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181001

SALISBURY HILL EL 20/94

MID-TERM RELINQUISHMENT REPORT

1999

**MICROFILMED**  
FICHE No. 015178 - 80



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Mid-Term Relinquishment Report - 1999 - Salisbury Hill, EL20/94  
Allstate Explorations NL\*; Beaconsfield Mine Joint Ven Hills, P.B.; Macdonald, G. EL20/94

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October 1999

MINERAL RESOURCES  
26 OCT 1999  
TASMANIA

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## 1.0 SUMMARY

EL 20/94 lies south along stratigraphic strike from the BMJV's Beaconsfield Gold Mine, a mesothermal quartz + ankerite + gold reef with a pre-mining resource of 2Moz.

The licence was established in 1994 to facilitate exploration for similar mesothermal style gold mineralisation in the surrounding district. To date, work on EL 20/94 has focussed largely on reconnaissance of the areas of highest prospectivity within the licence. In particular, work has focussed on investigations of the old working of the historical Salisbury Mining Field. This work has consisted of a programme of gridding, soil sampling, and rock sampling and mapping with attention paid to locating, mapping and sampling old workings.

Work has also focussed on grid based soil sampling and geological mapping of those potentially prospective areas within the licence that do not benefit from the pedigree of historical activity. This has been done to develop a detailed understanding of the licence and assist in providing targets for continued investigation in the latter half of the licence tenure.

The current report has been prepared to meet the requirements of statutory relinquishment of 50% of the licence by the end of the fifth reporting year. It provides a snap-shot of the geology of the tenement and the district generally as it is currently understood. The report also provides details of all work completed over the areas chosen for relinquishment during the history of the licence to date.

## 2.0 INTRODUCTION

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### 2.1 LOCATION AND ACCESS

EL 20/94 lies to the south of the township of Beaconsfield near Tasmania's central north coast (see figure 1). Beaconsfield lies approximately 40 kilometres north from Launceston on the western side of the Tamar River. Access to the EL is by bitumen road from Launceston. Access within the licence is generally good with a number of bitumen roads and numerous gravel roads crossing the licence area.

### 2.2 TENURE

The licence was granted to Allstate Prospecting Pty Ltd and is held on behalf of the Beaconsfield Mine Joint Venture, operators of the Beaconsfield Gold Mine. The original licence covered 45 skm of which slightly more than 5 skm was excluded by pre-existing mining leases. The licence is due for final relinquishment on 28<sup>th</sup> October 2004. At this time slightly more than 19 skm is being relinquished to meet a requirement for 50% relinquishment by 28<sup>th</sup> October, 1999.

### 2.3 TOPOGRAPHY, VEGETATION AND LAND USE

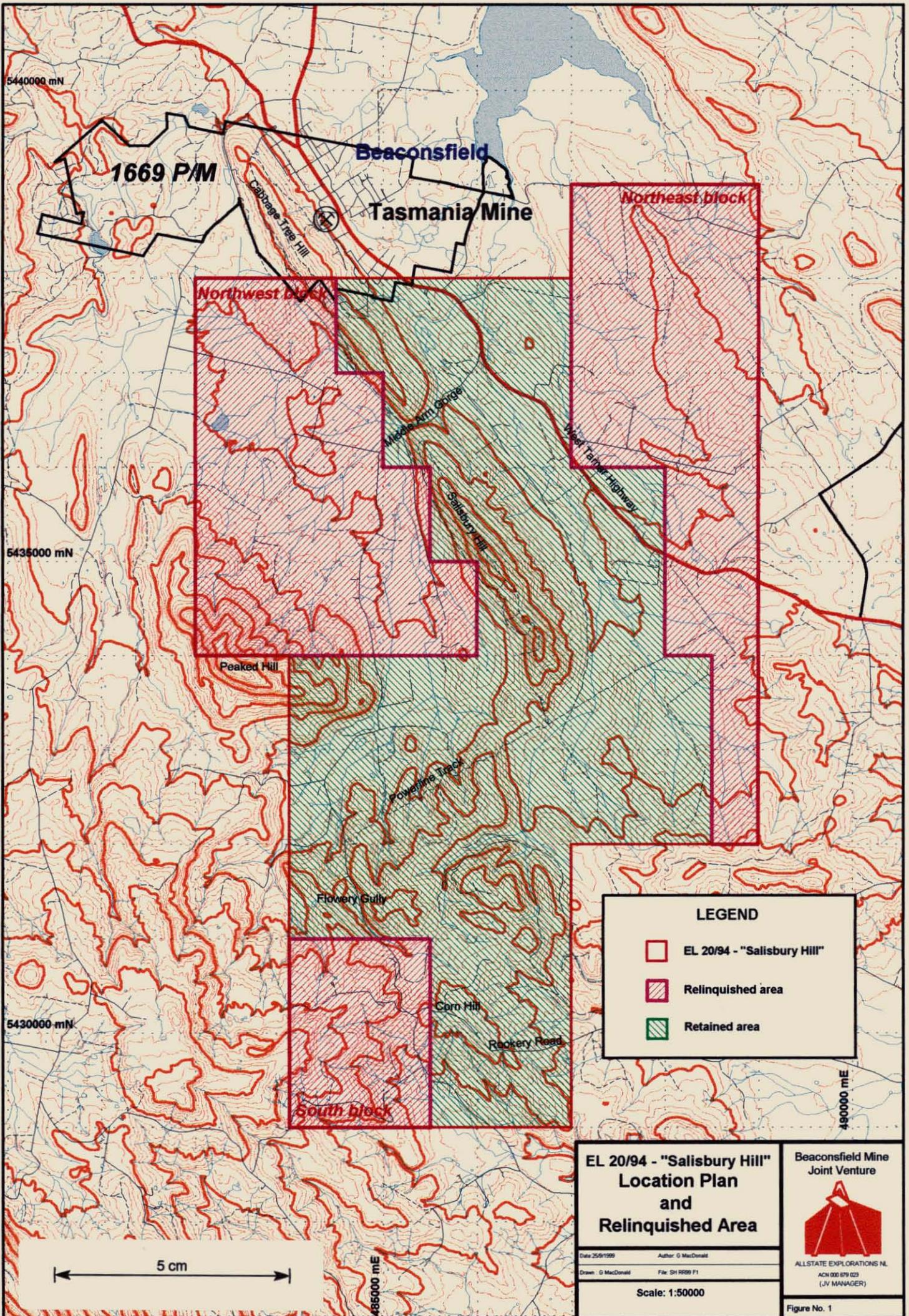
The topography is dominated by Salisbury Hill (and the southern end of Cabbage Tree Hill) and Peaked Hill in the northern half of the licence becoming generally more hilly in the south. The area between these hills in the north is moderately flat.

Apart from the area under agricultural cultivation (~60%) the rest of the licence is covered by dry sclerophyll vegetation on the slopes becoming more of a wet sclerophyll community in the gullies and on shaded slopes.

The land is used largely for agriculture or forestry. Forestry is practiced on the hillier ground and hence is more common over the favourable rocks. The relinquished area includes most of the area under agricultural cultivation and the lightly forested Peaked Hill.

### 2.4 RELINQUISHMENT

The portion of EL 20/94 being relinquished is illustrated in figure 1. The portion includes 3 areas, the Northwest Block, the Northeast Block and the South Block. The Northwest Block is defined as that area commencing at 483000E, 5438000N and continuing east to 484500E then south to 5437000N then east to 485000E then south to 5436000N then east to 485500E then south to 5435000N then east to 486000E then south to 5434000N then west to 483000E then north to the point of commencement. The Northeast Block is defined as that area commencing at 487000E, 5439000N and continuing east to 489000E then south to 5432000N then west to 488500E then north to 5434000N then west to 488000E then north to 5436000N then west to 487000E then north to the point of commencement. The South Block is defined as that area commencing at 484000E 5431000N then continuing east to 485500E then south to 5429000N then west to 484000E then north to the point of commencement. Allowing for exclusions the total area being relinquished is slightly more than 19 skm out of a total licence area of slightly less than 40 skm.



**LEGEND**

- EL 20/94 - "Salisbury Hill"
- Relinquished area
- Retained area

**EL 20/94 - "Salisbury Hill"  
Location Plan  
and  
Relinquished Area**

Date: 25/8/1999 Author: G MacDonald  
 Drawn: G MacDonald File: SH R989 F1  
 Scale: 1:50000

**Beaconsfield Mine  
Joint Venture**



ALLSTATE EXPLORATIONS NL  
 ACN 000 879 023  
 (JV MANAGER)

Figure No. 1

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### 3.0 EXPLORATION PHILOSOPHY

Principally, the BMJV is exploring for sediment hosted mesothermal gold mineralisation. Empirically, the target model is based upon the developing understanding of the 2Moz Tasmania Reef. The latter is a northeast striking mesothermal quartz + ankerite + sulphide (pyrite + arsenopyrite > chalcopyrite + sphalerite + galena) reef hosted within the Salisbury Hill and Eaglehawk Gully Formations of the Denison Group in the Cabbage Tree Thrust slice of the Beaconsfield Block.

To date mapping, rock and soil sampling and aeromagnetics have been used as the principal search methods, however, it is recognized that systematic drilling will become more important as the reopened Beaconsfield Gold Mine starts to generate revenue.

#### 4.0 PREVIOUS EXPLORATION

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The area of EL 20/94 has been the subject of several geological investigations and limited exploration programmes over the past 30 years. However, little if any of the work occurred over the portions of the licence being relinquished.

Modern exploration for gold commenced in the early 1970's when the Mines Department drilled two diamond drill holes to test for reported nickel in inaccessible old workings on the historical Salisbury Gold Field. In the early 1980's AMAX carried out a programme of soil sampling, mapping and ground magnetics over the Salisbury Hill prospect as well as detailed mapping and channel sampling of some of the old workings at Salisbury Hill (Poltock, 1980; Hamlyn, 1982).

Further soil sampling and diamond drilling was carried out at the Salisbury Hill prospect by Goldfields Exploration Limited (Pease, 1984).

In 1988 a small programme of costeaning and RAB drilling was carried out again at the Salisbury Hill prospect (Stacpoole and Miedecke, 1988).

More regionally focused stream sediment sampling, mapping and an aeromagnetics survey was completed in the late 1980's by Beaconsfield Gold Mines Limited (Hicks, 1989).

Work on the current licence EL 20/94 has been ongoing for five years. After a literature review and limited reconnaissance work in the first 2 years of the licence (McKeown, 1995; Hills, 1996), the current phase of more intensive exploration commenced in 1997 with a high definition ground magnetics survey over the Salisbury Hill prospect. This was followed by reconnaissance scale soil sampling along ridge tops in the region (Hills, 1997). Regional mapping and rock sampling was the focus of the BMJV's exploration of the licence in 1997/98 (MacDonald, 1998a) and detailed grid based soil sampling and geological mapping of second priority outcropping palaeozoic geology occurred in 1998/99 (MacDonald, 1999).

## 5.1 INTRODUCTION

The geology of EL 20/94 has previously been described in various company reports, the most significant of which are those by Poltock (1980), Hamlyn (1982), Pease (1984), Hicks (1989), Hills (1997) and MacDonald (1998, 1999). The area was the focus of work by Green (1959), Kennedy (1971) and Hills (1982). The area straddles the boundary between the Beaconsfield (Gee and Legge, 1971) and Frankford (Gulline and Naqvi, 1973) 1 mile series map sheets with discussion in the Explanatory Notes accompanying each of these map sheets Gee and Legge (1979) and Gulline (1981) respectively. A significant addition to the understanding of the geology of the region was also made by Lewis (1998). He described the Denison Group in the Beaconsfield Gold Mine from diamond drill core and formally defined the Salisbury Hill and Eaglehawk Gully Formations. The geology of EL 20/94 as it is currently understood is illustrated in figure 2.

With the exception of descriptions of the geology by Green (1959) and Gee and Legge (1979), only MacDonald (1999) makes direct reference to the geology of the area being relinquished. His work involved grid based mapping as part of a programme of soil sampling and mapping over approximately 50% of the licence area. The location of gridlines and soil samples, with results, are shown on figure 3. The factual mapping data is shown on figure 4 at a scale of 1:5000. As part of the mapping work the +3mm fraction from the soil samples (the -3mm fraction was assayed) was been logged providing geological information in areas with limited or no outcrop. Those descriptions are included in appendix 1 as well as being shown symbolically on figure 5.

In addition to the grid base mapping, the location of a number of old workings on Peaked Hill are also shown on figure 4.

## 5.2 REGIONAL AND LOCAL GEOLOGY

The geological setting of the area of northern Tasmania including the environs of Beaconsfield was recently neatly established by Elliot et. al. (1993). Those authors describe the Beaconsfield Block as the entire pre-Permian package between the Precambrian Badger Head Block and the Tamar River. Recent mapping by Purvis (1998a) which focussed on the Lower Palaeozoic rocks and particularly the Denison Group correlates at Mt Careless, including their structural setting, has taken the argument further. Indeed Purvis (1998a) agreed with Gulline (1981) that the Denison group correlates on Mt Careless on-lap the Precambrian rocks of the Badger Head Block unconformably. Purvis (1998a) also recognised the significance of the Bald Tier Fault which he described as a Devonian thrust remobilised during the formation of the Tamar Graben. Interpretation of the 1987 aeromagnetic survey suggested that the Bald Tier Fault trace runs along the western margin of the buried southeast extension of the Anderson's Creek Ultramafic Complex and that the latter was caught up within the Bald Tier Fault at depth. It follows therefore that the Bald Tier Fault is the western margin of the Beaconsfield Block and the Lower Palaeozoic rocks west of the Bald Tier Fault are more correctly assigned to the Badger Head Block. The Bald Tier Fault therefore originated as a major, east



dipping, bounding thrust in the Devonian in line with the models summarised by Leaman (1998)

The Anderson's Creek Ultramafic Complex and associated rocks thus forms the basement to the Beaconsfield Block above the Bald Tier Fault. Above the Anderson's Creek Ultramafic Complex in turn, the "Beaconsfield sedimentary package", considered to include the pre-Devonian rocks of the Beaconsfield Block, commencing with the Blyth's Creek Formation, was deposited. 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 (see figure 3). These thrust slices have been the focus of exploration by the Beaconsfield Mine Joint Venture for "Tasmania Reef-like" mineralisation across EL 20/94. The Tasmania Reef, the central orebody within the Beaconsfield Gold Mine is sub-orthogonal to strike and is hosted within the north-northwest striking, east dipping, early Ordovician Salisbury Hill and Eaglehawk Gully Formations in the Cabbage Tree Hill thrust slice of the Beaconsfield Block.

As a result of the economic significance of the Cabbage Tree Hill slice it is the best understood of the four thrust slices with a full cross-section in drill core in the vicinity of the Beaconsfield Gold Mine. For this reason the following description of the local geology is largely based on observations made in the Cabbage Tree Hill slice. Lewis (1998) has described the Denison Group stratigraphy and sedimentology in the Cabbage Tree Hill thrust slice in some detail and the following discussion of those units draws largely from this work.

The basement strata of the Lower Palaeozoic package in the Beaconsfield Block 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. This formation was originally described by Green (1959) as "the friable quartz sandstone formation conformable 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. Green (1959) correlated the rocks on the western side of Peaked Hill with his Leonardsburgh Siltstone on the basis of lithology and stratigraphic position, believing Peaked Hill to be an anticline within the Denison Group described below. Neither of his findings in this regard continue to be supported by the work of subsequent authors. The Blyth's Creek formation is assigned a Cambrian age on the basis of fossils

found by Green (1959) and MacDonald (1998a) near the West Tamar Highway east of Salisbury Hill and by Gee and Legge (1959) 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, 1998). 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 (1998). 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 of 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. 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 (MacDonald, 1998). 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 (MacDonald, 1998). The basalt exhibits a particularly high Ti content which is not reflected in the sediments of the Eaglehawk Gully Formation.

The entire package 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 (Hills, 1998). 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 (1998) 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 (Banks, Pers. Comm.). 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 fails to recognise the Cobblestone Creek Thrust between the Grubb Beds and the eastern limestone which has since been interpreted as a lithology within the Blyth's Creek Formation as described by Green (1959) from outcrop 1.5km south-southeast of the Beaconsfield Gold Mine.

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 because the fauna allows timing of deposition to be fixed and makes direct correlation possible. Also, the unit remains mappable in the field. 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).

Thus the pre-Permian stratigraphic nomenclature of the Beaconsfield Block (excluding the Anderson's Creek sub-Block) within the relinquished tenement (and EL 20/94 generally) is summarised as illustrated in table 1.

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 stratigraphic nomenclature of EL 20/94.

### 5.3 NORTHWEST BLOCK GEOLOGY

The Peaked Hill slice preserves the greatest thickness of the stratigraphic section with late Cambrian to Early Devonian sediments. Although localized folding (associated with thrusting) on Bulls Road (5431600mN 485650mE) and at the old Rifle Range (5438000mN 481750mE) have complicated the picture somewhat the slice probably contains approximately 3.5 km of the section.

The Blyth's Creek Formation is represented by quartz sandstones, siltstones, interbedded sandstone-shale sequences (including outcrop with reported

Cambrian fossils, Gee and Legge, 1979) and chert cropping out on the western slopes of Peaked Hill. Gee and Legge (1979) also report serpentinite float. No such rock has been located subsequently. However, the occurrence is not totally unexpected given that similar rocks are found in mullock around an old shaft into Blyth's Creek Formation rocks at Salisbury Hill and also in drill core at Salisbury Hill and the Beaconsfield Gold Mine.

