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Annual Report Year 2 - EL 19/97 - Winkleigh

Beaconsfield Gold NL\*  
Morrison, K.C.

EL19/97

602002



**Beaconsfield Gold NL**

**EL 19/97 - Winkleigh**

**Year 2 Annual Report**

Ken Morrison  
29 August 1999

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## SUMMARY

Ongoing regional mapping, combined with lithochemisty and the results of drill hole WDH-2 have caused a reinterpretation of the pre Permian geology of the EL.

The sandstone unit which contains the Winkleigh Prospect is considered to be a facies of Eldon Group correlate (Corn Hill Beds) which unconformably overlies Flowery Gully Limestone at Winkleigh. Regionally this sandstone is one of a series of basal, intraformational lenses of sandstone and granule wacke within the siltstone-mudstone dominant Corn Hill Beds. A major fault structure (Winkleigh Thrust) is interpreted to project under Permian and Cainozoic cover through the southern part of the EL, some 500 metres NE of the prospect area. WSW directed thrusting has transported Cabbage Tree Formation Lower Transition Beds (NE of the fault) over Corn Hill Beds (SW of the fault).

An arsenic/gold soil anomaly was detected over basal Corn Hill Beds, 450 metres NW of the percussion drill hole site WDH-1. The anomaly was tested with a 201 metre angled HQ cored drill hole, WDH-2. The hole collared in and remained in an interbedded sandstone-slatey siltstone sequence and was terminated without reaching the Flowery Gully Limestone. No gold mineralisation was encountered but strong arsenic anomalism persisted through the sandstone units.

An additional drill hole, with a NE or SW azimuth, is needed to fully test the alternative fault configurations which could have sourced the surface anomaly.

## TENEMENT INFORMATION

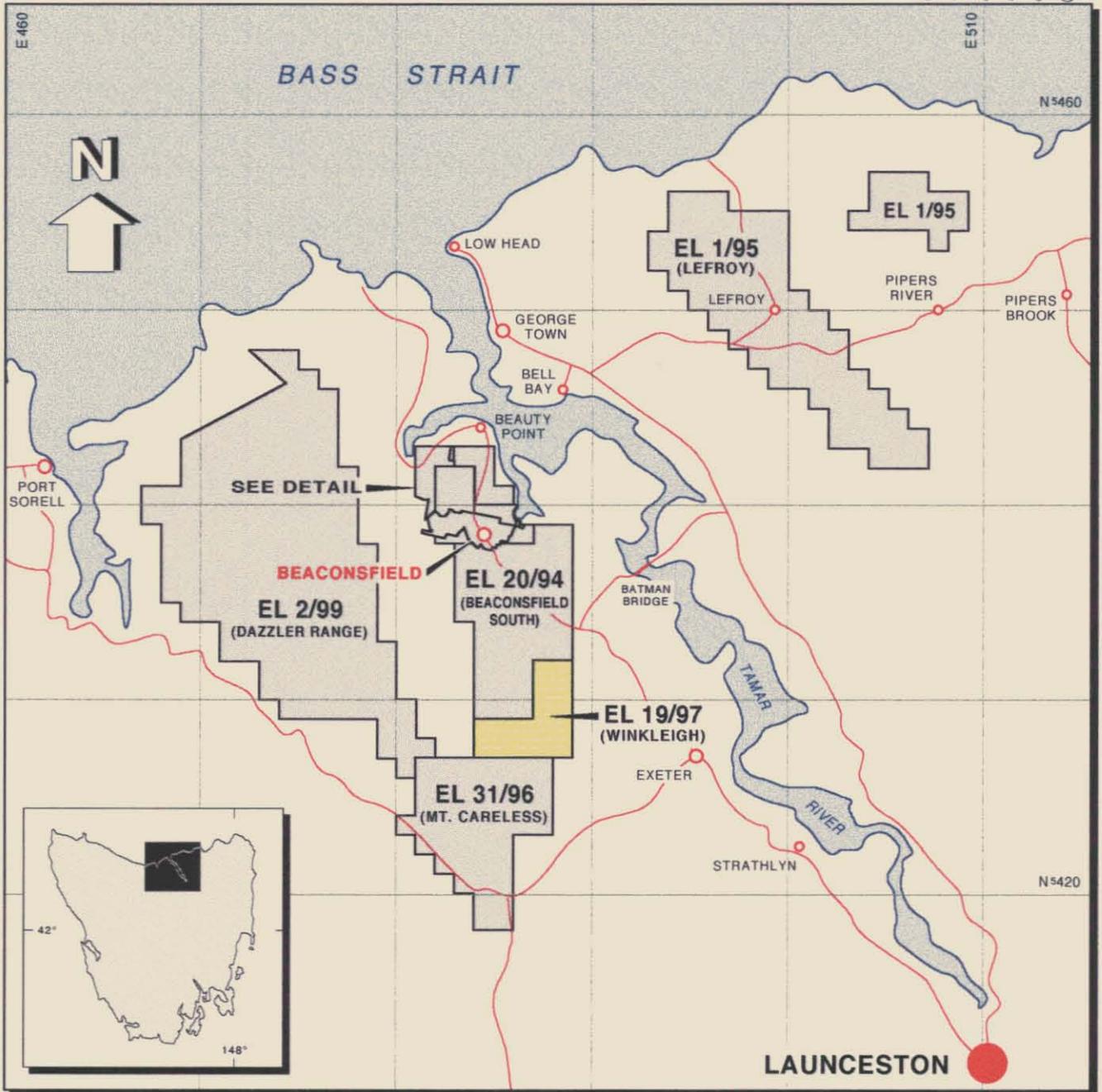
EL 19/97 covers 16 km<sup>2</sup> of freehold farm land and eucalypt plantation centred on Winkleigh, west of the Tamar Valley (Figure 1).

The licence was awarded to Beaconsfield Gold NL (BGNL) in September 1997, to explore for gold in the probable southerly extension of the belt of Cambrian to Devonian sedimentary rocks which host the Tasmania Reef at Beaconsfield.

Infrastructure and services are well established throughout the area. Access to the north of the tenement is via Rookery Road and to the south, via Winkleigh Road. Both roads connect directly to the East Tamar Highway and consequently any part of the EL can be accessed all year round within one hour from either Launceston or Beaconsfield.

BGNL holds 100% equity in the licence.

This report deals with exploration conducted during licence Year 2, which ends on 19 September 1999, and outlines proposed future work.



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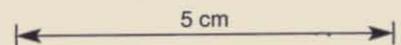
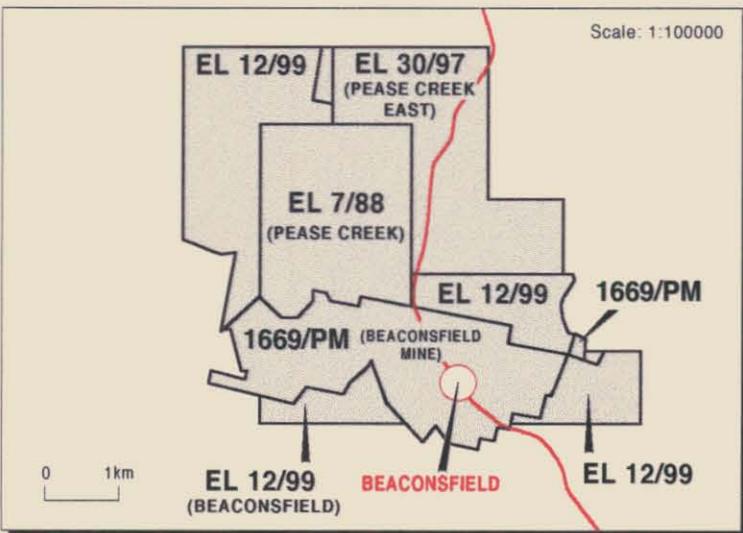
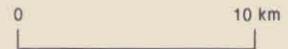


Figure 1

BEACONSFIELD GOLD NL		
EL 19/97 Winkleigh		
Location Map		
Drafting: R.Carroll	Date: August 1999	Scales: as shown

## REVIEW OF PREVIOUS EXPLORATION

The Company's exploration aims and a description of the minimal pre EL 19/97 prospecting and exploration activities in the area are outlined in the Year 1 Annual Report (Morrison, 1998).

