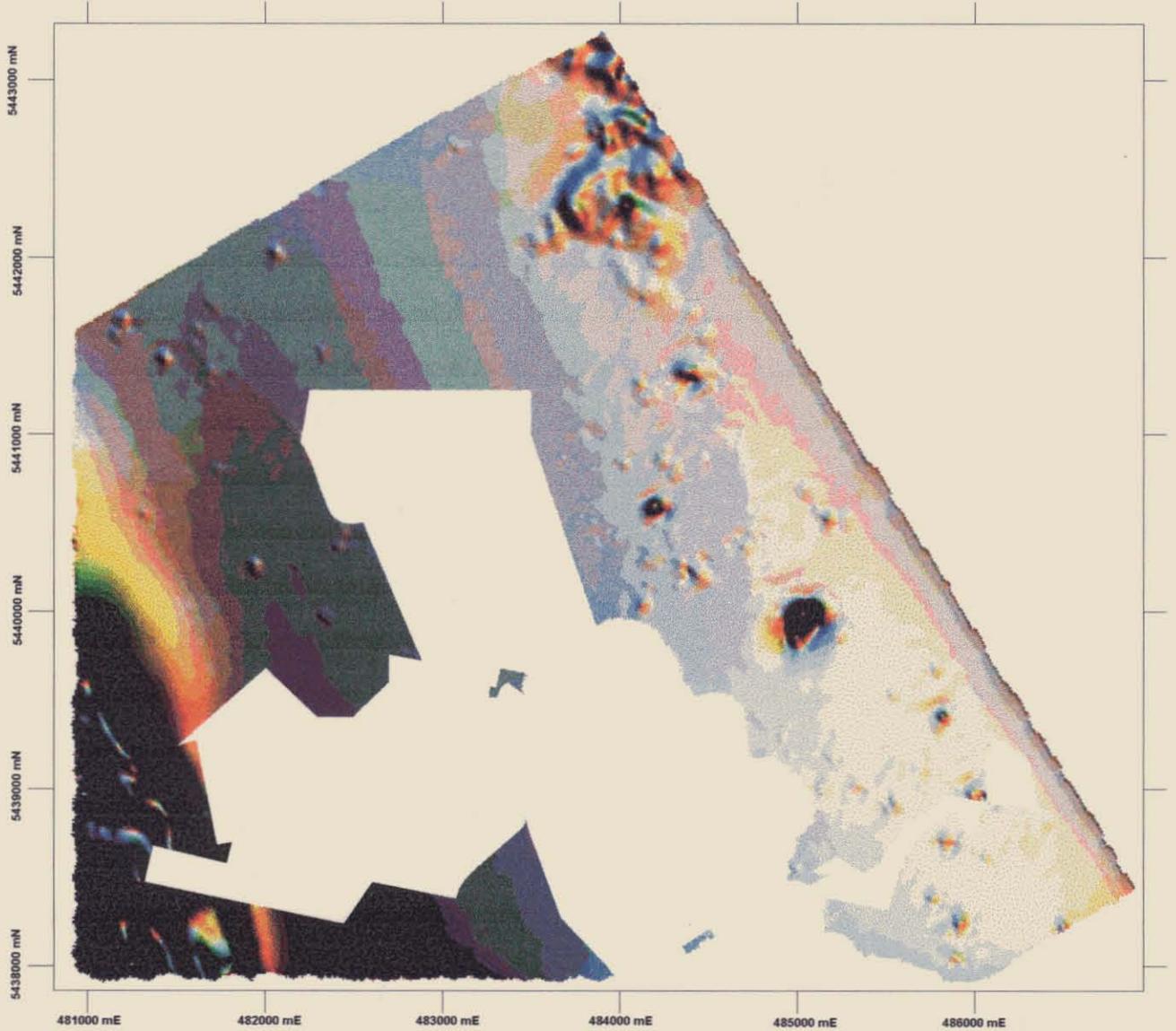
BEACONSFIELD HELI MAG DATA



167054

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RTP Colour		
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Author: RMS White	File:	
Scale: as shown		
Figure No.		

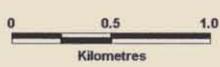
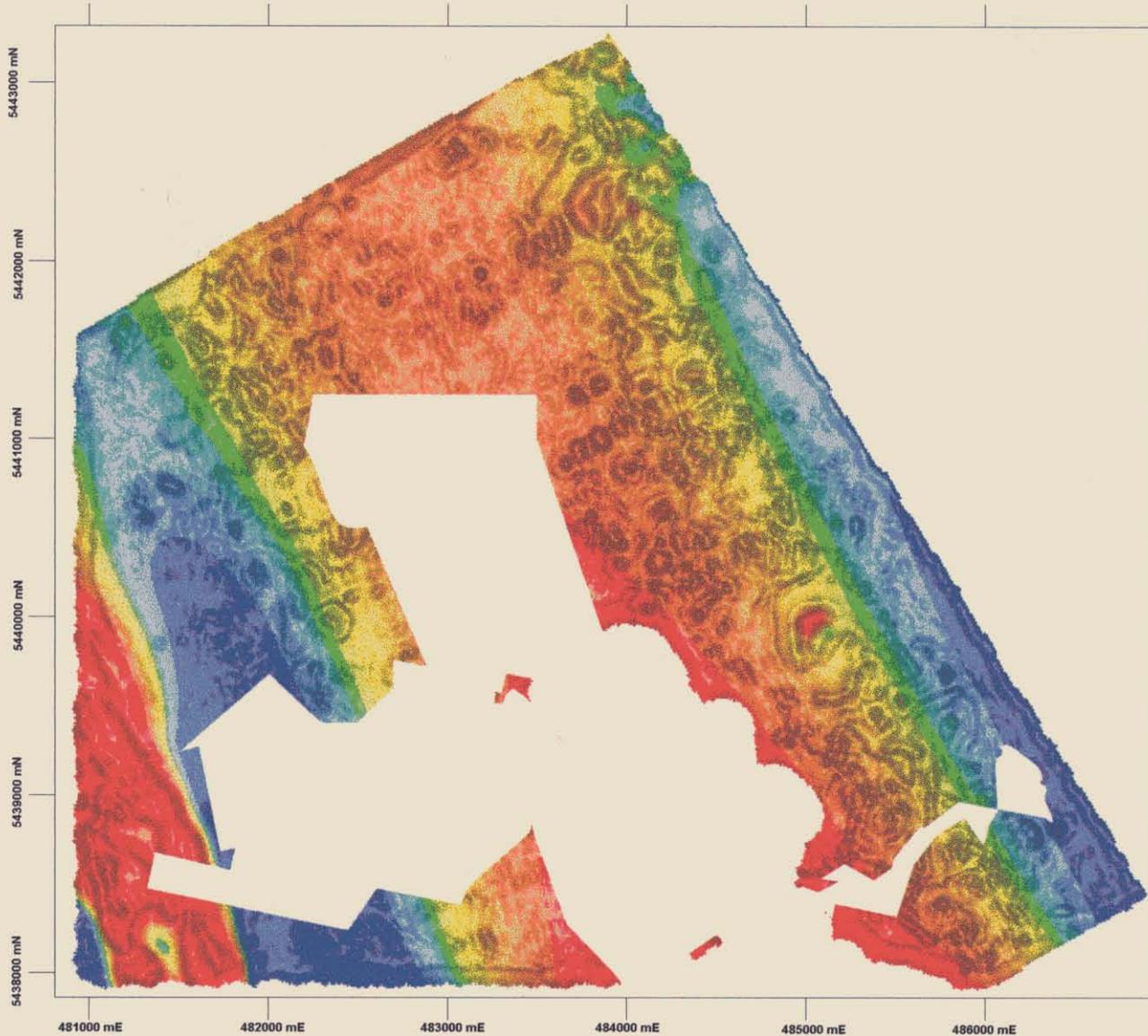
BEACONSFIELD HELI MAG DATA



167055

HELICOPTER MAGNETIC SURVEY		Beaconsfield Mine Joint Venture
RTP Composite Sun Angle		
Date: 27/6/98	Author:	 ALLSTATE EXPLORATIONS NL ACN 000 679 023 (JV MANAGER)
Author: RMD White	File:	
Scale: as shown		
Figure No.		

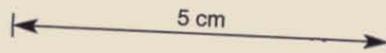
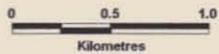
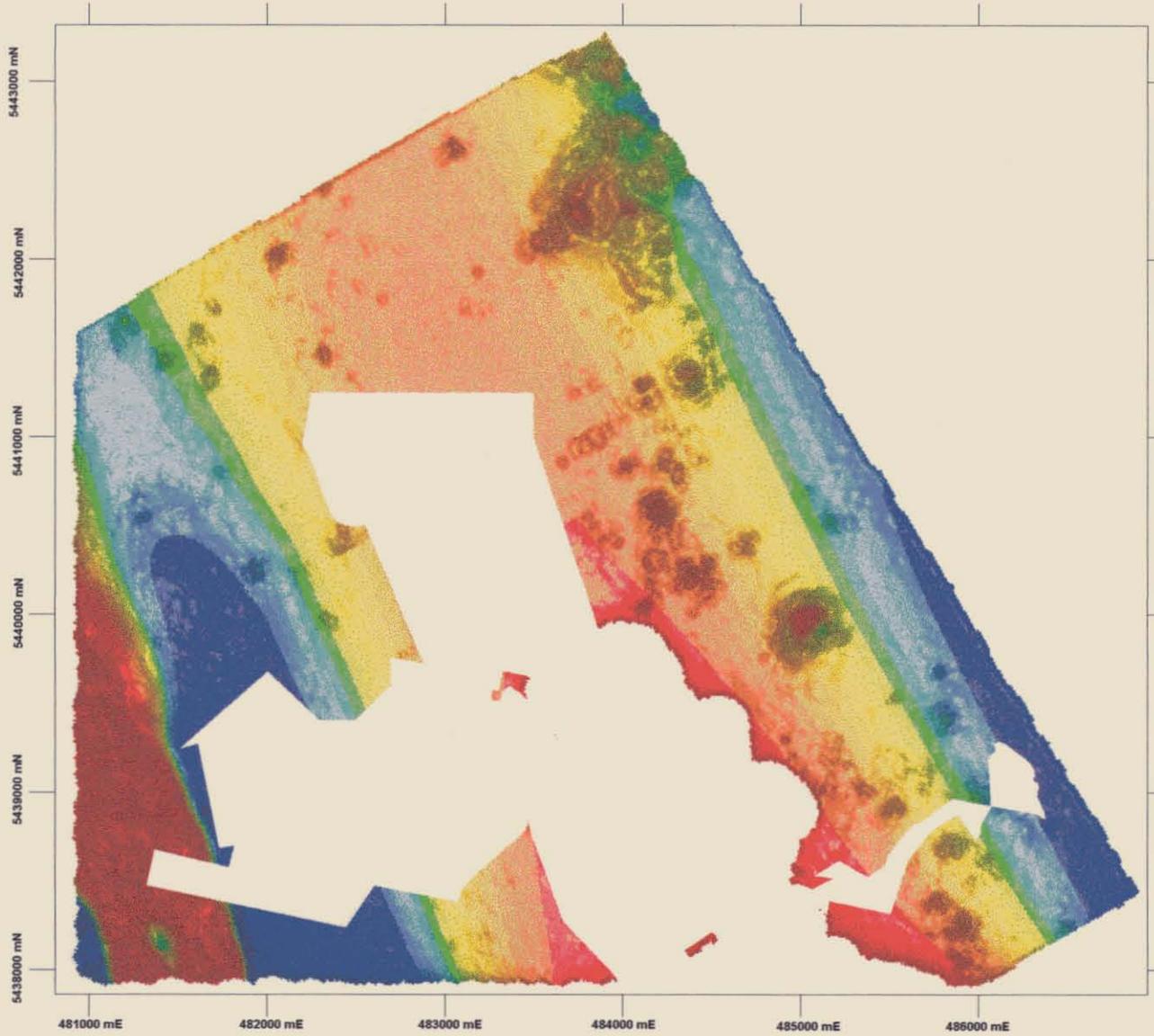
BEACONSFIELD HELI MAG DATA



167056

HELICOPTER MAGNETIC SURVEY RTP Colour 50m AGC, 50r Intensity		Beaconsfield Mine Joint Venture 
Date: 27/6/98 Author: RMS White	File: Scale: as shown	
		ALLSTATE EXPLORATIONS NI <small>ACN 000 679 023</small> (JV MANAGER)
		Figure No.

BEACONSFIELD HELI MAG DATA



167057

HELICOPTER MAGNETIC SURVEY

**RTP Colour
with 1 vd Intensity**

Date: 27/6/98 Author:

Author: RMS/White File:

Scale: as shown

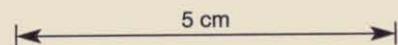
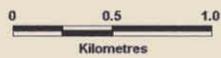
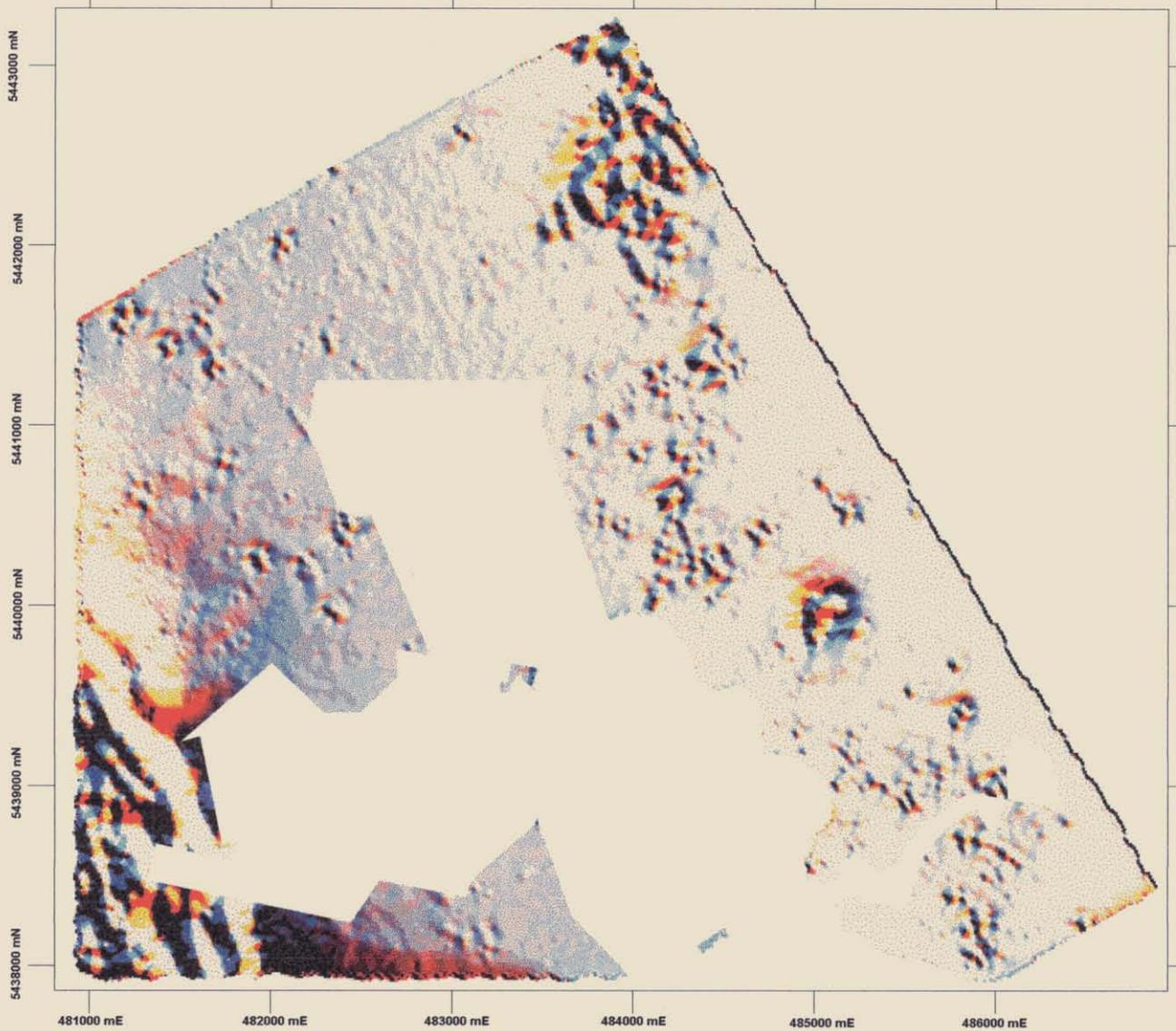
Beaconsfield Mine
Joint Venture



ALLSTATE EXPLORATIONS N
ACN 000 679 023
(JV MANAGER)

Figure No.

