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# JERVOIS MINING N.L.



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## DOLCOATH EL 37/97, TASMANIA FIRST PROGRESS REPORT



Hole NC10 in progress at West Higgs, November 1998.

99-4287

ANNUAL REPORT - EL 37/97  
DOLCOATH - JERVOIS MINING  
J G PURVIS

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J. G. PURVIS

J. G. Purvis & Associates P/L

31<sup>st</sup> January 1999

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## 1. SUMMARY

In April 1998 Jervis Mining N.L. were granted the Dolcoath EL 37/97 over 13 sq km in the Moina area of NW Tasmania. The licence was taken up to test the gold and basemetal potential of metasomatized Ordovician Moina Sandstone in the aureole of the Devonian Dolcoath Granite.

In October – November 1998 12 short diamond drillholes, totalling 335m, tested gold targets in the valley of Narrawa Creek. Ten out of the 12 holes encountered gold mineralization and in six of these the intersections were significant.

At the old Higgs Gold Mine holes NC06 (17.4m @ 2.65 g/t Au) & NC12 (25.4m @ 4.33 g/t Au) intersected a steeply-dipping stratiform body of gold and basemetal mineralization, lying around and beneath the old workings.

The Higgs Gold Body is 65m long and 20m thick, and is estimated to contain 215,000 t @ 3.5 g/t Au, 23 g/t Ag, 1.5% Pb & 1.3% Zn, to 60m depth. Below this depth the tonnage potential is believed to be restricted by the inward-dipping bounding faults.

The body comprises stratiform disseminations and semi-massive bands of pyrite-pyrrhotite-galena-sphalerite, replacing selected beds within intensely metasomatized quartzose sandstones. Veining and fracturing is minimal.

High grade zones occur, up to 1.2m @ 17.7 g/t Au (with 10% Pb + Zn) in hole NC06 and 1.3m @ 20.1 g/t Au (9% Pb + Zn) in hole NC12. Grains of free visible gold were noted in such zones.

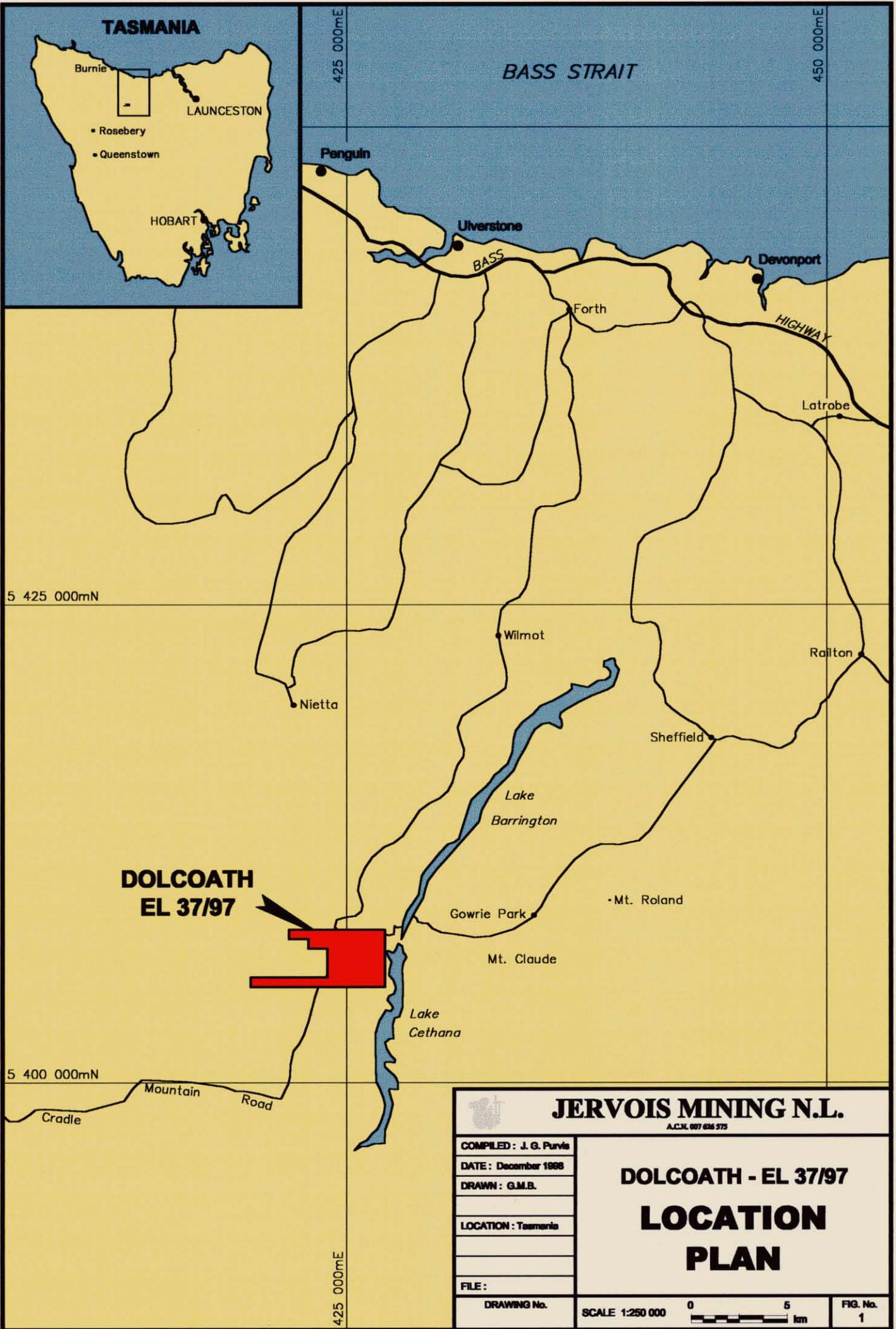
UTEM responses extending 200m east and west along strike are likely to be indicating extensions to the Higgs Gold Body, particularly to the east.

The body would respond well to IP, which has not been tried to date at Narrawa Creek. A detailed dipole-dipole IP survey of 11 line km is recommended to better define the UTEM responses, and to detect similar shallow auriferous sulphide bodies elsewhere on the grid. Estimated cost of the IP survey is \$47,000.

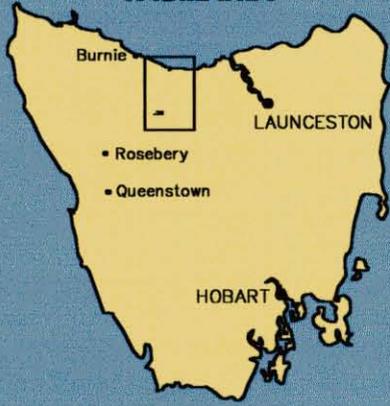
There is good potential for further such bodies at Narrawa Creek. Indications include widespread soil gold anomalism, intersections in Jervis drillholes (including 7m @ 1 g/t Au in skarn in hole NC04, 450m NE of Higgs), and at least two further UTEM anomalies associated with old gold workings. The latter include a 500m long UTEM response over the Narrawa Reward Mine, 200m north of Higgs.

Some of these targets are recommended for immediate drilling in a \$94,000 programme of 14 short diamond holes totalling 505m. Four holes are designed to further define the Higgs Gold Body, four to test other outcropping gold mineralization near Higgs, three to target the Narrawa Reward Mine area and three to follow-up the auriferous skarn occurrence in NC04.

With an indicated grade of 3.5 g/t Au, the Higgs Gold Body confirms that exploration at Narrawa Creek should at present be directed at depths of less than 100m.



**TASMANIA**



BASS STRAIT

Penguin

Ulverstone

Devonport

Forth

HIGHWAY

Latrobe

5 425 000mN

Nietta

Wilmot

Ralton

Lake Barrington

Sheffield

**DOLCOATH  
EL 37/97**

Mt. Roland

Gowrie Park

Mt. Claude

Lake Cethana

5 400 000mN

Mountain Road

Cradle

425 000mE

**JERVOIS MINING N.L.**

A.C.N. 007 626 375

COMPILED : J. G. Purvis

DATE : December 1988

DRAWN : G.M.B.

LOCATION : Tasmania

FILE :

DRAWING No.

SCALE 1:250 000

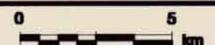


FIG. No. 1

**DOLCOATH - EL 37/97**

**LOCATION  
PLAN**

## 2. INTRODUCTION

The 13 sq km Dolcoath EL 37/97 is situated in North-West Tasmania, near the old township of Moina 40 km south of Ulverstone. The tenement area is rugged and forested but accessible, being traversed by the sealed Cradle Mountain Road and Cethana Road, as well as several all-weather 4WD tracks. The eastern EL boundary abuts Lake Cethana. See *Figure 1*.

The tenement covers strongly metasomatized Ordovician sediments in the aureole of the Devonian Dolcoath Granite. It encompasses numerous old mines and showings of tin, tungsten, bismuth, molybdenum and gold. None of these were significant producers and total gold production is estimated at only 1,000 oz (Jack, 1961).

The EL lies less than a kilometre east of Australia's largest undeveloped fluorite resource, the Moina deposit of 26 mmt @ 18% CaF<sub>2</sub> (Askins, 1979) which occurs in skarn near the granite margin. The eastern part of the deposit contains patchy gold values in the 0.2-0.4 g/t Au range. Better gold mineralization is hosted by pyrrhotite and sphalerite-rich parts of the skarn, with drill intersections up to 8m @ 1.5 g/t Au and 16m @ 0.9 g/t Au obtained by Comalco-CRA (Funnell, 1988).

EL 37/97 was taken up by Jervois Mining N.L. in May 1998 to test the gold and associated basemetal potential of part of the Dolcoath Granite aureole. Previous exploration and small-scale mining in the tenement area had delineated significant gold and lead-zinc mineralization in the catchment of Narrawa Creek, centred on the old Higgs and Narrawa Reward goldmines.

This first progress report details the programme undertaken in the period May 1998 to January 1999. The work comprised:

- A review of existing data including that from EM and magnetic surveys.
- Examination of existing drillcore (holes ND2 & ND3).
- In-field designwork for 38 hole RC drilling programme (not proceeded with due to lack of a suitable rig).
- Drilling of 12 short diamond holes totalling 335m.

This report reviews the results of the work done, including a resource calculation for the gold body discovered at Higgs Mine and makes recommendations for the future direction of the programme.

Acknowledgements are due to A.Jannink, who carried out much of the data review and assisted in drill planning, and to H.Rutter who examined the geophysical data. Field assistance was ably provided by G.Walker.

### 3. **TENURE**

The Dolcoath EL 37/97 covers 13 sq km and was granted to Jervois Mining N.L. on 3<sup>rd</sup> April 1998 and will expire on 3<sup>rd</sup> April 2003. The area was won by Jervois in competitive tender for ETA 457, which became available as a result of a statutory 50% reduction in the adjacent EL 20/92 held by the Goldstream Mining - Titan Resources JV.

EL 37/97 is predominantly Crown Land. It includes State Forest (Multiple Use Forest Land), RFA – Informal Reserves, Land Vested in the HEC and a small amount of Private Property. A 10ha Mining Lease (part of a 16ha Gravel Lease beside the Cradle Mountain Road) is excluded from the EL.