In licence Year 1 a program of mapping, rock chip sampling and ridge top B/C horizon soil sampling was aimed at delineating the outcrop/subcrop extent of Cabbage Tree Formation sandstones and to screen them for evidence of mineralisation. This work generated one significant anomaly in the EL, a coincident soil arsenic-gold rock chip anomaly (40-90 ppm As in soil + 170-190 ppb Au in outcrop), near the Winkleigh Road-South Winkleigh Road intersection. A 60 metre vertical RC percussion hole was drilled on the Winkleigh anomaly (WDH-1 at 487,465 m E, 5,428,049 m N AMG). The hole intersected 42 metres of dark, silicified fine quartz sandstone and minor cleaved siltstone, overlying crystalline micritic limestone. Increased veining, deformation and pyrite concentration around the sandstone-limestone contact suggested a fault contact and as the sandstone visually correlated well with both the Pease Creek sandstone and sandstones within both the upper and lower Transition Beds in the Beaconsfield Mine Sequence, the WDH-1 section was interpreted as Cabbage Tree Formation thrust over Flowery Gully Limestone (Figure 2, Morrison 1998). The "Winkleigh Thrust" position was interpreted as the southeasterly strike extension of a prominent regional scale photolinear NW of EL 19/97, which had initially been interpreted as a probable unconformity at the top of the Flowery Gully Limestone.

A subtle gold kick (20 ppb) was encountered near the base of oxidation in WDH-1, suggesting slight supergene concentration. Several >100 ppm As values occur within the sandstone unit but do not appear to correlate with structures or veins.

## EL 19/97 YEAR 2 EXPLORATION RESULTS

### *1. Mapping*

Regional scale mapping and lithogeochemistry is progressing over all tenements in which BGNL has equity, to resolve the structural and stratigraphic problems fundamental to generating new prospects. Much of this work is collaborative with Beaconsfield Mine JV and Allstate Exploration geologists, as the exploration implications are equally applicable to all the pre Permian geology of the region.

Outcrop exposures 5 km NW of Winkleigh (within EL 20/94) indicate that basal intra Corn Hill Beds (using the nomenclature of Hills, 1982 for Eldon Group correlates in the Beaconsfield region) facies of fine quartz sandstone and quartz grit wacke unconformably overlie Flowery Gully Limestone. The limestone is relatively undeformed; although calcite veining is common, bioturbation burrows remain undeformed and this would be unlikely if the sandstone-limestone contact was a thrust.

Within EL 19/97, WDH-2 was drilled along strike (to the SE) from this exposure. The hole encountered three significant faults and they are clearly intraformational structures preferentially picking the ductility contrasts of sandstone-lutite depositional contacts. Although WDH-2 did not reach limestone the demonstration of intraformational faults

imposed on lithological boundaries stratigraphically above the top of the limestone means that the fault contact interpreted from percussion drill chips in WDH-1 need not be a thrust.

Preliminary use of lithogeochemical correlation of sandstone units throughout the region suggests that Cabbage Tree Formation and Corn Hill Beds sandstones can be differentiated on phosphorous content, with the Corn Hill Beds containing some 10x the phosphorous of the Cabbage Tree sandstones (this work is in progress and will be fully discussed in the Year 3 Annual Report).

Sandstones sampled from outcrop and drill core at the Winkleigh Prospect plot clearly within the Corn Hill Beds population and are much higher in phosphorous than sandstones within EL 19/97 which are considered on fossil and stratigraphic evidence to belong to the Cabbage Tree Formation.

On the basis of the above lines of evidence the position of the Winkleigh Thrust has been shifted eastwards such that it now projects under Cainozoic fluvial sediments some 500 metres northeast of the sandstone-limestone contact at the Winkleigh Prospect (Figure 2). The sandstone-granule conglomerates and interstratified siltstones NE of the structure have been demonstrated on fossil grounds to belong to the Cabbage Tree Formation (Laurie, 1996a, b) and as shown on Figure 2, the top limestone unconformity interpretation of the prominent thrust-parallel photolinear has been reinstated. The two small wedges of sandstone outcropping SW of the Flowery Gully Limestone have been tentatively assigned to the Cabbage Tree Formation mainly because of their apparent stratigraphic position relative to the limestone. It is planned to test the chemistry of these rocks in Year 3 and resolve their affinities.

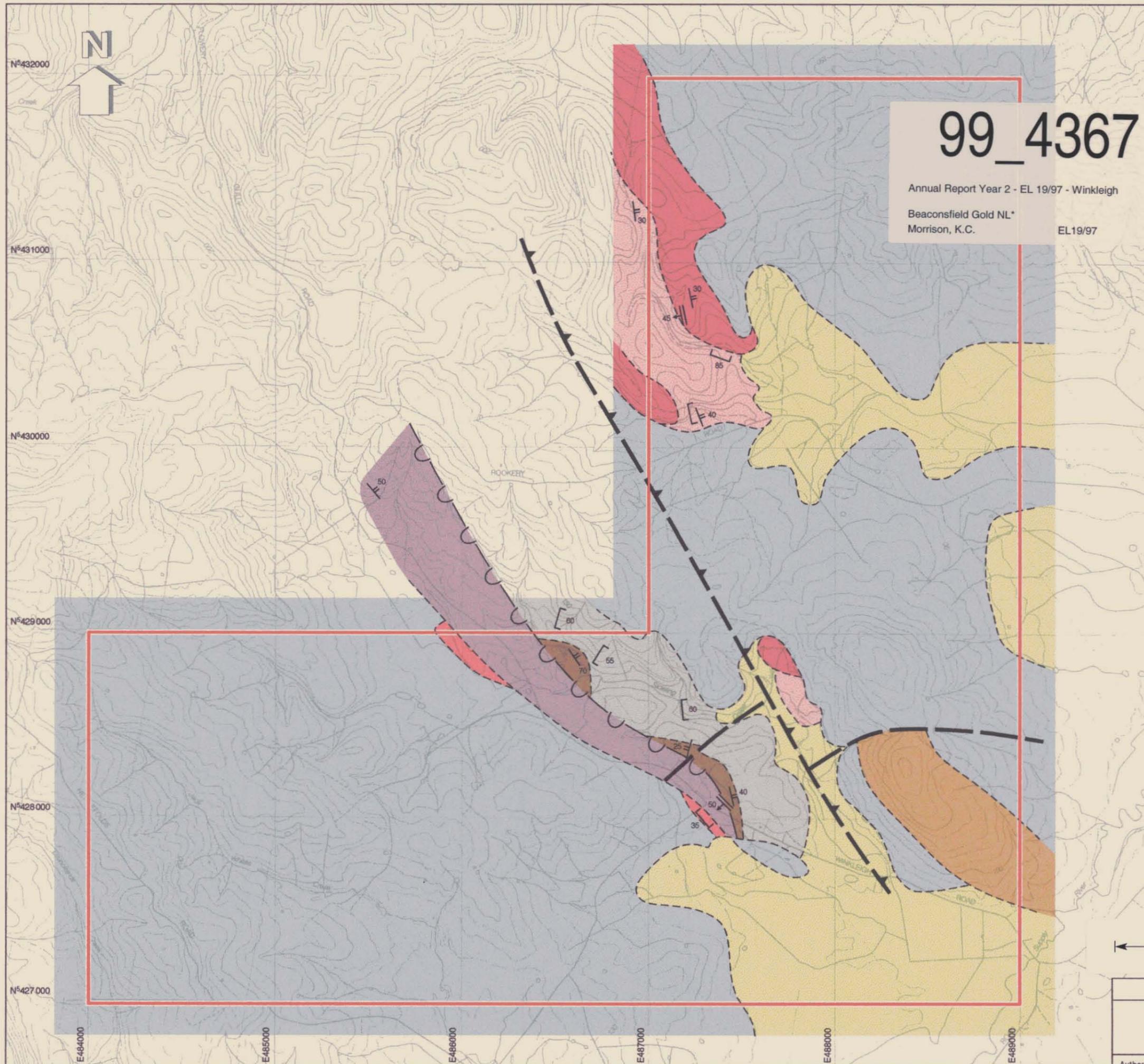
Prospect scale mapping of the sandstone body which appears to contain the Winkleigh Prospect (Figure 3) indicates that the sand facies is roughly lenticular in shape and that both thrust-parallel faults and orthogonal NE-SW structure are likely. Field evidence in the form of drainage control and sandstone displacement, deformation and strike rotation support the existence of both fault directions.