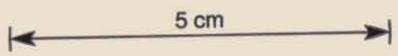
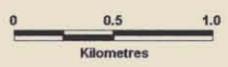
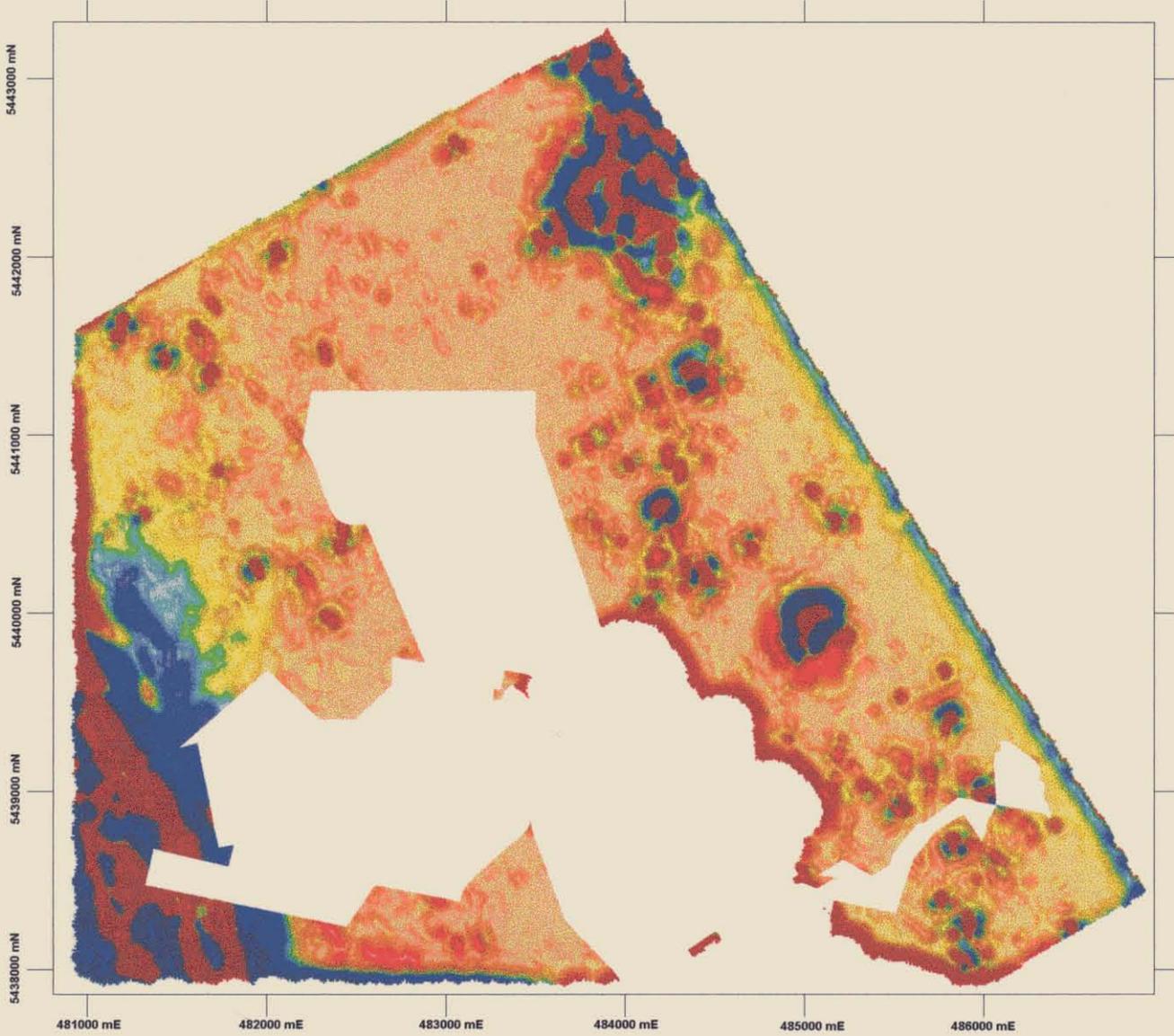
BEACONSFIELD HELI MAG DATA



167058

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Author: RMS White	File:	
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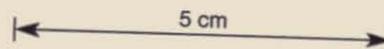
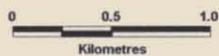
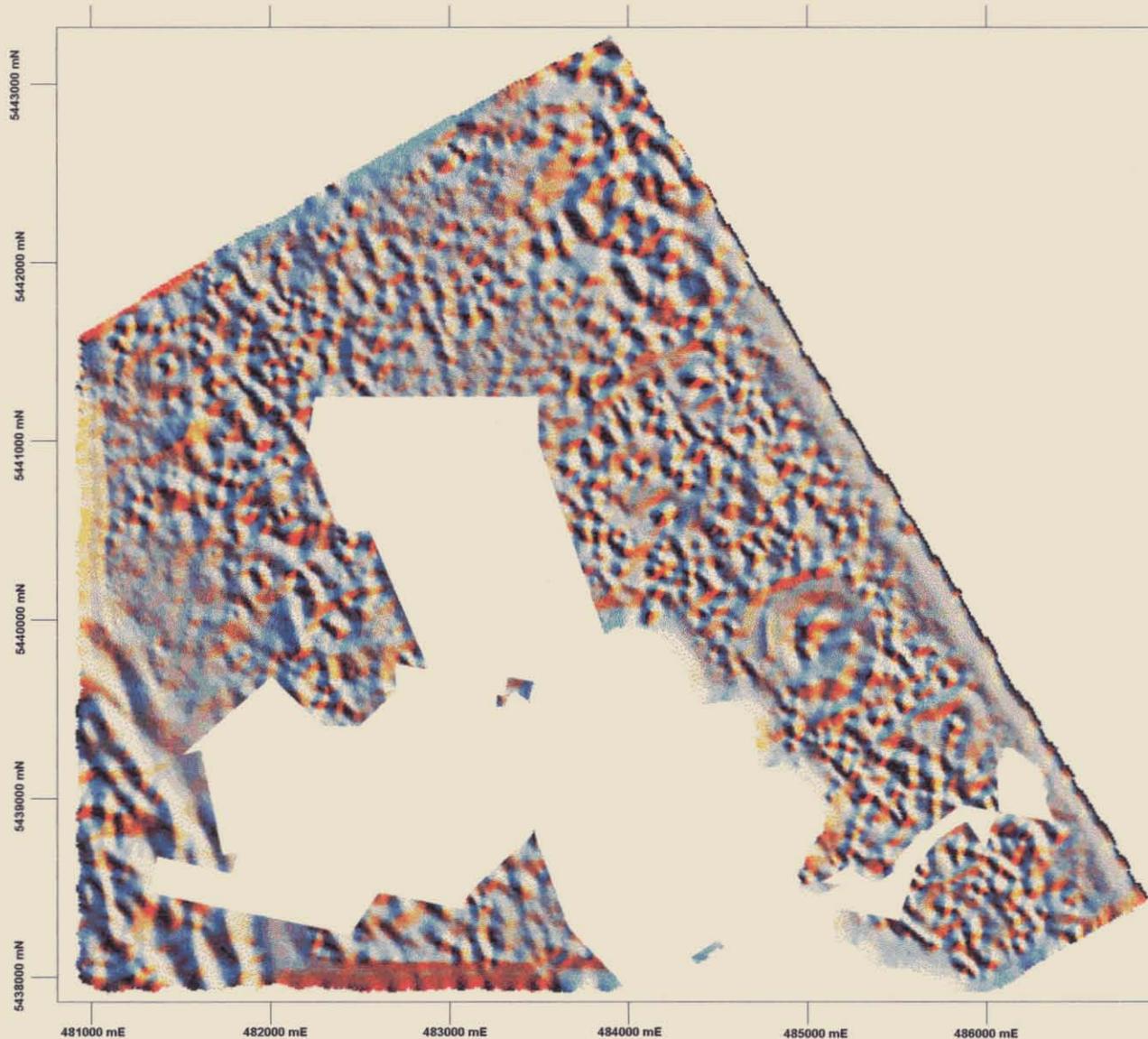
BEACONSFIELD HELI MAG DATA



167058A

HELICOPTER MAGNETIC SURVEY		Beaconsfield Mine Joint Venture
50m Residual of RTP		
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Author: RMS White	File:	
Scale as shown		
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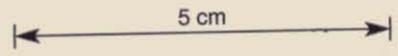
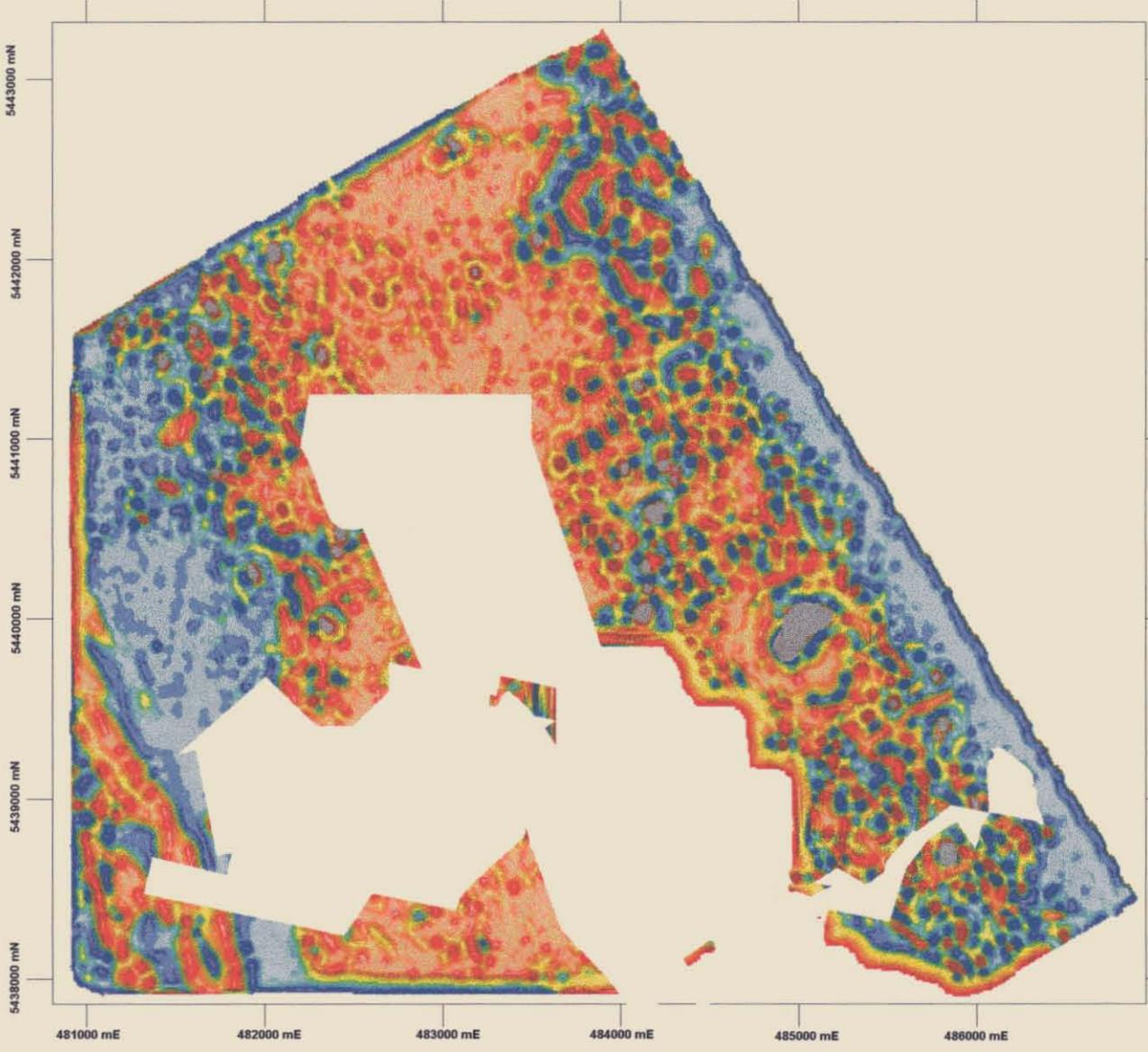
BEACONSFIELD HELI MAG DATA



167059

HELICOPTER MAGNETIC SURVEY 100m AGC 50m Residual of RTP Magnetics		Beaconsfield Mine Joint Venture  ALLSTATE EXPLORATIONS NL <small>ACN 000 679 023</small> (JV MANAGER)
Date: 27/6/98 Author: RMS White Scale: as shown	Author: RMS White File:	
		Figure No.