EL 37/97 abuts the eastern and northern boundaries of Retention Licence 8810 over the Moina fluorite deposit, held by Rio Tinto and Acacia Metals in Joint Venture with Goldstream-Titan.

See *Figure 2*.

#### 4. GEOLOGY

EL 37/97 covers Ordovician Denison Group sediments and Cambrian Mt Read Volcanics in the aureole of the Devonian Dolcoath Granite. In the central part of the EL these rocks are overlain by a thin veneer of Tertiary Basalt. See Figure 2.

The Dolcoath Granite is a medium to coarse grained alkali-feldspar I-type granite. Its extensively greisenized margins host small showings of tin, tungsten, molybdenum and bismuth. The granite outcrops over 2 sq km in the SE corner of the EL.

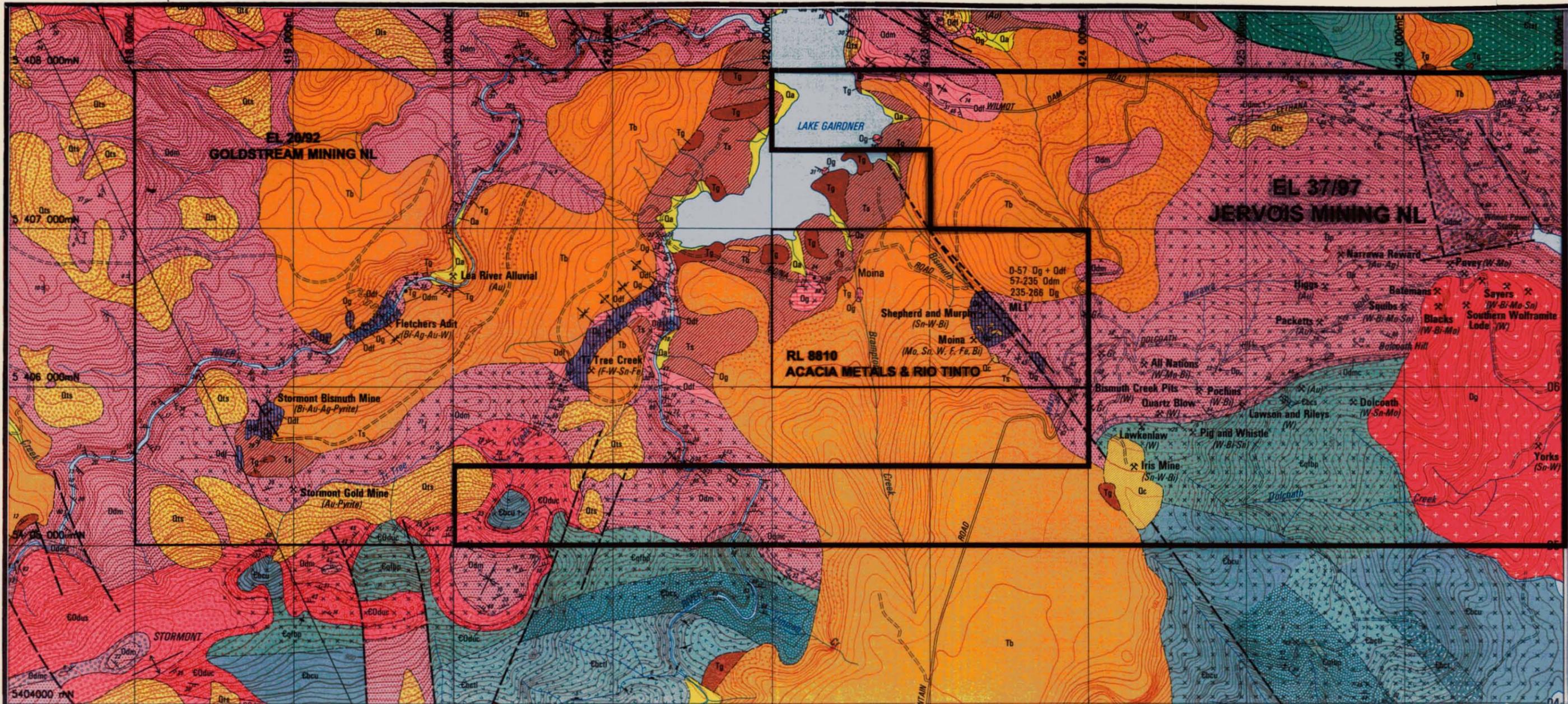
Gravity data (Leaman, 1988) shows that this outcrop lies at the eastern end of a shallowly-buried E-W trending granite spine, with a gently-sloping western margin and much steeper northern, eastern and southern margins. The granite thus underlies all the EL at very shallow depth, for the vast majority of it a matter of a few hundred metres at most.

This explains the large area of metasomatic alteration the intrusion has imposed on the flanking Palaeozoic rocks. Within this alteration halo numerous showings and old mines of tin-tungsten( $\pm$ bismuth-molybdenum), or to a much lesser extent gold ( $\pm$ silver-lead-zinc), occur within the tenement area. Most of these are of lode/vein style.

The oldest Palaeozoic unit is the Bond Range Porphyry of the Cambrian Mt Read Volcanics which occupies 2 sq km along the southern EL boundary. Mt Read Volcanics underlie the Ordovician sediments of the Denison Group, which cover most of the EL.

At the base of the Ordovician is a thin band of siliciclastic Roland Conglomerate. This is overlain by the Moina Sandstone, a thick formation of quartzose sandstones. The upper part of the Moina Sandstone contains thin carbonate bands (now largely altered to skarn), transitional to the overlying massive limestone of the Gordon Formation. The latter does not occur within the EL but is exposed a short distance to the west.

GFEL (Roberts, 1987) considered the Moina Sandstone was folded around an open E-W synclinal axis running down the Narrawa Creek valley, as demonstrated by the predominance here of outcrops of the upper transitional units. It is in these rocks that the two best gold shows, Higgs and Narrawa Reward, occur.



- ✕ (Ag-Pb) Prospect or abandoned mine with commodity indicated.
- ✕ Gr Gravel pit or quarry.
- qv— Prominent quartz vein.
- Macro fossil locality.
- ◇ Plant fossil locality (Tertiary).
- Geological boundary — accurate or approximate.
- - - - - Geological boundary — inferred or concealed.
- Fault — accurate or approximate.
- - - - - Fault — inferred or concealed.
- ↗ ↘ Axial surface trend of major anticline, syncline with plunge where known.
- ↗ ↘ ↗ ↘ Minor fold with plunge where known, anticline, syncline, unspecified.
- ↗ ↘ ↗ ↘ Strike and dip of bedding — facing known, unknown, overturned, vertical, horizontal.
- ↗ ↘ Banding in volcanic or igneous rock, vertical banding.
- ↗ ↘ Strike and dip of dominant cleavage of unspecified type in Cambrian or younger rocks; vertical cleavage.
- ↗ ↘ Joint-dipping, vertical.

**TERTIARY**

- Ts Unconsolidated sediments — gravel, sand, clay and minor lignite with some horizons of plant fossils.
- Tb Vesicular to massive basalt flows. Columnar jointing common. Overprint indicates areas of hyaloclastic breccias.
- Tg Silicified gravel and/or breccia of locally derived rock type ("Greybilly").

**LATE CAMBRIAN — EARLY ORDOVICIAN  
DENISON GROUP — OWEN CONGLOMERATE**

- Odf Fawn weathering siltstone and calcareous sandstone — Correlate of Florentine Valley Mudstone.
- Odm Grey siliclastic sandstone, thick bedded to massive, commonly bioturbated and with tubular burrows — Moira Sandstone.
- Odmc Grey medium to coarse-grained sandstone and pebble-cobble conglomerate, rarely bioturbated (Odmc).
- ✕ ✕ ✕ ✕ Contact aureole associated with Dolcoath Granite. Variable effects include pervasive silicification, epidote-chlorite-actinolite alteration and local formation of epidote knots in Cambrian rocks; recrystallisation, silicification and local muscovite alteration in Moira Sandstone. Local quartz-wolframite-muscovite mineralisation in country rocks.

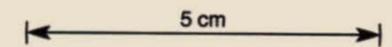
**BOND RANGE-STORMONT-BULL CREEK AREA**

- Eqfhp Quartz-feldspar-biotite ± hornblende porphyry ("Bond Range Porphyry").
- Ebcu Interbedded tuffaceous sandstone, vitric tuff and minor crystal lithic tuffs, generally quartz-phryic.

**INTRUSIVE ROCKS**

- Dp Quartz-feldspar porphyry with associated muscovite-rich greisen zones.
- Dg Alkali-feldspar granite. Cream to pink medium to coarse grained equigranular to porphyritic with minor microgranite apfite, pegmatite and greisen — Dolcoath Granite.

562009



<b>JERVOIS MINING N.L.</b> <small>A.C.N. 007 634 573</small>	
<b>COMPILED:</b> J. G. Purvis	<b>DOLCOATH - EL 37/97</b>
<b>DATE:</b> January 1990	
<b>DRAWN:</b> G.M.B.	<b>GEOLOGY</b>
<b>LOCATION:</b> Tasmania	
<b>FILE:</b>	<b>FROM MAP 9 - MT READ VOLCANICS PROJECT</b>
<b>DRAWING No.</b>	<b>GEOLOGICAL SURVEY OF TASMANIA</b>
<b>SCALE:</b> 1:25,000	0 600 m
	<b>FIG. No.</b> 2

## 5. PREVIOUS EXPLORATION & MINING

Small-scale mining and prospecting commenced in the area before the turn of the century and continued intermittently until the 1980's. Most activity was directed at the numerous veins and greisens bearing tin-tungsten( $\pm$ bismuth-molybdenum), the strongest of which were developed as the All Nations and Squibb mines. All Nations produced 36t WO<sub>3</sub> and 0.5t Bi from 1910-1942 (Jennings, 1979).

Shear-hosted gold (and silver-lead) was discovered at the Narrawa Reward Mine beside Narrawa Creek in 1893. The mine was abandoned by 1913 after apparent production of less than 100oz Au. In 1934 gold (and lead) was discovered at the Higgs Mine 200m to the SW. Disseminated mineralization was worked here from 1934-47 and 1960-61, with 910oz won from underground stoping and surface sluicing of oxidized rock (Blake, 1937 & Jack, 1961).

The first systematic exploration was in 1981-82 when CRA tested the basemetal and tin-tungsten potential of the metasomatized sediments on the granite margin.

To follow up anomalies detected by airborne DIGHEM-magnetics CRA cut a large grid over the Narrawa Creek catchment and undertook soil sampling, VLF EM, UTEM and ground magnetics. The VLF EM and UTEM delineated broadly coincident conductive zones associated with both old goldmines, with the responses extending hundreds of metres beyond the workings. A major NE-trending structure along Narrawa Creek was inferred from the magnetics (Flis, 1982).

CRA drilled three diamond holes, 113m to 216m deep. Two holes beneath the Narrawa Reward Mine intersected low lead-zinc-gold values (best: 3.7m @ 1.2% Pb, 1.2% Zn, 0.3 g/t Au). Although the old mine clearly contained more significant gold than basemetals, CRA assayed only one in 10 core samples for gold (Weber, 1982).