No direct evidence for the age of the basal Corn Hill Beds or for the hiatus at the top of the Flowery Gully Limestone have been found at Winkleigh. Devonian fossils were found by Hills (1982) some 4 km along strike and stratigraphically up-section, to the NW of the Winkleigh Prospect, in turbiditic slaty siltstones. Guilline (1981) reported black slaty siltstone unconformably overlying the limestone and that the siltstone possibly contained Ordovician graptolites. The location is not specifically identified but is in the general Flowery Gully area. It may be that the Eldon Group correlates in the region span the same 100 million year Ordovician-Devonian age range as appears on sparse fossil evidence to be the case in the Mathinna Beds, east of the Tamar River.

## 2. *Gridding and Soil Survey*

Following the results of WDH-1, a grid was established along strike to the NW of the drill hole to fully explore the exposed sandstone unit which generated the rock chip and soil anomalies tested by WDH-1.

A 650 metre strike-parallel base line and 50 metre spaced cross lines were established by hip chain and compass on the grazing pasture and light bush which cover the target



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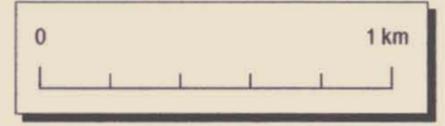
Annual Report Year 2 - EL 19/97 - Winkleigh

Beaconsfield Gold NL\*  
Morrison, K.C.

EL19/97

- CAINOZOIC**
- Qu Undifferentiated surficial sediments
- JURASSIC**
- Jdl Dolerite
- PERMIAN**
- Pu Undifferentiated flat lying mudstone, pebbly mudstone, sandstone & conglomerate
- ? SILURIAN - DEVONIAN**
- Dch Black-grey slate, slaty flaser bedded mudstone, siltstone (Eldon Group Correlate - Corn Hill Beds)
  - Dch Grey carbonaceous fine quartz sandstone (Eldon Group Correlate - Basal Corn Hill Beds)
- ORDOVICIAN**
- Ofg Grey crystalline micritic limestone (Flowery Gully Limestone)
  - Oct Grey fine-medium quartz sandstone (Denison Group Correlate - Undifferentiated Cabbage Tree Formation)
  - Oct Brown-pink bioturbated, fossiliferous cleaved siltstone (Denison Group Correlate - Lower Cabbage Tree Formation)
  - Oct Grey, blue grey medium-coarse quartz sandstone, granule conglomerate (Denison Group Correlate - Lower Cabbage Tree Formation)
- U — Top limestone unconformity
- — — Fault
- ▲— Thrust fault with indication on up-thrust side
- 40 Bedding dip & strike
- 60 Principal cleavage dip & strike
- 45 Quartz vein dip & strike

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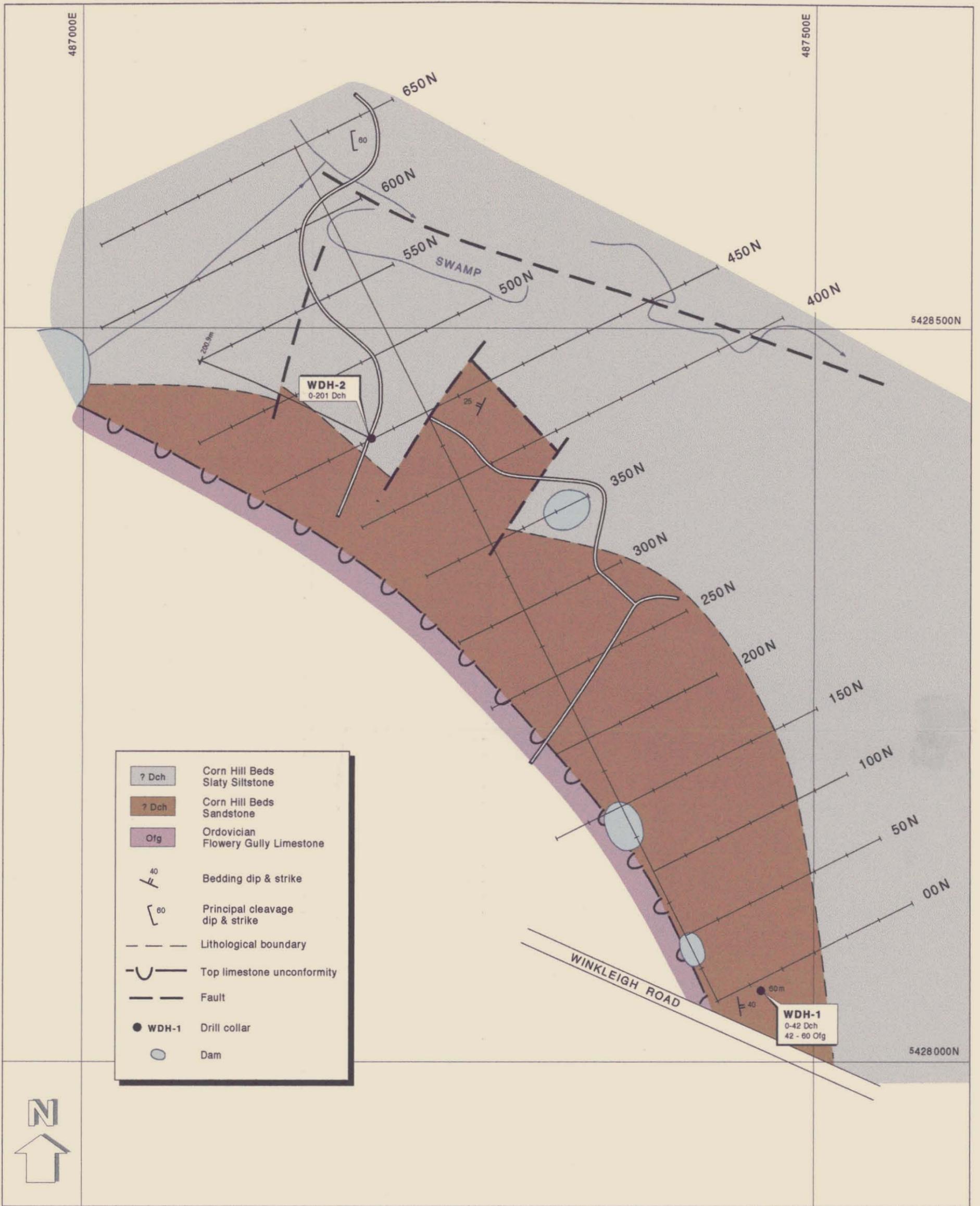
5 cm

**Figure 2**

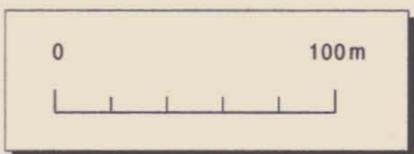
**BEACONSFIELD GOLD N L**

EL 19/97 Winkleigh  
Winkleigh Prospect  
Interpretive Geology

Author: K. Morrison | Drafting: R. Carroll | Date: 17.8.99 | Scale: 1:2000 (A3)



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5 cm

Annual Report Year 2 - EL 19/97 - Winkleigh

Beaconsfield Gold NL\*  
Morrison, K.C.