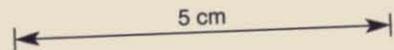
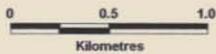
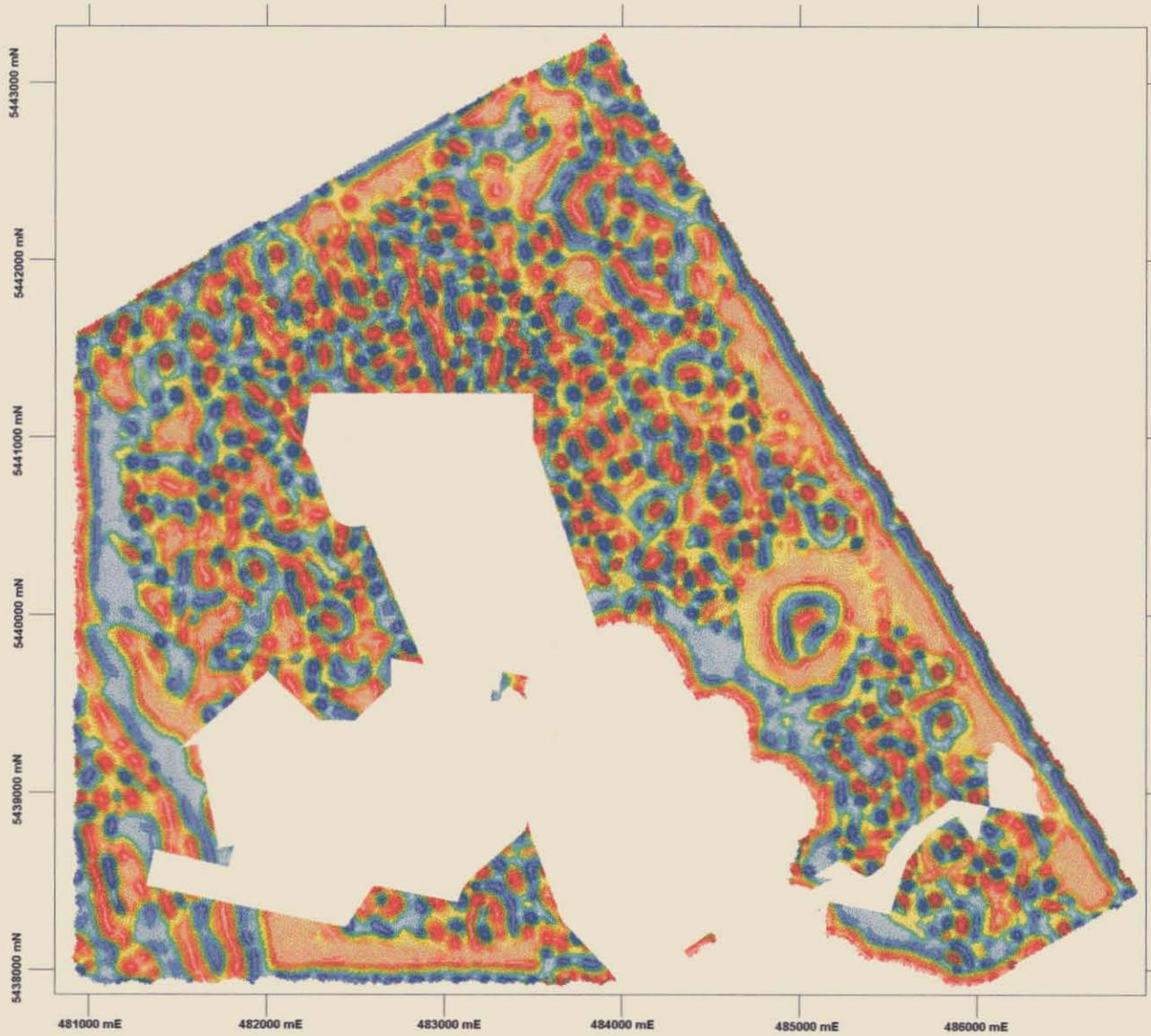
BEACONSFIELD HELI MAG DATA



167060

<p>HELICOPTER MAGNETIC SURVEY</p> <p>50m AGC 50r of Masked RTP</p>		<p>Beaconsfield Mine Joint Venture</p> 
<p>Date: 27/6/98</p> <p>Author: RMC White</p>	<p>File:</p> <p>Scale: as shown</p>	
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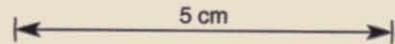
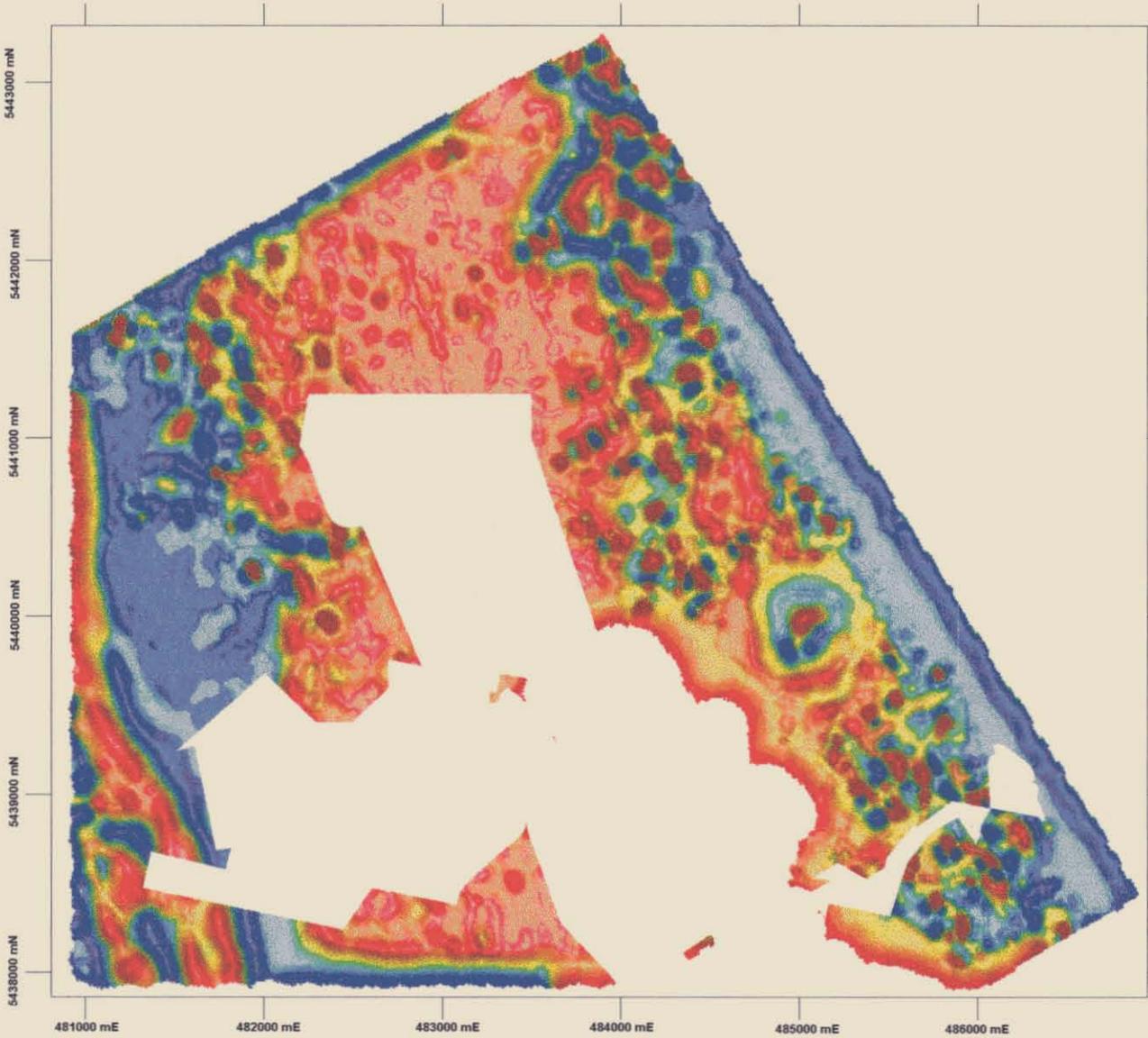
BEACONSFIELD HELI MAG DATA



167061

<p>HELICOPTER MAGNETIC SURVEY 50m AGC of 50m Residual of (100mR-25mR) RTP Magnetics</p>		<p>Beaconsfield Mine Joint Venture</p> 
<p>Date: 27/6/98</p>	<p>Author:</p>	
<p>Author: RMS Whitt</p>	<p>File:</p>	<p>ALLSTATE EXPLORATIONS N ACH 000 079 023 (JV MANAGER)</p>
<p>Scale as shown</p>		
<p>Figure No.</p>		

BEACONSFIELD HELI MAG DATA



167062

HELICOPTER MAGNETIC SURVEY	
100m AGC of 100m Residual of RTP Magnetics	
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Author: RMD White	File:
Scale: as shown	

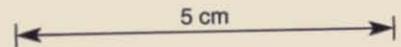
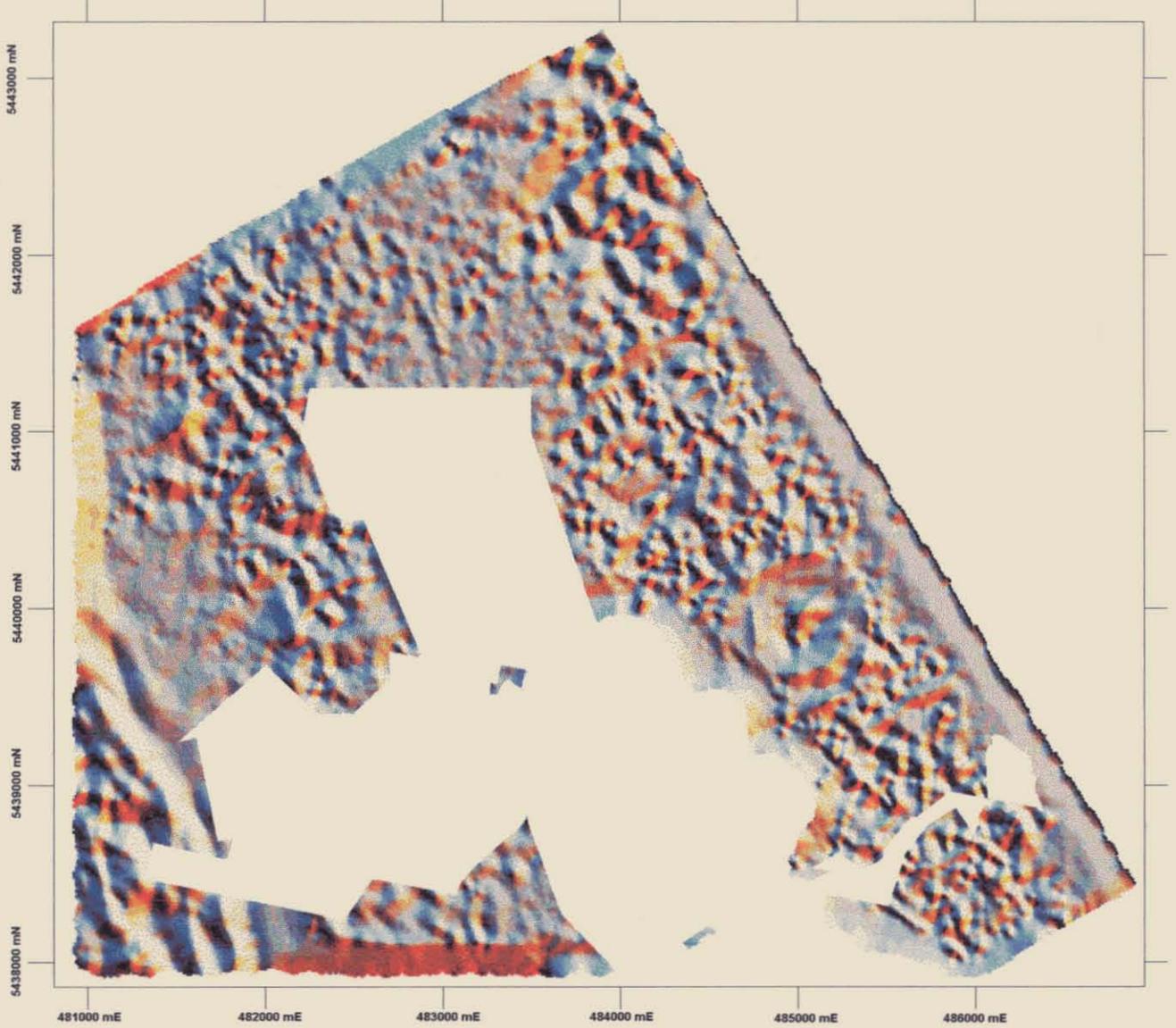
Beaconsfield Mine
Joint Venture



ALLSTATE EXPLORATIONS NI
ACN 000 679 023
(JV MANAGER)

Figure No.

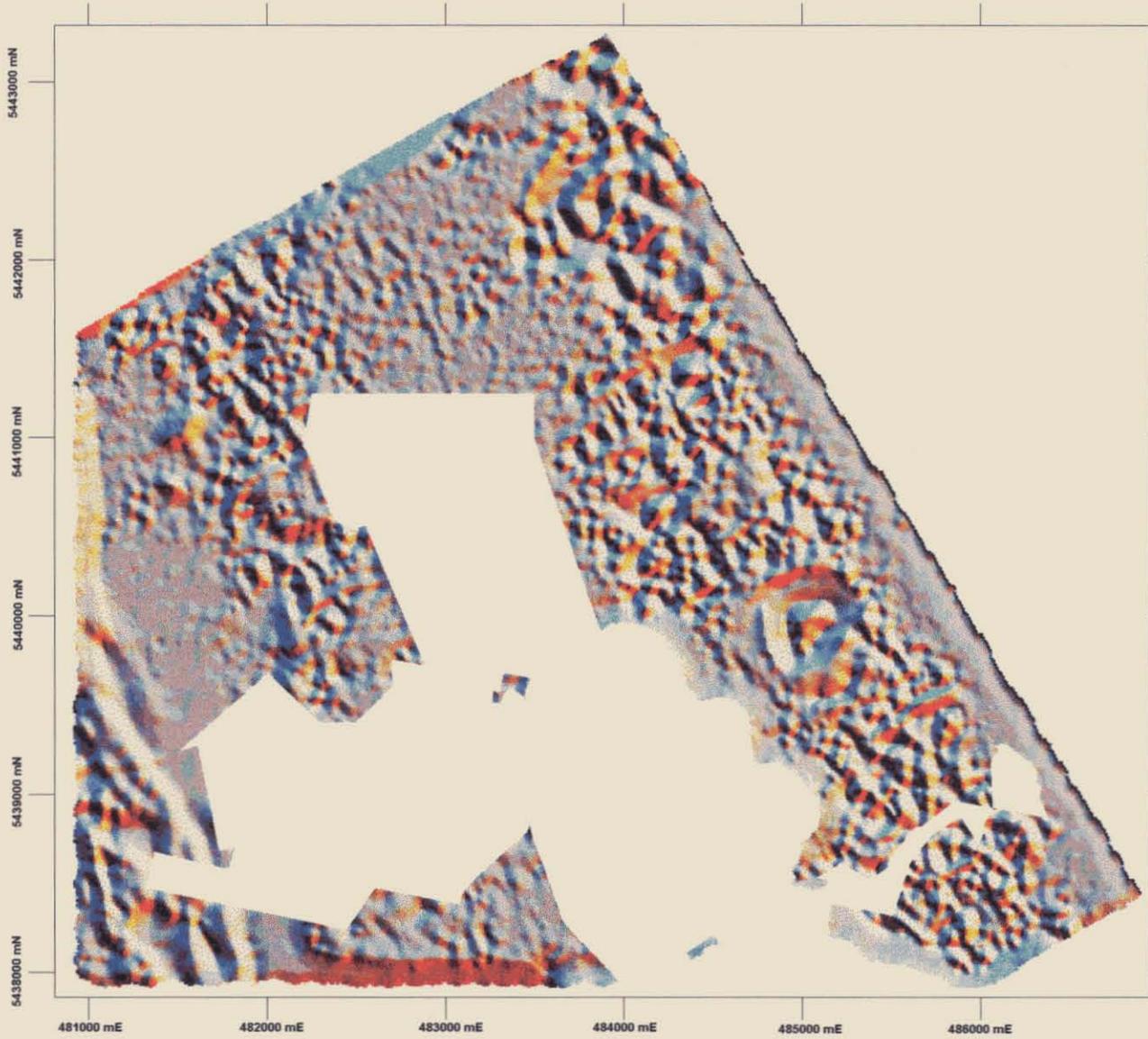
BEACONSFIELD HELI MAG DATA



167063

<p>HELICOPTER MAGNETIC SURVEY</p> <p>100m AGC of 75m Residual of RTP Magnetics</p>		<p>Beaconsfield Mine Joint Venture</p> 
<p>Date: 27/8/98</p> <p>Author: RMS White</p>	<p>Author: RMS White</p> <p>File:</p> <p>Scale: as shown</p>	<p>ALLSTATE EXPLORATIONS N</p> <p>AGN 000 075 023 (JV MANAGER)</p>
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BEACONSFIELD HELI MAG DATA