In 1986 Gold Fields Exploration (GFEL) started work on the CRA grid to test the gold potential. They did C-horizon soil sampling and channel sampled the old workings. They rectified CRA's oversight by assaying their two Narrawa Reward holes for gold, getting best intersections of 9m @ 0.24 g/t Au (DG1) and 6m @ 0.28 g/t Au (DG2).

GFEL got numerous soil anomalies in the 0.5-3.9 g/t Au range. They also got very significant gold in their channel sampling, particularly at the Higgs Mine where results included 1.3m @ 59 g/t, 8.5m @ 7.8 g/t & 4.5m @ 7.2 g/t (Roberts, 1987). They followed this up with three diamond holes under Higgs to depths of 121m to 134m.

Gold values in GFEL's holes were much weaker than those from surface sampling. Best intersection was 20m @ 0.5 g/t in ND1 (including 1m @ 6.2 g/t). The drilling results seemed to accord with the view of a skarn expert GFEL commissioned who implied the Narrawa Creek mineralization was in a setting too close to the granite (ie: too hot) and the Dolcoath Granite insufficiently mafic or oxidized, to have significant potential (L. Meinert in Fleming, 1988). GFEL pulled out in 1989.

No exploration was done at Narrawa Creek or elsewhere on the EL 37/97 area in the 10 years prior to the licence being granted. The Goldstream-Titan JV took up the ground in 1992 and flew a detailed aeromagnetic survey over it in 1996 during coverage of their total tenement, but no groundwork was done (Newnham, 1997).

## 6. 1998 DRILLING

### 6.1. Introduction

Between 26<sup>th</sup> October and 29<sup>th</sup> November 1998 12 short diamond drillholes were put down to test various gold targets within metasomatized Moina Sandstone in the Narrawa Creek valley. Holes NC01 to NC12 totalled 335m and were drilled within an area measuring 600m east-west and 200m north-south. See Figure 3.

Eight holes tested the Higgs line of mineralization (NC05-NC12), one hole tested Narrawa Reward (NC02), two holes tested gold in soil anomalies (NC03 & NC04) and one hole tested outcropping gold mineralization found by GFEL in 1987 (NC01).

All holes were angled at - 45° grid north or south (033° or 213° AMG), to depths ranging from 19.3m to 44.4m. They were drilled by a lightweight Gopher rig (see cover photograph) in order to minimize the environmental impact, particularly around the old mine workings (Photograph 4).

Holes NC01 and NC02 were drilled BQTK size (41mm core) but experienced core losses of 30-40% in fractured ground. The remaining holes were drilled NTW size (56mm core) and in most cases recoveries were almost 100%.

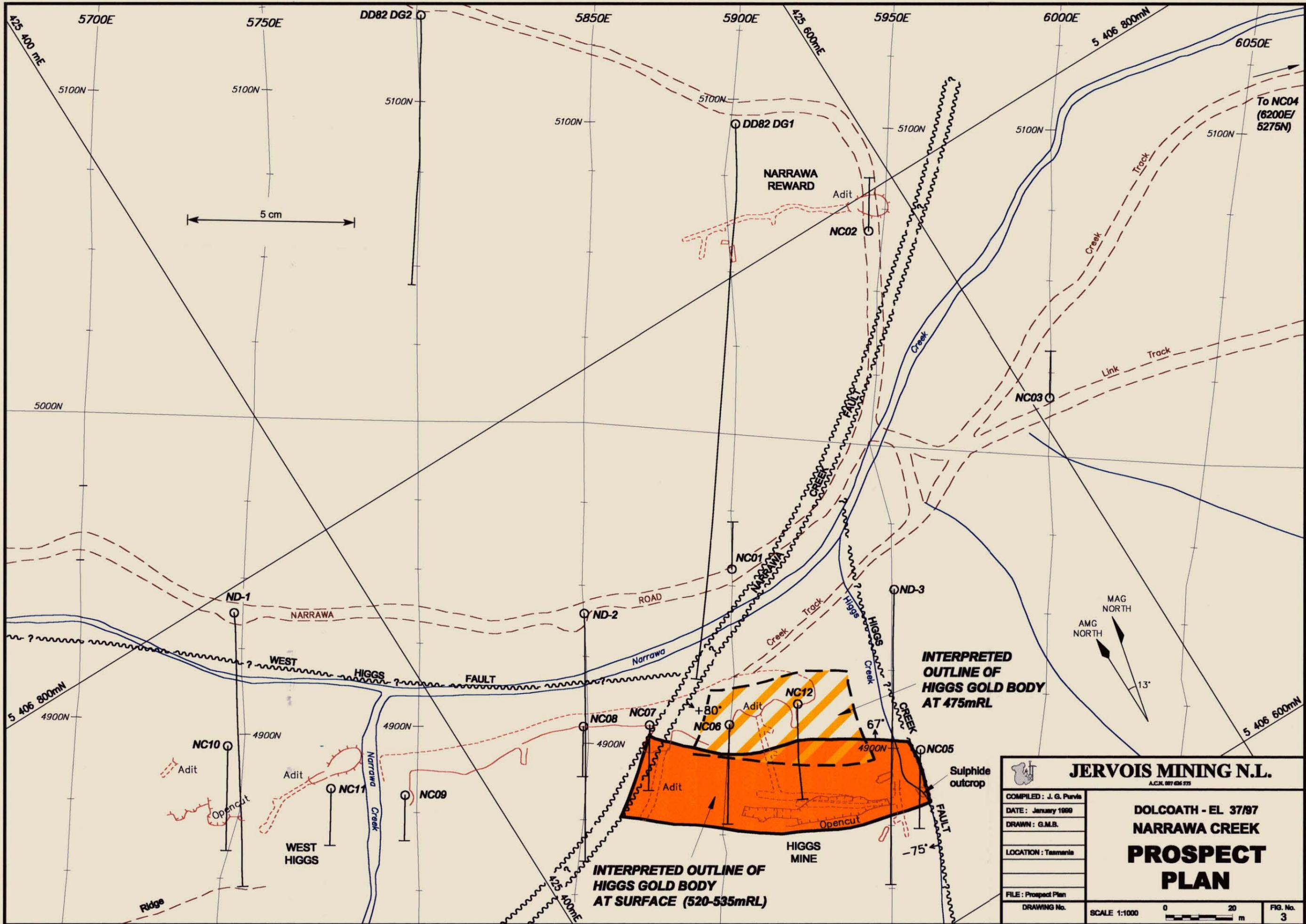
All core was photographed and logged in detail, then sampled for gold with selected intervals also analysed for lead, zinc, copper and silver, or tin and tungsten. In future, it is recommended that analyses for all these plus arsenic and bismuth should be routine.

It was initially anticipated (judging from past reports) that the gold would be in fractures, shears and veins, and that losses would occur if the core was split. So whole-core sampling was instituted. The core in NC04, NC08, NC09 and NC12 was particularly unbroken and was sawn, with half-core retained in storage.

### 6.2 Results

Ten out of the 12 holes encountered gold mineralization and in 6 of these the intersections were significant. All intersections are listed in Table 1. Geological and assay sections of the holes are shown in Figures 4-25. The drill logs are in Appendix 1.

The important intersections in NC06 and NC12 represent close to true widths. Those in holes NC01, NC02 and NC04 are oblique to varying degrees (see sections). The mineralization in NC07 was disrupted by a major fault running down the hole.



<b>JERVOIS MINING N.L.</b> <small>A.C.N. 007 626 575</small>	
COMPILED : J. G. Purvis	<b>DOLCOATH - EL 37/97 NARRAWA CREEK PROSPECT PLAN</b>
DATE : January 1989	
DRAWN : G.M.B.	
LOCATION : Tasmania	
FILE : Prospect Plan	
DRAWING No.	SCALE 1:1000  m
	FIG. No. 3

**TABLE 1: SUMMARY OF DRILLHOLE INTERSECTIONS,  
NARRAWA CREEK**

<b>HOLE</b>	<b>From</b>	<b>To</b>	<b>Interval</b>	<b>Au</b>	<b>Ag</b>	<b>Pb</b>	<b>Zn</b>	<b>Cu</b>
<b>No.</b>	<i>(m)</i>	<i>(m)</i>	<i>(m)</i>	<i>gt</i>	<i>gt</i>	<i>%</i>	<i>%</i>	<i>%</i>
<b>NC01</b>	0	10.9	<b>10.9</b>	<b>1.31</b>	9	0.6	0.7	
including	0	2	2	2.82	11	0.9	0.6	
	9.5	10.9	1.4	4.03	33	2.8	3.9	
NC01 anchor	0	1.5	1.5	5.49	15	0.7	0.2	
<b>NC02</b>	10.7	17.7	<b>7</b>	<b>1.06</b>	27	0.6	0.5	
including	12.8	15.2	2.4	2.57	61	1	1	0.1
<b>NC03</b>				all <0.05				
<b>NC04</b>	5	11.9	<b>6.9</b>	<b>1</b>				
including	6.6	7.2	0.6	4.88				
<b>NC05</b>				all <0.02				
<b>NC06</b>	7.5	24.9	<b>17.4</b>	<b>2.65</b>	23	1.1	1	
including	10.25	10.5	0.25	10.34	57	6	5.1	0.1
	14.5	15.7	1.2	17.74	34	5.9	4.5	0.1
	22.05	23.85	1.8	9.55	156	4.7	4.2	0.1
<b>NC07</b>	3.1	22	<b>18.9</b>	<b>1.04</b>	6	0.5	0.4	0.1
including	15.6	16.3	0.7	11.77	92	10.3	6.9	0.2
<b>NC08</b>	10	17	<b>7</b>	<b>0.47</b>				
including	16	17	1	0.98				
<b>NC09</b>	1.3	1.7	0.4	2.4				
<b>NC10</b>	39.9	41.1	1.2	1.8				
<b>NC11</b>	0	1.6	1.6	0.35				
<b>NC12</b>	7.1	32.5	<b>25.4</b>	<b>4.33</b>	23	2	1.5	<0.1
including	7.1	8.4	1.3	20.1	49	4.9	4	
	15.25	16.25	1	14.21	10	0.5	<0.1	
	18.6	19.75	1.15	12.13	67	5.3	5.3	0.1

562014



*Photograph 1.  
Logging drillcore at Narrawa Creek.*



*Photograph 2. Old adit at West Higgs.*



*Photograph 3.  
Drilling hole NC09, Higgs Mine.  
November 1998.*



*Photograph 4. Moving drill rig near hole NC12, Higgs Mine. The gold body lies beneath this area. Note ruins of miners hut in background.*

562016



*Photograph 5.  
Old opencut, Higgs Mine.  
Excavated within the  
Higgs Gold Body.*



*Photograph 6. Grains of visible gold (outlined) in Higgs Gold Body drillcore (15.4m, NC12).*

## 6.2.1 Higgs Gold Body: Holes NC06 & NC12

### Geology

Holes NC06 and NC12, drilled 20m apart beneath the main workings of the old Higgs Mine, intersected a body of gold and basemetal mineralization within highly metasomatized quartzose sandstones and skarn. This body lies around and down dip beneath the old workings which were excavated in the oxidized upper oxidized parts of high-grade zones within it (see Photograph 5).