EL19/97

602009

Figure 3

**BEACONSFIELD GOLD N L**

EL 19/97 Winkleigh  
Winkleigh Prospect  
Geology of the Pre Permian Rocks

Author: K.Morrison | Drafting: R.Carroll | Date: 2.8.99 | Scale: 1:2500 (A3)



rocks. Grid based mapping (Figure 3) was followed by a combined B/C horizon – 2mm soil survey at 25 metre sample spacing (Figure 4). 129 soil samples were assayed for gold (fire assay – AAS, 1 ppb detection) and arsenic (triple acid digest – AAS, 50 ppm detection / hydride generation, 1 ppm detection). Assay data are attached in Appendix 2.

Soil geochemistry (Figure 4) shows a contourable arsenic anomaly around the WDH-1 site and two anomalies centred on the 450 N grid cross line and elongated in the strike direction. Low concentrations of gold were achieved close to but mainly separate from the arsenic highs. The distribution of arsenic and gold in the “450 N anomaly” was interpreted as showing evidence for both metal partitioning during dispersion to soil and the focussing effects of NE and NW striking faults. This feature required drilling.

### 3. *Drilling*

A 200.9 metre cored drill hole tested the 450N anomaly in March-April 1999. The hole was planned to jointly test the two prognosed fault trends considered as sources for the arsenic and gold soil anomalism and the prognosed northeast dipping Corn Hill Beds-Flowery Gully Limestone contact. The hole was successfully completed in HQ core with a 98.9% core recovery and no significant drilling problems. The hole had lifted 2° in dip and swung 3° to the south at the bottom hole survey. The hole was collared and completed in a sequence of slaty siltstone and mudstone interbedded with fine quartz sandstone and did not penetrate the Flowery Gully Limestone (see Figure 5, and log sheets in Appendix 1). Three faults causing crenulation of the principal slaty cleavage and brecciation close to the fault position were intersected. All are intraformational faults although two occur at siltstone-sandstone stratigraphic contacts (Figure 5). The core was not orientated but after viewing by and discussion with Mineral Resources Tasmania structural geologist Alistair Read it was concluded that the attitude of the crenulation cleavage relative to core axis could be consistent with faulting near-parallel to the drill hole.

Fifty five half core samples were cut and assayed. All samples showed one or more of; veining (quartz ± calcite ± ankerite types), brecciation, pyrite enrichment or locally pervasive quartz or calcite flooding. Figures 6 and 7 show examples of alteration and veining styles considered prospective.

Assay results are attached in Appendices 1 and 2. No gold was encountered. Significant arsenic enrichment occurs through much of the sandstone and several samples returned arsenic values in the range 0.1-0.3% (Figure 5). The highest arsenic values do not in general coincide with the heaviest development of veining, pervasive silica or carbonate overprint, or even the highest pyrite contents as detected during logging. However the single highest arsenic value (0.33% at 148.0 – 148.4 m) was sourced from the only occurrence noted of a crackle quartz interval with patchy orange colour (Figure 7). The sandstone units overall are heavily fractured and veined, with abundant fine stockwork development and the overall arsenic content is considered anomalous and potentially indicating a position close to a mineralised structure. If the interpretation of kinking and fault orientation is correct then it is possible that WDH-2 has drilled sub parallel to a mineralised structure and remained



**Figure 6** Erosional contact at 131.4 metres in WHD-2, showing fining up sandstone unit overlying flaser bedded laminated siltstone. The basal 10 cm of the sandstone unit contains angular pebbles of reworked unaltered siltstone. An alteration overprint of pervasive calcite and green ? chlorite, combined with mainly stratiform pyrite enrichment is preferentially focussed around the stratigraphic contact and only extends for approximately 1 metre below and 30 cm above the contact (up hole direction to the left).



**Figure 7** Quartz crackle and fine veinlet stockwork texture in massive grey-black fine quartz sandstone at 148.0 – 148.4 metres in WDH-2. Patchy pale orange colour (possibly hematite or adularia) occurs in the quartz at only this interval. This interval recorded the highest arsenic value in the hole – 0.33% (up hole direction to the left).

within an arsenic-rich halo to gold mineralisation. Another angled hole, drilled NE or SW under the line of soil gold values shown on Figure 4, would test that possibility.

#### 4. *Expenditure*

In the 12 month period 1/7/1998 to 30/6/1999, \$48,930 was spent exploring EL 19/97. This represents a cumulative 2 year expenditure to 30/6/1999 of \$90,245.