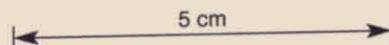
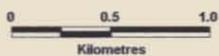
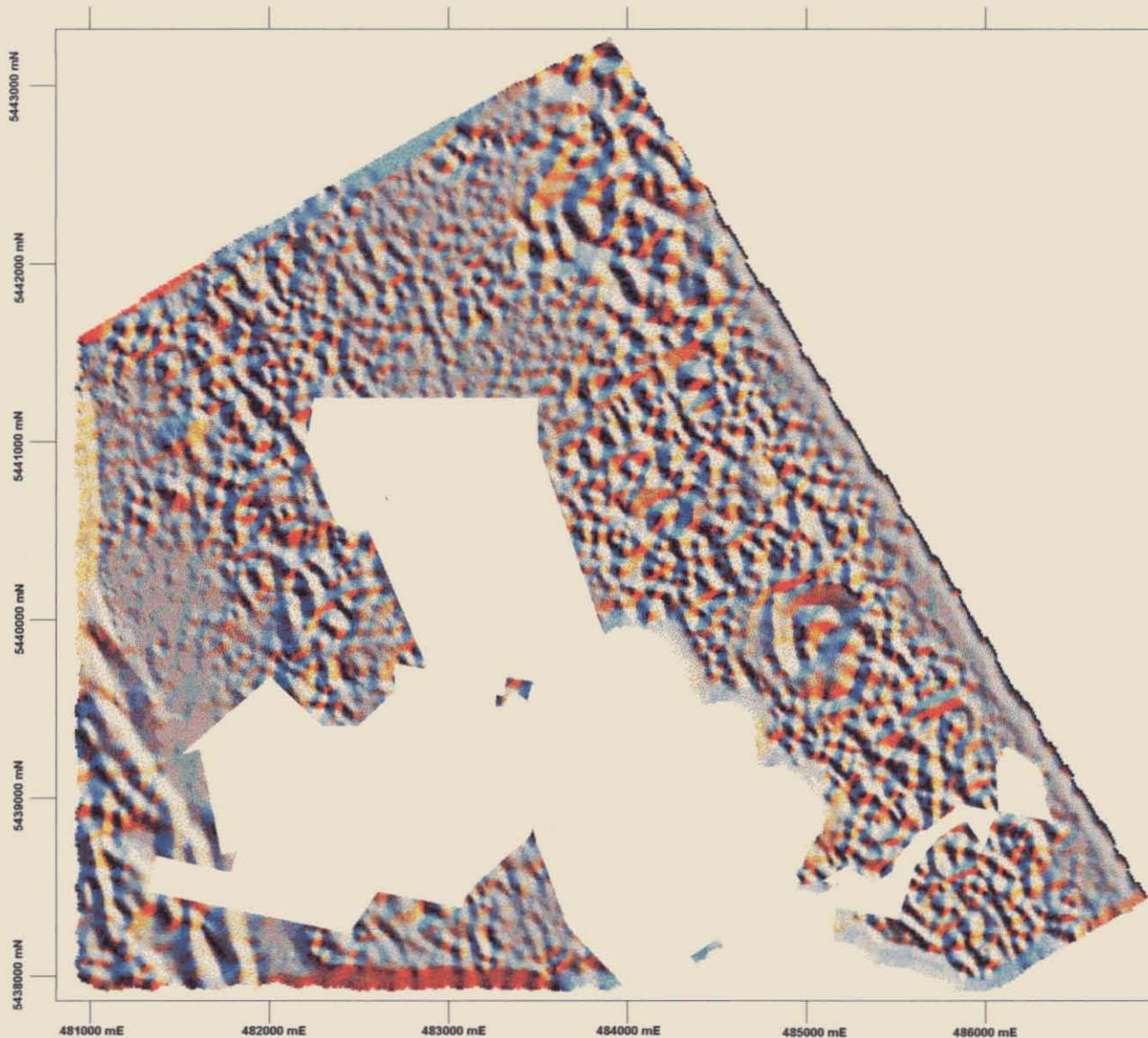
0 0.5 1.0
Kilometres

5 cm

167064

HELICOPTER MAGNETIC SURVEY		Beaconsfield Mine Joint Venture 
50m AGC of 75r of RTP Composite Sun Angle		
Draw: 27/006	Author:	ALLSTATE EXPLORATIONS N ACN100 079 023 (JV MANAGER)
Author: RMS White	File:	
Scale: as shown		
		Figure No.

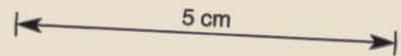
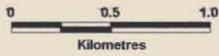
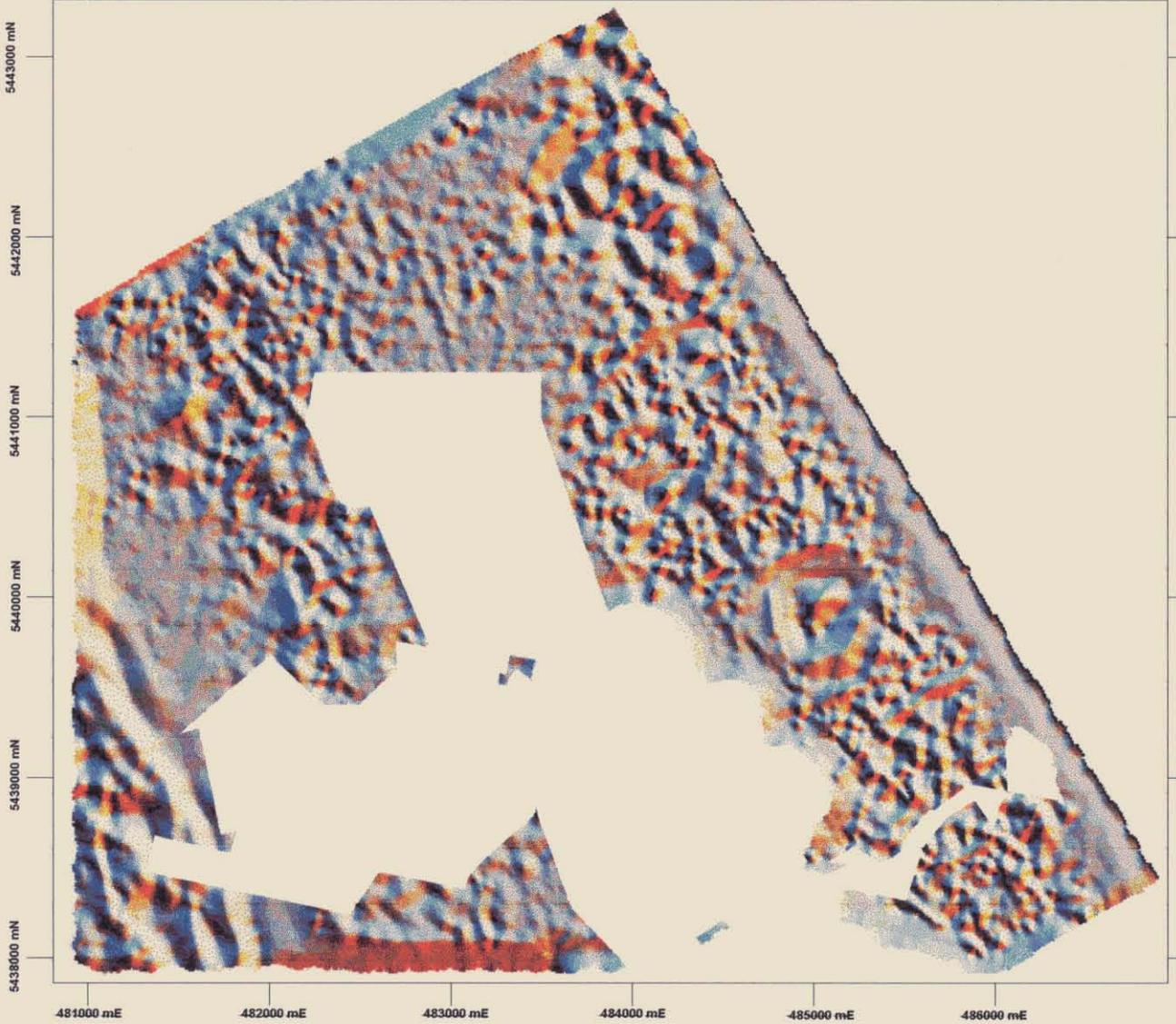
BEACONSFIELD HELI MAG DATA



167065

HELICOPTER MAGNETIC SURVEY 50m AGC of 50r of RTP Composite Sun Angle		Beaconsfield Mine Joint Venture 
Date: 2/6/98 Author: RMS White	Author: RMS White File:	
Scale: as shown		ALLSTATE EXPLORATIONS NI <small>ACN 00 079 023</small> (JV MANAGER)
		Figure No.

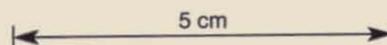
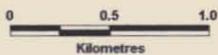
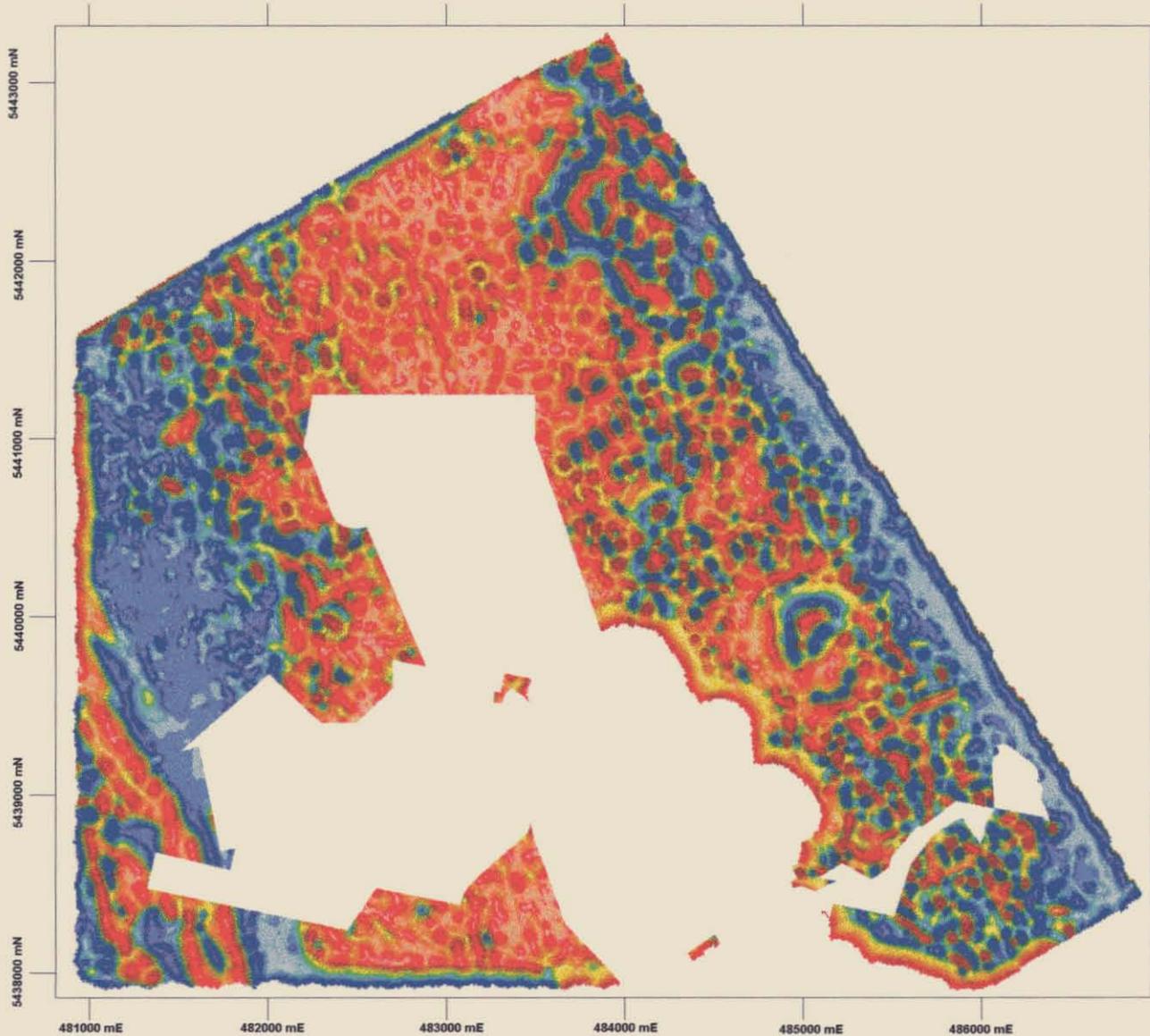
BEACONSFIELD HELI MAG DATA



167066

HELICOPTER MAGNETIC SURVEY		Beaconsfield Mine Joint Venture 
75m AGC of 75r of RTP Composite Sun Angle		
Date: 27/6/98	Author:	ALLSTATE EXPLORATIONS NI ACN 000 679 023 (JV MANAGER)
Author: RMS White	File:	
Scale: as shown		
		Figure No.

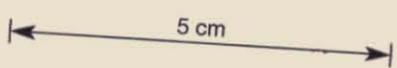
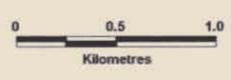
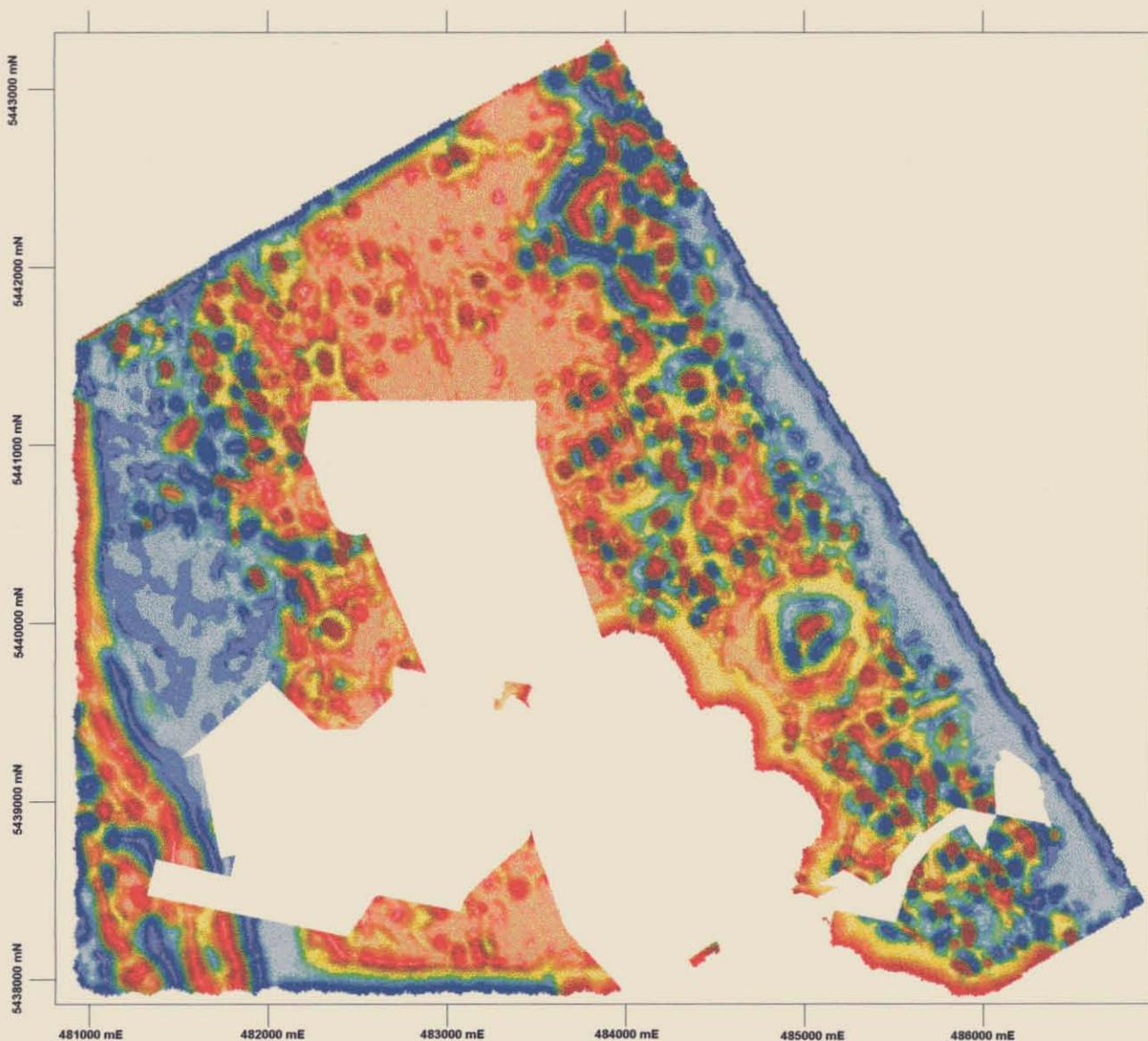
BEACONSFIELD HELI MAG DATA