In NC12 the intersection was 25.4m (23m true width) @ 4.33 g/t Au and in NC06 it was 17.4m (16m true width) @ 2.65 g/t Au. The intersections were accompanied by 1-2% Pb, 1-1.5% Zn and 23 g/t Ag. See Figures 4 & 5.

As shown in Table 1, within these intersections there were several high grade zones in both holes: up to 1.2m @ 17.7 g/t Au in NC06 and 1.3m @ 20.1 g/t Au in NC12.

The mineralization comprises conformable bands (individually up to 3.5m thick) of finely disseminated to semi-massive sulphides: pyrite/pyrrhotite-galena-sphalerite. Within these there are patchy coarser-grained quartz-sulphide segregations and sulphide veinlets, both also generally conformable. Grains of visible gold up to 1.5mm<sup>1</sup> were noted in and adjacent to several of the veinlets in NC12 - see Photograph 6.

Selected sediment beds have been replaced by the sulphidic mineralization which is associated with intense biotite and lesser silica alteration. The predominant host rocks within the body are metasomatized quartzose sandstones, but include a 9m mafic skarn band (hole NC06).

Originally the host sequence was largely quartzose sandstones, but they appear to have been more varied and less massive than usual for the Moira Sandstone. They ranged from silty to microconglomeratic and the mineralization shows some preference for the coarser grained types. The skarn band indicates the sequence also contained carbonates. Many of the most-biotitized bands have below-average detrital quartz content and were probably limey sandstones.

In the drillholes there is a noticeable paucity of fracturing, shearing, faulting and non-sulphidic veining within the mineralized body. "Greisenous" veinlets of quartz-fluorite-muscovite-sulphides are common in places but show no relationship to gold values. At 15-16m in NC12 conformable sulphide veinlets with visible gold actually cut through the greisenous sulphide veinlets. However, towards the base of NC12 greisenous veinlets overprint and bleach pre-existing biotite alteration.

Overall, there is a clear association of better gold values with zones of stronger sulphides and biotitization.

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<sup>1</sup> The coarse grained nature of some of the gold at Narrawa Creek is confirmed by the variation in individual assays in many drillholes - see Appendix 1

### **Dimensions**

The Higgs Gold Body apparently sits within a fault wedge - see Figure 3. It has a grid east-west strike length of 85m on surface, interpreted to reduce to about 45m at 60m down-dip. This is because the body is terminated, or at least dislocated, by inward-dipping faults at either end. A length of 65m has been used in the resource calculation (Table 2).

The western bounding fault is the very large fault in NC07 at 5875E (see Figure 15). Air photo interpretation indicates this is part of the major structure inferred from the magnetics to trend along Narrawa Creek, hence it has been named the Narrawa Creek Fault. Its grid NE air-photo trace is shown in Figure 3.

The Narrawa Creek Fault separates gold body rocks from the minimally altered and poorly mineralized massive silicified quartz sandstones seen in holes NC08-11 further west. NC07 was drilled down the fault and encountered patches of mineralization, including 0.7m @ 11.8 g/t Au (with 10% Pb & 7% Zn), 7.2m @ 1.1 g/t Au and 3m @ 1 g/t Au. Because of poor recoveries it is not clear if the fault is mineralized or whether it has merely caught up parts of the gold body.

GFEL mapping and sampling in the adit 5-20m directly above NC07 suggests it lies along the eastern edge of the fault zone. The workings have gold values up to 4m @ 8.9 g/t indicating these rocks are part of the gold body. To lie just west of the adit and also pass through NC07, the Narrawa Creek Fault is calculated to have a SE dip of 80° or more. Overall, the mineralization in NC07 and the workings above is interpreted as representing the complexly-faulted western edge of the gold body.

At its eastern end the gold body is again cut off by a fault, interpreted to trend NNW (grid) down Higgs Creek. Evidence for this fault comes from the abrupt end to the high-grade mineralization on surface at 5962E in Higgs Creek, from Jervois' barren hole NC05 only 10m beneath these outcrops at 5958E, and from GFEL hole ND3 at 5950E and 50m down-dip of NC05. It is considered both holes intersected altered and sulphidic but poorly-auriferous rocks in the block east of the fault.

To satisfy the various geometries the Higgs Creek Fault must dip west and as it seems both holes passed beneath rather than through the structure, this gives it a westerly dip of less than 75°. At 475m RL this dip would put the interpreted fault at a maximum easting of 5935E, as shown on Figure 3.

The gold body and bedding dips grid north at 65-70°. In NC06 the body is 16m thick at 20m down-dip and in NC12 it is 23m thick at 30m down-dip. The mineralized zone is missing in CRA hole DG-1, 110m down-dip below the NC06 intersection and 135m from surface. The culprit is probably the Narrawa Creek Fault which should cut through close to the end of DG-1.

Given the strength of the mineralization in both NC06 and NC12 it seems reasonable to assume it will extend at least 60m down-dip (double the depth of NC12), unless faulted off. This depth is about 475m RL and it has been used as a base for the resource calculation. There is insufficient data at this stage to take the depth estimate further.

Allowing for some losses due to ground slope and past mining, it is estimated that the body delineated to date by holes NC06 and NC12 is in the order of **215,000t at a grade around 3.5 g/t Au, 1.5% Pb, 1.3% Zn & 23g/t Ag.**

Details of the calculation are shown in Table 2.

<b>Length</b>	<b>65m</b>	From 5875E to 5940E
<b>Thickness</b>	<b>20m</b>	Average of NC06 and NC12 intersections
<b>Depth</b>	<b>60m</b>	Double the depth of NC12 intersection
<b>SG</b>	<b>3</b>	Assumes 12% sulphides
<b>Less</b>	<b>4,000t</b>	Maximum estimate of past mining
<b>Less</b>	<b>15,000t</b>	Maximum estimate of losses due to slope
<b>Grade</b>		Weighted average of NC06 & NC12 intersections
<b>TOTAL</b>	<b>215,000t @</b>	<b>3.5 g/t Au, 1.5% Pb, 1.3% Zn, 23 g/t Ag</b>

### 6.2.2 Comments on Remaining Drillholes

#### **North of Narrawa Creek: Holes NC01 and NC02**

Only two holes were drilled on the northern side of Narrawa Creek but they share some geological features not seen in the holes south of it. These include fault-bounded cross-cutting sulphide lodes and the presence of quartz-feldspar porphyries (a feature also seen in the CRA drilling). In both the Jervois holes the bedding still dips north<sup>2</sup> but at a lesser angle than south of the creek and flattening northwards.

NC01, directed north on the same section as NC06 at Higgs and 47m north of that hole, tested gold mineralization outcropping beside Narrawa Road. GFEL had obtained 11m @ 2.2 g/t Au in channel sampling here, parallel strike in pyritic silicified quartz sandstones.

NC01 intersected 1.3 g/t Au from 0-10.9m in the same rocks, possibly an oblique intersection as the hole was at a low angle to bedding. Best values were in a cross-cutting fault-bounded sulphide lode dipping 80° north at 9.5-10.9m: 1.4m @ 4.0 g/t Au, 33 g/t Ag, 2.8% Pb and 3.9% Zn. A 1.6m interval of quartz-feldspar porphyry occurred just below the lode. The 1.5m vertical anchor hole at the collar of NC01 contained visible gold and assayed 5.5 g/t Au.

<sup>2</sup> No orientation device was used during the drilling. It was possible to orientate core at the top of some holes by comparing core angles with those from the 1.5m anchor holes drilled at each site to tie the rig down. Use of an orientation device is recommended for future drilling at Narrawa Creek.

NC02 was drilled to test the Narrawa Reward line of mineralization 7m east of the mouth of the old adit. The hole intersected 7m @ 1.1 g/t Au, 27 g/t Ag, 0.6% Pb and 0.5% Zn, from 10.7-17.7m.

Most of the gold was in a fault-bounded pyrite-arsenopyrite lode at 12.8-16.7m, 2.4m of which assayed 2.6 g/t Au, 61 g/t Ag, 1% Pb and 1% Zn. The lode lies 15m below the line of the Narrawa Reward workings down a dip of 80° north and has a true width of 3m. It is clearly the extension of the lode worked by the old miners.

A second parallel pyritic lode 1.5m wide was encountered 2m uphole (ie: to the south). However, this assayed only 0.1 g/t Au and 1% Zn with no lead or silver. The north-dipping quartz-feldspar porphyry, seen in outcrop just south of the adit entrance, was intersected at 3-6m.

#### ***Testing Gold Soil Anomalies: Holes NC03 and NC04***

NC03 tested a GFEL 3.1 ppm Au C-horizon soil anomaly at 5025N / 6000E. The hole encountered strongly oxidized sandstones and skarn, but no gold. The upper 4m (possibly 8m) of the hole was a scree deposit containing vein quartz fragments and the anomaly is obviously transported.

NC04 was drilled 450m grid NE of the Higgs Mine to test a 0.72 ppm Au GFEL soil anomaly on a 35° slope at 5275N / 6200E. The geology in this area is slightly different to that around the Higgs and Narrawa Reward mines in that it is mostly hornfels and skarn. This is well demonstrated by the ground magnetics which outline a large strong magnetic high here, unlike Higgs-Narrawa Reward which is an area of magnetic lows (see Figure 27).

NC04 intersected 6.9m @ 1 g/t Au from 5-11.9m in strongly magnetic pyrrhotite-magnetite-mafic skarn. This included 4.9 g/t Au in a 0.6m thick semi-massive pyrrhotite-magnetite band. Minor traces of chalcopyrite, arsenopyrite and cassiterite are associated with the mineralization (tin values in the hole were up to 850 ppm). The rocks dip very steeply south.

It is evident NC04 has only partially and obliquely tested the target magnetic skarn sequence, mainly as a consequence of the steep terrain which limits drill sites at present to the Creek Track. See Figure 11.

The NC04 result is significant in that it opens up the large cluster of strongly magnetic skarns at the eastern end of Narrawa Creek as potential drill targets. There are at least 7 separate untested soil anomalies ranging from 0.1-1 ppm Au in this area. See Figure 26. The result also confirms gold mineralization at Narrawa Creek exists in a variety of settings.

**Testing the Higgs Line: Holes NC05, NC07, NC08 and NC09**

These holes were put down either side of the main Higgs workings.

As explained in 6.2.1, NC05 was drilled south beneath the basemetal sulphide outcrop in Higgs Creek 8m east of the opencut. This outcrop is the eastern-most exposure of the main Higgs mineralization and had assayed 3.5m @ 15.4 g/t Au, and 5m @ 2.6 g/t, 5% Pb, 4.4% Zn & 56 g/t Ag, in GFEL and CRA sampling.

NC05 was the biggest disappointment of the drilling programme. No values in the hole exceeded 0.01 g/t Au despite it intersecting sulphides, skarn and other altered rocks. A possible cavity at 19.5-20.8m may have been a drive from the workings along strike to the west.

It appears a north-south fault passes between the collar of NC05 and the mineralized outcrops 10m to the south. The fault, which is interpreted to have grazed the hole in the broken zone from 3-16m downhole, must dip west under the outcrops and cut them off so that NC05 remained in unmineralized rocks beneath and east of it.