On the eastern slopes of Peaked Hill outcropping quartz sandstones and minor siltstones with very minor quartz pebble conglomerate have been mapped along the top of the hill. The Peaked Hill grid covers most of these eastern slopes with only very minor outcrop other than that along a new logging track on the lower slopes. There is, however, a considerable amount of float. The rocks are correlated with the Denison Group rocks in the Cabbage Tree slice.

On the flat to the east of Peaked Hill is a swampy depression around which reprecipitated carbonate crops out at 483300E 5436450N suggesting the presence of the Flowery Gully Limestone subsurface. Similar springs run along the very lowermost eastern slope of Peaked Hill to the south along the Flowery Gully Road. This inferred subsurface limestone lies along strike from the Flowery Gully Limestone which crops out in the Flowery Gully area. Much of the valley east of Peaked Hill is covered by Tertiary and Quaternary sediments which have not been studied by Beaconsfield Mine Joint Venture geologists.

The Flowery Gully Limestone is overlain by the shales, siltstones and sandstones of the Corn Hill Beds. This unit crops out on Leviathan Hill and Daake's Hill along the eastern margin of the Northwest Block. The contact with the Flowery Gully Limestone may be an unconformity but this is unclear from outcrop. It does not appear to be faulted in the Flowery Gully area.

The eastern contact of the Corn Hill Beds and thus the Peaked Hill slice on the western slopes of Cabbage Tree Hill is the Cabbage Tree Thrust. The Cabbage Tree Thrust is intersected in diamond drilling at the Beaconsfield Gold Mine and in outcrop at the western end of the Middle Arm Gorge on the Flowery Gully Road. It is also intersected by the west cross cut on the 422' level of the historical Moonlight Mine on the western slopes of Cabbage Tree Hill (Montgomery, 1892). Rocks cropping out east of the Cabbage Tree Thrust in the Northwest Block are considered to be Cabbage Tree Conglomerate although Richard Keele (in Hills, 1997) mapped a small sliver of the Blyth's Creek Formation. Detailed geology of the Northwest Block is illustrated in figure 4.

#### 5.4 NORTHEAST BLOCK GEOLOGY

The geology of the Northeast Block is dominated by Permian sediments with some overlying Tertiary gravels. No work has been done in this area by the Beaconsfield Mine Joint Venture although the pre-Permian stratigraphy in the Cobblestone Creek Slice is presumed to continue beneath the Permian outcrop for some distance at least.

Green (1959) and Gee and Legge (1979) provide detailed descriptions of the Permian Geology.

## 5.5 SOUTH BLOCK GEOLOGY

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Again, the surface geology is dominated by Permian sediments. To the east of the Permian, a narrow sliver of Denison Group sediments, presumably the upper portion of the Eaglehawk Gully Formation, is overlain by the type locality outcrop of the Flowery Gully Limestone. The Flowery Gully Limestone is in turn overlain by the base of the Corn Hill Beds.

All outcropping pre-Permian rocks in the South Block occur with a mining lease excluded from exploration licence.

## 5.6 STRUCTURAL GEOLOGY

The framework of the structural geology is described by Gee and Legge (1979) and Elliot et. al. (1993). Structurally the rocks in the Beaconsfield Block are dominated by faulting with only very minor folding. The exceptions to this appear to be folds associated with thrusting. Hills (1982) mapped recumbent folding within the Corn Hill Beds 1 km east of Flowery Gully. Purvis (1998a) recently mapped evidence of macro scale west directed recumbent folding of Denison Group rocks within the Beaconsfield Block on Clarke's Hill 4 km south of Winkleigh.

The deformation is manifested differently between rocks of different strength. The finer grained Cambrian siltstones in Middle Arm Creek and the shales and siltstones of the Corn Hill Beds west of Cabbage Tree Hill have a moderately to well developed slaty cleavage generally dipping steeply to the east-northeast. The coarser, siliciclastic, Cabbage Tree Conglomerate, Salisbury Hill and Eaglehawk Gully Formations are strongly jointed. A second later cleavage is mapped on Peaked Hill. This cleavage generally dips steeply to the west.

Hills (1998) described the principal joint sets in Denison Group rocks in the Beaconsfield Gold Mine as averaging 72/291 (AMG) and 64/166 based upon underground mapping. This apparently conjugate set is bisected by the orientation of the Tasmania Reef which Hills (1998) describes as being 60/131. Although the Blyth's Creek Formation and Corn Hill Beds shales and siltstones to the east and west are generally cleaved they are occasionally jointed with joint orientations consistent with those in the mine. The jointing is most probably Middle Devonian in age and related to a compressional regime at the time of formation of the Tasmania Reef structure.

## 5.7 MINERALISATION

Regionally the most significant gold deposit is the Tasmania Reef. The Tasmania Reef is a quartz + ankerite + gold + arsenic + chalcopyrite + sphalerite + minor galena reef of mesothermal type. The reef is approximately 320-350 metres long and averages 2.5 metres in width (Hills, 1998). It is analogous in many ways to mesothermal slate belt deposits in northeastern Tasmania, Victoria and elsewhere in the world. The main difference is the actual host rocks themselves.

Exploration throughout EL 20/94 has targeted this style of mineralisation but with no success in the relinquished areas.

## 6.1 INTRODUCTION

Prior to 1998/99 exploration under the current EL 20/94 on the areas being relinquished had been restricted to a ridge top soil sampling programme which covered small portions of the Northwest and South Blocks. The results of this programme were found to be flawed, due to assaying error, during the course of more recent work. Corrected results only are included below.

During 1998/99 grid based mapping and soil sampling was undertaken over selected areas of outcropping pre-Permian rocks within EL 20/94. As far as the relinquished areas are concerned, all work was confined to the Northwest Block, principally on Peaked Hill but also in isolated areas on Leviathan Hill and outcropping areas of Corn Hill Beds along strike to the southeast.

## 6.2 GRIDDING

The grids were designed to be optimal for discovering north-east to east-northeast striking reefs similar to the Tasmania Reef. Consequently, grid lines were oriented at 330° true north. Although relatively broadly spaced for reefs only a few metres (at most) wide, soil sampling was undertaken at 50 metres spacing on 100 metre spaced grid line. It was hoped that relatively more mobile pathfinder elements such as arsenic, copper, lead and zinc would define sufficiently broad halos around potential interest areas to allow infill sampling to locate more narrowly focussed gold mineralisation.

Consideration was given to the mobility of all elements in the clayey B/C-horizon soils available for sampling. Relatively expensive newer Mobile Metal Ion methods, whilst arguably more effective, could not be justified within the budgetary framework which was aimed at defining areas for relinquishment. For this reasons classical B/C-horizon soil sampling using a hand auger was chosen as the most suitable method.

## 6.3 BASELINES

Baseline pegs were surveyed using a Trimble real time differential GPS. Accuracy is estimated to be  $\pm 2$  metre based upon the accuracy of the equipment ( $\pm 1$  metre) and the level of accuracy accepted in placing the peg ( $\pm 1$  metre). Real time differential surveying allowed pegs to be placed on 'baselines' which utilised tracks, clearings etc.

## 6.4 SOIL SAMPLING

### 6.4.1 1998/99 Soil Sampling

Soil samples were collected from the B/C-horizon using a manual 4" Jarrod tree planting/post hole auger. In EL 20/94 the soil profile is usually topped by a 0.1-0.3 metre thick layer of humic A-horizon material. This overlies a leached sandy B-horizon, particularly in soil profiles developed over quartz sandstones, of around 0.2 metres thickness. The C-horizon is a yellowish orange to dark yellowish orange clayey material with increasing coherent rock fragments with depth. Most soil samples were collected from 0.4 to 0.7 metres depth.

All soil samples were dried (generally naturally) and sieved through a 3mm sieve. Representative rock fragments in the +3mm fraction were taken and collected in chip trays. These rock chips have been logged and the descriptions included in the soil ledger (appendix 1). The -3mm fraction was rebagged and analysed by ANALABS Burnie for Au (to a 1ppb detection limit), As (to 1ppm), Cu, Pb and Zn. Considerable time and care was taken by ANALABS in cleaning the sample preparation circuit prior to preparing the soil samples and the authors are quite confident that those anomalies defined by the soil sampling are genuine and not a product of contamination the laboratory.

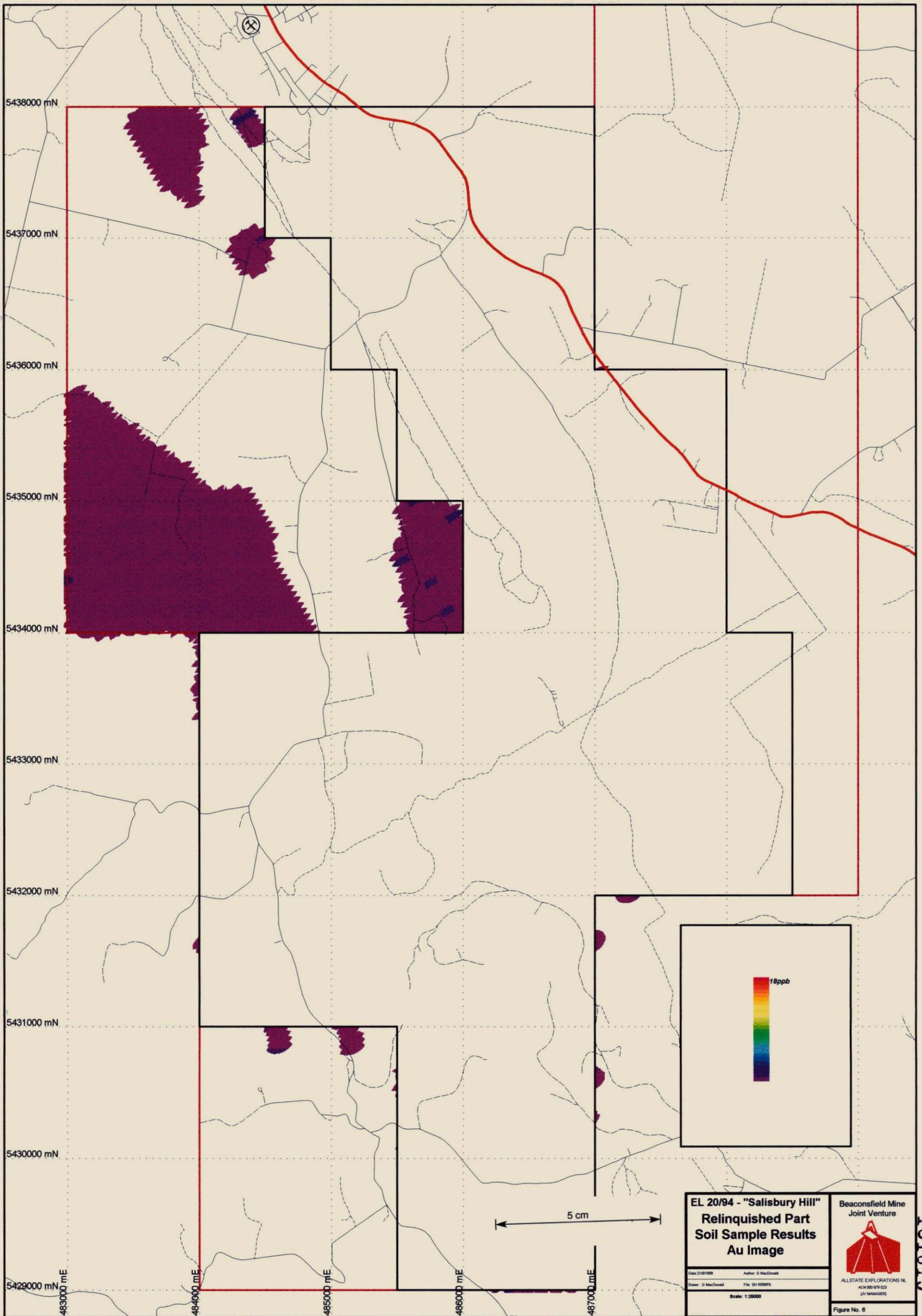
A total of 2062 soil samples were collected in the 1998/99 reporting year. 1873 of these were collected in the first round of sampling on a number of 100m x 50m grid. The remainder were collected in localised infilling programmes on 50m x 50m grids. The location of all samples, with results, taken from within the relinquished areas are illustrated in figure 5. Figures 6 to 10 provide colour contoured images for Au, As, Cu, Pb and Zn respectively. Details of all soil samples including sample number, grid, AMG co-ordinates, grid co-ordinates, sample depth, analyses, +3mm chip descriptions and interpreted geology are included in appendix 1.

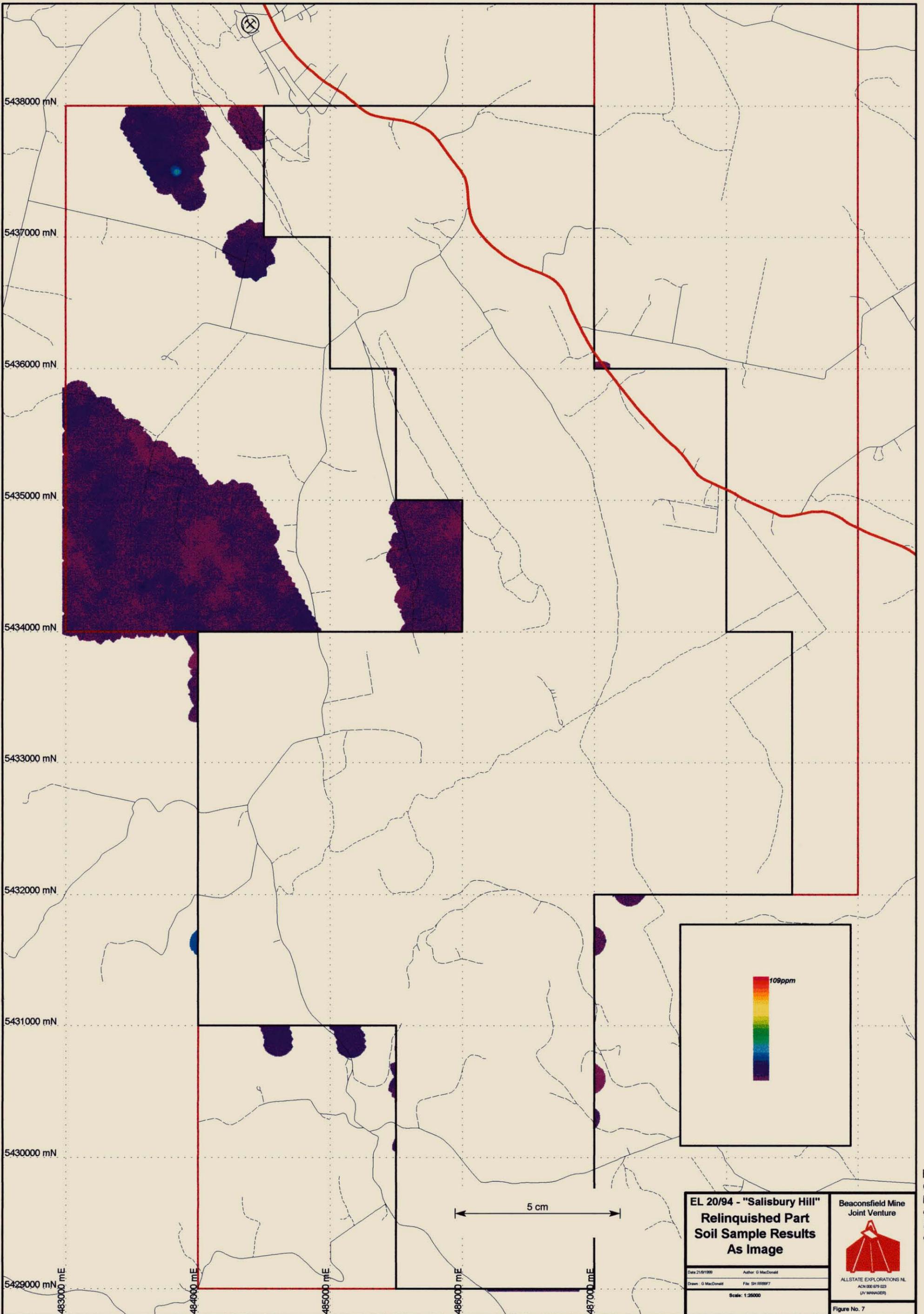
#### **6.4.2 Re-assaying 1997 Ridge Top Soil Samples**