167067

<p>HELICOPTER MAGNETIC SURVEY</p> <p>50m AGC of 50r of RTP</p>		<p>Beaconsfield Mine Joint Venture</p> 
<p>Date: 27/05/98</p> <p>Author: RMS White</p>	<p>File:</p> <p>Scale: as shown</p>	
		<p>ALLSTATE EXPLORATIONS NI ACH 000 679 023 (JV MANAGER)</p>
		<p>Figure No.</p>

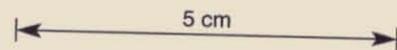
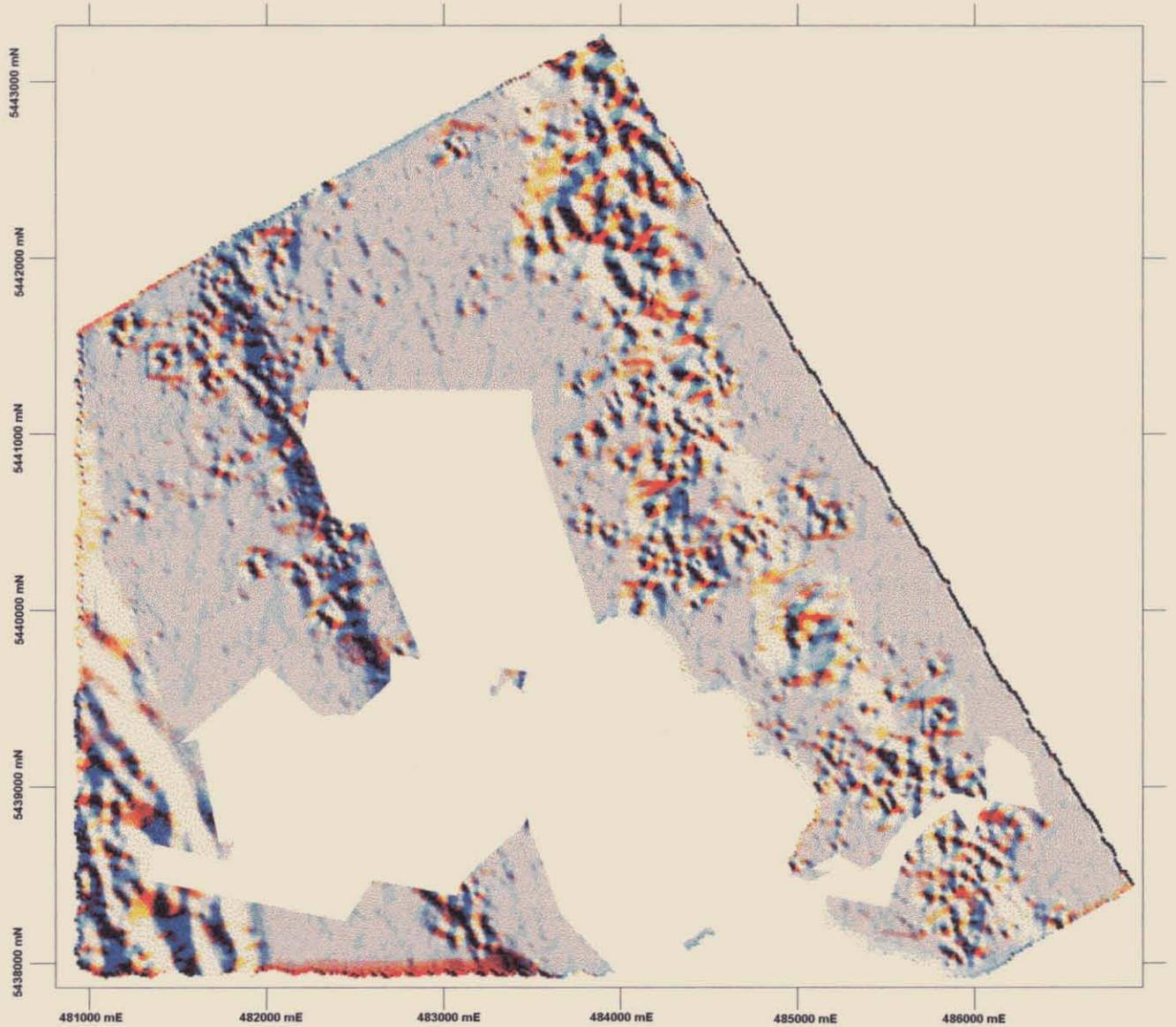
BEACONSFIELD HELI MAG DATA



167068

HELICOPTER MAGNETIC SURVEY		
75m AGC 75r of RTP		
Date: 27/09/06	Author:	ALLSTATE EXPLORATIONS NI ACN 050 679 023 (JV MANAGER)
Author: RMS White	File:	
Scale as shown		
		Figure No.

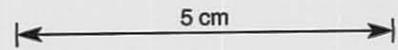
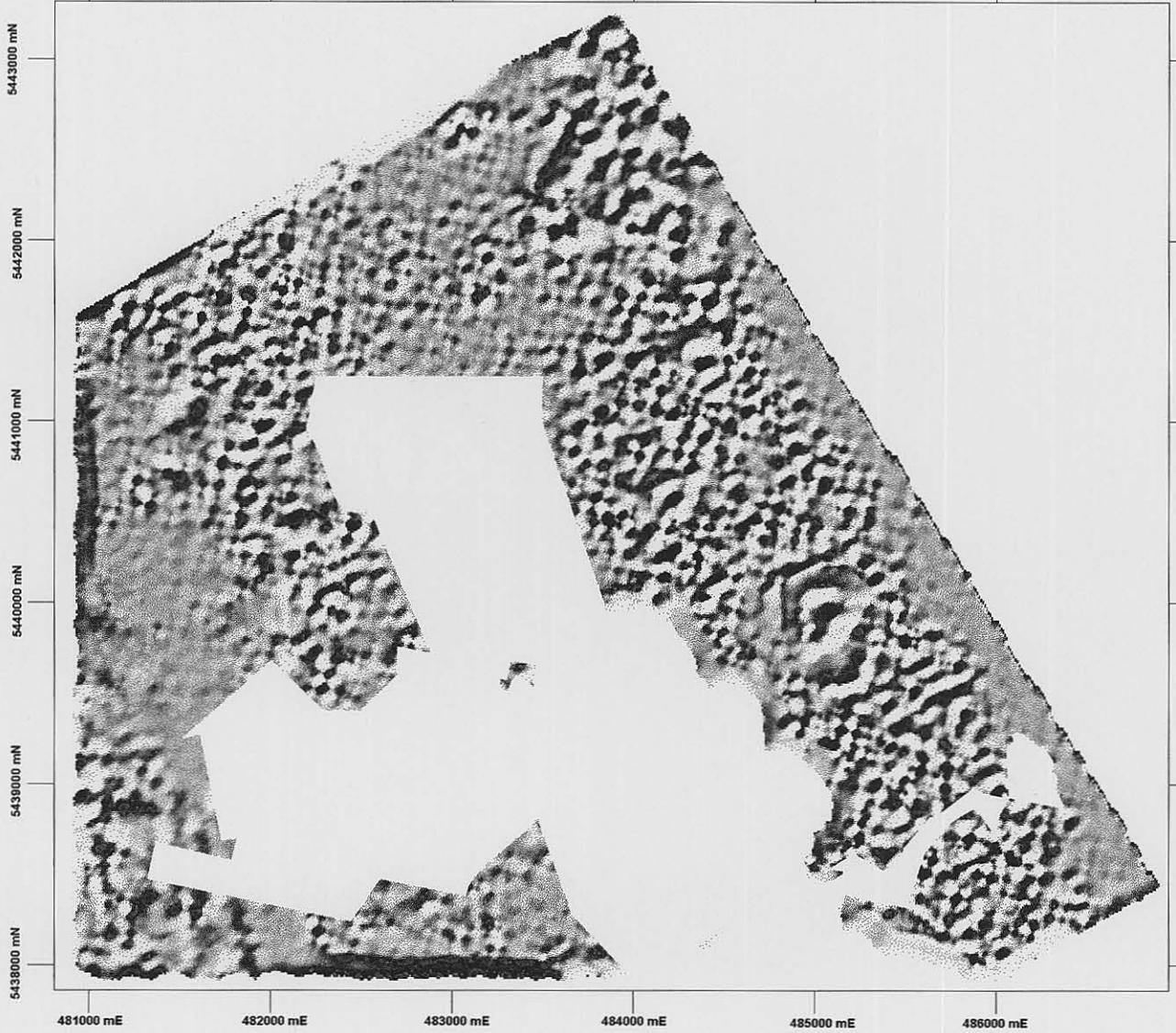
BEACONSFIELD HELI MAG DATA



167069

HELICOPTER MAGNETIC SURVEY		Beaconsfield Mine Joint Venture  ALLSTATE EXPLORATIONS NI <small>ACH 380-679-023</small> (JV MANAGER)
100m AGC of 1vd Composite Sun Angle		
<small>Date:</small> 27/6/96	<small>Author:</small>	Figure No.
<small>Author:</small> RMS White	<small>File:</small>	
<small>Scale:</small> as shown		

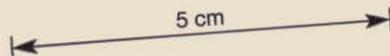
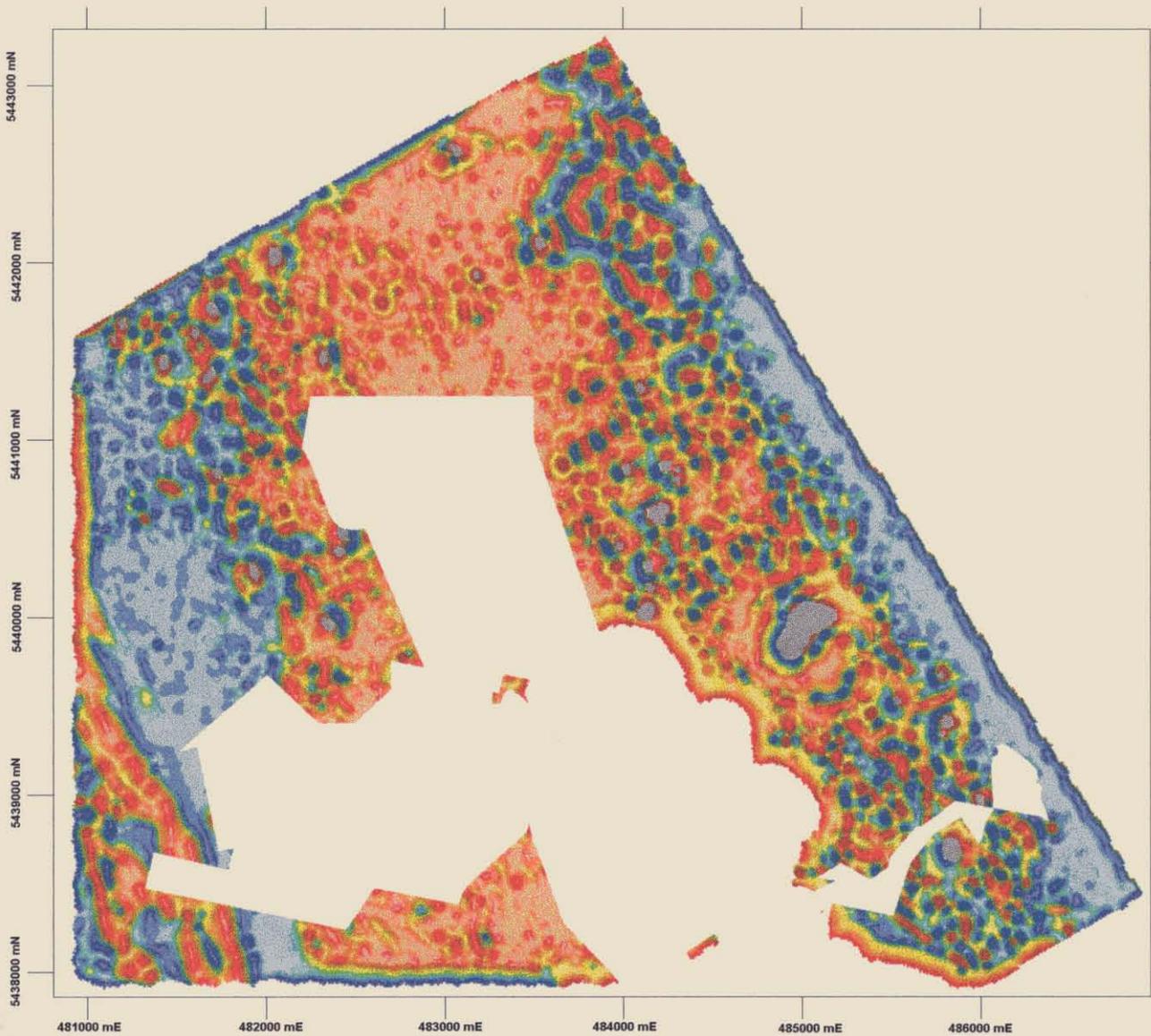
BEACONSFIELD HELI MAG DATA



167070

<p>HELICOPTER MAGNETIC SURVEY</p> <p>50m AGC of 50r with Sun Dec 330 inc. 30 degrees</p>		<p>Beaconsfield Mine Joint Venture</p>
<p>Date: 27/6/98</p> <p>Author: RMS White</p>	<p>File:</p> <p>Scale: as shown</p>	
		<p>ALLSTATE EXPLORATIONS NI ACN 000 679 023 (JV MANAGER)</p>
		<p>Figure No.</p>