The fault must also pass to the west of the poorly-mineralized GFEL hole ND3, drilled 8m west and 50m down-dip beneath NC05.

As also mentioned in 6.2.1, NC07 ran down a major fault at the western end of the main Higgs workings, with the structure intersected at intervals all the way down the hole. Because of this the geology in and around the hole is difficult to interpret. Bedding in the upper part of NC07 dips anomalously to the south, reflecting the size of the fault.

NC07 intersected 18.9m @ 1 g/t Au at 3.1-22m, in three separate intervals. These included 0.7m @ 11.8 g/t Au, 92 g/t Ag, 10.3% Pb & 6.9% Zn, in a band of fault-bounded semi-massive sulphides at 15.6-16.3m.

This band is probably part of the Higgs Gold Body to the east of the hole. This is likely also true of the other faulted auriferous sulphide zones in NC07 and in the workings above (where channel samples got values up to 4m @ 8.9 g/t Au).

In both holes NC08 and NC09, 20m and 73m respectively west of NC07, massive silicified quartz sandstone is the predominant rock type. Dip is 80° to the north. These rocks represent an important change in geology from those hosting the Higgs Gold Body, in that they lack the variation, alteration and mineralization seen in that area. They are notably lacking in basemetal sulphides.

NC08 intersected 7m @ 0.5 g/t Au, including 1m @ 1 g/t. The rocks were mildly biotitized throughout but sulphides were minor (3% maximum) and dominantly pyrite.

NC09 was sited immediately east of Narrawa Creek where it turns south and cuts across the Higgs line of workings. Apart from a strongly altered interval at 3-7m the rocks were similar to those in NC08, but the gold values were worse. Best value was only 0.15 g/t Au with all others <0.1 g/t. The quartz sandstone was notable for containing up to 5% dendritic pyrite.

The interval 1.3-1.7m assayed 2.4 g/t Au from pyritic sandstone containing visible gold. Unfortunately the upper 1.8m of the hole was almost certainly fill, apparently from the workings at West Higgs. See Photograph 3.

**West Higgs: Holes NC10 and NC11**

This small area of workings lies 150m west along strike from the main Higgs opencut and on the western side of Narrawa Creek. The main adit here is shown in Photograph 3.

GFEL channel sampling in the small West Higgs opencut obtained good gold values in pyritic silicified quartz sandstone. The best section, which included a 0.3m band or lode of brecciated quartz-pyrite dipping north at 55°, assayed 1.3m @ 58.7 g/t Au. This was part of a 4.3m interval grading 27.3 g/t.

Hole NC10 was directed southwards at this high-grade mineralization but unfortunately because of the steep slope had to be sited 25m north of the exposure. See Figure 21. The silicified quartz sandstone was intersected in the hole at 13.8-40m, about 30m down the 70-80° northerly dip.

NC10 was another big disappointment. The only gold was in a low-angle fault at 40-42.5m, which contained 1.8 g/t Au over 1.2m. All samples of the silicified sandstone unit assayed <0.06 g/t Au. Pyrite in it averaged <2% and was generally of finely dendritic type. Alteration was limited to bands of calc-silicate in the upper 8m.

The only possible sign of the mineralization seen this rock at surface was a barren zone of shearing and quartz veining at 26.3-27m, which was directly down-dip of the pyritic lode seen in the opencut.

NC11 was put in 30m east of NC10 and 22m west across the creek from NC09. It was designed to test the eastward extent of the West Higgs mineralization in an area where GFEL obtained values of 2.6 g/t Au over 1.7m in pyritized sandstone.

NC11 was barren, with all values <0.03 g/t Au, except for 1.6m @ 0.35 g/t Au in quartz sand overburden at the hole collar. Like the flanking holes NC09 & 10, the predominant rock type was silicified quartz sandstone with up to 5% dendritic pyrite. From 4-11m quartz-chlorite-biotite hornfels was intersected with locally 3% pyrite-pyrrhotite and in the bottom of the hole there were strong greisenous pyritic fractures.

## 7. DISCUSSION

### 7.1 Geophysics

It appears that the Higgs Gold Body discovered by Jervois and as defined by the drilling to date, is strike-limited by faulting. However, possible extensions are indicated by responses detected by the 1982 CRA UTEM survey. The best of these lie immediately to the east.

The UTEM detected weak conductive responses over both the Higgs and Narrawa Reward workings. In both cases these responses were traced for about 500m, ie: approximately 200m to the east and west of both old mines. Other UTEM responses included a strong anomaly near the West Packetts gold workings.

The Higgs response extended grid ENE from 5700E / 4800N, across the main Higgs workings (ie: outcrop of the gold body), to 6200E / 5000N. The responses on all lines were shallow, with depths to top of <20m (Flis, 1982). The strongest responses were immediately to the east of the Higgs workings, on lines 5950E, 6000E and 6100E.

Bishop (1987, in Roberts, 1987) recommended to GFEL that they drill the response at 4960N / 6100E, but this was not done. Both Flis and Bishop, taking account of the disseminated nature of the mineralization, recommended IP surveys to define drill targets. This was not carried out by either CRA or GFEL.

Rutter (1999) recently made the same recommendation to Jervois and this is strongly endorsed.

A detailed dipole-dipole IP survey could be used to detect and map out shallow concentrations (ie: <100m deep) of auriferous sulphides for short-hole drilling. The disseminated to semi-massive pyrite-pyrrhotite-galena, associated with the gold in the Higgs Gold Body, should respond magnificently to IP.

The principal aim of such a survey would be to accurately define the possible dislocated along-strike extensions of the Higgs Gold Body as indicated by the UTEM responses, especially the anomalies to the east of Higgs.

However, the IP is considered to also have an excellent chance of finding more deposits similar to the Higgs Gold Body. On the grid there are several other UTEM responses and widespread indications of gold. The latter include several old workings (eg: Packetts), numerous soil anomalies and drillhole intersections such as that in NC04 (450m NE of Higgs).

The area recommended for an IP survey is shown on Figures 26 & 27, and is based on the coverage suggested by Rutter with minor modifications to ensure full coverage of soil anomalies and old workings.

As Rutter points out, the planned IP coverage is centred along the NE-SW (grid) structural trend evident in the magnetics (Figure 27). But this is also the overall trend of the gold soil geochemistry (Figure 26). It is interesting that this trend is at an angle to the UTEM responses, which parallel rock strike (grid east-west).

## 7.2 Drill Targets

There are several obvious targets at Narrawa Creek worthy of immediate drilling and which are not dependent on the IP survey for further definition. Many of these exist as a result of the first round of Jervois drilling.

UTEM responses are not included as they should logically be tested by the IP first.

The suggested targets are:

### A. Higgs Gold Body – Definition Drilling

2 x 60m holes sited 20m north of holes NC06 and NC12, angled south to test the body down-dip at 475m RL.	120m
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1 x 45m hole sited on 5940E (20m E of NC12), angled south to test body at 500m RL.	45m
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1 x 45m hole sited on 5885E (15m W of NC06), angled south to test body at 500m RL	45m
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### B. Follow-up of NC01 Intersection

2 x 25m holes 20m apart angled south either side of NC01	50m
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### C. Narrawa Reward

2 x 30m holes angled south on 5890E and 5910E to test areas of better values in the old adit	60m
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1 x 25m hole angled south from near NC02 site	25m
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### D. West Higgs

2 x 20m holes angled south to test very shallowly beneath high-grade values in old open cut	40m
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### E. Follow-up of NC04 Intersection

3 x 40m holes around NC04 to test the auriferous magnetic skarn	120m
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<b>Total</b>	<b>14 holes</b>	<b>505m</b>
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### 7.3 *Geological Observations*

Three features are conspicuous in the Narrawa Creek drillcore:

1. The strength of the granite-related metasomatism.
2. The amount of disseminated pyrite and basemetal sulphides.
3. The relative lack of veining.

Because of the alteration, logging the Narrawa Creek core is a minor nightmare. Accurate mineral identification is important if the metasomatic processes are to be understood and geological settings prospective for gold mineralization identified.

It is suspected that both telescoping and retrogression of alteration facies has occurred at Narrawa Creek, in a complex pattern of over-printing alteration phases.

In future drilling full use should be made of petrology and the advice of skarn experts, to assist the geologist.

The Narrawa Creek rocks are, or were, predominantly sandstones and quartzose to a greater or lesser degree. Even the skarns contain remanent detrital quartz grains and clasts. It is also clear that many of these sandstones were calcareous, with occasional bands of carbonate or more commonly, impure sandy carbonate.

In the Higgs Mine opencut the mineralized zone is associated with stratabound puggy clay bands and conspicuous fracturing (see Photograph 5). The clay bands have been mapped as shears by GFEL (Roberts, 1987) and others (Jack, 1961), and they certainly show signs of movement in places.

However, the Jervois drilling suggests that these clay bands are decomposed altered and mineralized rock, possibly originally carbonate horizons. Evidence for shearing in the drillcore is almost entirely lacking.

Blakes 1937 description of the underground workings is worth reading:

"the primary lodes consist of impregnations and partial replacement of quartzite beds with sulphidic minerals in a fine state of division...galena is the chief component."

Also: "an irregular zone of oxidation extends from surface to a known maximum of 60 feet, in which fine particles of free gold are visible in places through quartzites stained by hydrated iron oxides. It is from this zone that the greater part of the ore has been mined for treatment"

Although some local shearing and fracturing is present, particularly at surface where the latter may have been enhanced by mining activities, the Higgs mineralization does not appear to be structurally controlled, at least in its sites of deposition.

#### 7.4 Surveying

In future, drillcore at Narrawa Creek needs to be orientated to improve the structural understanding. This is especially important when seeking mineralization that may be stratiform. No Narrawa Creek drillcore has been properly orientated to date, including that from GFEL and CRA.

Future drillholes at Narrawa Creek should be surveyed, both for accurate collar positioning and by downhole camera. It is suggested a network of permanent survey stations be gradually established. At present many features, including the Jervois drillholes and particularly the grid, are only approximately located.

The Narrawa Creek grid was put in by CRA in 1981 and is uncorrected (ie: pegs and lines are ground-slope distance apart). In this sort of steep terrain this leads to substantial discrepancies in co-ordinate positions between lines. This type of grid is only useable for detailed work (like that of Jervois) if the basic framework of the grid is accurately picked up, warts and all. GFEL picked up parts of the grid but this is now inadequate.

It makes sense for Jervois to continue using the grid so that new data, such as the IP, is collected at the same sites as the UTEM, for example. This gives a higher standard of correlation and therefore, interpretation.

## 8. **PROPOSED PROGRAMME & BUDGET**

The following programme is recommended for the next phase of testing of the gold potential at Narrawa Creek. As discussed in section 7, the programme involves drilling and an IP survey which are independent of each other.

It would be sensible however, to be doing the drilling programme at the time the IP results were being assessed by the geophysicist. The option would then exist to quickly move the rig onto the best targets defined by the IP.

### A: **Drilling Programme**

Diamond drilling using lightweight Gopher rig and NTW core.  
Targets and holes as outlined in section 7.2.