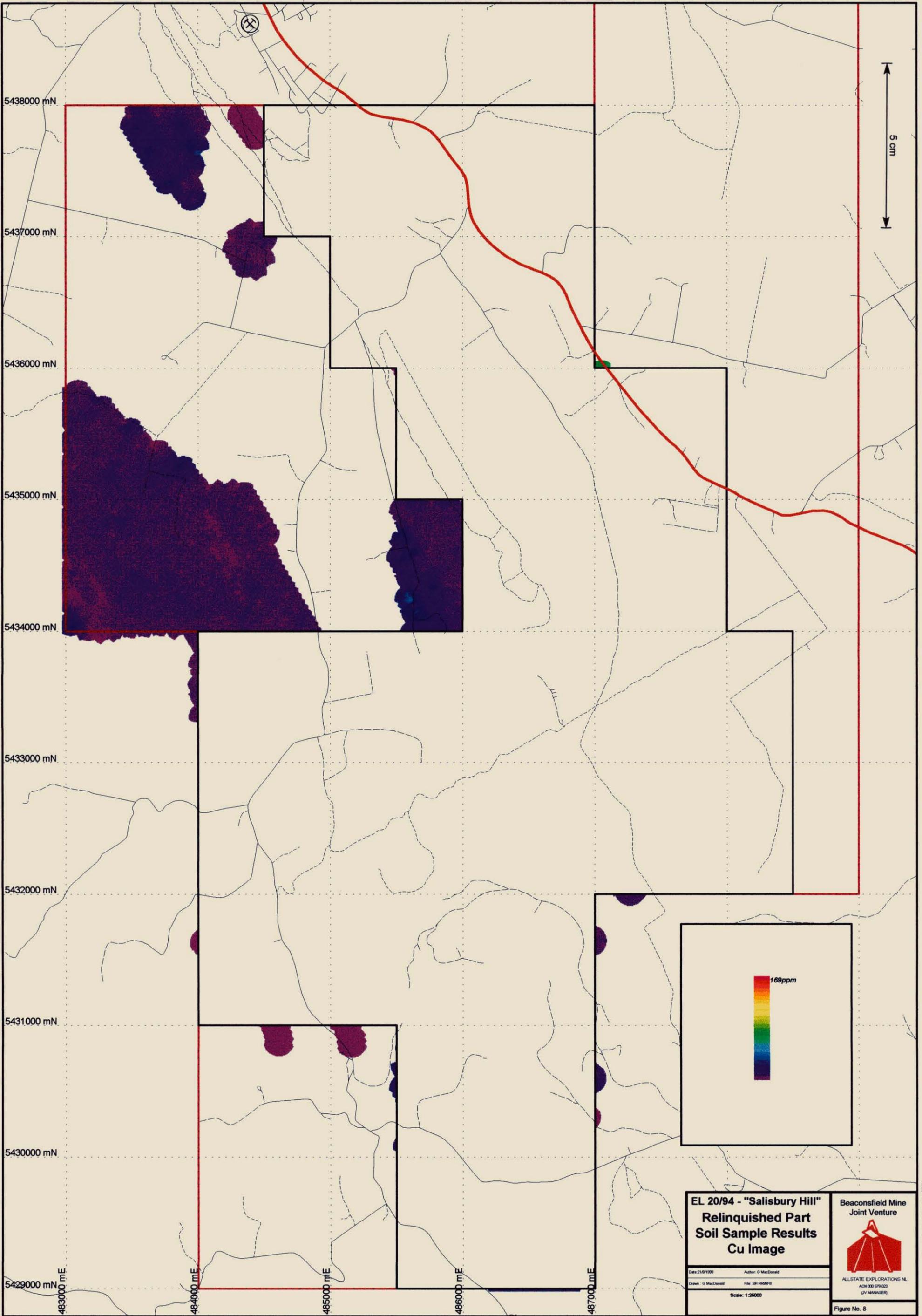
As part of the soil sampling work an effort was made to integrate the results of all soil sampling programmes undertaken in the area and available to the author. The spread of values returned from this years programme accord well with those of Beaconsfield Gold NL's work on the Winkleigh licence (Morrison, 1998). Similarly they accord with those from Resolute Limited's work on their Andersons Creek licence. However, it became apparent that the results of the Ridge Top soil sampling programme undertaken by the BMJV previously (Hills, 1997) were quite markedly elevated.

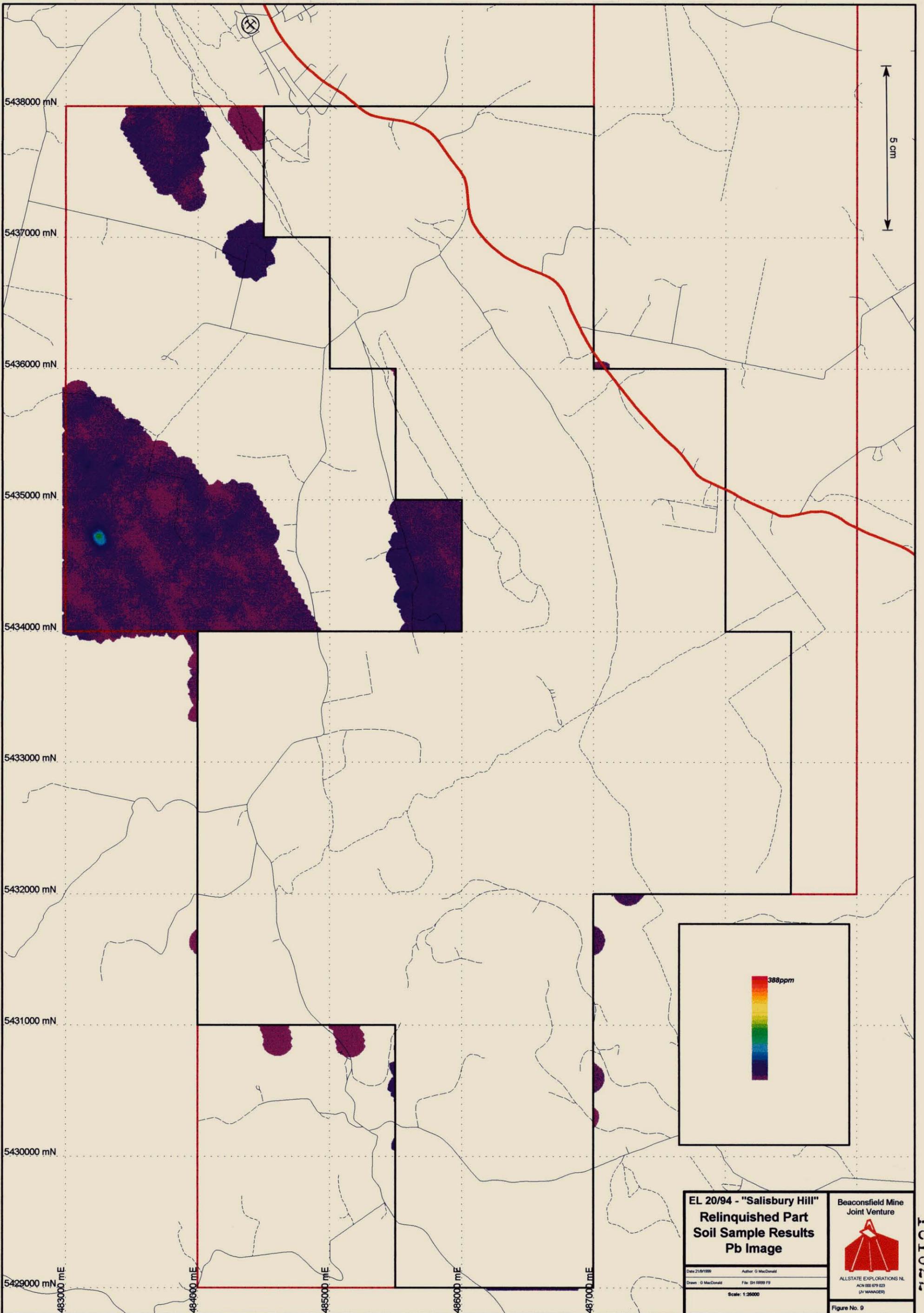
The analytical method used in early programme had a detection limit of 10ppb meaning that values around that range (considered anomalous in the BMJV's work this year) were potentially spurious. In order to allow the data sets to be integrated it was decided to re-assay some of the pulps retained from the Ridge Top programme using the more accurate, lower detection limit (1ppb Au), method of the 1998/99 programme. The result was that almost all reassayed samples returned values below 1ppb Au. Further checking by the external laboratory where the samples had originally been assayed revealed systematic errors in the values initially reported. The error was human and apparently involved a failure to accommodate the gold inherent in the flux used in analysis. The laboratory recalculated those values greater than 1ppb and reassayed a significant number of those pulps to confirm the validity of the recalculation.

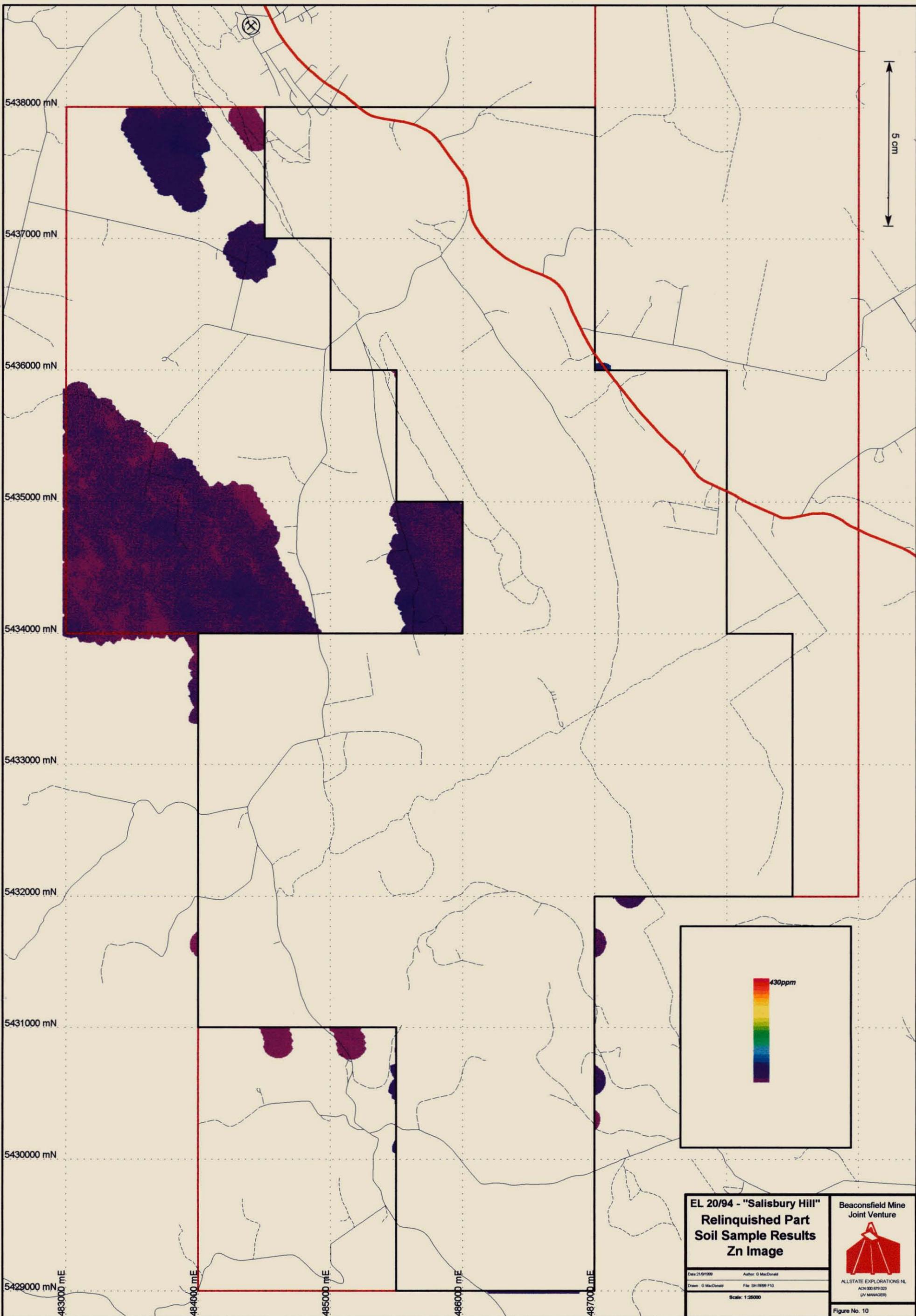
The correct results only are shown on figure 5 and have been included in appendix 1.











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### 6.4.3 Results/Conclusions

Figures 6 to 10 are colour enhanced images displaying anomalous zones for each of the elements. The DISCOVER software used in creating these images calculates a weighted average for every 20m square using a search ellipse (120m x 80m) oriented at 060° (TN) and a weighting factor of 5 which acts to smooth out the image but also tends to hide spot anomalies.

No significant anomalies were located within the relinquished areas but the following comments are made.

#### *Leviathan Hill Grid*

There are no anomalous Au values from soil samples on Leviathan Hill or the flats alongside Denmans Road. However, there is a zone of anomalous As on line 9400mE from 19250mN to 19350mN with values of 28, 109 and 61 ppm As respectively. A limited number of rock samples from this zone do not contain anomalous Au. Apart from this zone the grid contains a number of scattered anomalous As values, i.e. 44, 39, 37 and 27 ppm and Zn up to 71, 71 and 67 ppm.

#### *Peaked Hill Grid*

There are two zones with anomalous soils on the Peaked Hill grid, neither of which are anomalous for Au.

On line 7500mE there is a zone of anomalous Pb over 100 metres from 17150mN to 17250mN defined by 68, 193 and 132 ppm Pb. Float mapped in the area includes sandstone with sheeted quartz veining. A sample of this rock assayed 56 ppm Pb but <1 ppb Au.

The second zone is on line 7700mE around 17700mN with Pb up to 56 ppm and As to 25 ppm. This zone is associated with subcropping ironstone. Three samples of this ironstone assayed up to 270 and 365 ppm As, 538 and 1095 ppm Pb and 132 and 228 ppm Zn. All three samples assayed <1 ppb Au.

#### *Greaves Road/Fulwood Grid*

There is only weakly anomalous Pb, Zn and Cu on line 9300mE from 15550mN to 15600mN with Cu to 42 ppm, Pb to 52 ppm and Zn to 64 ppm. Au is all <1 ppb.

## 6.5 MAPPING

All grid lines marked for the soil sampling programme were mapped in detail. In addition the mapping the +3mm rock chips retained from the soil samples were logged and assigned to lithological units. This mapping is presented as figure 4. A number of rock samples were collected in course of geological mapping. Assay results for all samples are displayed in figure 4 and a detailed rock sample ledger is included in appendix 2.

Mapping located a series of short shallow trenches running step-like up the steep northern side of a gully on line 7600mE on the Peaked Hill grid between 16675mN and 16700mN. These have been developed on ironstone float which

must have been prospected up the gully. Assays of mullock adjacent to these trenches returned up to 280 ppm As, 138 ppm Cu, 171 ppm Pb and 280 ppm Zn though all were <1 ppb Au.

## 6.6 LITHOGEOCHEMISTRY

Commencing in 1998, a programme of lithogeochemical sampling and assaying has been in progress throughout the Beaconsfield district. The aim of the programme is to determine the degree to which trace element geochemistry can be used as a tool for stratigraphic correlation and distinction of the extensive suite of Palaeozoic sediments across the Beaconsfield Block. Initial work concentrated on Denison Group correlates using the detailed drill core logging of Lewis (1998) as a quasi-type section. The programme was quickly expanded to encompass the Gordon and Mathinna Group correlates in the district and extended to sampling outside the immediate area for control purposes. To date a total of 253, samples have been collected from as far west as Deloraine (Purvis, 1998b) through Mt Careless (Purvis, 1998a), Winkleigh, (Morrison, Pers. Comm.), Flowery Gully (MacDonald, 1998a; 1999), Beaconsfield (MacDonald, 1998b) and Lefroy (Purvis, 1999). All samples have been analysed by ANALABS, Welshpool W.A. for Ti, Zr, V, Nb, Rb, Y, Ba, Sr, Sn, Cr and P using XRF and Ni and Co by AAS. In some cases other elements have also been read.

The programme is in its infancy but is starting to bear fruit assisting with the assignment of previously unassigned outcrops and in local and regional geological interpretation generally. To date three samples have been collected from within the relinquished portion of EL 20/94. These samples were collected on Leviathan Hill and Daakes' Hill and served to support assignment of the outcropping sediments to the Corn Hill Beds of Hills (1982) and thus correlateable with the Mathinna Group of northeastern Tasmania. Previously these rocks had been assigned to the Cambrian package at Beaconsfield by Gee and Legge (1971, 1979) and were presumed to be correlates of the Cambrian sequences of western Tasmania.

Lithogeochemical sample sites are illustrated in figure 4 and the analyses are tabulated in appendix 2. The remainder of the lithogeochemical database is considered proprietary at the present time.

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APPENDIX 2

~~ROCK~~ SAMPLE LEDGER  
SOIL

Appendix 1: Soil Sample Ledger

Table with columns: Sample Number, Grid East(mE), Sample Depth, Au, Au(R), Au (ave), As, Cu, Pb, Zn, Chips Description - abbreviated (G MacDonald), Interpreted Geology. The table contains 1000 rows of soil sample data.

Table with columns for sample ID, location (e.g., Pkd Hill, Greaves Rd/Fulwood), coordinates (e.g., 5434846.4), elevation (e.g., 483062.98), and soil test results (e.g., 0.6, <1, <1, <1, 3, 2, <3, 2, glysh org wed qtz sat). The table contains 1000 rows of data.