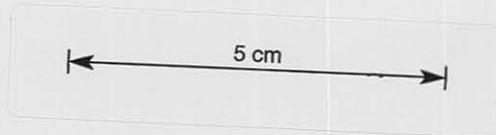
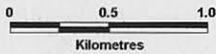
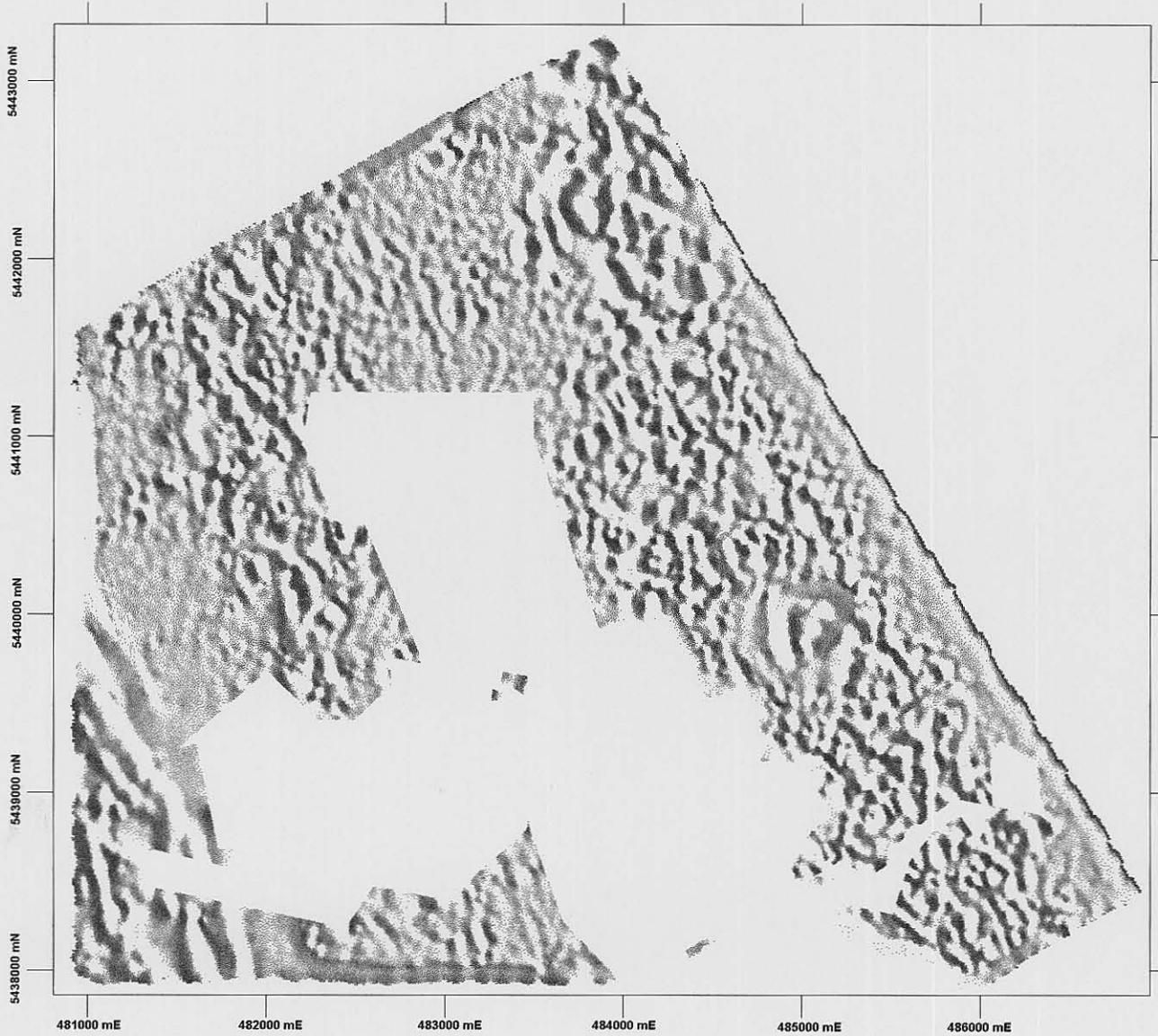
BEACONSFIELD HELI MAG DATA



167071

HELICOPTER MAGNETIC SURVEY		Beaconsfield Mine Joint Venture
50m AGC of 50r Masked RTP Colour		
Date: 27/6/98	Author:	
Author: RMS White	File:	
Scale: as shown		
		Figure No.

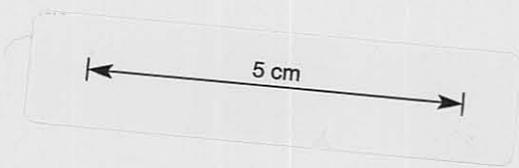
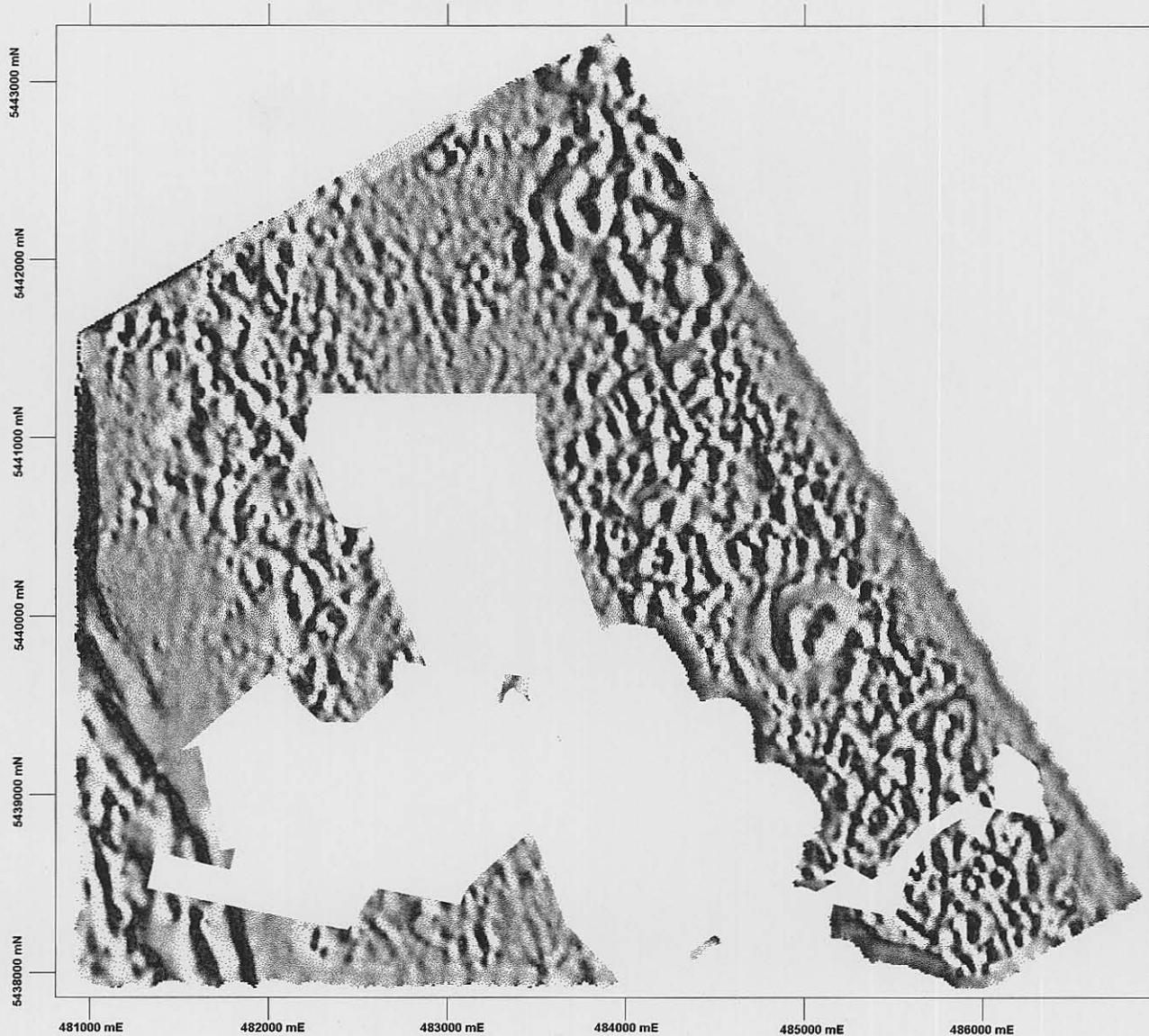
BEACONSFIELD HELI MAG DATA



167072

<p>HELICOPTER MAGNETIC SURVEY</p> <p>50m AGC of 50r of RTP with Sun Dec 071, inc 74</p>		<p>Beaconsfield Mine Joint Venture</p>
<p>Date: 27/8/98</p> <p>Author: RMS White</p>	<p>Author:</p> <p>File:</p> <p>Scale: as shown</p>	
		<p>ALLSTATE EXPLORATIONS NI ACN 000 679 023 (JV MANAGER)</p>
		<p>Figure No.</p>

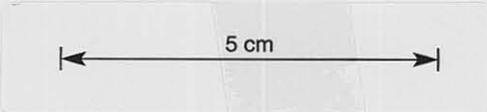
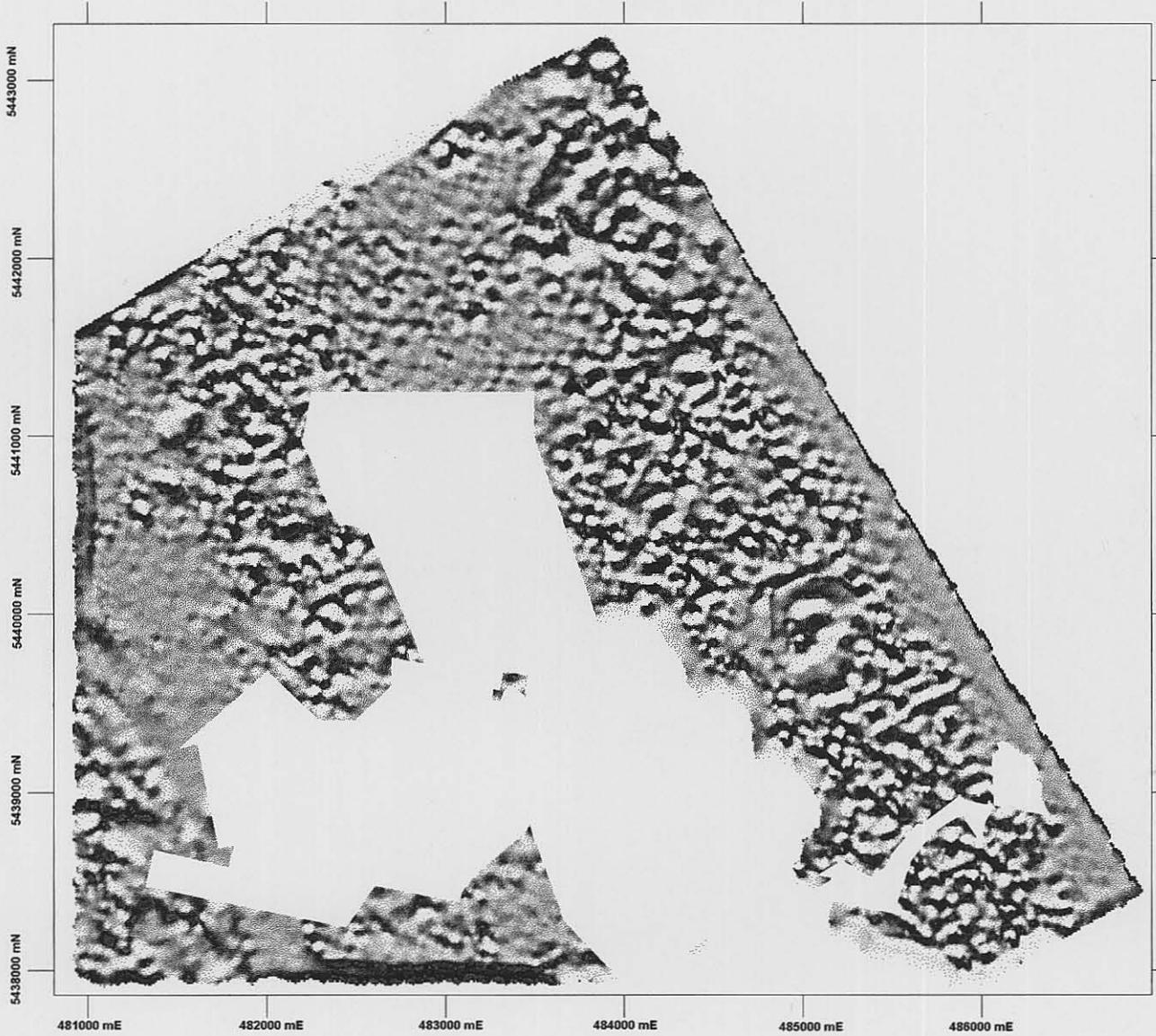
BEACONSFIELD HELI MAG DATA



167073

<p>HELICOPTER MAGNETIC SURVEY</p> <p>50m AGC of 50r of RTP with Sun Dec 262, inc 61</p>		<p>Beaconsfield Mine Joint Venture</p>
<p>Date: 27/6/98</p> <p>Author: RMS White</p>	<p>Author: RMS White</p> <p>File:</p> <p>Scale: as shown</p>	<p>ALLSTATE EXPLORATIONS NL ACN 000 679 023 (JV MANAGER)</p>
<p>Figure No.</p>		

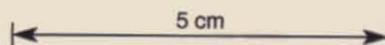
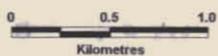
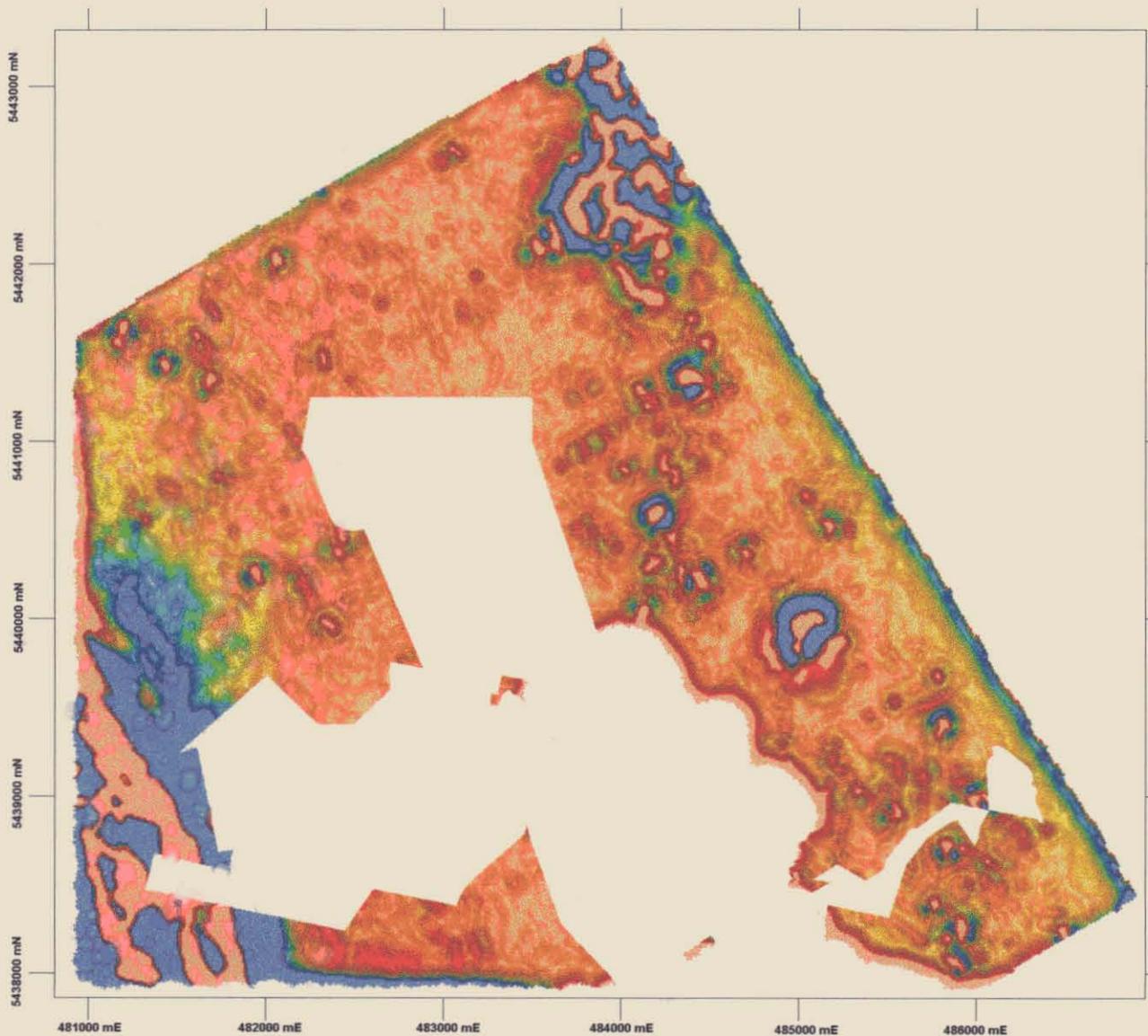
BEACONSFIELD HELI MAG DATA