4 holes (210m) to further define Higgs Gold Body  
3 holes (85m) to test Narrawa Reward  
4 holes (90m) for further testing in Higgs area  
3 holes (120m) to test skarns around hole NC04

TOTAL: 14 holes for 505m.

#### **Drilling Budget**

Drilling contractor	\$43,000
Support (site prep, vehicles, consumables, accommodation)	\$14,000
Geologist, assistant	\$27,000
Assaying	\$10,000
<b>TOTAL</b>	<b>\$94,000</b>

### B: **IP Survey**

11km dipole-dipole survey using 50m dipoles and reading to n=5,  
on lines generally 100m apart over area outlined in Figure 26.

Grid refurbishment (13.5km)	\$11,000
IP Contractor (incl mobilization)	\$22,000
Support (accommodation, vehicles)	\$ 5,000
Jervis assistant & supervision	\$ 4,000
Geophysicist	\$ 5,000
<b>TOTAL</b>	<b>\$47,000</b>

## 9. CONCLUSIONS

1. The Higgs Gold Body, discovered by Jervois at the old Higgs goldmine, is conservatively estimated to contain 215,000t at a grade of 3.5 g/t Au, 1.5% Pb, 1.3% Zn and 23 g/t Ag, to a depth of 60m.
2. There is insufficient data at present to take the resource estimate below 60m but faulting is interpreted to restrict the tonnage potential here.
3. UTEM responses extending 200m east and west along strike are likely to be indicating extensions to the fault-bounded body, particularly to the east.
4. High concentrations of iron and lead sulphides in the body would respond well to IP. A detailed survey could be used detect and map out similar shallow concentrations of auriferous sulphides.
5. IP would also better define the UTEM responses. Therefore the main aim of an IP survey should be to accurately locate the possible extensions of the Higgs Gold Body indicated by the UTEM.
6. Good potential exists for further bodies of gold mineralization elsewhere on the Narrawa Creek grid. Indications include widespread soil gold anomalism, auriferous skarn in hole NC04 (450m NE of Higgs) and at least two further UTEM anomalies associated with old gold workings. The latter include a 500m long UTEM response over the Narrawa Reward Mine.
7. Some of these targets warrant immediate drilling, others need better definition by IP.
8. The grade of the Higgs Gold Body confirms that exploration for the present should be directed at depths of less than 100m.

## 10. RECOMMENDATIONS

1. A 14 hole, 505m diamond drilling programme be undertaken to test a range of identified targets.

These include 4 holes to further define the Higgs Gold Body, 3 holes to test the Narrawa Reward mineralization, 4 holes in the general Higgs Mine area and 3 holes around the NC04 auriferous skarn intersection.

Details of the programme are in section 7.2. Cost is estimated at \$94,000.

2. A detailed dipole-dipole IP survey be carried out over 11 line km of the Narrawa Creek grid, as outlined in Figures 26 & 27.

The survey should comprise readings on 100m spaced lines, tightening to 50m spacing on two lines either side of the Higgs Gold Body. A 50m dipole length and readings to  $n=5$  are recommended.

The all-up cost of the IP survey is estimated at \$47,000.

3. In future drilling all core should be sampled by splitting. More-comprehensive assaying, petrological sampling and orientation of core should be undertaken, and the holes accurately surveyed. A network of permanent survey stations needs to be gradually established at Narrawa Creek.

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**APPENDIX 1**

**DRILL LOGS  
HOLES NC01 – NC12**

## JERVOIS MINING NL - DRILLHOLE LOG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
<b>DRILLHOLE: NC01</b>					<b>Logged by: J.G.Purvis</b>			<b>Date: 26.10.98</b>	<b>Depth: 20.1m</b>	<b>Size: BQTK</b>
					<b>Co-ords: 4955N / 5900E (Grid)</b>			<b>RL: 515m (est)</b>	<b>Dip: -45</b>	<b>Azimuth: 033 AMG</b>
0	1.5	1.5	1.2	0.3	0	1.5	ANCHOR HOLE (vertical): SILICIFIED & PYRITIZED QUARTZ SANDSTONE. Grey, fi gr. Brecciated below 0.6m with limonite matrix.	Strongly silicified and partly oxidized.	Sulphide lineation 40/LCA At 0.4m: 3mm py-gn veinlet 40/LCA (opp sense to lineation).	To 0.6m: small grains of GOLD & 10% dissem & lineated py>gn-sp>aspy. 0.6-1.5m: limonite boxworks.
0	1.4	1.4	1.1	0.3	0	4	PYRITIZED QUARTZ SANDSTONE. Pale grey, fi gr, uniform. Fractured & broken at intervals.	Strong oxidation on fractures. Leached in places.	Sulphide lineation 10/LCA (dips N at 55). Fracts 70 & 35/LCA (opp senses).	5-10% dissem & veinlet py-sp-gn, some in diffuse bands. At 1.6m: 1cm py vein 65/LCA.
1.4	3	1.6	1.6	0						
3	3.4	0.4	0.2	0.2						
3.4	4.4	1	0.6	0.4						
4.4	5.6	1.2	0.1	1.1	4	9.3	SHATTERED PYRITIC QUARTZ SANDSTONE. Grey, medium gr (some qtz grains to 2-3mm).	Silicified. Weak oxidation on fractures. Partly leached.	Badly broken by fractures at all angles. Vein qtz frags 9-9.3m.	10-15% dissem py, 3-5% below 8.3m. Minor sp-gn-aspy.
5.6	5.9	0.3	0.3	0						
5.9	6.4	0.5	0.2	0.3						
6.4	7.5	1.1	0.25	0.85						
7.5	8.3	0.8	0.15	0.65	9.3	9.5	FAULT. Pyritic sand with vein quartz frags. Fragments of leached sericitic sandstone.	Sericitized.	Fault.	10-15% py. Trace sp-gn-aspy.
8.3	9	0.7	0.05	0.65						
9	9.3	0.3	0.1	0.2						
9.3	9.5	0.2	0.2	0	9.5	10.9	SULPHIDE-QUARTZ-CARBONATE LODGE. Weakly-banded sulphides in sugary qtz & creamy carbonate, replacing qtz sst.	Strong qtz-carbonate alteration.	Banding 35/LCA. Recemented breccia texture below 10.2m.	9.5-10.2m: semi-massive sp-gn>py. 10.2-10.9m: 10-20% sp-gn>py, trace aspy.
9.5	9.8	0.3	0.15	0.15						
9.8	10.7	0.9	0.65	0.25						
10.7	11	0.3	0.15	0.15						
11	11.9	0.9	0.7	0.2	10.9	11.7	QUARTZ SANDSTONE. Grey, fi gr, uniform.	Minor biotitization.	Fractured & broken.	Minor sp-gn-py.
11.9	12.6	0.7	0.7	0						
12.6	14	1.4	1.4	0	11.7	13.3	QUARTZ-FELDSPAR PORPHYRY. Creamy-grey. Euhedral & subhedral qtz & feldspar to 2mm in fi gr groundmass.	Minor silification & clay alteration. Minor tourmaline on fractures.	Fractured & broken. Contacts irregular, lower at low angle to LCA.	1% py in microveinlets. Minor dissem sp-gn.
14	14.7	0.7	0.55	0.15						
14.7	15.9	1.2	1.2	0						
15.9	16.9	1	1	0						
16.9	19.5	2.6	2.4	0.2	13.3	20.1	METASOMATIZED SANDSTONE. Brown to creamy-grey, variable & mottled qtz-carbonate-biotite-garnet-sericite rock (calc-silicate in places). Largely after quartzose sandstone.	Strong carbonate-biotite>garnet-sericite alteration. Some garnet assoc with qtz veinlets.	Mildly fractured & broken Small shears 17.8-19.7m 60-80/LCA with quartz-sericite veins to 2cm.	Minor to 2% py>aspy, dissem & veinlets. 14.75-15.25m: veinlets of qtz-garnet-py>aspy, to 1cm, 30-45/LCA.
19.5	20.1	0.6	0.6	0						
<b>END OF HOLE 20.1m</b>										

562032

JERVOIS MINING NL - ASSAY SHEET										DRILLHOLE: NC01				
SAMPLED DEPTH		INTERVAL (m)	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm
From	To		Au	Au(R)	Au(R2)	Au(S)	Au(av)	Cu	Pb	Zn	Ag	As	Sn	W
Anchor hole: 1.5m vertical														
0	1.5	1.5	7.26	3.48	5.73		5.49		0.75	0.18	15			
Main hole:														
0	1	1	6.84	1.73	3.32		3.96		1.06	0.62	12			
1	2	1	1.68	1.68			1.68		0.66	0.65	10			
2	3	1	0.36						0.08	0.02	<5			
3	4.4	1.4	0.19						0.08	0.01	<5			
4.4	6.4	2	0.31						0.08	0.2	<5			
6.4	8.3	1.9	0.88	0.85			0.86		0.25	0.46	5			
8.3	9.3	1	0.09						0.04	0.06	<5			
9.3	9.5	0.2	0.17			0.15	0.16		0.02	0.09	12			
9.5	10.9	1.4	4.34	3.62	4.14		4.03		2.76	3.91	33			
10.9	11.7	0.8	0.36											
11.7	12.6	0.9	0.02											
12.6	13.3	0.7	0.1	0.12			0.11							
13.3	14.3	1	<0.01	<0.01			<0.01							
14.3	15.3	1	<0.01	<0.01			<0.01							
15.3	16.3	1	<0.01											
16.3	17.3	1	<0.01											
17.3	18.3	1	0.02	0.03			0.02							
18.3	19.3	1	<0.01	<0.01			<0.01							
19.3	20.1	0.8	<0.01											
Laboratory: Analabs, Coosee														
Method :		F650	F650	F650	F650			A103	A103	A103	A103		X401	X401