215382	Leviathan Hill/Denmans	5437715.06	483831.64	19500	9500	0.5	<1	-	<1	10	9	10	67	gyish org wed slit	CHBslit
215383	Leviathan Hill/Denmans	5437758.37	483806.64	19550	9500	0.6	<1	-	<1	5	8	3	43	ywish org wed slit	CHBslit
215384	Leviathan Hill/Denmans	5437801.67	483781.64	19600	9500	0.5	<1	-	<1	14	4	<3	35	ywish org wed slit	CHBslit
215385	Leviathan Hill/Denmans	5437844.97	483756.64	19650	9500	0.6	<1	-	<1	21	5	<3	34	ywish org wed slit	CHBslit
215386	Leviathan Hill/Denmans	5437888.27	483731.64	19700	9500	0.6	<1	-	<1	16	3	<3	35	gyish org wed sst	CHBsst
215387	Leviathan Hill/Denmans	5437931.57	483706.64	19750	9500	0.5	<1	<1	<1	4	<2	3	5	gyish org wed sst	CHBsst
215388	Leviathan Hill/Denmans	5437974.87	483681.64	19800	9500	0.5	<1	<1	<1	6	2	11	7	gyish org wed sst	CHBsst
215389	Leviathan Hill/Denmans	5437635.16	483993.25	19350	9600	0.6	<1	-	<1	7	31	19	71	ywish org wed slit	CHBslit
215390	Leviathan Hill/Denmans	5437678.46	483968.25	19400	9600	0.5	<1	-	<1	4	22	10	44	gyish org cy aft sst	CHBsst
215391	Leviathan Hill/Denmans	5437721.76	483943.25	19450	9600	0.6	<1	-	<1	<1	20	18	37	gyish org cy aft sst	CHBsst
215392	Leviathan Hill/Denmans	5437765.06	483918.25	19500	9600	0.5	<1	-	<1	5	8	9	24	gyish org cy aft sst w qtz vng	CHBsst
215393	Leviathan Hill/Denmans	5437808.37	483893.24	19550	9600	0.7	<1	-	<1	9	13	12	37	gyish org wed sst	CHBsst
215394	Leviathan Hill/Denmans	5437851.67	483868.24	19600	9600	0.6	<1	-	<1	7	21	18	48	gyish org cy	?
215395	Leviathan Hill/Denmans	5437894.97	483843.24	19650	9600	0.6	<1	-	<1	6	6	6	20	p ywish bn cy aft wed sst	CHBsst
215396	Leviathan Hill/Denmans	5437938.27	483818.24	19700	9600	0.6	<1	-	<1	<1	4	8	25	p ywish bn cy w rdd pebbles	?
215397	Leviathan Hill/Denmans	5437981.57	483793.24	19750	9600	0.4	<1	-	<1	<1	4	6	10	med lt gy sandy cy	?
215398	Leviathan Hill/Denmans	5437771.76	484029.85	19450	9700	0.9	<1	-	<1	2	5	20	24	gyish org sandy cy	?
215399	Leviathan Hill/Denmans	5437815.06	484004.85	19500	9700	0.7	<1	-	<1	1	2	16	24	v p org clayey wed sst	CHBsst
215400	Leviathan Hill/Denmans	5437858.37	483979.85	19550	9700	0.7	<1	-	<1	7	2	15	16	v p org clayey wed sst	CHBsst
215401	Leviathan Hill/Denmans	5437901.67	483954.85	19600	9700	1	<1	-	<1	2	4	19	29	v p org clayey wed sst	CHBsst
215402	Leviathan Hill/Denmans	5437944.97	483929.85	19650	9700	0.4	<1	<1	<1	6	3	9	11	v p org clayey wed sst w qtz vng	CHBsst
215403	Leviathan Hill/Denmans	5437988.27	483904.85	19700	9700	0.4	<1	-	<1	4	6	9	14	v p org sand and grit	?
215404	Leviathan Hill/Denmans	5436719.13	484406.64	18350	9500	0.7	<1	-	<1	44	3	15	18	mod ywish bn cy w qtz vng	?
215405	Leviathan Hill/Denmans	5436762.43	484381.64	18400	9500	0.9	<1	-	<1	7	7	38	21	gyish org cy aft slit	CHBslit
215406	Leviathan Hill/Denmans	5436805.73	484356.64	18450	9500	0.6	<1	-	<1	4	2	15	18	reddish wen qtz sst also qtx vng	CHBsst
215407	Leviathan Hill/Denmans	5436849.03	484331.64	18500	9500	0.5	<1	-	<1	14	2	18	16	qtz vng	?
215408	Leviathan Hill/Denmans	5436892.34	484306.64	18550	9500	0.7	<1	-	<1	7	2	19	17	v p org sandy cy	?
215409	Leviathan Hill/Denmans	5436935.64	484281.64	18600	9500	0.9	<1	-	<1	15	2	19	19	v p org sandy cy	?
215410	Leviathan Hill/Denmans	5436978.94	484256.64	18650	9500	0.7	<1	-	<1	5	<2	16	13	v p org sandy cy	?
215411	Leviathan Hill/Denmans	5436769.13	484493.25	18350	9600	0.6	<1	-	<1	19	4	18	22	gyish org cy	?
215412	Leviathan Hill/Denmans	5436812.43	484468.25	18400	9600	0.4	<1	-	<1	9	<2	13	12	gyish org wed qtz sst	CHBsst
215413	Leviathan Hill/Denmans	5436855.73	484443.25	18450	9600	0.7	<1	-	<1	3	2	21	16	gyish org cy	?
215414	Leviathan Hill/Denmans	5436899.03	484418.25	18500	9600	0.5	<1	-	<1	14	2	16	13	gyish org cy	?
215415	Leviathan Hill/Denmans	5436942.34	484393.25	18550	9600	0.6	<1	-	<1	19	3	16	15	gyish org cy w frag reddish slit	CHBslit
215416	Leviathan Hill/Denmans	5436985.64	484368.25	18600	9600	0.6	<1	-	<1	9	2	14	16	gyish org cy w frag reddish slit	CHBslit
215417	Leviathan Hill/Denmans	5437028.94	484343.25	18650	9600	0.8	<1	<1	<1	3	3	13	20	gyish org wen reddish slit	CHBslit
215418	Leviathan Hill/Denmans	5436905.73	484529.85	18450	9700	0.4	<1	-	<1	14	2	25	37	gyish org wen reddish slit	CHBslit
215419	Leviathan Hill/Denmans	5436949.03	484504.85	18500	9700	0.7	<1	-	<1	7	8	15	28	gyish org slit	CHBslit
215420	Leviathan Hill/Denmans	5436992.34	484479.85	18550	9700	0.9	2	<1	1	4	3	27	14	v p org wed fol slit	CHBslit
215421	Leviathan Hill/Denmans	5437035.64	484454.85	18600	9700	0.6	<1	-	<1	9	2	14	15	v p org wed fol slit w qtz vng	CHBslit
215422	Leviathan Hill/Denmans	5437078.94	484429.85	18650	9700	0.5	<1	-	<1	1	<2	13	12	gyish org cy	?

1996/97 Ridge Top soils programme

FGA41	Ridge Top	5430960	485150							Δ5	18.7	-	-	-	
FGA42	Ridge Top	5430915	485155							Δ5	7.5	-	-	-	
FGA43	Ridge Top	5430875	485160							Δ5	20	-	-	-	
FGA44	Ridge Top	5430840	485160							Δ5	7	-	-	-	
FGA45	Ridge Top	5430790	485165							Δ5	18.5	-	-	-	
FGB29	Ridge Top	5430975	484595							Δ1	15.8	-	-	-	
FGB30	Ridge Top	5430930	484605							Δ5	18	-	-	-	
FGB31	Ridge Top	5430885	484610							Δ1	19.4	-	-	-	
FGB32	Ridge Top	5430845	484615							Δ1	11	-	-	-	
FGB33	Ridge Top	5430805	484605							5	9.4	-	-	-	
PH50	Ridge Top	5434385	483000							5	5	-	-	-	
PH51	Ridge Top	5434355	483020							Δ1	5.6	-	-	-	
PH52	Ridge Top	5434330	483050							Δ1	7.4	-	-	-	
PH53	Ridge Top	5434295	483070							Δ1	4.8	-	-	-	
PH54	Ridge Top	5434265	483100							Δ5	<0.5	-	-	-	
PH55	Ridge Top	5434235	483125							Δ5	0.9	-	-	-	
PH56	Ridge Top	5434210	483145							Δ5	2.6	-	-	-	
PH57	Ridge Top	5434180	483180							Δ5	12.1	-	-	-	
PH58	Ridge Top	5434150	483205							Δ5	1.3	-	-	-	
PH59	Ridge Top	5434120	483230							Δ5	<0.5	-	-	-	
PH60	Ridge Top	5434080	483255							Δ1	<0.5	-	-	-	
PH61	Ridge Top	5434055	483270							Δ1	10.8	-	-	-	
PH62	Ridge Top	5434010	483290							Δ1	9.7	-	-	-	

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APPENDIX 2  
ROCK SAMPLE LEDGER

## Appendix 2: Rock Sample Ledger

Sample Number	AMG Northing	AMG Easting	Description	Ti	Zr	Nb	Rb	Y	Ba	Sr	Sn	V	Ni	Cr	Co	P	Sc	Lu
Trace element lithochemical samples and analyses				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
213622	5437106	484244	micaceous dk gy silt	3100	273	60	99	33	383	21	7	60	32	77	9	456	8	0.30
213626	5437065	484210	v dk gy carbonaceous sandstone	2708	341	14	87	25	340	21	6	61	29	126	6	478	6	0.30
213637	5434260	485630	dk gy shaley silt, wed	3639	311	15	129	34	887	24	4	74	16	74	13	105	6	0.30
				La	Ce	Pr	Nd	Sm	Eu	Gd	Dy	Er	Yb	Ga	Th	Tb	Ho	Tm
				ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
213622	aa	aa		33.60	69.37	7.87	29.5	5.6	1.09	4.7	3.9	2.1	2	14.6	14.22	0.65	0.75	0.32
213626	aa	aa		32.43	66.67	7.49	28.1	5.2	1.01	4.1	3.4	1.7	1.7	12.3	12.69	0.52	0.65	0.27
213637	aa	aa		56.54	116.11	12.43	45.1	8	1.64	5.9	4.7	2.1	2.1	14.8	16.33	0.72	0.85	0.33

Gold and pathfinder suite samples and analyses				Au	Au (rpt)	Au (ave)	As	Ag	Cu	Pb	Zn	Ni	Cr
				ppb	ppb	ppb	ppm	ppm	ppm	ppm	ppm	ppm	ppm
213478	5434065	485930	assorted quartz, hmt	30	<10x2	10	<1	<1	6	<3	2	-	-
213479	5434060	485900	assorted quartz, hmt	<10	-	<10	<1	<1	4	<3	<2	-	-
213480	5434110	485820	assorted quartz, hmt	<10	-	<10	<1	<1	6	4	<2	-	-
216129	5434611	483786	qtz vng from o/c	2	<1	2	<1	2	4	7	38	-	-
216130	5434619	483786	qtz vng from o/c	<1	<1	<1	<1	<1	<2	7	7	-	-
216131	5434584	483912	qtz vng from o/c	<1	<1	<1	<1	<1	2	9	35	-	-
216132	5434590	483945	qtz vng from o/c	10	10	10	3	<1	4	8	6	-	-
216133	5434602	484032	qtz vng from o/c	7	4	6	2	<1	2	52	7	-	-
216134	5434608	484051	qtz vng from o/c	3	4	4	<1	<1	3	24	21	-	-
216135	5434506	484004	qtz vng from o/c	6	6	6	<1	<1	2	13	15	-	-
216136	5434922.6	483597.6	qtz vng from o/c	<1	-	<1	<1	<1	3	4	13	-	-
216137	5434956	483600	qtz vng from o/c	<1	-	<1	<1	<1	<2	<3	4	-	-
216138	5435085	483603	qtz vng from o/c	<1	-	<1	<1	<1	2	3	6	-	-
216793	5434732.92	483486.46	10-30mm sheeted qtz vn in sst	<1	-	<1	2	<1	15	39	23	-	-
216794	5435039.69	483297.8	asstd bucky qtz	<1	-	<1	<1	<1	5	<3	<2	-	-
216795	5435270	483200	asstd ferrug qtz in fest	<1	-	<1	270	<1	125	538	132	-	-
216796	5435270	483200	ferrug qtz in fest	<1	-	<1	365	<1	185	1095	228	-	-
216797	5435270	483200	asstd ferrug qtz in fest	<1	-	<1	1	<1	15	36	25	-	-
216798	5435384.27	483104.63	bucky qtz	<1	-	<1	1	<1	3	15	3	-	-
216799	5435516.01	483022.8	10-30mm sheeted qtz vn	<1	-	<1	55	<1	32	50	53	-	-
216800	5435400	483120	asstd bucky qtz	26	23	25	95	<1	5	<3	2	-	-
216801	5434679.88	483274.6	10-30mm sheeted qtz vn in sst sim 216793	<1	-	<1	2	<1	2	56	3	-	-
216805	5434974.07	483324.14	tightly folded tension qtz vns	<1	<1	<1	2	<1	6	15	4	-	-
216806	5434541.73	483585.3	mod fest w qtz	<1	-	<1	29	<1	17	16	51	-	-
216807	5434318.52	483598.7	ferrug tension vn 10mm	<1	-	<1	280	<1	138	171	56	-	-
216808	5434344.5	483583.7	fest	<1	-	<1	39	<1	24	159	27	-	-
216809	5434340.17	483586.2	fest	<1	-	<1	17	<1	7	36	280	-	-
216810	5434338.34	483593.03	fest	<1	-	<1	33	<1	34	52	43	-	-
216811	5434334.01	483595.53	fest w 10mm qtz vng	<1	-	<1	18	<1	35	218	95	-	-
216812	5434132.32	483706.2	ocl tension vnts (<10mm) in qtz sst	<1	-	<1	6	<1	6	18	12	-	-
216813	5434082.32	483619.6	50mm tension vn	<1	-	<1	3	<1	4	10	4	-	-
216814	5434108.3	483604.6	sim 216814 w qtz tension vng	<1	-	<1	<1	<1	<2	7	10	-	-
216815	5434142.94	483584.6	bucky lmc qtz	<1	-	<1	<1	<1	<2	11	3	-	-
216816	5434212.23	483544.6	wy hmt-100mm tension vn in qtz sst	<1	-	<1	<1	<1	17	3	5	-	-
216817	5434175.22	483450.49	asstd tension vng in qtz sst	<1	-	<1	1	<1	3	<3	19	-	-
216818	5434140	483290	tension vns in qtz sst	<1	<1	<1	1	<1	4	<3	5	-	-
216822	5434460	484150	asstd bucky qtz	<1	-	<1	11	<1	17	49	15	-	-
216826	5434120	484330	hmt qtz	<1	-	<1	<1	<1	<2	<3	<2	-	-
216827	5434250	484200	asstd bucky qtz	<1	-	<1	<1	<1	5	<3	3	-	-
216828	5434260	484170	asstd bucky qtz	<1	-	<1	<1	<1	8	<3	2	-	-
216829	5434590	484070	asstd bucky qtz	<1	-	<1	<1	<1	<2	5	3	-	-
217011	5437400	483900	asstd bucky, wy lmc qtz	<1	<1	<1	<50	-	9	8	<2	-	-
217012	5437200	483950	asstd bucky, wy lmc qtz	<1	-	<1	<50	-	3	<3	<2	-	-
217013	5437270	483870	asstd bucky, wy lmc qtz	<1	-	<1	<50	-	7	32	<2	-	-
217014	5437600	483750	asstd bucky, wy lmc qtz	<1	-	<1	<50	-	4	3	<2	-	-
217015	5437550	483850	asstd bucky, wy lmc qtz	<1	-	<1	<50	-	6	3	<2	-	-

APPENDIX 3

SOIL SAMPLE ASSAY RESULT SHEETS (ANALABS)

181035

A N A L A B S



Our reference : BU015742  
Your reference : 114151  
Project code : 9908104679  
Date received : 25/01/99  
Date reported : 11/02/99

Analabs Pty. Ltd.  
ACN 004 591 664  
14 Thirkell St, Burnie  
Tasmania 7320  
Telephone : (03) 6431 6837  
Facsimile : (03) 6431 8890

Grant MacDonald

Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD

TAS 7270

Number of pages of results : 12  
Number of Samples : 576  
First Sample : 214387  
Last Sample : 214963

Electronic Data Transmission :  
Modem Y 11/02/99  
Facsimile //  
Disk Report Y //

Preliminary Reports :  
10/02/99 Modem Report  
11/02/99 Report

PEAKED HILL SOILS.

Authorised by  
On behalf of:

Rob Chapman  
Laboratory Manager

The results in the following analytical report pertain to the samples provided to this laboratory for preparation and/or analysis as requested by the client.