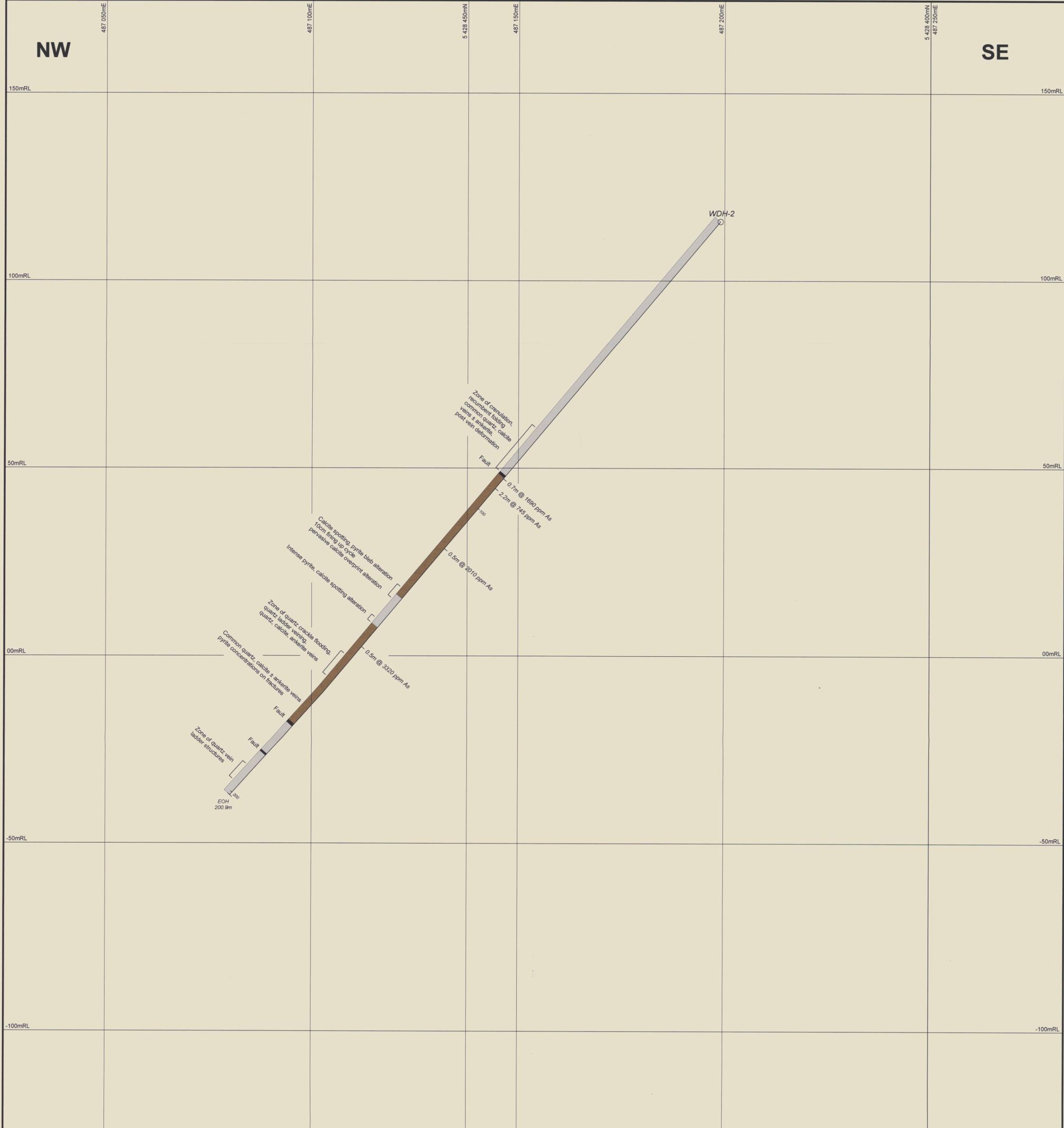
### **YEAR 3 WORK PROGRAM**

A collaborative regional scale lithogeochemistry project is in progress using outcrop and drill core samples from all tenements in which BGNL has an interest. Data from EL 19/97 are currently being collated and fed into a combined data base. This work will continue through the next year and will be reported in full in the Year 3 Annual Report.

A review of all surface and drill hole data relating to the Winkleigh Prospect will occur during Year 3 and a decision on drilling options will be made.

### **REFERENCES**

- Guilline, A.B., 1981. Geological Survey Explanatory Report, Frankford, Tasmania Department of Mines.
- Hills, PB, 1982. The geology of the Lower and Middle Palaeozoic rocks of Flowery Gully, Northern Tasmania, BSc Honours thesis, University of Tasmania, Hobart.
- Laurie, JR, 1996a. Macrofossils from the Cabbage Tree Formation, Middle Arm Gorge, near Beaconsfield, Tasmania, Australian Geological Survey Organisation Professional Opinion 1996/008.
- Laurie, JR, 1996b. Correlation of Lower-Middle Ordovician clastics in Tasmania, Australian Geological Survey Organisation Record, 1996/23.
- Morrison, K.C., 1998. Beaconsfield Gold NL, EL 19/97 Winkleigh, Year 1 Annual Report.



DRILLHOLE PLAN - 1:2500



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Beaconsfield Gold NL\*  
Morrison, K.C. EL19/97

- LEGEND**
- Grey black cleaved flaser laminated carbonaceous siltstone, mudstone
  - Dark grey uniform massive bedded, silicified fine quartz sandstone with consistent carbonaceous clastic component



**Beaconsfield Gold N.L.**

E.L. 19/97 - WINKLEIGH  
WINKLEIGH PROSPECT  
DRILL SECTION  
**WDH-2**  
SECTION BEARS 294° AMG

COMPILED - K. C. M.
DATE - July 1999
DRAWN - G.M.B.
REVISIONS:
FILE No. WDH-2
FIGURE No. 5



602014

# **APPENDIX 1**

**WDH-2 Log Sheets**

## Beaconsfield Gold NL

### Diamond Drill Hole Summary Log Sheet

Tenement: EL 19/97
Prospect: Winkleigh
Hole No: WDH-2
Date Drilled: 30 Mar – 15 Apr 1999
Driller: Stacpoole-W Bald

Collar: 487,199E, 5,428,423N AMG
RL: 115.8m
AZM: 294 AMG
Dip: -50
Core Size: HQ 1.3 – 200.9m

Total Depth: 200.9m
Water Table: not detected
Base of Oxid'n: 29.9m
Sample No's: WDM2-11 to -66
Geologist: K Morrison

Purpose		Results
<p>To test an As-Au soil anomaly over a sandstone dominant unit and prognosed thrust related fault structures near the contact with underlying Flowery Gully Limestone.</p>	<p><i>Core Recovery:</i>            98.9%</p> <p><i>Down Hole Surveys</i></p> <p>1.        119.4 metres,           Dip -50°           AZ 297° AMG</p> <p>2.        193.9 metres           Dip -48°           AZ 291° AMG</p>	<p>The hole collared and remained in an interbedded sequence of brittle sandstone and slaty carbonaceous siltstone. Three major intraformational faults were intersected but no evidence of section thickening was seen. The sequence is interpreted as basal Corn Hill Beds. Quartz, calcite and ankerite veining, stockwork textures and localised pervasive calcite, chlorite or silica alteration are common in the sandstone units. No gold was encountered but anomalous arsenic (up to 0.3%) persists through the sandstone.</p>

## Beaconsfield Gold NL Diamond Drill Hole Core Log

Tenement: EL 19/97
Prospect: Winkleigh
Hole No: WDH-2
Date Drilled: 30 Mar – 15 Apr 1999
Driller: Stacpoole-W Bald

Collar: 487,199E, 5,428,423N AMG
RL: 115.8m
AZM: 294 AMG
Dip: -50
Core Size: HQ 1.3 – 200.9m

Total Depth: 200.9m
Water Table: not detected
Base of Oxid'n: 29.9m
Sample No's: WDM2-11 to -66
Geologist: K Morrison

Depth (m)	Litho	Unit	Description
0 – 1.3	Regolith		pre collar soil, regolith, weathered clay, rock.
1.3 – 2.45	Siltstone	Dch	yell-brn, heavily oxidised, abundant clay.
2.45 – 5.75	Siltstone	Dch	mottled lt-dk gry cleaved sltst, minor f qtz sst, blk sh, abund dk mud flasers, pelletel bodies sub parallel to bedding. Principal cleavage parallel to bedding CBA 50-60.
5.75 – 20.0	Siltstone	Dch	bleached pale cleaved sltst-mdst A/A, flaser laminated, discordant burrow-like structures. Principal cleavage crenulated by later cleavage in localised 10-20 cm zones.
20.0 – 29.9	Siltstone	Dch	transition zone of alternating fresh, oxidised cleaved, flaser laminated (?bioturbated) sltst-mdst A/A.
29.9 – 73.6	Siltstone	Dch	fresh lt-dk gry cleaved sltst, mdst, minor vf-f qtz sst with wht mica, up to 30% dk flasers flattened carb pellets, CBA 55, local blk slate zones, crush zones with qtz, calcite, ankerite veining (31.4-31.5, 42.5-42.55, 43.65-43.68, 52.45-53.05, 57.50-57.75, 59.0-59.1, 65.2-66.0) and rare coarse py blebs at base.