167074

<p>HELICOPTER MAGNETIC SURVEY</p> <p>50m AGC of 50r of RTP with Sun Dec 346, inc 84</p>		<p>Beaconsfield Mine Joint Venture</p> 
<p>Date: 27/8/98</p>	<p>Author:</p>	<p>ALLSTATE EXPLORATIONS NI ACN 000 679 023 (JV MANAGER)</p>
<p>Author: RMS White</p>	<p>File:</p>	
<p>Scale: as shown</p>		<p>Figure No.</p>

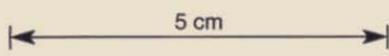
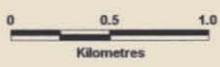
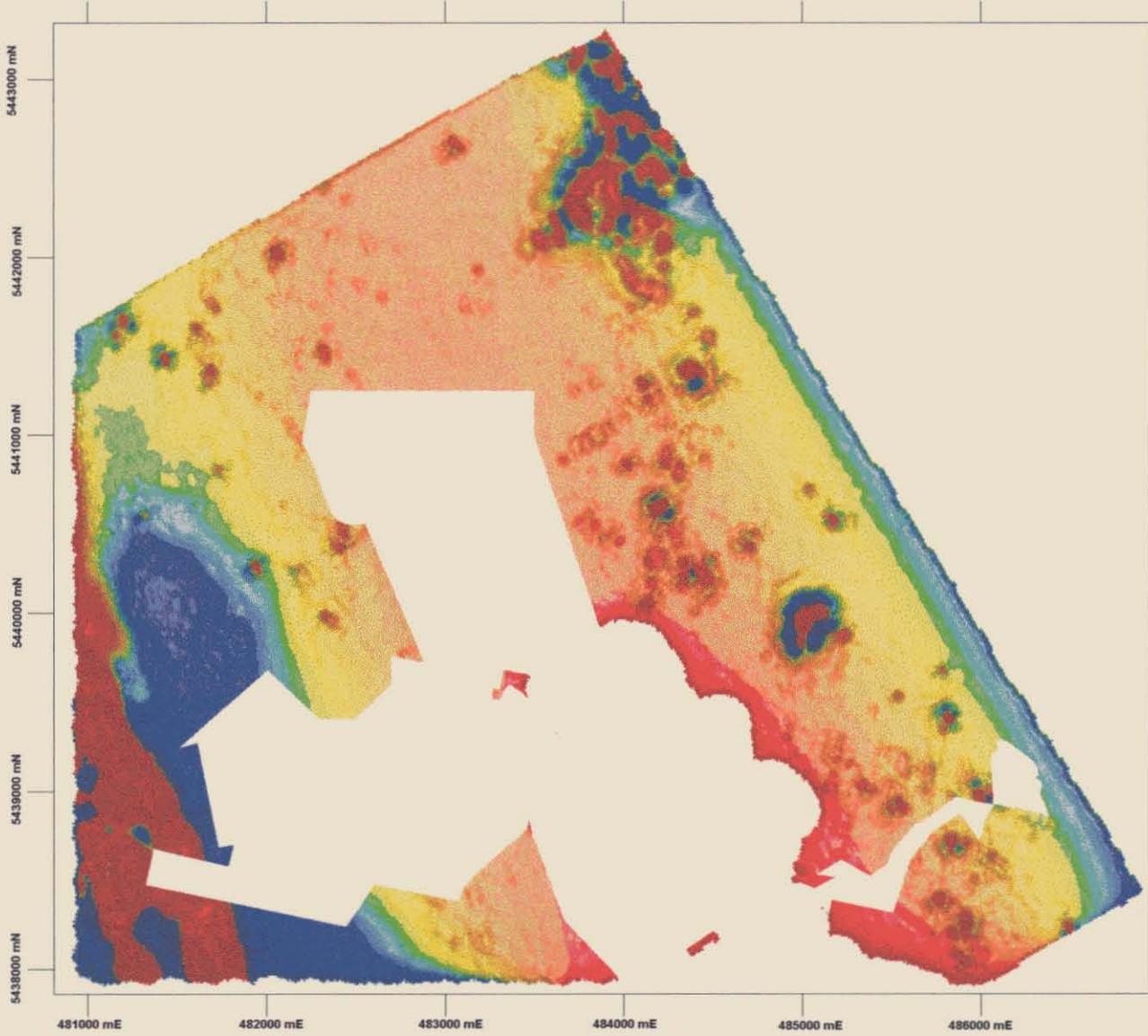
BEACONSFIELD HELI MAG DATA



167075

HELICOPTER MAGNETIC SURVEY		Beaconsfield Mine Joint Venture
50m AGC of 50r colours clipped -10 to 10		
Date: 27/5/98	Author:	 ALLSTATE EXPLORATIONS NL ACN 000 679 023 (JV MANAGER)
Author: RMS White	File:	
Scale: as shown		
		Figure No.

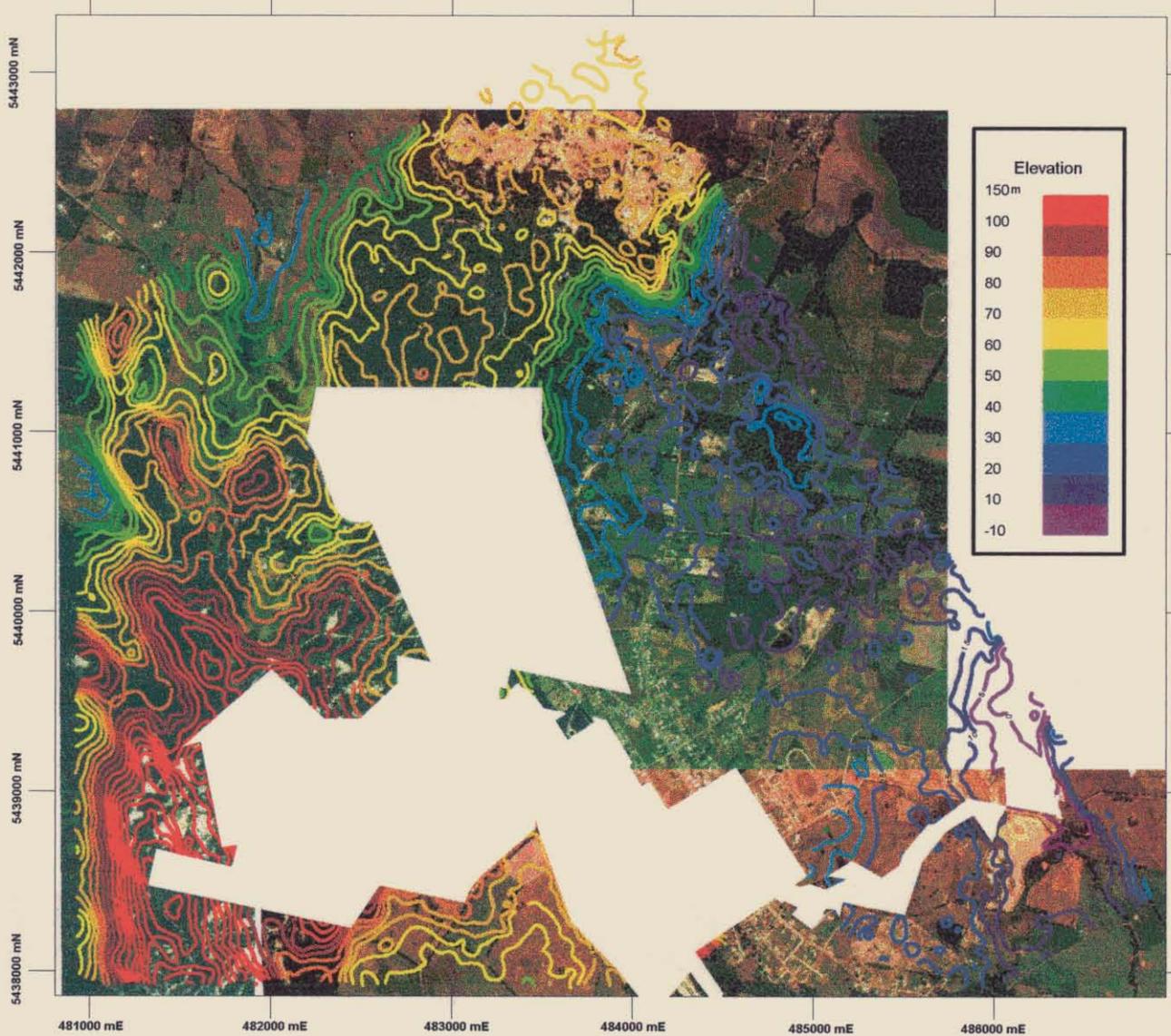
BEACONSFIELD HELI MAG DATA



167076

<p>HELICOPTER MAGNETIC SURVEY</p> <p>1vd of RTP</p>		<p>Beaconsfield Mine Joint Venture</p> 
<p>Date: 27/6/88</p>	<p>Author:</p>	
<p>Author: IMS White</p>	<p>File:</p>	<p>ALLSTATE EXPLORATIONS NL ACN 000 679 023 (JV MANAGER)</p>
<p>Scale: as shown</p>		
		<p>Figure No.</p>

BEACONSFIELD HELI MAG DATA



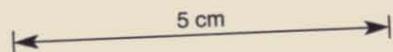
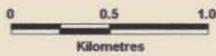
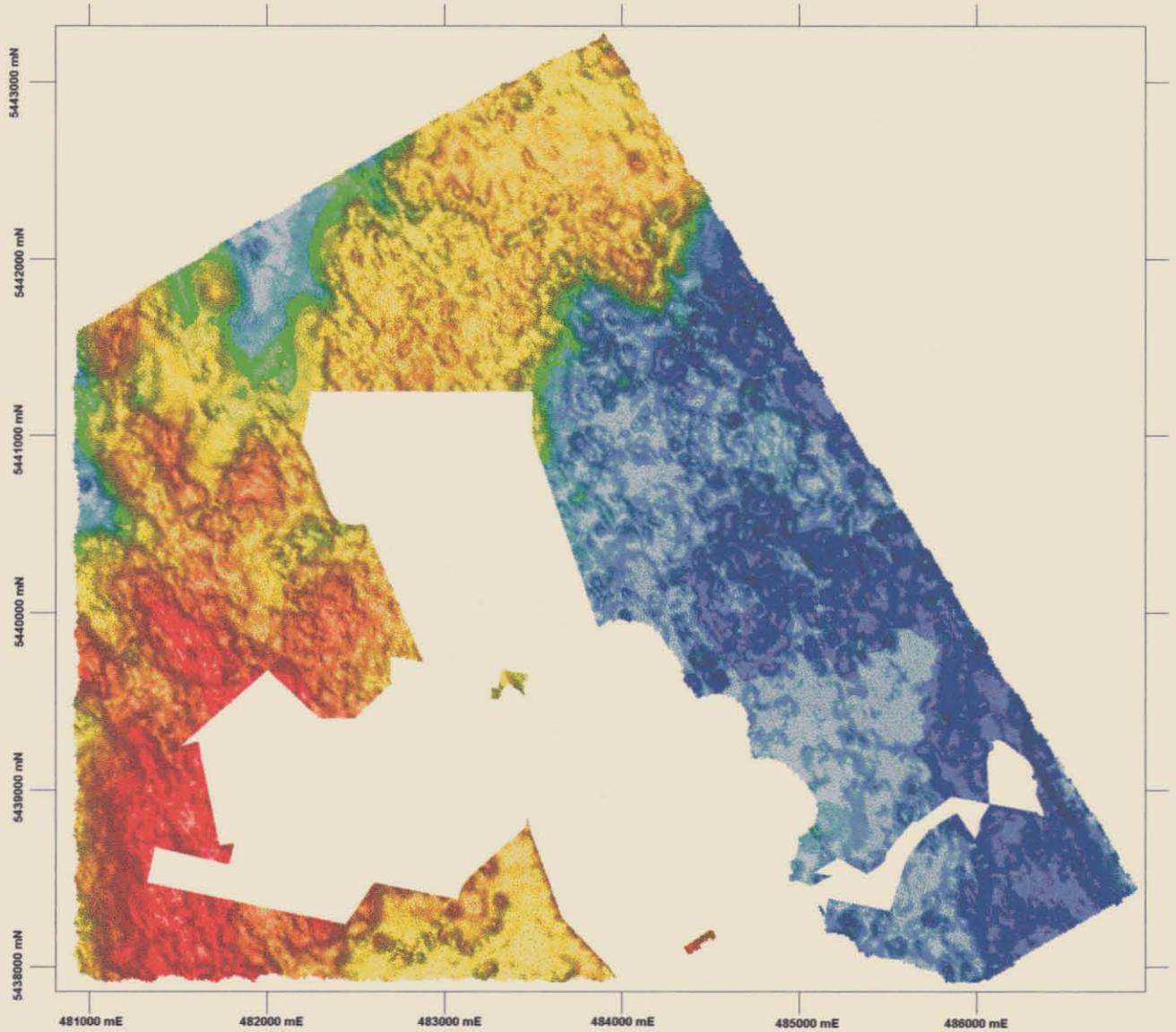
0 0.5 1.0
Kilometres

5 cm

167077

HELICOPTER MAGNETIC SURVEY		Beaconsfield Mine Joint Venture 
Elevation		
Date: 27/8/98	Author:	ALLSTATE EXPLORATIONS NL ACN 000 679 023 (JV MANAGER)
Author: RMG White	File:	
Scale: as shown		
		Figure No.