Our reference : BU015742  
 Your reference : 114151  
 Project code : 9908104679  
 Report date : 11/02/99  
 Report status : Final  
 Page : 1 of 12

Analabs Pty. Ltd.  
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 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
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### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214387	<1	<1	6	22	18	11
214388	<1	--	11	17	12	7
214389	<1	--	2	<3	3	1
214390	<1	--	4	9	3	2
214391	<1	--	4	14	7	2
214392	<1	--	5	8	5	2
214393	<1	--	4	<3	3	<1
214394	<1	--	3	<3	2	<1
214395	<1	<1	4	7	12	15
214396	<1	--	4	3	2	1
214397	<1	--	5	8	9	9
214398	<1	--	5	<3	5	7
214399	<1	--	2	<3	2	1
214400	<1	<1	3	5	<2	1
214401	<1	--	3	12	<2	17
214402	<1	--	4	8	10	13
214403	<1	--	2	6	6	7
214404	<1	--	3	<3	10	3
214405	<1	--	4	4	27	12
214406	<1	--	4	<3	10	4
214407	<1	--	4	3	12	6
214408	<1	<1	5	<3	10	14
214409	<1	--	3	<3	8	4
214410	<1	--	4	<3	5	3
214411	<1	--	5	6	7	23
214412	<1	--	3	<3	4	6
214413	<1	--	3	<3	2	5
214414	<1	--	3	<3	<2	<1
214415	<1	--	3	<3	5	5
214416	<1	--	2	<3	8	4
214417	<1	--	2	<3	3	2
214418	<1	--	3	<3	2	8
214419	<1	<1	3	<3	5	6
214420	<1	<1	3	<3	5	13
214421	<1	--	2	<3	6	3
214422	<1	--	4	<3	4	2
214423	<1	--	2	<3	4	2
214424	<1	--	3	<3	4	6
214425	<1	--	3	9	9	4
214426	<1	--	4	<3	4	4
214427	<1	--	4	6	7	9
214428	<1	--	11	9	10	11
214429	<1	--	3	15	5	5
214430	<1	--	2	11	5	6
214431	<1	--	2	8	5	7
214432	<1	--	6	15	7	8
214433	<1	--	2	<3	<2	<1
214434	<1	--	3	3	2	1
214435	<1	--	4	<3	6	7
214436	<1	--	3	<3	4	5
Method Units Detection Limit	F614 ppb 1	F614 ppb 1	A102 ppm 2	A102 ppm 3	A102 ppm 2	H102 ppm 1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
 Our reference : 114151  
 Project code : 9908104679  
 Report date : 11/02/99  
 Report status : Final  
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Analabs Pty. Ltd.  
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 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214437	<1	--	3	<3	3	7
214438	<1	<1	7	6	5	11
214439	<1	--	3	14	4	18
214440	<1	--	3	13	6	8
214441	<1	--	3	5	5	12
214442	<1	--	3	<3	6	6
214443	<1	<1	2	<3	5	4
214444	<1	--	3	<3	3	<1
214445	<1	<1	3	<3	7	3
214446	<1	<1	4	<3	7	1
214447	<1	--	2	<3	5	2
214448	<1	--	2	<3	5	<1
214449	<1	--	3	<3	20	10
214450	<1	--	2	<3	4	2
214451	<1	--	2	<3	6	6
214452	<1	--	<2	<3	8	5
214453	<1	--	2	<3	5	1
214454	<1	--	4	<3	7	1
214455	<1	--	<2	<3	13	<1
214456	<1	--	2	<3	9	1
214457	<1	--	2	<3	9	4
214458	<1	--	2	<3	6	1
214459	<1	<1	2	6	6	5
214460	<1	--	3	11	11	<1
214461	<1	--	2	<3	3	3
214462	<1	--	3	<3	3	4
214463	<1	--	2	3	4	3
214464	<1	--	3	4	13	13
214465	<1	--	2	<3	4	<1
214466	<1	--	3	<3	10	<1
214467	<1	--	<2	<3	7	<1
214468	<1	--	4	19	14	3
214469	<1	--	2	<3	4	3
214470	<1	<1	2	8	4	4
214471	<1	--	2	3	7	2
214472	<1	<1	3	4	10	4
214473	<1	--	2	9	8	3
214474	<1	--	2	3	10	2
214475	<1	--	2	8	15	4
214476	<1	--	4	9	14	11
214477	<1	--	2	<3	2	<1
214478	<1	--	2	3	7	<1
214479	<1	--	2	9	12	3
214480	<1	--	3	<3	7	2
214481	<1	--	3	<3	5	3
214482	<1	--	3	11	10	7
214483	<1	--	2	8	7	3
214484	<1	--	3	5	8	2
214485	<1	--	2	6	4	4
214486	<1	--	7	60	10	6
Method	F614	F614	A102	A102	A102	H102
Units	ppb	ppb	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	3	2	1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
 Your reference : 114151  
 Project code : 9908104679  
 Report date : 11/02/99  
 Report status : Final  
 Page : 3 of 12

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214487	<1	--	2	<3	3	1
214488	<1	<1	3	8	7	6
214489	<1	--	2	10	5	1
214490	<1	--	3	11	5	7
214491	<1	--	2	<3	8	2
214492	<1	--	3	5	20	6
214493	<1	--	2	3	8	2
214494	<1	--	4	<3	4	3
214495	<1	<1	5	27	5	11
214496	<1	--	4	28	8	18
214497	<1	--	2	4	2	1
214498	<1	--	3	4	2	2
214499	<1	--	2	<3	2	1
214500	<1	--	3	<3	6	5
214501	<1	--	4	<3	11	5
214502	<1	--	3	<3	7	2
214503	<1	--	2	<3	3	<1
214504	<1	--	3	<3	2	3
214505	<1	--	2	3	6	1
214506	<1	--	3	<3	5	<1
214507	<1	--	3	<3	6	2
214508	<1	--	3	5	12	11
214509	<1	<1	2	3	2	<1
214510	<1	--	2	<3	3	1
214511	<1	--	2	<3	5	1
214512	<1	--	2	<3	6	5
214513	<1	--	2	<3	<2	<1
214514	<1	--	2	<3	<2	<1
214515	<1	--	2	<3	8	<1
214516	<1	--	2	<3	4	2
214517	<1	--	2	<3	<2	<1
214518	<1	--	<2	<3	3	<1
214519	<1	--	3	<3	8	5
214520	<1	<1	3	4	3	<1
214521	<1	--	3	6	2	<1
214522	<1	--	2	4	7	<1
214523	<1	--	3	7	10	6
214524	<1	--	<2	<3	2	<1
214525	<1	<1	2	5	3	<1
214526	<1	--	3	5	2	<1
214527	<1	--	2	<3	<2	<1
214528	<1	--	3	9	13	<1
214529	<1	--	2	6	5	<1
214530	<1	--	3	12	11	<1
214531	<1	--	2	4	4	3
214532	<1	<1	3	14	12	2
214533	<1	--	2	16	10	5
214534	<1	--	2	6	18	2
214535	<1	--	4	<3	15	2
214536	<1	--	3	<3	8	2
Method	F614	F614	A102	A102	A102	H102
Units	ppb	ppb	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	3	2	1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
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 14 Thirkell St, Burnie  
 Tasmania 7320  
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### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214537	<1	--	2	<3	5	4
214538	<1	--	2	<3	2	5
214539	<1	--	4	<3	<2	<1
214540	<1	--	2	<3	<2	<1
214541	<1	--	6	<3	7	12
214542	<1	--	3	6	4	3
214543	<1	<1	4	15	4	2
214544	<1	--	4	7	4	5
214545	<1	--	3	<3	<2	<1
214546	<1	--	3	3	<2	1
214547	<1	--	4	11	4	10
214548	<1	--	4	5	5	8
214549	<1	<1	3	10	5	<1
214550	<1	--	2	7	<2	<1
214551	<1	--	3	7	2	5
214552	<1	<1	3	8	<2	2
214553	<1	--	3	5	<2	4
214554	<1	--	4	6	2	8
214555	<1	--	4	6	3	5
214556	<1	<1	9	19	6	11
214557	<1	--	5	<3	4	<1
214558	<1	--	4	<3	<2	2
214559	<1	--	4	3	10	9
214560	<1	--	5	<3	2	<1
214561	<1	--	4	<3	5	<1
214562	<1	--	4	5	14	2
214563	<1	<1	3	<3	4	<1
214564	<1	--	4	<3	3	2
214565	<1	--	13	6	22	12
214566	<1	--	3	3	6	1
214567	<1	--	3	<3	6	1
214568	<1	--	3	<3	8	5
214569	<1	--	3	6	8	5
214570	<1	<1	4	3	15	18
214571	<1	--	4	8	12	15
214572	<1	--	4	4	12	12
214573	<1	--	4	<3	8	4
214574	<1	--	2	<3	6	<1
214575	<1	<1	4	20	15	15
214576	<1	--	3	3	2	1
214577	<1	--	3	<3	7	<1
214578	<1	--	4	<3	12	<1
214579	<1	--	3	6	8	<1
214580	<1	--	3	9	15	1
214581	<1	--	3	14	6	4
214582	<1	--	3	7	9	4
214583	<1	--	3	<3	5	1
214584	<1	--	2	4	4	1
214585	<1	--	2	<3	2	<1
214586	<1	--	2	9	4	<1
Method	F614	F614	A102	A102	A102	H102
Units	ppb	ppb	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	3	2	1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
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 Project code : 9908104679  
 Report date : 11/02/99  
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 Page : 5 of 12

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 14 Thirkell St, Burnie  
 Tasmania 7320  
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### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214587	<1	--	<2	<3	2	1
214588	<1	--	2	6	6	<1
214589	<1	--	<2	<3	5	<1
214590	<1	--	3	<3	2	2
214591	<1	--	3	<3	3	<1
214592	<1	<1	3	4	8	5
214593	<1	--	3	<3	3	1
214594	<1	--	3	<3	2	<1
214595	<1	<1	3	<3	4	4
214596	<1	--	5	<3	2	1
214597	<1	<1	4	<3	3	<1
214598	<1	--	4	<3	5	2
214599	<1	<1	6	17	10	11
214600	<1	--	5	3	3	<1
214601	<1	--	3	<3	2	<1
214602	<1	--	5	3	<2	<1
214603	<1	--	5	<3	2	<1
214604	<1	--	<2	6	2	<1
214605	<1	--	2	<3	<2	<1
214606	<1	--	6	11	5	<1
214607	<1	--	16	17	7	5
214608	<1	--	<2	7	4	1
214609	<1	--	3	4	7	5
214610	<1	--	2	<3	3	1
214611	<1	--	2	<3	7	22
214612	<1	--	2	<3	6	9
214613	<1	--	2	<3	2	2
214614	<1	<1	2	<3	4	<1
214615	<1	--	4	<3	2	<1
214616	<1	--	3	3	7	19
214617	<1	--	2	<3	2	3
214618	<1	--	5	<3	2	<1
214619	<1	--	2	5	2	18
214620	<1	<1	2	<3	2	<1
214621	<1	--	3	<3	<2	3
214622	<1	<1	2	<3	<2	<1
214623	<1	--	3	<3	2	<1
214624	<1	--	2	3	6	11
214625	<1	--	2	<3	4	3
214627	<1	--	3	<3	3	3
214628	<1	--	3	3	2	1
214629	<1	--	8	<3	4	4
214630	<1	--	4	<3	2	1
214631	<1	--	<2	3	3	5
214632	<1	--	3	6	9	6
214633	<1	--	3	<3	8	12
214634	<1	--	3	<3	3	2
214635	<1	<1	3	29	10	27
214636	<1	--	4	25	8	8
214637	<1	--	3	8	<2	<1
Method	F614	F614	A102	A102	A102	H102
Units	ppb	ppb	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	3	2	1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
 Our reference : 114151  
 Project code : 9908104679  
 Report date : 11/02/99  
 Report status : Final  
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Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214638	<1	--	2	6	<2	1
214639	<1	--	2	56	9	25
214640	<1	<1	3	28	5	8
214641	<1	--	3	38	7	9
214642	<1	--	2	3	<2	<1
214643	<1	--	2	9	5	1
214644	<1	--	2	<3	2	1
214645	<1	--	6	6	9	10
214646	<1	<1	<2	4	4	2
214647	<1	--	3	16	5	10
214648	<1	--	3	12	6	5
214649	<1	--	<2	3	<2	<1
214650	<1	<1	2	9	<2	2
214651	<1	--	2	<3	<2	<1
214652	<1	--	<2	10	<2	1
214653	<1	--	2	13	<2	4
214654	<1	--	2	6	<2	3
214655	<1	--	3	10	<2	8
214656	<1	--	<2	6	<2	<1
214657	<1	--	2	8	<2	<1
214658	<1	--	2	3	<2	1
214659	<1	<1	4	<3	<2	<1
214660	<1	--	3	12	<2	4
214661	<1	--	2	8	<2	<1
214662	<1	--	3	9	<2	1
214663	<1	--	4	8	<2	4
214664	<1	--	5	18	5	30
214665	<1	<1	4	8	2	<1
214666	<1	--	5	5	7	<1
214667	<1	--	3	16	4	10
214668	<1	--	2	9	<2	1
214669	<1	--	3	4	<2	1
214670	<1	--	<2	6	<2	<1
214671	<1	<1	2	<3	<2	1
214672	<1	--	4	4	<2	4
214673	<1	--	<2	<3	<2	1
214674	<1	--	2	9	<2	2
214675	<1	--	6	22	6	11
214676	<1	--	3	9	3	11
214677	<1	--	3	13	3	3
214678	<1	--	2	6	2	3
214679	<1	--	<2	3	2	5
214680	<1	<1	3	19	<2	8
214681	<1	--	2	4	2	<1
214682	<1	--	2	19	<2	1
214683	<1	--	3	4	<2	5
214684	<1	--	2	11	4	7
214685	<1	--	<2	3	<2	2
214686	<1	--	2	4	<2	3
214687	<1	--	3	3	<2	<1
Method Units Detection Limit	F614 ppb 1	F614 ppb 1	A102 ppm 2	A102 ppm 3	A102 ppm 2	H102 ppm 1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
 Your reference : 114151  
 Project code : 9908104679  
 Report date : 11/02/99  
 Report status : Final  
 Page : 7 of 12