562033

## JERVOIS MINING NL - DRILLHOLE LOG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
DRILLHOLE: NC02					Logged by: J.G.Purvis			Date: 28.10.98	Depth: 22.7m	Size: BQTK
					Co-ords: 5069N / 5946E (Grid)			RL: 504m (est)	Dip: - 45	Azimuth: 033 AMG
0	1.2	1.2	0.2	1	0	1	SOIL & SCREE.			
1.2	1.7	0.5	0.1	0.4						
1.7	2	0.3	0.15	0.15	1	3	QUARTZ SANDSTONE. Whitish-grey, medium grained.	Carbonate spotting. Mildly oxidized.	Lineation 20/LCA (dips 25 to N). Some qtz veins	Limonite stains, with some boxworks on fractures.
2	3.2	1.2	0.3	0.9						
3.2	3.6	0.4	0.35	0.05						
3.6	4.5	0.9	0.75	0.15	3	6	QUARTZ-FELDSPAR PORPHYRY. Pale grey. Euhedral to subhedral qtz 2-5mm & occasional feldspars to 2mm, in fi gr felsic groundmass.	Partly oxidized: clayey & leached in places.	Lower contact broken.	Minor pyrite microveinlets 80/LCA Limonite on fractures.
4.5	6.2	1.7	0.3	1.4						
6.2	6.6	0.4	0.15	0.25						
6.6	6.9	0.3	0.1	0.2						
6.9	7.2	0.3	0.1	0.2	6	8.8	RUBBLE of QUARTZ SANDSTONE with QUARTZ VEINS. Creamy-grey, medium gr.	Partly oxidized & clayey. Weak silif & cb spotting	5cm qtz-py vein //LCA 6.6-7.4m.	Minor to 2% py in sst. 5% py & minor sp, in qtz veins.
7.2	7.6	0.4	0.2	0.2						
7.6	8.2	0.6	0.1	0.5						
8.2	8.6	0.4	0.4	0	8.8	10.7	SULPHIDIC ZONE. Dark grey. Dissem sulphides in quartz-carbonate-replaced quartz sandstone.	Strong qtz-carbonate alteration. Moderately leached.	Sulphide banding 30/LCA Mildly broken. Sharp basal contact 50/LCA.	20% py>>sp. Semi-massive in top 30cm, 5% at base. Dissem with minor microveinlets.
8.6	9.2	0.6	0.25	0.35						
9.2	10.6	1.4	0.85	0.55						
10.6	10.9	0.3	0.3	0						
10.9	12.2	1.3	1.1	0.2	10.7	12.8	SKARN? Softish leached & bleached, banded micaceous rock. Bands with 1-2mm garnets & bands of mafics (actinolite?).	Partly oxidized. Strong biotite>mafic-garnet alt. Trace fuchsite.	Banding after bedding 20/LCA (0-45/LCA), & 45/LCA at base.	3% py-sp-gn, in stringers & clots // banding.
12.2	13.7	1.5	0.6	0.9						
13.7	13.9	0.2	0.15	0.05						
13.9	14.3	0.4	0.4	0						
14.3	15.2	0.9	0.8	0.1	12.8	16.65	SULPHIDIC ZONE. Dark brownish-grey. Crumbly partly leached sulphidic zone in altered quartzose sandstone. No qtz veining.	Silicified, with strong biotite-garnet alteration	Lineation 50-65/LCA. Fractured. Basal contact 10cm puggy fault 55/LCA	10-20% py>aspy-sp-gn, largely dissem with less in small stringers along lineation.
15.2	15.4	0.2	0.2	0						
15.4	16.7	1.3	0.95	0.35						
16.7	17.5	0.8	0.8	0						
17.5	18.4	0.9	0.9	0	16.65	22.7	METASOMATIZED SILTY QUARTZOSE SANDSTONE. Brownish-grey (hard) or greenish-grey (softer).	Strong silicification & biotite-garnet-chlorite alteration, especially in fault zone 17.3-19.5m.	Fractured & broken due to fault 10/LCA at 17.3-19.2m. Bedding 40/LCA at 22.4m. 8mm quartz veinlet 65/LCA at 20.55m	16.65-17.7m: 3-5% py>aspy>sp-gn, dissem>veinlets, including 15cm lode of gn-py>aspy-sp 50/LCA at 17.2m. 17.7-22.7m: 1-2% py, trace sp-gn, dissem & veinlets 70/LCA.
18.4	19.7	1.3	1.1	0.2						
19.7	20.6	0.9	0.9	0						
20.6	22.7	2.1	2	0.1						
							END OF HOLE 22.7m			

562034



## JERVOIS MINING NL - DRILLHOLE LOG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
DRILLHOLE: NC03					Logged by: J.G.Purvis			Date: 30.10.98	Depth: 19.9m	Size: NTW
					Co-ords: 5018N / 6000E (Grid)			RL: 512m (est)	Dip: -45	Azimuth: 033 AMG
0	4	4	0.65	3.35	0	4	SOIL & SCREE. Clay, with rubble at 2-4m of strongly oxidized and limonite-stained quartz sandstone and vein quartz.	Strongly oxidized.		Limonitic.
4	5.8	1.8	0.55	1.25						
5.8	8.2	2.4	1.05	1.35						
8.2	9	0.8	0.7	0.1						
9	10	1	0.6	0.4	4	5.8	SAND. Pale yellow-brown limonite-stained quartz sand after highly oxidized quartz sandstone. Minor fragments of vein qtz.	Strongly oxidized.		Limonitic.
10	11.3	1.3	0.75	0.55						
11.3	12.5	1.2	1.1	0.1						
12.5	13.6	1.1	0.4	0.7						
13.6	14.5	0.9	0.75	0.15	5.8	8.2	QUARTZ SANDSTONE. Rubbly core. Whitish-grey, medium to coarse grained & hard. Variability & presence of qtz fragments suggests this may be scree deposit.	Moderately oxidized. Silicified.	Very badly broken. Vein qtz frags to 3cm.	Minor py. Limonite on fractures
14.5	15.3	0.8	0.75	0.05						
15.3	16	0.7	0.7	0						
16	16.8	0.8	0.7	0.1						
16.8	18.7	1.9	0.65	1.25						
18.7	19.3	0.6	0.5	0.1	8.2	10	OXIDIZED ALTERED SILTY QUARTZOSE SANDSTONE. Yellow-brown, rotten clayey rock	Strongly oxidized. Metasomatized.	Badly fractured & broken.	Strong limonite stains, esp on fractures, & pits after py. Qtz-limonite veinlets 20-30/LCA.
19.3	19.9	0.6	0.5	0.1						
					10	11.3	OXIDIZED CARBONATE? Creamy-yellow, rotten, soft silty-clayey rock.	Strongly oxidized & bleached.		Weak limonite stains.
					11.3	13.6	QUARTZ SANDSTONE. Brownish-white, fi gr, hard.	Strongly oxidized. Silicified.	Badly fractured & broken	To 12.5m: limonite stains & on fractures, with some pits after py
					13.6	19.9	SKARN. Green & purplish-brown, variable, sandy quartz-diopside(?)-biotite-garnet rock. Banded or mottled appearance. Ranges from hard to clayey & crumbly.	Strong qtz-diopside-biotite-garnet metasomatism. Clayey oxidation in places.	Finely lineated 25-30/LCA Very minor veinlets of qtz or carbonate. Veinlets of diopside 17-19m.	1-2% dissem po-py, trace cp. Sulphides decrease with depth. Minor hematite on some fractures.
							<b>END OF HOLE 19.9m</b>			

562036



## JERVOIS MINING NL - DRILLHOLE LOG

<b>DRILLHOLE: NC04</b>					<b>Logged by: J.G.Purvis</b>			<b>Date: 2.11.98</b>		<b>Depth: 20.1m</b>		<b>Size: NTW</b>	
					<b>Co-ords: 5275N / 6200E (Grid)</b>			<b>RL: 490m (est)</b>		<b>Dip: - 45</b>		<b>Azimuth: 213 AMG</b>	
<b>DRILL ADVANCE</b>					<b>LITHOLOGY</b>								
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION			
0	1.2	1.2	0.7	0.5	0	3	SKARN. Green & brown, med gr massive rock composed of mafics (diopside?), with pale pink spotty mineral - carbonate(?).	Very strongly metasomatized. Partly oxidized.	Mildly broken. Mineral lineation 15/LCA (dips S at 60). Lower contact 25/LCA (parallel lineation).	Prominent MnOx & FeOx stains & veinlets. 2-3% dissem py-po.			
1.2	1.8	0.6	0.6	0									
1.8	2.7	0.9	0.9	0									
2.7	3.2	0.5	0.5	0									
3.2	4.8	1.6	1.3	0.3									
4.8	6.3	1.5	1.5	0	3	5.7	CHLORITE-QUARTZ-ALBITE HORNFELS. Possibly after altered quartz sandstone. Pale bluish-green, fi-med gr, very hard.	Strong chlorite-silica-albite alteration. Micro-veinlets of dark green mineral (tourmaline?).	Weak lineation 20-40/LCA Basal contact 20/LCA, // lineation.	4.45-4.85m: (10cm recovered) leached vein of semi-massive po>mag-py, 15/LCA, parallel lineation.			
6.3	7.6	1.3	1.3	0									
7.6	8.9	1.3	1.3	0									
8.9	10.5	1.6	1.6	0									
10.5	12	1.5	1.5	0									
12	13.5	1.5	1.5	0	5.7	12.1	SKARN. Green, med gr, mafic(diopside?)-quartz-biotite-pyrrhotite-magnetite rock. Very hard. Some remanent detrital qtz clasts 3-4mm at 8.3-9.3m.	Very strongly metasomatized. Qtz patches to 10cm.	Unbroken. Mineral banding 25-35/LCA. Basal contact sharp, 25/LCA, // banding.	6m: 2cm fluorite-mo vein 35/LCA 5.7-6.6m: 3-5% po-mag. 6.6-7.2m: semi-massive po>mag 7.2-8.3m: Minor aspy. 8.3-9.4m: 5-7% po>mag. 9.4-11.9m: 20% banded po-mag, minor cp>aspy			
13.5	15.1	1.6	1.6	0									
15.1	16.7	1.6	1.6	0									
16.7	18.3	1.6	1.6	0									
18.3	19.8	1.5	1.5	0									
19.8	20.1	0.3	0.3	0									
					12.1	18.35	QUARTZ-SERICITE-BIOTITE-CHLORITE HORNFELS. Pale khaki-grey or pale green, med gr, very hard. Variable interval, with spotty & lineated appearance. Largely after altered med-coarse gr quartz sandstone.	V strong silica-sericite-biotite-chlorite alteration Irreg qtz veins to 5cm cut by greisenous low-angle qtz-fluor-musc veinlets with py-bi.	Unbroken. Weak lineation 20-70/LCA.	1% dissem py-po, some in margins of the qtz veins. 5cm qtz-cassiterite vein at 15.1m.			
					18.35	20.1	CALC-SILICATE. Creamy green & brown, mottled metasomatized rock. Composed of green mineral (actinolite or chlorite?) & white mineral (wollastonite?), with hard quartz-biotite patches.	Very strongly metasomatized. The chlorite/actinolite introduced via veinlets 25-45/LCA	Unbroken.	Minor dissem po-py.			
<b>END OF HOLE 20.1m</b>													