Assays			
Sample No	Interval (m)	As (ppm)	Au (ppb)

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Depth (m)	Litho	Unit	Description
73.6 – 89.0	Siltstone	Dch	dk gry deformed crush zone sltst-mdst A/A, grading down to contact at 89.0 m; crenulated zone, recumbent zone, breccia zone. Calcite veinlets, clots, folded qtz + calcite veins, including ankerite below 83.5 (very little py).
89.0 – 105.1	Sandstone	Dch	gry blk f qtz sst, partly recrystallised, abund flecks carbonaceous clasts, abund f fractures, pits, stylolite structures, in part forming network fabric. vf py + green ?chlorite on fracture surfaces, typically <1% py, locally up to 20% over 5 cm, minor stratiform trains py blebs. 3 veins typically occur throughout the interval; 1-3 cm folded, dismembered qtz, calcite, ankerite, 5-10 cm massive qtz, calcite with common dissolution pits, coarse xtals, 1-2 cm qtz, carbonate veinlet stockwork, common stylolites. blk clay breccia crush zone, 104.9 – 105.1.
105.1 – 130.4	Sandstone	Dch	gry f minor med qtz sst, massive siliceous, frequent zones fine stylolites, veinlet stockworks but less deformed than interval above. Qtz calcite ± ankerite veins (107.3-107.45, 111.4-111.55, 111.95-112.2, 117.45-118.35) crack seal textures in qtz. BCA 60-70 Coarse sphalerite xtals (3) in 117.45-118.35 vein – this vein is sub parallel to core. Zones of 1-10% vf py in veinlet stockwork and on fracture surfaces. Massive 1-5 cm qtz + minor carbonate veins normal to bedding VCA 30.

Assays			
Sample No	Interval (m)	As (ppm)	Au (ppb)
WDM2-11	87.6-88.2	<50	<10
WDM2-12	88.2-88.8	<50	<10
WDM2-13	88.8-89.0	330	<10
WDM2-14	89.0-89.7	1690	<10
WDM2-15	89.7-90.2	175	<10
WDM2-16	90.2-90.8	405	<10
WDM2-17	90.8-91.6	325	<10
WDM2-18	91.6-92.5	220	<10
WDM2-19	92.5-93.4	840	<10
WDM2-20	93.4-94.7	630	<10
WDM2-21	94.7-95.3	155	<10
WDM2-22	95.3-95.9	345	<10
WDM2-23	95.9-96.5	<50	<10
WDM2-24	96.5-97.2	55	<10
WDM2-25	97.2-97.9	55	<10
WDM2-26	97.9-98.7	60	<10
WDM2-27	98.7-99.5	85	<10
WDM2-28	99.5-100.3	80	<10
WDM2-29	100.3-101.2	210	<10
WDM2-30	101.75-102.4	395	<10
WDM2-31	102.4-103.1	80	<10
WDM2-32	103.1-103.8	145	<10
WDM2-33	103.8-104.5	370	<10
WDM2-34	111.25-111.6	185	<10
WDM2-35	111.95-112.25	<50	<10
WDM2-36	113.9-114.4	2010	<10
WDM2-37	117.7-118.2	<50	<10
WDM2-38	118.2-118.7	<50	<10
WDM2-39	127.3-128	125	<10
WDM2-40	128.9-129.6	60	<10
WDM2-41	129.6-130.5	135	<10

Depth (m)	Litho	Unit	Description
130.4 – 130.9	Sandstone	Dch	alteration overprint of 0.5-1 cm calcite spotting + trains, blebs py. Abrupt edges to alt zone.
130.9 – 131.37	Sandstone	Dch	fining up cycle of med qtz sst with angular blk sh slasts in 10 cm basal unit grading up to f qtz sst A/A. Interval bleached with calcite alt and enriched in py blebs, trains.
131.37 – 132.6	Siltstone	Dch	olive grn interbedded sltst-mdst with alteration overprint of calcite bleaching, stratiform py.
132.6 – 140.5	Siltstone	Dch	dk gry flaser bedded cleaved sltst-carb mdst, mainly stratiform py trains (possibly authigenic). Weakly developed qtz vein stockwork 134.5-134.7, minor brittle deformation in top 20 cm (ductile contrast at strat contact). Small fold 136-138.
140.5 – 141.4	Siltstone	Dch	olive gry interstrat sltst-mdst, minor vf qtz sst with alt overprint of zones of intense py + speckled calcite.
141.4 – 143.0	Sandstone	Dch	gry blk silicified f qtz sst (orthoquartzite), abund fine fracturing, veinlet stockwork, local brecciation, calcite spotting, common pits, vugs, minor py.
143.0 - 152.7	Sandstone	Dch	gry blk silicified sst/orthoquartzite A/A but no calcite. Patchy zones py blebs up to 10%, stylolitic carbonaceous layers with local graphitic slickensides. Zone of qtz crackle, veinlet stockwork 148-148.4
152.7 – 160.0	Sandstone	Dch	gry blk silicified f qtz sst A/A with overprint of qtz ladder veining, minor pervasive qtz crackle, veins qtz + minor ankerite, common bedding parallel pits, cavities, minor py blebs. BCA 40-50. Common graphite, some calcite, wht ?clay on fracture surfaces.
160.0 – 163.0	Sandstone	Dch	A/A but badly broken core with 5% py enrichment.

Assays			
Sample No	Interval (m)	As (ppm)	Au (ppb)
WDM2-42	130.5-131.4	100	<10
WDM2-43	131.4-131.9	<50	<10
WDM2-44	131.9-132.6	<50	<10
WDM2-45	140.6-141.0	135	<10
WDM2-46	141.4-141.95	135	<10
WDM2-47	141.95-142.5	50	<10
WDM2-48	142.5-142.9	<50	<10
WDM2-49	143.4-143.9	<50	<10
WDM2-50	144.15-144.65	70	<10
WDM2-51	145.05-145.25	60	<10
WDM2-52	147.55-147.75	145	<10
WDM2-53	147.9-148.4	3320	<10
WDM2-54	153.4-153.8	65	<10
WDM2-55	156.05-156.6	<50	<10
WDM2-56	160.5-160.9	55	<10
WDM2-57	161.2-161.8	<50	<10
WDM2-58	161.8-162.2	<50	<10
WDM2-59	162.2-162.7	<50	<10

Depth (m)	Litho	Unit	Description
163.0 – 174.0	Sandstone	Dch	gry blk silicified f qtz sst, blk glassy fracture surfaces, common calcite, 1-5% py on fractures, qtz, calcite ± ankerite veins up to 5 cm, decreased pervasive silica.
174.0 – 175.8	Sandstone	Dch	fault zone, heavily pitted qtz, calcite veined, heavy calcite spotting, 5-10% py.
175.8 – 177.5	Siltstone	Dch	fault zone, brecciated, crumpled, kinked, recumbent folded carbonaceous, flaser laminated sltst-mdst.
177.5 – 200.9	Siltstone	Dch	gry blk uniform flaser laminated carb sltst-mdst, minor kinking of principal cleavage, associated ladder veinlets, single qtz calcite veins 1-5 cm. Veins are faulted, ladder structures mainly normal to bedding, Main zones of veining ladder structures at 191.9-193.8, 195.6-196.7. Fault structure 185.9 – 187.7 = intra unit structure, equivalent style to strat contact faults. Abrupt edges to fault zone, crush clay, broken core, graphitic slickensides within 70 cm each side of fault.
EOH			

Assays			
Sample No	Interval (m)	As (ppm)	Au (ppb)
WDM2-60	163.15-163.5	385	<10
WDM2-61	169.3-169.8	<50	<10
WDM2-62	173.2-173.6	170	<10
WDM2-63	173.8-174.2	<50	<10
WDM2-64	174.2-174.85	65	<10
WDM2-65	175.2-175.6	<50	<10
WDM2-66	175.6-176.2	95	<10