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214688	<1	--	2	5	<2	3
214689	<1	--	3	<3	<2	<1
214690	<1	--	3	<3	2	6
214691	<1	--	3	<3	3	<1
214692	<1	--	4	3	4	<1
214693	<1	--	4	<3	3	<1
214694	<1	<1	2	8	4	1
214695	<1	--	3	<3	3	3
214696	<1	<1	4	<3	2	<1
214697	<1	--	2	<3	2	3
214698	<1	--	5	5	<2	1
214699	<1	--	4	4	3	1
214700	<1	--	3	11	3	10
214701	<1	--	3	3	3	3
214702	<1	--	3	37	8	20
214703	<1	--	3	132	9	23
214704	<1	<1	3	193	7	13
214705	<1	--	3	68	8	11
214706	<1	--	4	13	5	8
214707	<1	--	2	3	2	1
214708	<1	<1	2	15	6	7
214709	<1	--	2	3	5	2
214710	<1	--	2	7	3	2
214711	<1	--	4	16	8	6
214712	<1	--	3	3	2	1
214713	<1	--	2	<3	<2	<1
214714	<1	--	2	5	6	2
214715	<1	--	2	<3	2	1
214716	<1	--	2	3	2	1
214717	<1	--	2	<3	2	1
214718	<1	--	2	<3	<2	<1
214719	<1	--	2	<3	<2	1
214720	<1	--	6	5	5	4
214721	<1	<1	3	3	<2	2
214722	<1	--	2	6	2	<1
214723	<1	--	2	3	3	4
214724	<1	<1	3	<3	3	2
214725	<1	--	3	<3	2	4
214726	<1	--	3	10	<2	13
214727	<1	--	2	<3	<2	3
214728	<1	<1	2	10	<2	3
214729	<1	--	2	<3	<2	<1
214730	<1	--	3	<3	<2	3
214731	<1	--	2	<3	<2	2
214732	<1	--	2	4	2	5
214733	<1	--	2	4	<2	2
214734	<1	--	2	<3	2	3
214735	<1	--	2	4	6	6
214736	<1	--	2	<3	<2	<1
214737	<1	--	2	<3	<2	1
Method	F614	F614	A102	A102	A102	H102
Units	ppb	ppb	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	3	2	1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
 Your reference : 114151  
 Project code : 9908104679  
 Report date : 11/02/99  
 Report status : Final  
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Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214738	<1	<1	2	19	<2	2
214739	<1	--	2	<3	<2	2
214740	<1	--	2	6	<2	<1
214741	<1	<1	<2	15	5	3
214742	<1	--	<2	6	2	<1
214743	<1	--	<2	11	5	17
214744	<1	--	<2	3	<2	<1
214745	<1	--	<2	5	<2	<1
214746	<1	<1	<2	<3	2	1
214747	<1	--	2	7	<2	<1
214748	<1	--	<2	<3	<2	<1
214749	<1	--	<2	<3	<2	<1
214750	<1	--	2	<3	<2	<1
214751	<1	--	2	<3	9	2
214752	<1	--	2	<3	7	<1
214753	<1	--	2	<3	3	<1
214754	<1	--	<2	<3	5	<1
214755	<1	--	<2	<3	3	5
214756	<1	--	2	<3	2	<1
214757	<1	--	2	<3	2	2
214758	<1	--	<2	3	2	5
214759	<1	<1	<2	<3	2	4
214760	<1	--	2	<3	<2	<1
214761	<1	--	2	<3	2	<1
214762	<1	--	2	3	2	<1
214763	<1	<1	2	<3	<2	2
214764	<1	--	<2	<3	<2	2
214765	<1	--	6	<3	3	1
214766	<1	--	<2	5	<2	1
214767	<1	--	<2	4	<2	<1
214768	<1	--	<2	6	2	1
214769	<1	--	<2	9	2	<1
214770	<1	--	3	6	2	4
214771	<1	<1	<2	4	2	<1
214772	<1	--	2	<3	2	<1
214773	<1	--	<2	<3	2	<1
214774	<1	--	<2	<3	2	2
214775	<1	--	<2	<3	3	<1
214776	<1	--	2	<3	2	<1
214777	<1	--	3	17	10	1
214778	<1	--	23	9	15	12
214779	<1	--	14	<3	9	5
214780	<1	<1	5	13	3	3
214781	<1	--	<2	3	9	2
214782	<1	<1	2	<3	6	1
214783	<1	--	2	<3	12	3
214784	<1	--	3	5	14	2
214785	<1	--	2	4	4	2
214786	<1	--	2	<3	11	5
214787	<1	--	<2	3	9	<1
Method Units Detection Limit	F614 ppb 1	F614 ppb 1	A102 ppm 2	A102 ppm 3	A102 ppm 2	H102 ppm 1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
 Our reference : 114151  
 Project code : 9908104679  
 Report date : 11/02/99  
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Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214788	<1	--	2	<3	4	<1
214789	<1	--	2	<3	6	1
214790	<1	--	2	<3	7	<1
214791	<1	--	<2	<3	6	<1
214792	<1	--	4	<3	20	11
214793	<1	--	2	<3	8	1
214794	<1	--	2	3	9	2
214795	<1	--	<2	5	6	4
214796	<1	<1	2	<3	6	<1
214797	<1	--	4	<3	12	3
214798	<1	<1	2	<3	3	3
214799	<1	<1	5	<3	21	5
214800	<1	--	2	<3	8	<1
214801	<1	--	<2	5	10	<1
214802	<1	--	<2	5	40	<1
214803	<1	--	2	4	23	5
214804	<1	--	3	9	19	<1
214805	<1	--	<2	<3	<2	<1
214806	<1	--	<2	3	4	<1
214807	<1	--	3	<3	2	<1
214808	<1	--	<2	<3	<2	<1
214809	<1	--	<2	<3	<2	<1
214810	<1	--	<2	3	<2	<1
214811	<1	--	2	11	3	<1
214812	<1	--	2	33	2	<1
214813	<1	--	2	6	6	<1
214814	<1	--	2	14	5	<1
214815	<1	<1	<2	<3	3	<1
214816	<1	--	2	7	6	4
214817	<1	--	2	3	2	5
214818	<1	--	2	<3	<2	<1
214819	<1	--	<2	<3	<2	<1
214820	<1	--	2	6	<2	15
214821	<1	<1	2	<3	4	<1
214822	<1	--	6	6	9	2
214823	<1	--	5	6	8	4
214824	<1	<1	6	7	7	<1
214825	<1	--	6	8	6	2
214826	<1	--	2	<3	<2	<1
214827	<1	--	<2	<3	<2	<1
214828	<1	--	<2	<3	<2	2
214829	<1	--	2	<3	4	<1
214830	<1	--	<2	<3	4	4
214831	<1	--	<2	<3	4	2
214832	<1	--	3	<3	5	1
214833	<1	--	2	<3	9	<1
214834	<1	--	2	7	6	<1
214835	<1	--	<2	8	8	2
214836	<1	--	2	6	11	3
214837	<1	--	<2	<3	<2	<1
Method	F614	F614	A102	A102	A102	H102
Units	ppb	ppb	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	3	2	1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
 Our reference : 114151  
 Project code : 9908104679  
 Report date : 11/02/99  
 Report status : Final  
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Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214838	<1	--	2	3	14	<1
214839	<1	--	<2	3	10	4
214840	<1	--	2	<3	9	2
214841	<1	<1	2	4	8	<1
214842	<1	--	2	5	13	1
214843	<1	<1	3	<3	15	7
214844	<1	--	<2	5	11	2
214845	<1	--	2	<3	9	4
214846	<1	<1	3	<3	15	<1
214847	<1	--	<2	3	7	<1
214848	<1	--	3	5	15	3
214849	<1	--	9	<3	8	1
214850	<1	<1	4	6	19	9
214851	<1	--	2	<3	14	2
214852	<1	--	2	<3	9	<1
214853	<1	--	2	<3	11	<1
214854	<1	<1	<2	<3	9	<1
214855	<1	--	<2	<3	6	1
214856	<1	--	<2	4	3	2
214857	<1	--	<2	<3	<2	<1
214858	<1	--	2	14	7	3
214859	<1	--	<2	<3	<2	<1
214860	<1	--	<2	4	<2	<1
214861	<1	--	<2	3	3	<1
214862	<1	--	<2	<3	<2	<1
214863	<1	--	<2	<3	2	3
214864	<1	--	3	13	14	2
214865	<1	--	2	9	9	1
214866	<1	--	3	22	9	2
214867	<1	--	2	12	11	8
214868	<1	--	3	20	6	4
214869	<1	--	7	12	10	4
214870	<1	--	6	7	7	3
214871	<1	<1	26	5	26	6
214872	<1	--	9	5	9	<1
214873	<1	--	4	<3	7	2
214874	<1	--	2	<3	4	<1
214875	<1	--	<2	<3	3	<1
214876	<1	--	2	<3	3	<1
214877	<1	--	<2	<3	3	<1
214878	<1	--	2	<3	4	3
214879	<1	--	<2	<3	3	2
214880	<1	--	3	<3	6	1
214881	<1	<1	<2	<3	7	4
214882	<1	--	2	7	17	2
214883	<1	<1	2	<3	7	<1
214884	<1	--	2	4	8	<1
214885	<1	--	2	4	9	6
214886	<1	--	<2	<3	<2	2
214887	<1	--	2	5	13	11
Method	F614	F614	A102	A102	A102	H102
Units	ppb	ppb	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	3	2	1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015742  
 Your reference : 114151  
 Project code : 9908104679  
 Report date : 11/02/99  
 Report status : Final  
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Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
214888	<1	--	2	<3	6	4
214889	<1	--	4	5	13	5
214890	<1	--	3	4	10	12
214891	<1	--	3	7	8	11
214892	<1	--	2	9	11	5
214893	<1	--	3	3	2	<1
214894	<1	--	2	5	5	1
214895	<1	<1	2	3	<2	4
214896	<1	<1	2	4	<2	3
214897	<1	<1	<2	<3	2	<1
214898	<1	--	2	4	<2	2
214899	<1	--	2	7	4	3
214900	<1	--	2	6	8	1
214901	<1	--	2	5	2	2
214902	<1	--	4	25	10	16
214903	<1	--	2	11	4	2
214904	<1	--	2	<3	<2	<1
214905	<1	--	5	10	10	2
214906	<1	--	3	5	6	5
214907	<1	--	2	<3	4	<1
214908	<1	--	3	<3	3	1
214909	<1	--	<2	<3	2	2
214910	<1	--	2	<3	9	5
214911	<1	--	3	<3	9	17
214912	<1	--	3	<3	15	9
214913	<1	--	3	<3	15	3
214914	<1	--	3	6	12	6
214915	<1	<1	6	7	16	3
214916	<1	--	3	3	8	5
214917	<1	--	2	6	9	8
214918	<1	--	5	6	18	21
214919	<1	--	5	9	18	25
214920	<1	--	2	4	5	5
214921	<1	<1	2	7	4	4
214922	<1	<1	3	<3	7	17
214923	<1	--	<2	<3	4	1
214924	<1	--	4	4	6	<1
214925	<1	--	2	<3	3	<1
214926	<1	--	3	5	4	2
214927	<1	--	3	<3	7	3
214928	<1	--	5	5	18	16
214929	<1	--	3	<3	8	2
214930	<1	--	3	<3	8	5
214931	<1	--	<2	<3	4	2
214932	<1	--	2	<3	7	4
214933	<1	--	4	6	12	3
214934	<1	--	3	<3	6	<1
214935	<1	<1	2	6	5	4
214936	<1	--	2	6	7	3
214937	<1	--	3	25	8	2
Method Units Detection Limit	F614 ppb 1	F614 ppb 1	A102 ppm 2	A102 ppm 3	A102 ppm 2	H102 ppm 1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



181048

A N A L A B S



Our reference : BU015817  
Your reference : 114029  
Project code : 9908104946  
Date received : 09/02/99  
Date reported : 04/03/99

Analabs Pty. Ltd.  
ACN 004 591 664  
14 Thirkell St, Burnie  
Tasmania 7320  
Telephone : (03) 6431 6837  
Facsimile : (03) 6431 8890

Peter Hills  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

Number of pages of results : 8  
Number of Samples : 380  
First Sample : 214964  
Last Sample : 215343

Invoice to:  
Peter Hills  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

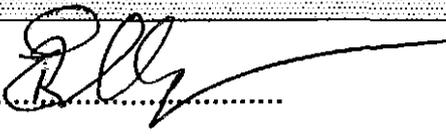
Electronic Data Transmission :  
Modem Y 04/03/99  
Facsimile //  
Disk Report Y //

Results to:

Results to:

*Corn Hill Looking Rd, Greaves Rd.  
Soils.*

Remarks :

Authorised by .....  
On behalf of:   
Rob Chapman  
Laboratory Manager

The results in the following analytical report pertain to the samples provided to this laboratory for preparation and/or analysis as requested by the client.

181049

A N A L A B S



Our reference : BU015817  
 Your reference : 114029  
 Project code : 9908104946  
 Report date : 04/03/99  
 Report status : Final  
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Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

**ANALYTICAL DATA**

Sample	Au	Au(R)	Cu	Pb	Zn	As
215213	<1	<1	8	10	12	<1
Method	F614	F614	A102	A102	A102	H102
Units	ppb	ppb	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	3	2	1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



181051

A N A L A B S



Our reference : BU015817  
 Our reference : 114029  
 Project code : 9908104946  
 Report date : 04/03/99  
 Report status : Final  
 Page : 6 of 8

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
215214	<1	<1	13	<3	21	3
215215	<1	--	17	7	19	4
215216	<1	--	10	9	10	3
215217	<1	--	22	7	10	5
215218	<1	--	9	12	8	2
215219	<1	--	3	<3	5	2
215220	<1	--	4	<3	14	<1
215221	<1	--	9	3	15	2
215222	<1	<1	13	6	15	5
215223	<1	--	8	12	12	<1
215224	<1	--	6	19	12	4
215225	<1	--	13	24	16	5
215226	<1	--	15	19	20	5
215227	<1	--	8	20	15	5
215228	<1	--	14	20	20	<1
215229	<1	--	16	23	19	3
215230	<1	--	12	6	16	4
215231	<1	--	10	6	15	1
215232	<1	--	11	13	19	1
215233	<1	--	12	8	19	3
215234	<1	--	7	8	19	4
215235	<1	--	5	<3	11	<1
215236	<1	--	5	4	13	4
215237	<1	--	5	4	12	3
215238	<1	--	15	17	19	4
215239	<1	--	8	19	14	1
215240	<1	--	12	18	16	5
215241	<1	--	20	23	16	5
215242	<1	--	4	6	8	<1
215243	<1	--	10	17	11	7
215244	<1	<1	10	21	14	4
215245	<1	--	11	21	18	6
215246	<1	--	28	22	44	4
215247	<1	<1	33	24	40	11
215248	<1	--	5	8	13	<1
215249	<1	--	42	17	64	1
215250	<1	<1	35	52	38	<1
215251	<1	--	4	8	8	<1
215252	<1	--	3	7	9	2
215253	<1	--	3	10	12	<1
215254	<1	--	7	13	13	5
215255	<1	--	4	9	10	3
215256	<1	<1	8	13	18	5
215257	<1	--	7	11	23	3
215258	<1	--	11	17	20	5
215259	<1	--	15	55	17	1
215260	<1	--	9	25	17	1
215261	<1	<1	8	20	17	1
215262	<1	--	9	14	16	2
215263	<1	--	10	17	19	6
Method Units Detection Limit	F614 ppb 1	F614 ppb 1	A102 ppm 2	A102 ppm 3	A102 ppm 2	H102 ppm 1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

181052

ANALABS



Our reference : BU015817  
 Your reference : 114029  
 Project code : 9908104946  
 Report date : 04/03/99  
 Report status : Final  
 Page : 7 of 8

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

## ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
215264	<1	--	8	17	15	1
215265	<1	--	6	13	19	4
215266	<1	--	5	6	10	<1
215267	<1	--	13	33	21	8
215268	<1	--	7	16	13	2
215269	<1	--	8	14	16	<1
215270	3	3	19	35	29	6
215271	<1	--	3	13	10	<1
215272	<1	--	8	17	12	<1
215273	<1	--	2	9	7	<1
215274	<1	--	11	21	15	<1
215275	<1	--	3	15	10	2
215276	<1	--	7	19	14	1
215277	<1	--	5	17	13	1
215278	2	3	3	10	8	2
215279	<1	--	11	19	15	7
215280	<1	<1	11	18	14	10
215281	<1	--	7	23	12	8
215282	<1	--	21	22	27	10
215283	2	2	11	41	19	8
215284	<1	--	8	29	20	3
215285	<1	--	3	6	21	4
215286	<1	--	4	8	13	8
215287	<1	--	3	<3	5	2
215288	<1	--	27	15	26	9
215289	<1	--	3	17	13	3
215290	<1	--	16	6	29	7
215291	<1	--	23	28	19	7
215292	<1	--	7	17	16	2
215293	<1	--	3	9	9	5
215294	<1	--	4	14	12	2
215295	<1	--	5	9	18	6
215296	<1	--	3	4	6	2
215297	<1	<1	2	13	8	1
215298	<1	<1	4	10	8	1
215299	<1	<1	5	10	7	4
215300	<1	<1	2	7	7	3
215301	<1	--	2	7	8	3
215302	<1	--	<2	6	8	3
215303	<1	--	3	16	9	1
215304	<1	--	3	11	10	3
215305	<1	--	2	3	5	2
215306	<1	--	3	4	5	1
215307	<1	--	2	3	5	<1
215308	<1	--	3	9	14	1
215309	<1	--	2	7	10	3
215310	<1	--	3	6	10	<1
215311	<1	--	3	9	10	3
215312	<1	<1	<2	7	6	2
215313	<1	<1	3	4	5	<1
Method Units Detection Limit	F614 ppb 1	F614 ppb 1	A102 ppm 2	A102 ppm 3	A102 ppm 2	H102 ppm 1

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



181054

A N A L A B S



Our reference : BU015860  
Your reference : 114034  
Project code : 9908104891  
Date received : 16/02/99  
Date reported : 19/03/99

Analabs Pty. Ltd.  
ACN 004 591 664  
14 Thirkell St, Burnie  
Tasmania 7320  
Telephone : (03) 6431 6837  
Facsimile : (03) 6431 8890

Grant MacDonald  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

Number of pages of results : 10  
Number of Samples : 229  
First Sample : 215344  
Last Sample : 215580

Invoice to:  
Grant MacDonald  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

Electronic Data Transmission :  
Modem Y 19/03/99  
Facsimile //  
Disk Report Y //

Results to:

Results to:

*Salisbury Rd, Leveilla Hill  
Dennis Rd, McFarlane sats*

Remarks :

Authorised by .....  
On behalf of:   
  
Rob Chapman  
Laboratory Manager

The results in the following analytical report pertain to the samples provided to this laboratory for preparation and/or analysis as requested by the client.  
A subsidiary of Scientific Services Limited

181055

ANALABS



Our reference : BU015860  
 Your reference : 114034  
 Project code : 9908104891  
 Report date : 19/03/99  
 Report status : Final  
 Page : 1 of 10

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	Cu	Pb	Zn	As
215344	<1	--	10	10	19	<50
215345	<1	--	30	12	36	<50
215346	<1	<1	6	11	21	<50
215347	<1	--	4	10	18	<50
215348	<1	--	10	12	24	<50
215349	<1	--	8	7	25	<50
215350	<1	--	19	12	29	<50
215351	<1	--	20	13	30	<50
215352	<1	<1	8	13	30	<50
215353	<1	--	9	13	27	<50
215354	<1	--	11	10	30	<50
215355	<1	--	17	27	28	<50
215356	<1	--	7	4	20	<50
215357	<1	--	<2	<3	13	<50
215358	<1	<1	19	14	30	<50
215359	<1	--	3	11	22	<50
215360	<1	--	11	<3	30	<50
215361	<1	--	2	<3	18	<50
215362	<1	--	<2	<3	21	<50
215363	<1	--	12	10	35	<50
215364	<1	--	9	31	30	110
215365	<1	--	8	20	27	60
215366	<1	--	6	<3	20	<50
215367	<1	<1	6	16	25	<50
215368	<1	--	5	<3	21	<50
215369	<1	--	14	11	34	<50
215370	<1	--	13	9	28	<50
215371	<1	--	10	7	28	<50
215372	<1	<1	9	5	40	<50
215373	<1	--	7	19	20	<50
215374	<1	--	10	10	26	<50
215375	<1	--	12	20	29	<50
215376	<1	--	3	3	12	<50
215377	<1	<1	4	5	28	<50
215378	<1	--	16	16	33	<50
215379	<1	--	5	20	23	<50
215380	<1	--	5	8	24	<50
215381	<1	--	16	4	71	<50
215382	<1	--	9	10	67	<50
215383	<1	--	8	3	43	<50
215384	<1	--	4	<3	35	<50
215385	<1	--	5	<3	34	<50
215386	<1	--	3	<3	35	<50
215387	<1	<1	<2	3	5	<50
215388	<1	<1	2	11	7	<50
215389	<1	--	31	19	71	<50
215390	<1	--	22	10	44	<50
215391	<1	--	20	18	37	<50
215392	<1	--	8	9	24	<50
215393	<1	--	13	12	37	<50
Method	F614	F614	A102	A102	A102	A102
Units	ppb	ppb	ppm	ppm	ppm	ppm
Detection Limit	1	1	2	3	2	50

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015860  
 Your reference : 114034  
 Project code : 9908104891  
 Report date : 19/03/99  
 Report status : Final  
 Page : 2 of 10