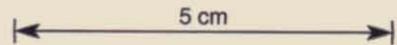
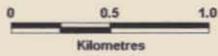
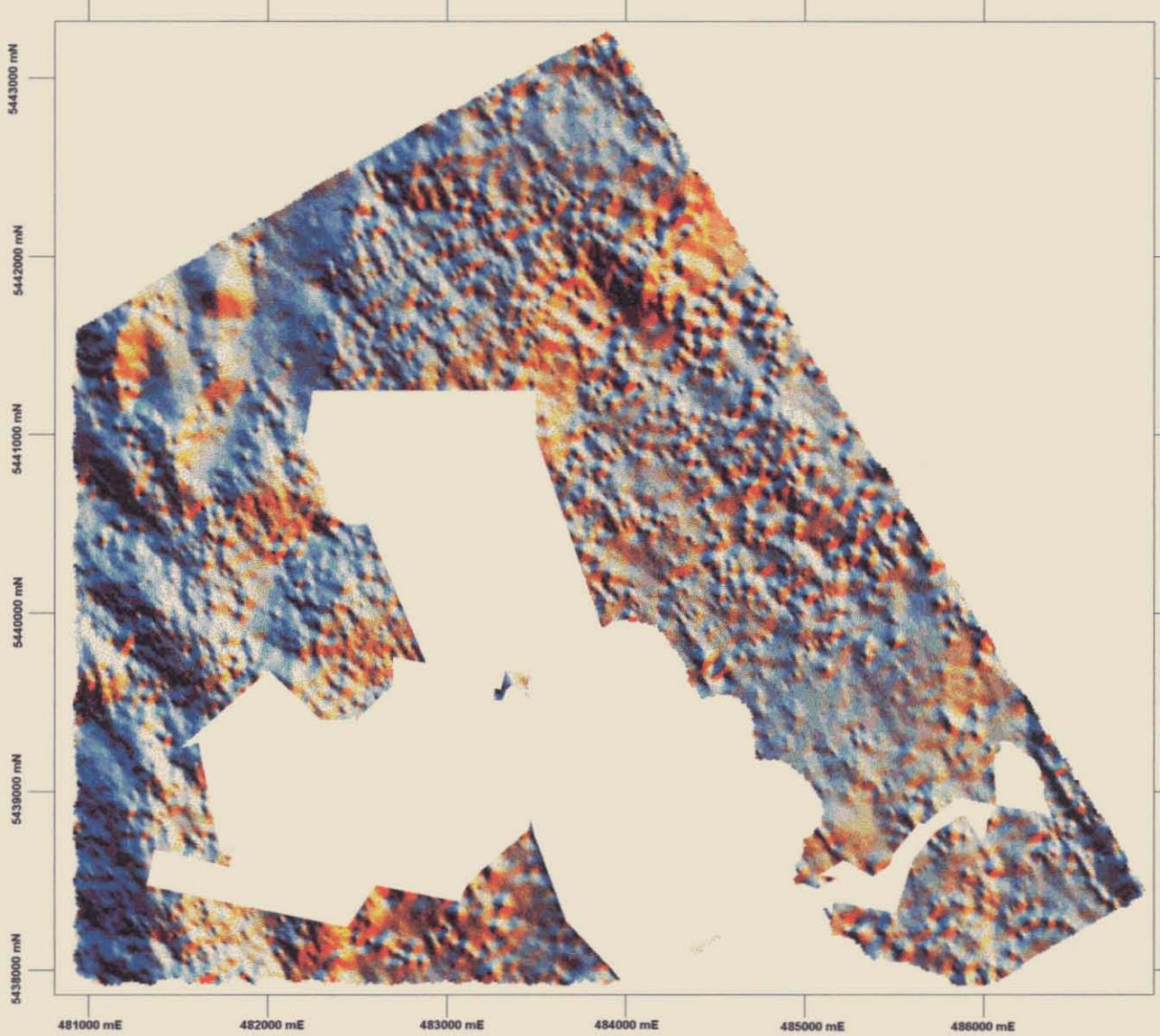
BEACONSFIELD HELI MAG DATA



167078

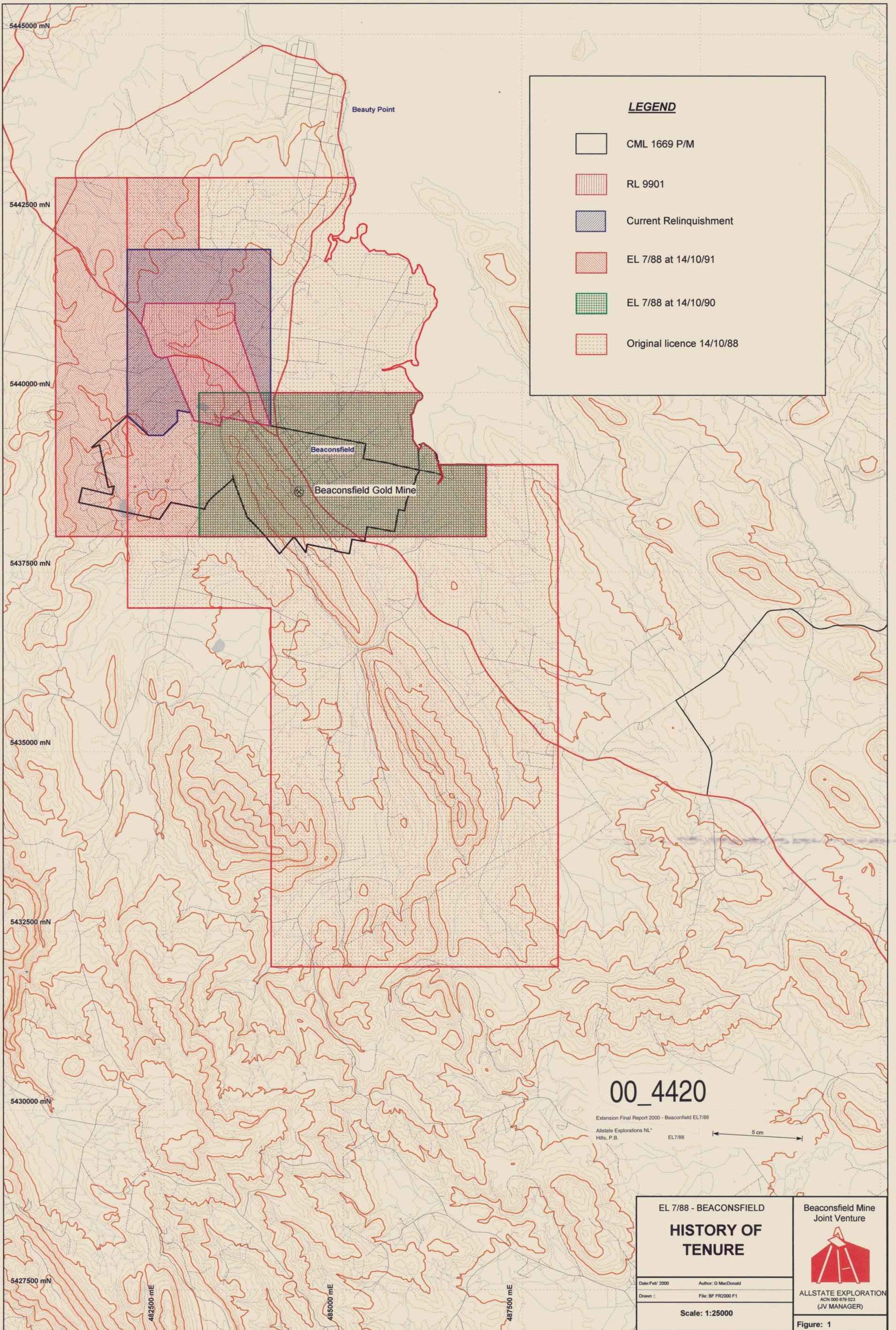
HELICOPTER MAGNETIC SURVEY DTM (25m Filtered)		Beaconsfield Mine Joint Venture 
Date: 27/6/98 Author: RMS White	Author: RMS White File:	
Scale: as shown		ALLSTATE EXPLORATIONS NL ACN 080 679 023 (JV MANAGER)
		Figure No.

BEACONSFIELD HELI MAG DATA



167079

HELICOPTER MAGNETIC SURVEY		Beaconsfield Mine Joint Venture
DTM Composite Sun Angle		
Date: 27/8/98	Author:	 ALLSTATE EXPLORATIONS N ACN 000 079 022 (JV MANAGER)
Author: RMS White	File:	
Scale: as shown		
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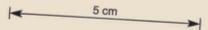


LEGEND

-  CML 1669 P/M
-  RL 9901
-  Current Relinquishment
-  EL 7/88 at 14/10/91
-  EL 7/88 at 14/10/90
-  Original licence 14/10/88

00_4420

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 Allstate Explorations NL*
 Hills, P.B. EL7/88



EL 7/88 - BEACONSFIELD
**HISTORY OF
 TENURE**

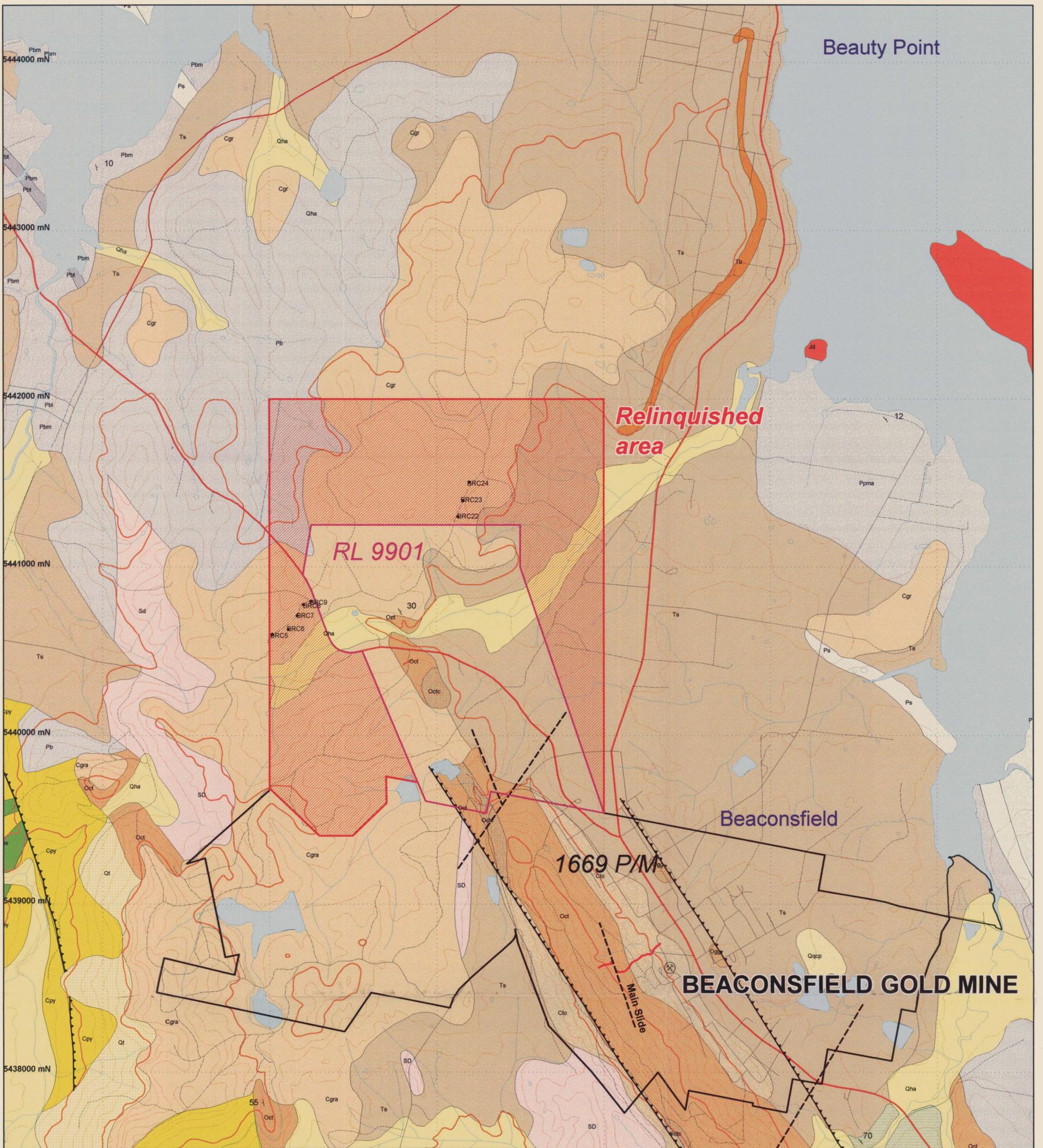
Beaconsfield Mine
 Joint Venture



ALLSTATE EXPLORATION
 ACN 000 679 023
 (JV MANAGER)

Date: Feb/ 2000 Author: G MacDonald
 Drawn: File: BF FR2000 F1
 Scale: 1:25000

Figure: 1



GEOLOGICAL LEGEND

QUATERNARY	PERMIAN	CAMBRIAN
Qha Stream alluvium, swamp and marsh deposits	P Undifferentiated sediments	Cdss Slate.
Qcp Silt with rounded clasts of granite, schist, quartzite, conglomerate, derived from Permian strata.	Pp Undifferentiated Ppct, Ppmm, Ppwa equivalent to Pm and Pg	Cv Basaltic andesite
Qt Talus	Ppct Carbonaceous sandstone and shale	Cwcs Interbedded slate and chert.
Qdt Dolerite talus.	Ppma Wormcast siltstone and sandstone	Cdsg Slate with impersistent greywacke sandstone.
Qts Talus dominantly of Ordovician sandstone	Ppms Fossiliferous sandstone, siltstone and limestone	Cpy Pyroxenite and serpentinised pyroxenite.
Qsp Partially consolidated granule sand	Pps Quartz-sandstone, cross-bedded with common interbedded and interlaminated shale lesser cong & rare coal	Cms Siliceous metamorphic rock.
Qga Angular gravel, mainly vein quartz	Pb Poorly sorted pebbly mudstone, sandstone and minor conglomerate marine fossils present in places	L Sandstone, slate and phyllite
Cgra Rounded and angular gravel, mainly vein quartz	Pbm Mudstone, pebbly siltstone and sandstone	Tb Basalt.
Ts Dominantly non-marine sequences of gravel, sand, silt, clay and regolith.	Pbl Clastic limestone	Jd Dolerite and related rocks
Tbd Basaltic dolerite	Pbl Angular boulder beds, siltite and erratic rich mudstone	Oga Basaltic andesite (Eaglehawk Gully andesite)
Tb Basalt.	Sd Shallow marine quartz sandstone, siltstone and shale (Corn Hill Beds - Eidon Group correlates).	Cv Basaltic andesite (West Tamar Highway andesite)
Ti Pisolithic ironstone	SDq Quartzite (Corn Hill Beds)	Odl Diorite.
TR Cross-bedded quartz sandstone, feldspathic sandstone and shale.	Ogg Shale and siltstone (Grubb Beds)	Cpy Pyroxenite and serpentinised pyroxenite.
1669 P/M Mining lease - BMJV	OR Limestone sequence with siltstone in some areas. (Flowery Gully Limestone)	
RL 9901 Retention lease - BMJV	Oga Basaltic andesite - extrusive or very shallow intrusive (Eaglehawk Gully andesite)	
Area to be relinquished - BMJV	Ogs Quartz grits, sandstone and siltstone, basalt unit shown (Salisbury Hill - Eaglehawk Gully Formations)	
BRC1 Drillholes in relinquished area	Otc Quartz conglomerate (Cabbage Tree Conglomerate)	
	IGNEOUS ROCKS	PRECAMBRIAN
		Ts Sandstone, slate and phyllite
		OR Basalt.
		Jd Dolerite and related rocks
		Oga Basaltic andesite (Eaglehawk Gully andesite)
		Cv Basaltic andesite (West Tamar Highway andesite)
		Odl Diorite.
		Cpy Pyroxenite and serpentinised pyroxenite.
		Thrust
		Faults
		Tasmania Reef at No.6 level (-46m ASL)

00_4420

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 Allstate Explorations NL
 Hills, P.B.

EL 7/88 - BEACONSFIELD
Regional Geology

Date: 14/2/2000 Author: G MacDonald
 Drawn: G MacDonald File: BF FR2000 F2
 Scale: 1:25000

Beaconsfield Mine Joint Venture

ALLSTATE EXPLORATIONS NL
 ACN 000 679 023
 (JV MANAGER)

Figure: 2