602020

**Beaconsfield Gold NL  
WDH-2 Core Recovery Log**

<b>Drill Interval (m)</b>	<b>Core Length (m)</b>	<b>Core Recovery (%)</b>
1.3-2.6	0.67	51.5
2.6-3.6	1.14	114.0
3.6-4.5	0.9	100
4.5-6.0	1.37	91.3
6.0-7.5	1.5	100
7.5-9.0	1.5	100
9.0-10.5	1.53	102
10.5-12.0	1.47	98
12.0-13.5	1.4	93.3
13.5-15.0	1.6	106.6
15.0-16.5	1.55	103.3
16.5-18.0	1.42	94.6
18.0-19.5	1.5	100
19.5-20.9	1.5	107.1
20.9-23.9	3.0	100
23.9-26.9	3.05	101.6
26.9-29.9	2.96	98.6
29.9-32.9	3.00	100
32.9-35.9	3.15	105
35.9-38.9	3.05	101.6
38.9-41.9	2.87	95.6
41.9-44.9	3.00	100
44.9-47.4	2.45	98 *loss at bottom
47.4-50.4	2.78	92.6*loss at top
50.4-53.4	3.00	100
53.4-56.4	2.98	99.3
56.4-59.0	2.60	100
59.0-60.3	1.34	103
60.3-62.2	1.86	97.8
62.2-65.2	3.00	100
65.2-68.2	2.95	98.3
68.2-71.2	2.90	96.6 *loss in middle
71.2-71.9	0.65	92.8
71.9-74.9	2.91	97
74.9-77.9	2.96	98.6
77.9-80.9	3.00	100
80.9-83.9	2.96	98.6
83.9-86.0	2.08	99
86.0-86.9	0.90	100
86.9-89.9	2.92	97.3
89.9-92.7	2.75	98.2
92.7-93.7	0.73	73
93.7-95.9	2.22	100.9

Drill Interval (m)	Core Length (m)	Core Recovery (%)
95.9-97.9	2.17	108.5
97.9-100.4	2.40	96
100.4-101.9	1.50	100
101.9-103.1	1.34	111.6
103.1-104.9	1.64	91.1
104.9-107.9	2.90	96.6 *loss at top
107.9-110.9	3.00	100
110.9-113.9	2.95	98.3
113.9-116.9	3.03	101
116.9-119.9	2.80	93.3 *loss in middle (at top of vein)
119.9-122.9	3.10	103
122.9-125.4	2.36	94
125.4-126.4	1.05	105
126.4-128.0	1.55	97
128.0-128.9	0.97	108
128.9-129.4	0.60	120
129.4-131.9	2.42	97
131.9-134.9	3.00	100
134.9-137.9	3.00	100
137.9-140.9	2.96	99
140.9-143.9	3.03	101
143.9-146.9	2.88	96
146.9-148.4	1.56	104
148.4-149.9	1.47	98
149.9-152.9	2.98	99
152.9-155.9	3.03	101
155.9-158.9	3.14	105
158.9-161.2	2.32	101
161.2-162.2	1.30	130
162.2-164.9	2.75	102
164.9-167.9	2.92	97
167.9-170.9	2.99	99
170.9-173.9	3.02	101
173.9-176.4	2.45	98
176.4-179.4	2.95	98
179.4-182.4	2.43	81
182.4-185.4	3.05	102
185.4-187.9	2.60	104
187.9-188.9	0.93	93
188.9-191.9	2.95	98
191.9-194.9	2.90	97
194.9-197.9	3.07	102
197.9-200.9	2.94	98
<b>TOTALS</b>	<b>197.48</b>	<b>98.94</b>

# **APPENDIX 2**

## **Soil and Drilling Assay Data**



Our reference : BU015177  
 Your reference : **Ken Morrison**  
 Project code : Soils - WSJ  
 Date received : 15/09/98  
 Date reported : 24/09/98

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

Ken Morrison  
 Managing geologist  
 K.C. Morrison Pty Ltd  
 Beaconsfield Gold NL  
 41 Tasma Street  
 North Hobart

TAS 7000

Number of pages of results : 2  
 Number of Samples : 77  
 First Sample : WSJ 1  
 Last Sample : WSJ 77

Invoice to:  
 Ken Morrison  
 Managing geologist  
 K.C. Morrison Pty Ltd  
 Beaconsfield Gold NL  
 41 Tasma Street  
 North Hobart

TAS 7000

Electronic Data Transmission :  
 Modem Y 24/09/98  
 Facsimile / /  
 Disk Report Y / /

Preliminary Reports :  
 24/09/98 Report

Results to:

Results to:

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.



Our reference : BU015177  
 Your reference : Ken Morrison  
 Project code : Soils - WSJ  
 Report date : 24/09/98  
 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	Au	Au(R)	As	As		
WSJ 1	3	4	> 100	319		
WSJ 2	<1	--	36	--		
WSJ 3	<1	<1	33	--		
WSJ 4	<1	--	18	--		
WSJ 5	<1	--	21	--		
WSJ 6	<1	<1	14	--		
WSJ 7	<1	--	8	--		
WSJ 8	1	<1	15	--		
WSJ 9	<1	<1	19	--		
WSJ 10	<1	--	21	--		
WSJ 11	<1	--	12	--		
WSJ 12	<1	--	11	--		
WSJ 13	<1	--	10	--		
WSJ 14	<1	--	30	--		
WSJ 15	<1	--	23	--		
WSJ 16	<1	--	45	--		
WSJ 17	<1	--	63	--		
WSJ 18	<1	--	54	--		
WSJ 19	<1	--	20	--		
WSJ 20	<1	--	83	--		
WSJ 21	<1	--	56	--		
WSJ 22	<1	--	30	--		
WSJ 23	<1	--	24	--		
WSJ 24	<1	--	18	--		
WSJ 25	<1	--	10	--		
WSJ 26	<1	--	15	--		
WSJ 27	<1	--	45	--		
WSJ 28	<1	--	12	--		
WSJ 29	<1	--	3	--		
WSJ 30	2	1	16	--		
WSJ 31	<1	--	17	--		
WSJ 32	<1	--	14	--		
WSJ 33	<1	<1	33	--		
WSJ 34	<1	<1	31	--		
WSJ 35	<1	<1	25	--		
WSJ 36	<1	--	18	--		
WSJ 37	<1	--	16	--		
WSJ 38	1	<1	29	--		
WSJ 39	<1	--	24	--		
WSJ 40	<1	--	30	--		
WSJ 41	<1	--	38	--		
WSJ 42	<1	--	46	--		
WSJ 43	<1	1	5	--		
WSJ 44	<1	--	25	--		
WSJ 45	<1	--	8	--		
WSJ 46	<1	--	24	--		
WSJ 47	<1	<1	12	--		
WSJ 48	<1	--	13	--		
WSJ 49	<1	--	51	--		
WSJ 50	<1	<1	35	--		
Method Units Detection Limit	F614 ppb 1	F614 ppb 1	H102 ppm 1	A102 ppm 50		

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





### ANALYSIS DESCRIPTION

Job number : BU015177 Order number : Ken Morrison

-----  
Scheme code : S031 - Soils; Dry, Fine pulverise, Ringmill <1.5kg  
-----

Sample preparation. Soil samples; Dry, Fine  
pulverise, Ringmill, <1.5 kg

-----  
Scheme code : F614 - 50g fire assay, Lead collection, DIBK, AAS  
-----

Fire assay, Lead collection, Aqua Regia digest,  
DIBK extraction, AAS, 50g sample.

-----  
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.