181050

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

**ANALYTICAL DATA**

Sample	Au	Au(R)	Cu	Pb	Zn	As
215394	<1	--	21	18	48	<50
215395	<1	--	6	6	20	<50
215396	<1	--	4	8	25	<50
215397	<1	--	4	6	10	<50
215398	<1	--	5	20	24	<50
215399	<1	--	2	16	24	<50
215400	<1	--	2	15	16	<50
215401	<1	--	4	19	29	<50
215402	<1	<1	3	9	11	<50
215403	<1	--	6	9	14	<50
215404	<1	--	3	15	18	<50
215405	<1	--	7	38	21	<50
215406	<1	--	2	15	18	<50
215407	<1	--	2	18	16	<50
215408	<1	--	2	19	17	<50
215409	<1	--	2	19	19	<50
215410	<1	--	<2	16	13	<50
215411	<1	--	4	18	22	<50
215412	<1	--	<2	13	12	<50
215413	<1	--	2	21	16	480
215414	<1	--	2	16	13	<50
215415	<1	--	3	16	15	<50
215416	<1	--	2	14	16	<50
215417	<1	<1	3	13	20	<50
215418	<1	--	2	25	37	<50
215419	<1	--	8	15	28	<50
215420	2	<1	3	27	14	<50
215421	<1	--	2	14	15	<50
215422	<1	--	<2	13	12	<50
Method Units	F614 ppb 1	F614 ppb 1	A102 ppm 2	A102 ppm 3	A102 ppm 2	A102 ppm 50
Detection Limit						

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU015860  
 Our reference : 114034  
 Project code : 9908104891  
 Report date : 19/03/99  
 Report status : Final  
 Page : 6 of 10

181057

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

**ANALYTICAL DATA**

Sample	As				
215344	5				
215345	11				
215346	1				
215347	44				
215348	16				
215349	39				
215350	19				
215351	18				
215352	15				
215353	17				
215354	4				
215355	15				
215356	3				
215357	10				
215358	12				
215359	12				
215360	11				
215361	1				
215362	7				
215363	28				
215364	N.A.				
215365	N.A.				
215366	12				
215367	15				
215368	11				
215369	23				
215370	27				
215371	15				
215372	19				
215373	17				
215374	37				
215375	13				
215376	2				
215377	13				
215378	7				
215379	8				
215380	6				
215381	10				
215382	10				
215383	5				
215384	14				
215385	21				
215386	16				
215387	4				
215388	6				
215389	7				
215390	4				
215391	<1				
215392	5				
215393	9				
Method Units Detection Limit	H102 ppm 1				

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



181059

APPENDIX 4

ROCK SAMPLE ASSAY RESULT SHEETS (ANALABS)

181060

A N A L A B S



Our reference : BU014819  
Your reference : WCAR455003  
Project code : Diamond Drill Core  
Date received : 26/06/98  
Date reported : 14/07/98

Analabs Pty. Ltd.  
ACN 004 591 664  
14 Thirkell St, Burnie  
Tasmania 7320  
Telephone : (004) 31 6837  
Facsimile : (004) 31 8890

Grant McDonald  
Geologist  
Geology  
Beaconsfield Mine Joint Venture  
P.O.Box 58  
BEACONSFIELD  
TAS 7270

Number of pages of results : 2  
Number of Samples : 29  
First Sample : 15000  
Last Sample : 213620

Invoice to:  
Grant McDonald  
Geologist  
Geology  
Beaconsfield Mine Joint Venture  
P.O.Box 58  
BEACONSFIELD  
TAS 7270

Electronic Data Transmission :  
Modem //  
Facsimile //  
Disk Report //

Results to:

213441 - 213620 EL 20/94

Results to:

213478  
213479  
213480

Remarks : Re-issue of report.  
Variable gold assay repeats indicate the presence of coarse gold.

Authorised by .....  
On behalf of:

Richard Newman  
Laboratory Manager

The results in the following analytical report pertain to the samples provided to this laboratory for preparation and/or analysis as requested by the client.

181061

A N A L A B S



Our reference : BU014819  
 Our reference : WCAR455003  
 Project code : Diamond Drill Core  
 Report date : 14/07/98  
 Report status : Final  
 Page : 1 of 2

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (004) 31 6837  
 Facsimile : (004) 31 8890

**ANALYTICAL DATA**

Sample	Cu	Pb	Zn	Ag	As	As
✓ 213478	6	<3	2	<1	<50	<1
✓ 213479	4	<3	<2	<1	<50	<1
✓ 213480	6	4	<2	<1	<50	<1
Method	A102	A102	A102	A102	A102	H102
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	2	3	2	1	50	1
Upper Method		A103				

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



181063

A N A L A B S



## ANALYSIS DESCRIPTION

Job number : BU014819 Order number : WCAR455003

Scheme code : S033 - Drillcore/Rock; Dry, Jaw crush, Fine pulv, Ring

Sample preparation. Drillcore, Rock samples; Dry,  
Jaw crush, Fine pulverise, Ringmill, <3.5kg

Scheme code : G102 - Triple acid digest, Geochemical samples

Triple acid digest, (HCl, HNO<sub>3</sub>, HClO<sub>4</sub>), Geochemical  
samples.

Scheme code : A102 - AAS analysis

AAS analysis of sample after G102 digest.

Scheme code : H102 - Hydride AAS analysis

Hydride AAS analysis after G102 digest.

Scheme code : G103 - Triple acid digest, Ore Grade samples

Triple acid digest, (HCl, HNO<sub>3</sub>, HClO<sub>4</sub>), Ore grade  
samples.

Scheme code : A103 - AAS analysis

AAS analysis of sample after G103 digest.

Scheme code : F630 - 30g fire assay, Lead collection, AAS

Fire assay, Lead collection, Aqua Regia digest,  
AAS, 30g sample.

181064

A N A L A B S



Our reference : BU016466  
Your reference : 114169  
Project code : 9912148861  
Date received : 17/06/99  
Date reported : 29/06/99

Analabs Pty. Ltd.  
ACN 004 591 664  
14 Thirkell St, Burnie  
Tasmania 7320  
Telephone : (03) 6431 6837  
Facsimile : (03) 6431 8890

Grant MacDonald  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

Number of pages of results : 4  
Number of Samples : 51  
First Sample : 216072  
Last Sample : 216182

Invoice to:  
Grant MacDonald  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

Electronic Data Transmission :  
Modem Y 29/06/99  
Facsimile //  
Disk Report Y //

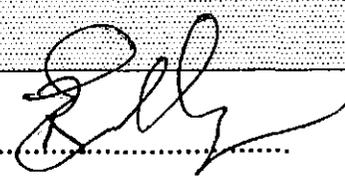
Preliminary Reports :  
25/06/99 Report  
25/06/99 Report

Results to:

Results to:

Powerline West, rocks.  
Rookery Rd  
Peaked Hill rocks

Remarks :

Authorised by .....  
On behalf of:   
Rob Chapman  
Laboratory Manager



Our reference : BU016466  
 Your reference : 114169  
 Project code : 9912148861  
 Report date : 29/06/99  
 Report status : Final  
 Page : 1 of 4

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	As		
216129	2	<1	<1		
216130	<1	<1	<1		
216131	<1	<1	<1		
216132	10	10	3		
216133	7	4	2		
216134	3	4	<1		
216135	6	6	<1		
216136	<1	--	<1		
216137	<1	--	<1		
216138	<1	--	<1		
Method	F614	F614	H102		
Units	ppb	ppb	ppm		
Detection Limit	1	1	1		
Upper Method			A102		

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received



Our reference : BU016466  
 Your reference : 114169  
 Project code : 9912148861  
 Report date : 29/06/99  
 Report status : Final  
 Page : 3 of 4

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Cu	Pb	Zn	Ag	As
216129	4	7	38	2	<50
216130	<2	7	7	<1	<50
216131	2	9	35	<1	<50
216132	4	8	6	<1	<50
216133	2	52	7	<1	<50
216134	3	24	21	<1	<50
216135	2	13	15	<1	<50
216136	3	4	13	<1	<50
216137	<2	<3	4	<1	<50
216138	2	3	6	<1	<50
Method Units Detection Limit	A102 ppm 2	A102 ppm 3	A102 ppm 2	A102 ppm 1	A102 ppm 50

Notes: N.A. = not analysed, -- = element not determined, I.S. = Insufficient sample, L.N.R. = listed not received

181067

A N A L A B S



Our reference : BU016592  
Your reference : 114172 A  
Project code : 8903052766  
Date received : 20/07/99  
Date reported : 04/08/99

Analabs Pty. Ltd.  
ACN 004 591 664  
14 Thirkell St, Burnie  
Tasmania 7320  
Telephone : (03) 6431 6837  
Facsimile : (03) 6431 8890

Grant MacDonald  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

Number of pages of results : 4  
Number of Samples : 78  
First Sample : 216783  
Last Sample : 216863

Invoice to:  
Grant MacDonald  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

Electronic Data Transmission :  
Modem Y 04/08/99  
Facsimile //  
Disk Report Y //

Preliminary Reports :  
22/07/99 Report  
22/07/99 Report  
23/07/99 Report

Results to:

Results to:

locks.

Remarks :  
  
inc EG edk rx

Authorised by .....  
On behalf of:

Rob Chapman  
Laboratory Manager

The results in the following analytical report pertain to the samples provided to this laboratory for preparation and/or analysis as requested by the client.



Our reference : BU016592  
 Your reference : 114172 A  
 Project code : 8903052766  
 Report date : 04/08/99  
 Report status : Final  
 Page : 1 of 4

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Au	Au(R)	As			
216793	<1	<1	2			
216794	<1	--	<1			
216795	<1	--	>50			
216796	<1	--	>50			
216797	<1	--	1			
216798	<1	--	1			
216799	<1	--	>50			
216800	26	23	>50			
216801	<1	--	2			
216805	<1	<1	2			
216806	<1	--	29			
216808	<1	--	39			
216809	<1	--	17			
216809A	<1	--	>50			
216810	<1	--	33			
216811	<1	--	18			
216812	<1	--	6			
216813	<1	--	3			
216814	<1	--	<1			
216815	<1	--	<1			
216816	<1	--	<1			
216817	<1	--	1			
216818	<1	<1	1			
216822	<1	--	11			
216826	<1	--	<1			
216827	<1	--	<1			
216828	<1	--	<1			
216829	<1	--	<1			
Method Units Detection Limit Upper Method	F614 ppb 1	F614 ppb 1	H102 ppm 1 A102			

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

181069

A N A L A B S



Our reference : BU016592  
 Our reference : 114172 A  
 Project code : 8903052766  
 Report date : 04/08/99  
 Report status : Final  
 Page : 3 of 4

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (03) 6431 6837  
 Facsimile : (03) 6431 8890

### ANALYTICAL DATA

Sample	Cu	Pb	Zn	Ag	As
216793	15	39	23	<1	<50
216794	5	<3	<2	<1	<50
216795	125	538	132	<1	270
216796	185	1095	228	<1	365
216797	15	36	25	<1	<50
216798	3	15	3	<1	<50
216799	32	50	53	<1	55
216800	5	<3	2	<1	95
216801	2	56	3	<1	<50
216806	17	16	51	<1	<50
216808	24	159	56	<1	<50
216809	7	36	27	<1	<50
216809A	138	171	280	<1	280
216810	34	52	43	<1	<50
216811	35	218	95	<1	<50
216812	6	18	12	<1	<50
216813	4	10	4	<1	<50
216814	<2	17	10	<1	<50
216815	<2	11	3	<1	<50
216816	17	3	5	<1	<50
216817	3	<3	19	<1	<50
216818	4	<3	5	<1	<50
216822	17	49	15	<1	<50
216826	<2	<3	<2	<1	<50
216827	5	<3	3	<1	<50
216828	8	<3	2	<1	<50
216829	<2	5	3	<1	<50
Method Units Detection Limit	A102 ppm 2	A102 ppm 3	A102 ppm 2	A102 ppm 1	A102 ppm 50

Notes: N.A. = not analysed, - = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

181070

A N A L A B S



Our reference : BU016873  
Your reference : 114174  
Project code : Rocks  
Date received : 16/09/99  
Date reported : 22/09/99

Analabs Pty. Ltd.  
ACN 004 591 664  
14 Thirkell St, Burnie  
Tasmania 7320  
Telephone : (03) 6431 6837  
Facsimile : (03) 6431 8890

Grant MacDonald  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

Number of pages of results : 1  
Number of Samples : 32  
First Sample : 216988  
Last Sample : 217019

Invoice to:  
Grant MacDonald  
  
Beaconsfield Mine Joint Venture  
PO Box 58  
BEACONSFIELD  
  
TAS 7270

Electronic Data Transmission :  
Modem Y 22/09/99  
Facsimile / /  
Disk Report Y / /

Preliminary Reports :  
21/09/99 Report

Results to:

Results to:

Rocks.

Remarks :  
Leviata, Lightwood Hill rx.

Authorised by .....  
On behalf of:  
  
Rob Chapman  
Laboratory Manager

The results in the following analytical report pertain to the samples provided to this laboratory for preparation and/or analysis as requested by the client.

A subsidiary of Scientific Services Limited



181072

A N A L A B S



Our reference : BU014974  
Your reference : WX2A072698  
Project code : Rock  
Date received : 04/08/98  
Date reported : 19/08/98

Analabs Pty. Ltd.  
ACN 004 591 664  
14 Thirkell St, Burnie  
Tasmania 7320  
Telephone : (004) 31 6837  
Facsimile : (004) 31 8890

Grant McDonald  
Geologist  
Geology  
Beaconsfield Mine Joint Venture  
P.O.Box 58  
BEACONSFIELD  
  
TAS 7270

Number of pages of results : 6  
Number of Samples : 37  
First Sample : 213621  
Last Sample : 213577

Invoice to:  
Grant McDonald  
Geologist  
Geology  
Beaconsfield Mine Joint Venture  
P.O.Box 58  
BEACONSFIELD  
  
TAS 7270

Electronic Data Transmission :  
Modem Y 19/08/98  
Facsimile / /  
Disk Report / /

Preliminary Reports :  
17/08/98 Report

Results to:

Results to:

213622, 213626 + 213637 from  
Relinquished part EL 20/94.

Remarks :

Authorised by .....  
On behalf of:

Richard Newman  
Laboratory Manager

The results in the following analytical report pertain to the samples provided to this laboratory for preparation and/or analysis as requested by the client.

181073

A N A L A B S



Our reference : BU014974  
 Your reference : WX2A072698  
 Project code : Rock  
 Report date : 19/08/98  
 Report status : Final  
 Page : 1 of 6

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (004) 31 6837  
 Facsimile : (004) 31 8890

**ANALYTICAL DATA**

Sample	La	Ce	Pr	Nd	Sm	Eu
213622	33.60	69.37	7.87	29.5	5.6	1.09
213626	32.43	66.67	7.49	28.1	5.2	1.01
213637	56.54	116.11	12.43	45.1	8.0	1.64

Method Units Detection Limit	M104 ppm 0.05	M104 ppm 0.05	M104 ppm 0.05	M104 ppm 0.1	M104 ppm 0.1	M104 ppm 0.05

Notes: N.A. = not analysed, - = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

181074

A N A L A B S



Our reference : BU014974  
 Your reference : WX2A072698  
 Project code : Rock  
 Report date : 19/08/98  
 Report status : Final  
 Page : 2 of 6

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (004) 31 6837  
 Facsimile : (004) 31 8890

ANALYTICAL DATA

Sample	Gd	Dy	Er	Yb	Ga	Th
213622	4.7	3.9	2.1	2.0	14.6	14.22
213626	4.1	3.4	1.7	1.7	12.3	12.69
213637	5.9	4.7	2.1	2.1	14.8	16.33

Method	M104	M104	M104	M104	M104	M104
Units	ppm	ppm	ppm	ppm	ppm	ppm
Detection Limit	0.1	0.1	0.1	0.1	0.5	0.05

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

181075

A N A L A B S



Our reference : BU014974  
 Your reference : WX2A072698  
 Project code : Rock  
 Report date : 19/08/98  
 Report status : Final  
 Page : 3 of 6

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (004) 31 6837  
 Facsimile : (004) 31 8890

**ANALYTICAL DATA**

Sample	P	Ti	Zr	V	Nb	Rb
213622	456	3100	273	60	11	99
213626	478	2708	341	61	14	87
213637	105	3639	311	76	15	129

Method Units Detection Limit	X401 ppm 30	X401 ppm 100	X401 ppm 5	X401 ppm 5	X401 ppm 3	X401 ppm 5

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

181076

A N A L A B S



Our reference : BU014974  
 Your reference : WX2A072698  
 Project code : Rock  
 Report date : 19/08/98  
 Report status : Final  
 Page : 4 of 6

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (004) 31 6837  
 Facsimile : (004) 31 8890

**ANALYTICAL DATA**

Sample	Tb	Ho	Tm	Lu	Sc	P
213622	0.65	0.75	0.32	0.3	.8	N.A.
213626	0.52	0.65	0.27	0.3	.6	N.A.
213637	0.72	0.85	0.33	0.3	.6	N.A.

Method Units Detection Limit	M104 ppm 0.05	M104 ppm 0.05	M104 ppm 0.05	M104 ppm 0.1	M104 ppm 2	X408 % 0.005

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

181077

A N A L A B S



Our reference : BU014974  
 Your reference : WX2A072698  
 Project code : Rock  
 Report date : 19/08/98  
 Report status : Final  
 Page : 5 of 6

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (004) 31 6837  
 Facsimile : (004) 31 8890

**ANALYTICAL DATA**

Sample	Y	Ba	Sr	Sn	Cr
213622	33	383	21	7	77
213626	25	340	21	6	126
213637	34	887	24	4	74

Method Units Detection Limit	X401 ppm 3	X401 ppm 10	X401 ppm 5	X401 ppm 3	X401 ppm 5

Notes: N.A. = not analysed, -- = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

181078

A N A L A B S



Our reference : BU014974  
 Your reference : WX2A072698  
 Project code : Rock  
 Report date : 19/08/98  
 Report status : Final  
 Page : 6 of 6

Analabs Pty. Ltd.  
 ACN 004 591 664  
 14 Thirkell St, Burnie  
 Tasmania 7320  
 Telephone : (004) 31 6837  
 Facsimile : (004) 31 8890

**ANALYTICAL DATA**

Sample	Ni	Co				
213622	32	9				
213626	29	6				
213637	16	13				

Method Units Detection Limit	A104 ppm 5	A104 ppm 5				

Notes: N.A. = not analysed, - = element not determined, I.S. = insufficient sample, L.N.R. = listed not received

181079

A N A L A B S



## ANALYSIS DESCRIPTION

Job number : BU014974 Order number : WX2A072698

-----  
Scheme code : S002 - Drying  
-----

Sample preparation. Drying.