Our reference : BU015478  
 Your reference : Drop Off 24/11/98  
 Project code : Soil Samples  
 Date received : 24/11/98  
 Date reported : 04/12/98

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

Ken Morrison  
 Managing geologist  
 K.C. Morrison Pty Ltd  
 Beaconsfield Gold NL  
 41 Tasma Street  
 North Hobart

TAS 7000

Number of pages of results : 2  
 Number of Samples : 52  
 First Sample : WSJ078  
 Last Sample : WSJ129

Invoice to:  
 Ken Morrison  
 Managing geologist  
 K.C. Morrison Pty Ltd  
 Beaconsfield Gold NL  
 41 Tasma Street  
 North Hobart

TAS 7000

Electronic Data Transmission :  
 Modem Y 04/12/98  
 Facsimile //  
 Disk Report Y //

Preliminary Reports :  
 03/12/98 Report

Results to:

Results to:

Remarks :

Authorised by .....  
 On behalf of:

Alex Chong  
 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 : BU015478  
 Your reference : Drop Off 24/11/98  
 Project code : Soil Samples  
 Report date : 04/12/98  
 Report status : Final  
 Page : 1 of 2

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)	Au(R2)	As	As
WSJ078	<1	--	--	<50	12
WSJ079	<1	--	--	<50	9
WSJ080	<1	--	--	<50	14
WSJ081	<1	--	--	<50	7
WSJ082	<1	<1	--	<50	16
WSJ083	<1	--	--	<50	<1
WSJ084	<1	--	--	<50	2
WSJ085	<1	--	--	<50	15
WSJ086	<1	<1	--	59	N.A.
WSJ087	<1	--	--	<50	32
WSJ088	<1	<1	--	71	N.A.
WSJ089	<1	--	--	<50	5
WSJ090	<1	--	--	<50	<1
WSJ091	<1	--	--	<50	6
WSJ092	<1	--	--	<50	<1
WSJ093	<1	--	--	<50	6
WSJ094	<1	--	--	<50	1
WSJ095	<1	--	--	<50	26
WSJ096	<1	--	--	<50	24
WSJ097	46	23	10	<50	19
WSJ098	2	--	--	<50	10
WSJ099	2	2	--	<50	7
WSJ100	<1	--	--	<50	31
WSJ101	2	--	--	<50	20
WSJ102	1	--	--	167	N.A.
WSJ103	<1	--	--	135	N.A.
WSJ104	<1	--	--	<50	37
WSJ105	<1	--	--	<50	6
WSJ106	<1	--	--	<50	18
WSJ107	<1	--	--	<50	2
WSJ108	<1	--	--	<50	2
WSJ109	<1	<1	--	<50	4
WSJ110	<1	--	--	<50	19
WSJ111	<1	<1	--	<50	22
WSJ112	<1	--	--	<50	5
WSJ113	<1	--	--	<50	6
WSJ114	<1	--	--	<50	10
WSJ115	<1	--	--	<50	5
WSJ116	<1	--	--	<50	10
WSJ117	<1	--	--	<50	10
WSJ118	<1	--	--	<50	7
WSJ119	<1	--	--	<50	7
WSJ120	<1	--	--	<50	7
WSJ121	<1	--	--	<50	11
WSJ122	<1	--	--	<50	13
WSJ123	<1	--	--	<50	4
WSJ124	<1	--	--	<50	7
WSJ125	<1	<1	--	<50	12
WSJ126	<1	--	--	<50	11
WSJ127	<1	<1	--	<50	12
Method Units Detection Limit	F614 ppb 1	F614 ppb 1	F614 ppb 1	A102 ppm 50	H102 ppm 1

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





## ANALYSIS DESCRIPTION

Job number : BU015478 Order number : Drop Off 24/11/98

-----  
Scheme code : S031 - Soils; Dry, Fine pulverise, Ringmill <1.5kg  
-----

Sample preparation. Soil samples; Dry, Fine  
pulverise, Ringmill, <1.5 kg

-----  
Scheme code : F614 - 50g fire assay, Lead collection, DIBK, AAS  
-----

Fire assay, Lead collection, Aqua Regia digest,  
DIBK extraction, AAS, 50g sample.

-----  
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.

602032

A N A L A B S



Our reference : BU016300  
Your reference : 810356BU  
Project code : Drill Core  
Date received : 13/05/99  
Date reported : 26/05/99

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

Ken Morrison  
Managing Geologist  
K.C. Morrison Pty Ltd  
Beaconsfield Gold NL  
41 Tasma Street  
NORTH HOBART

TAS 7000

Number of pages of results : 2  
Number of Samples : 56  
First Sample : WDM 2-11  
Last Sample : WDM 2-66

Invoice to:  
Ken Morrison  
Managing Geologist  
K.C. Morrison Pty Ltd  
Beaconsfield Gold NL  
41 Tasma Street  
NORTH HOBART

TAS 7000

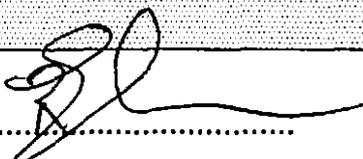
Electronic Data Transmission :  
Modern //  
Facsimile //  
Disk Report //

Preliminary Reports :  
18/05/99 Report

Results to:

Results to:

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.



Our reference : BU016300  
 Your reference : 810356BU  
 Project code : Drill Core  
 Report date : 26/05/99  
 Report status : Final  
 Page : 1 of 2

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			
WDM 2-11	<0.01	<0.01	<50			
WDM 2-12	<0.01	--	<50			
WDM 2-13	<0.01	--	330			
WDM 2-14	<0.01	--	1690			
WDM 2-15	<0.01	--	175			
WDM 2-16	<0.01	<0.01	405			
WDM 2-17	<0.01	--	325			
WDM 2-18	<0.01	--	220			
WDM 2-19	<0.01	--	840			
WDM 2-20	<0.01	--	630			
WDM 2-21	<0.01	--	155			
WDM 2-22	<0.01	--	345			
WDM 2-23	<0.01	--	<50			
WDM 2-24	<0.01	--	55			
WDM 2-25	<0.01	--	55			
WDM 2-26	<0.01	--	60			
WDM 2-27	<0.01	--	85			
WDM 2-28	<0.01	--	80			
WDM 2-29	<0.01	--	210			
WDM 2-30	<0.01	--	395			
WDM 2-31	<0.01	--	80			
WDM 2-32	<0.01	--	145			
WDM 2-33	<0.01	--	370			
WDM 2-34	<0.01	--	185			
WDM 2-35	<0.01	--	<50			
WDM 2-36	<0.01	--	2010			
WDM 2-37	<0.01	--	<50			
WDM 2-38	<0.01	--	<50			
WDM 2-39	<0.01	--	125			
WDM 2-40	<0.01	--	60			
WDM 2-41	<0.01	--	135			
WDM 2-42	<0.01	--	100			
WDM 2-43	<0.01	--	<50			
WDM 2-44	<0.01	--	<50			
WDM 2-45	<0.01	--	135			
WDM 2-46	<0.01	--	135			
WDM 2-47	<0.01	--	50			
WDM 2-48	<0.01	<0.01	<50			
WDM 2-49	<0.01	--	<50			
WDM 2-50	<0.01	--	70			
WDM 2-51	<0.01	--	60			
WDM 2-52	<0.01	--	145			
WDM 2-53	<0.01	--	3320			
WDM 2-54	<0.01	<0.01	65			
WDM 2-55	<0.01	--	<50			
WDM 2-56	<0.01	--	55			
WDM 2-57	<0.01	--	<50			
WDM 2-58	<0.01	--	<50			
WDM 2-59	<0.01	--	<50			
WDM 2-60	<0.01	--	385			
Method	F650	F650	A102			
Units	ppm	ppm	ppm			
Detection Limit	0.01	0.01	50			

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