-----  
Scheme code : S005 - Jaw Crushing to nominal 6mm to 12mm  
-----

Sample preparation. Jaw crushing to nominal 6mm to 12mm.

-----  
Scheme code : S020 - Dry, Ringmill < 500g  
-----

Sample preparation. Dry, Ringmill. < 500g.

-----  
Scheme code : G104 - Total acid digest, Geochemical samples  
-----

Total acid digest, (HF, HCl, HNO<sub>3</sub>, HClO<sub>4</sub>),  
Geochemical samples.

-----  
Scheme code : M104 - ICP-MS analysis, Base metals  
-----

ICP-MS analysis of sample after G104 digest, Base  
metals.

-----  
Scheme code : X401 - Pressed powder, XRF, Trace determination  
-----

Pressed powder, XRF, Trace determination.

-----  
Scheme code : A104 - AAS analysis  
-----

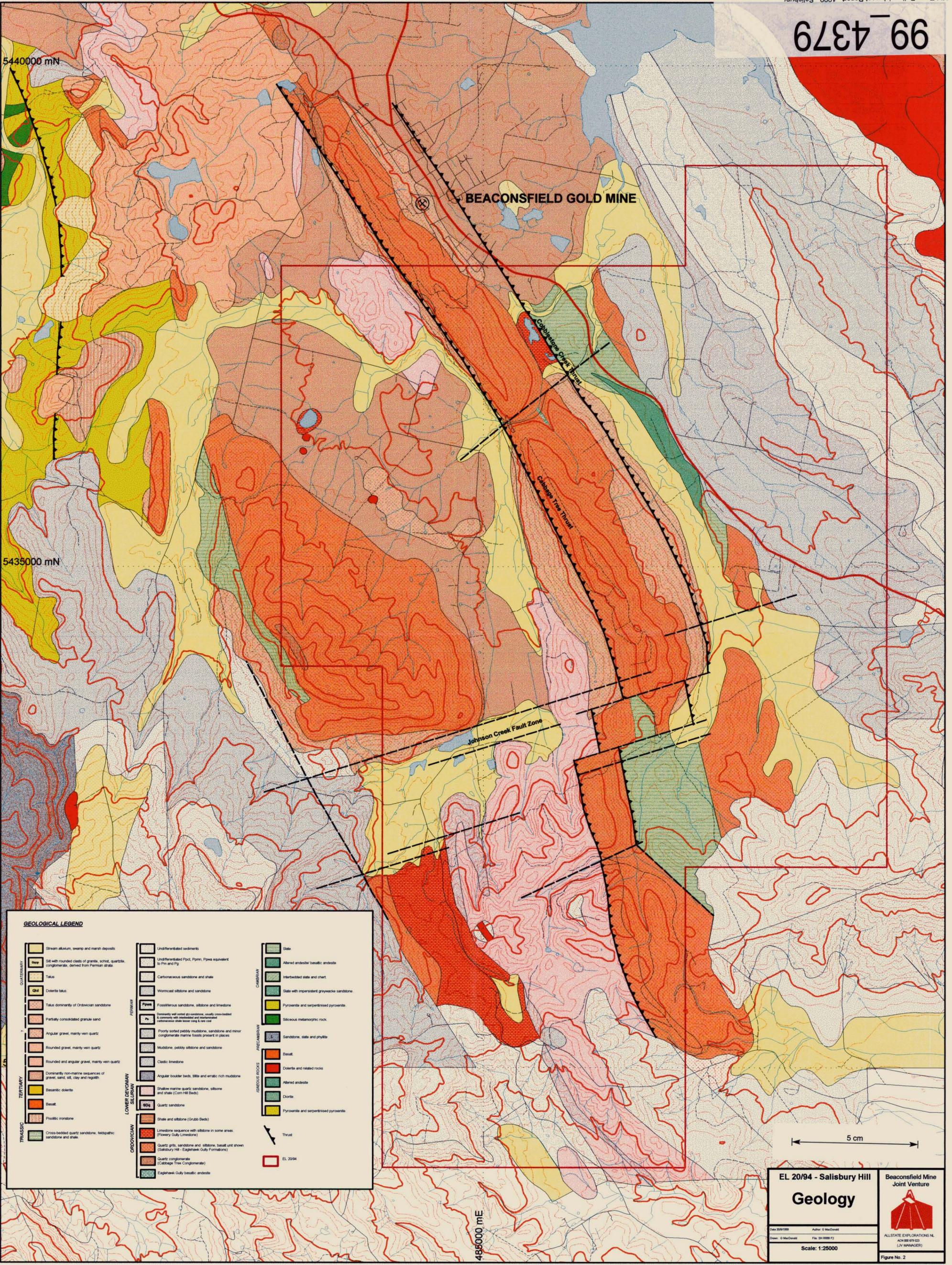
AAS analysis of sample after G104 digest.

-----  
Scheme code : X408 - Glass fusion, XRF, Silicate rock analysis  
-----

Glass fusion, XRF, Silicate rock analysis

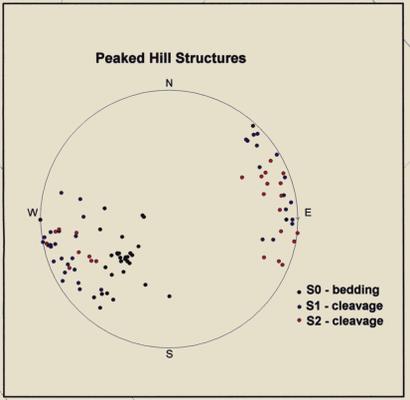
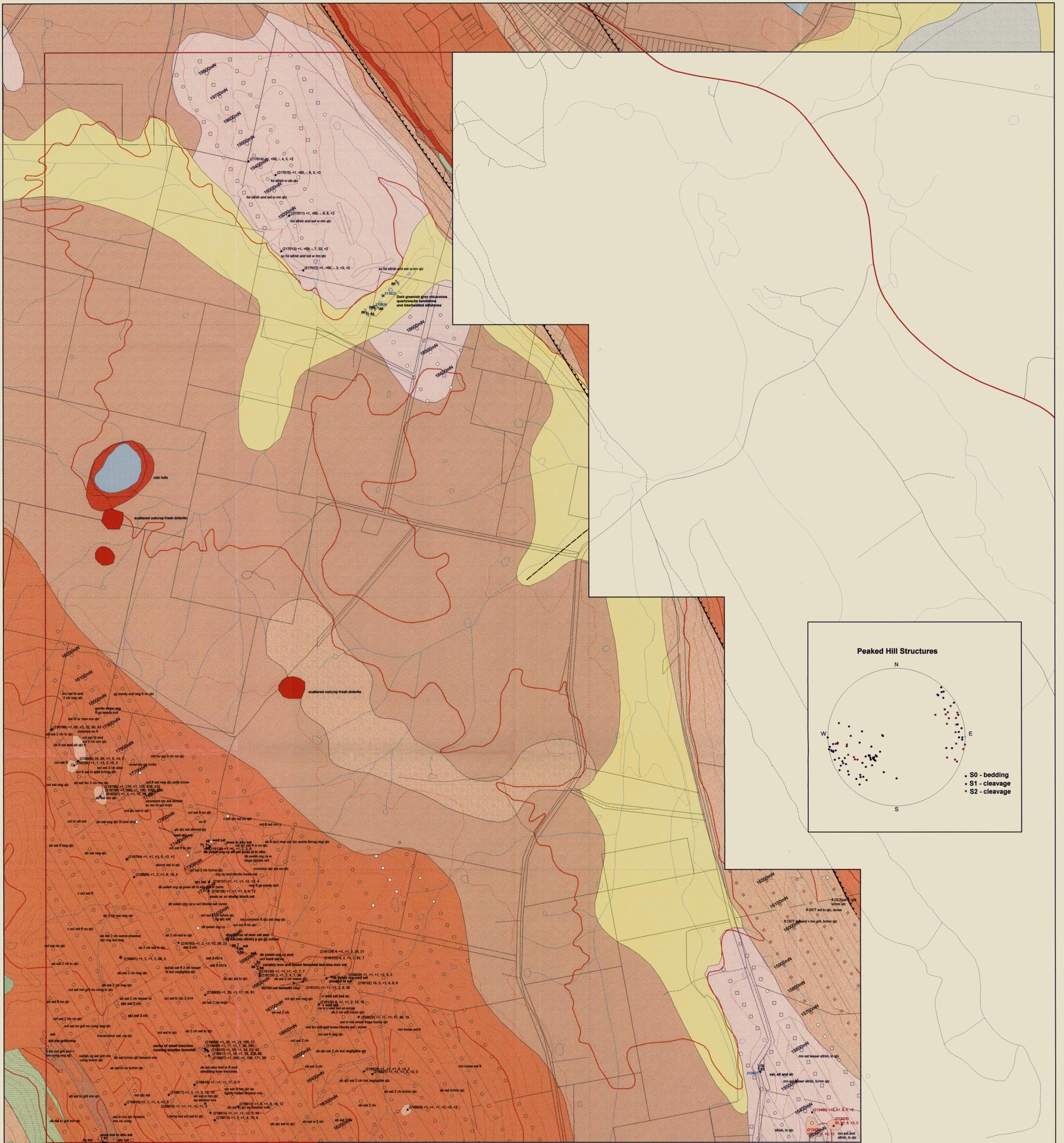
## ANALYSIS DESCRIPTION

99\_4379



**GEOLOGICAL LEGEND**


EL 20/94 - Salisbury Hill  
**Geology**  
 Beaconsfield Mine Joint Venture  
 ALLSTATE EXPLORATIONS NL  
 (JV MANAGER)  
 Scale: 1:25000  
 Figure No. 2



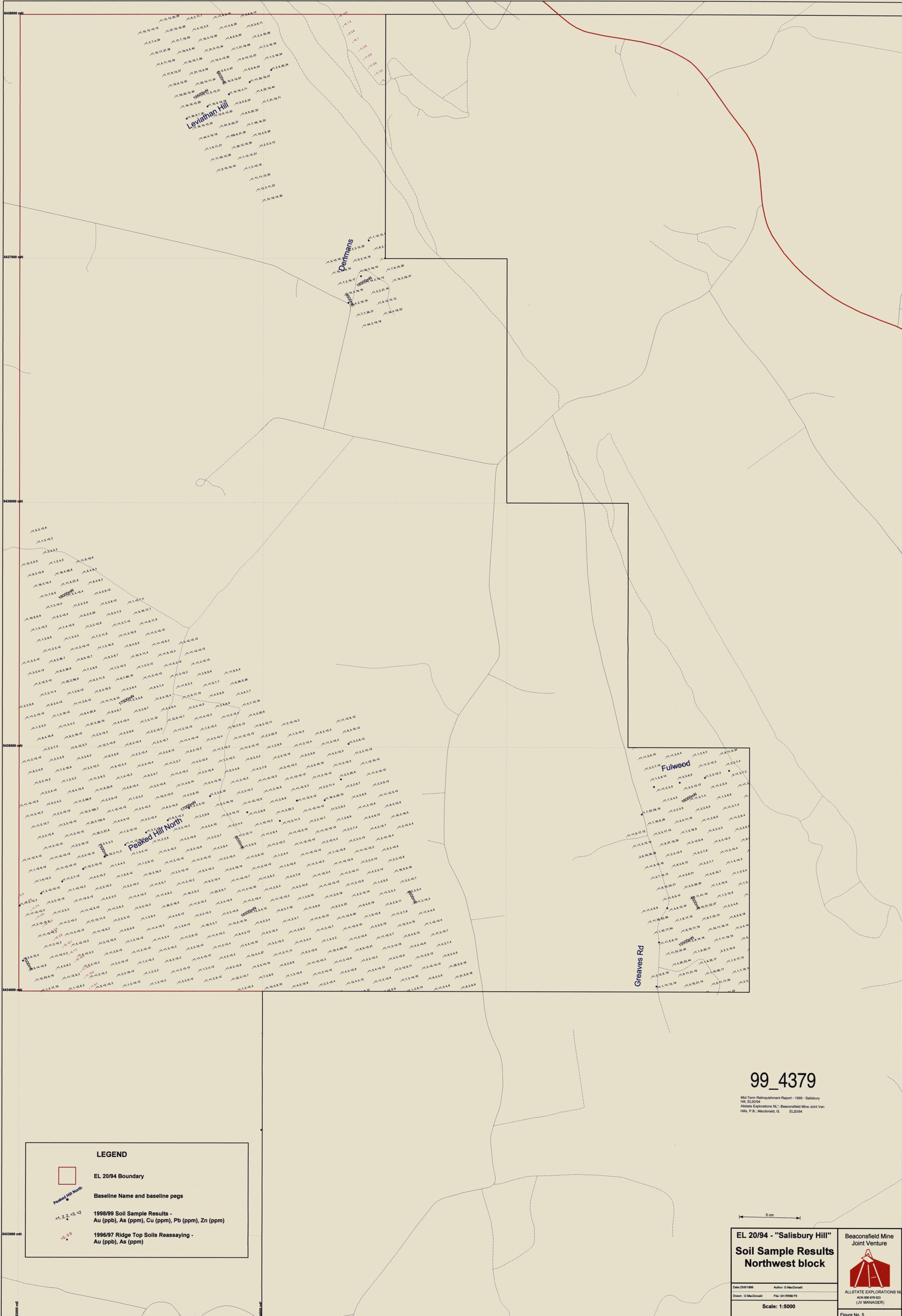
99\_4379

Mid-Term Reclamation Report - 1999 - Salisbury Hill, EL2004  
 Allstate Explorations NL, Beaconsfield Mine Joint Venture  
 Hills, P.B.; Macdonald, G. EL2004

LEGEND		
<b>Mapping and sampling</b> ○ float □ outcrop ■ Quartz 'blobs' (216080) +1, -1, -3, -4 21625 21615 21615 Gridline showing grid easting and northing	<b>Geology - float, outcrop and interpreted</b> □ Quaternary - alluvium ■ 19999 gold etc. sample (example not to scale) ■ 199799 trace element lithochemistry sample ■ 19999 trace element lithochemistry sample --- Gridline showing grid easting and northing	<b>Geology - from soil chip logs</b> ○ unknown ○ alluvium ○ Tertiary gravels ○ Permian lag - siliceous pebbles generally in clays ○ Permian in-situ ○ Corn Hill Beds siltstones and shales ○ Corn Hill Beds quartzwacke sandstones △ Corn Hill Beds quartz sandstone ○ Ordovician sandstones and occasionally grits in screw cover ○ Ordovician sandstones and occasionally grits - in-situ
<b>Geology - float, outcrop and interpreted</b> □ Quaternary - alluvium ■ 19999 gold etc. sample (example not to scale) ■ 199799 trace element lithochemistry sample ■ 19999 trace element lithochemistry sample --- Gridline showing grid easting and northing	<b>Geology - from soil chip logs</b> ○ unknown ○ alluvium ○ Tertiary gravels ○ Permian lag - siliceous pebbles generally in clays ○ Permian in-situ ○ Corn Hill Beds siltstones and shales ○ Corn Hill Beds quartzwacke sandstones △ Corn Hill Beds quartz sandstone ○ Ordovician sandstones and occasionally grits in screw cover ○ Ordovician sandstones and occasionally grits - in-situ	<b>Geology - from soil chip logs</b> ○ unknown ○ alluvium ○ Tertiary gravels ○ Permian lag - siliceous pebbles generally in clays ○ Permian in-situ ○ Corn Hill Beds siltstones and shales ○ Corn Hill Beds quartzwacke sandstones △ Corn Hill Beds quartz sandstone ○ Ordovician sandstones and occasionally grits in screw cover ○ Ordovician sandstones and occasionally grits - in-situ

5 cm

<b>EL 20/94 - Salisbury Hill</b> <b>Grid Fact Mapping and Rock Sampling</b> <b>Northwest block</b>		<b>Beaconsfield Mine</b> <b>Joint Venture</b>
Date: 30/9/1999 Drawn: G Macdonald	Author: G Macdonald File: SH AR99 F4	ALLSTATE EXPLORATIONS NL ACN 000 879 023 (JV MANAGER)
Scale: 1:5000		Figure No. 4



99\_4379

MO Term Relinquishment Report - 1999 - Salisbury Hill, EL20/94  
 Allstate Explorations NL, Beaconsfield Mine Joint Venture  
 Hills, P.B., Macdonald, G. EL20/94

**LEGEND**

-  EL 20/94 Boundary
-  Baseline Name and baseline pegs
-  1998/99 Soil Sample Results - Au (ppb), As (ppm), Cu (ppm), Pb (ppm), Zn (ppm)
-  1996/97 Ridge Top Soils Reassaying - Au (ppb), As (ppm)



<b>EL 20/94 - "Salisbury Hill"</b>		
<b>Soil Sample Results Northwest block</b>		
Date: 25/9/1999	Author: G MacDonald	ALLSTATE EXPLORATIONS NL ACN 000 979 023 (JV MANAGER)
Drawn: G MacDonald	File: SH RR99 P5	
Scale: 1:5000		Figure No. 5