562038



# JERVOIS MINING NL - DRILLHOLE LOG

DRILL ADVANCE					LITHOLOGY								
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION			
DRILLHOLE: NC05					Logged by: J.G.Purvis			Date: 4.11.98		Depth: 32.4m		Size: NTW	
					Co-ords: 4900N / 5958E (Grid)			RL: 524m (est)		Dip: -43		Azimuth: 213 AMG	
0	0.8	0.8	0.2	0.6	0	1.3	SCREE or DUMP MATERIAL. Fragments of leached white quartz sandstone & vein qtz.						
0.8	1.3	0.5	0.1	0.4									
1.3	1.4	0.1	0.1	0									
1.4	1.6	0.2	0.2	0	1.3	3	QUARTZ SANDSTONE. Whitish, med gr, hard.	Oxidized & leached. Silicified.	Mildly broken. Weak cleavage 50/LCA (dips N at 87). At 2.9m: 3.5cm qtz vein 85/LCA.	Minor limonite stains. Remanent py shows rock originally had 5% dissem & microveinlet py.			
1.6	1.9	0.3	0.1	0.2									
1.9	3.2	1.3	1.2	0.1									
3.2	3.6	0.4	0.4	0									
3.6	4	0.4	0.4	0									
4	4.7	0.7	0.7	0	3	3.8	SULPHIDIC ZONE. Dark greenish-grey, soft clayey & sericitic non-qtzose rock (altered carbonate?), with pyritic seams.	Partly oxidized. Strong clay-sericite alteration.	Top contact strong fault (high angle, 20cm pug). Bedding 50/LCA. Lower contact irreg, 50-60/LCA	15% py in veins to 2cm, usually sub-// LCA.			
4.7	5.5	0.8	0.75	0.05									
5.5	6.2	0.7	0.7	0									
6.2	7.2	1	0.85	0.15									
7.2	8.6	1.4	1.4	0									
8.6	9.4	0.8	0.45	0.35	3.8	8.85	ALTERED QUARTZOSE SANDSTONE	Weakly ox. Silicified.	Crumbly pyritic fault 4.6-4.8m.	Trace to 2% dissem & microveinlet py, except:			
9.4	10	0.6	0.25	0.35			BRECCIA. Brownish or greenish-grey, med to coarse gr, hard. Mottled due to numerous spaced clasts of similar sst to 1.5cm.	Weaker biotite-chlorite or sericite alteration.	Lineation 35-60/LCA.	4.6-4.8m: semi-massive py & minor sp-gn, in fault.			
10	10.7	0.7	0.7	0									
10.7	11.4	0.7	0.35	0.35									
11.4	12.2	0.8	0.1	0.7									
12.2	13	0.8	0.05	0.75									
13	13.6	0.6	0.4	0.2									
13.6	14.1	0.5	0.5	0									
14.1	14.5	0.4	0.35	0.05	8.85	16.5	FAULTED CALC-SILICATE. Fawn, clayey & sandy altered rock. Composed of quartz, chlorite, epidote, carbonate, biotite, albite and garnet. Carbonate now largely leached (rock is vughy).	Oxidized, bleached & clay-altered. This overprints strong metasomatism (principally silica-chlorite/epidote-carbonate).	Badly fractured & broken. Well banded in places, 70/LCA.	Minor hematite microveinlets & remanent magnetite. No sulphides.			
14.5	15	0.5	0.5	0									
15	15.8	0.8	0.75	0.05									
15.8	16.2	0.4	0.35	0.05									
16.2	16.5	0.3	0.15	0.15									
16.5	17.3	0.8	0.8	0									
17.3	17.5	0.2	0.2	0									
17.5	18.2	0.7	0.7	0	16.5	21.8	SKARN. Continuation of above zone but metasomatism stronger & largely unoxidized.	Intense metasomatism, metasomatism, mainly silica & chlorite-epidote,	Banding 70/LCA. 2.5cm qtz-py vein at 21.7m, 45/LCA.	17.9-18.7m: 1-2% py, trace sp-gn, in hematite zone.			
18.2	19.4	1.2	1.2	0									
19.4	20.8	1.4	0.15	1.25			Dark green to red, variable mottled rock, with						

562040

## JERVOIS MINING NL - DRILLHOLE LOG

DRILL ADVANCE					LITHOLOGY						
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION	
<b>DRILLHOLE: NC05</b>					<b>Logged by: J.G.Purvis</b>			<b>Date: 4.11.98</b>	<b>Depth: 32.4 m</b>	<b>Size: NTW</b>	
					<b>Co-ords: 4900N / 5958E (Grid)</b>			<b>RL: 524m (est)</b>	<b>Dip: -43</b>	<b>Azimuth: 213 AMG</b>	
20.8	21.2	0.4	0.4	0			siliceous bands intercalated with zones	with lesser biotite,		65/LCA with 10% dissem py>	
21.2	22.7	1.5	1.5	0			dominated by chlorite/epidote (after pyroxene?),	carbonate & garnet.		sp-gn (may have extended from	
22.7	23.2	0.5	0.5	0			serpentine or hematite.	Serpentine & hematite		19.5m through possible cavity).	
23.2	24.2	1	1	0			Possible cavity (old working?) at 19.5-20.8m	at 17.3-18.7m.		Similar smaller bands &	
24.2	25	0.8	0.8	0			(no recovery in good ground).			patches extend 20.9-21.7m.	
25	25.7	0.7	0.65	0.05							
25.7	26.6	0.9	0.9	0	21.8	24.9	QUARTZ-BIOTITE HORNFELS. Dark brown,	Strong biotite>	Very weak cleavage 45-	Trace py. Minor dissem mag.	
26.6	27.2	0.6	0.55	0.05			hard. After altered silty quartzose sst.	chlorite alteration.	60/LCA.		
27.2	28.7	1.5	1.5	0				Basal 1m is silicified.			
28.7	30.2	1.5	1.5	0							
30.2	30.7	0.5	0.5	0	24.9	26.4	FAULT. Fawny-grey, bleached & broken zone	Clayey & weakly	Badly broken. Some	1% dissem py 25.7-26.1m.	
30.7	31.6	0.9	0.9	0			due to fault <15/LCA. Host rock as above.	leached. Silicified	pug esp in basal 30cm.		
31.6	32.4	0.8	0.8	0				25.7-26.1m.	Bedding 70/LCA at 26m		
					26.4	27.2	QUARTZ-BIOTITE HORNFELS. As before.	Biotite>chlorite alt.		2% dissem py. 3.5cm qtz-py	
										vein 55/LCA at 26.9m.	
					27.2	27.75	QUARTZ-PYRITE VEIN. Upper 20cm true		Upper contact 45/LCA,	5% pyrite.	
							vein qtz, rest intense silica replacement of sst		lower 30/LCA.		
							Marks major contact to unit below.				
					27.75	32.4	SILICIFIED QUARTZ SANDSTONE.	Mod to strong silif &	Moderately broken by	1% py, dissem & microveinlets.	
							Pale grey, med gr, hard. Becoming very pure	weak sericitization.	fractures 5-10/LCA.	2% sp-gn in fault 29.9-30.1m.	
							"quartzite" below fault at 30m.	Weak carbonate-biotite	10cm fault zone at 30m,		
								alteration above 30m.	75/LCA. At 31.2m &		
									31.75m: 2.5cm & 5cm		
									qtz>py veins 70/LCA.		
							<b>END OF HOLE 32.4m</b>				

562041

**JERVOIS MINING NL - ASSAY SHEET** **DRILLHOLE: NC05**

SAMPLED DEPTH		INTERVAL	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm
From	To	(m)	Au	Au(R)	Au(R2)	Au(S)	Au(av)	Cu	Pb	Zn	Ag	As	Sn	W
1.3	1.9	0.6	<0.01											
1.9	3	1.1	<0.01											
3	3.8	0.8	<0.01											
3.8	4.6	0.8	<0.01											
4.6	4.8	0.2	<0.01	<0.01			<0.01							
4.8	5.65	0.85	<0.01	<0.01			<0.01							
5.65	6.25	0.6	<0.01											
6.25	7	0.75	<0.01											
7	7.6	0.6	<0.01											
7.6	8.05	0.45	<0.01	<0.01			<0.01							
8.05	8.85	0.8	<0.01											
8.85	10.15	1.3	<0.01											
10.15	11	0.85	<0.01											
11	13	2	<0.01											
13	14	1	<0.01											
14	14.9	0.9	<0.01											
14.9	15.7	0.8	<0.01											
15.7	16.5	0.8	<0.01	<0.01			<0.01							
16.5	17.2	0.7	<0.01											
17.2	17.9	0.7	<0.01											
17.9	18.6	0.7	<0.01											
18.6	19.5	0.9	<0.01											
20.8	21.2	0.4	<0.01											
21.2	21.8	0.6	<0.01											
21.8	22.4	0.6	<0.01											
22.4	23.1	0.7	<0.01	<0.01			<0.01							
23.1	23.8	0.7	<0.01	<0.01			<0.01							
23.8	24.5	0.7	<0.01											
24.5	25.2	0.7	<0.01											
25.2	26	0.8	<0.01											
26	26.6	0.6	<0.01											
26.6	27.2	0.6	<0.01											
Laboratory: Analabs, Coee		Method :	F650	F650	F650	F650		A103	A103	A103	A103		X401	X401

562042



# JERVOIS MINING NL - DRILLHOLE LOG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
DRILLHOLE: NC06					Logged by: J.G.Purvis			Date: 7.11.98	Depth: 42.3m	Size: NTW
					Co-ords: 4910N / 5900E (Grid)			RL: 516m (est)	Dip: -45	Azimuth: 213 AMG
0	0.6	0.6	0.3	0.3	0	2.5	OXIDIZED QUARTZOSE SILTY SANDSTONE.	Strongly oxidized from	Banding (bedding?) in	Limonite stains. Remanent
0.6	1.8	1.2	1.05	0.15			Cream to grey. Very clayey & crumbly below	1.25m. Minor qtz veins	zone above 1.25m: 60/	5-10% dissem py, mostly
1.8	3	1.2	0.65	0.55			1.25m - may represent start of true bedrock.	in upper 30cm.	LCA (dips 15 to N).	above 1.25m.
3	3.8	0.8	0.65	0.15						
3.8	4.2	0.4	0.3	0.1	2.5	9.8	ALTERED QUARTZOSE SANDSTONE.	Mildly ox & leached to	Badly fractured & broken	2.5-3.3m: 5-15% py>>sp-gn
4.2	4.8	0.6	0.45	0.15			Grey with brown tinge, med gr. Hard below 7m.	7m with clayey zones.	to 7m. Pug zone (fault?)	in puggy zone.
4.8	5.4	0.6	0.6	0				Mildly biotitized, with	2.5-3m. Weak cleavage	3.3-9.8m: Minor to 1% py-sp-gn
5.4	6.2	0.8	0.8	0				weaker silica-sericite-	60/LCA, strongest at	mainly on fractures.
6.2	6.8	0.6	0.45	0.15				carbonate alt.	base.	
6.8	7.8	1	1	0				Below 7m: common qtz-		
7.8	9.3	1.5	1.5	0				fluorite-muscovite-py		
9.3	10.8	1.5	1.5	0				veinlets at all angles.		
10.8	12.2	1.4	1.3	0.1						
12.2	13.6	1.4	1.4	0	9.8	15.7	SULPHIDIC ZONE IN ALTERED QUARTZ	Very strong biotite-qtz>	Banding in sulphides	9.8-10.3m: 2-3% dissem py.
13.6	14.5	0.9	0.6	0.3			SANDSTONE. Pale grey to dark brown.	chlorite alteration	60-70/LCA.	10.3-10.5m: Massive sp-gn-py,
14.5	15.3	0.8	0.8	0			Bands of semi-massive sp-gn-py in very	assoc with sulphides.	Mostly hard & unbroken,	finely banded 60/LCA.
15.3	16.8	1.5	1.5	0			strongly altered sst, intercalated with lesser-	Lesser-altered zones	except around crumbly	10.5-10.85m: 10-15% dissem
16.8	18.3	1.5	1.5	0			altered/sulphidic zones containing qtz veins to	contain qtz-sericite.	chloritic faults at 11.3m	py>sp-gn (3-5% to 11.05m).
18.3	19.8	1.5	1.5	0			18cm thick 50-70/LCA.		(70/LCA) & 14-14.5m.	11.05-12.45m: Trace py.
19.8	20.6	0.8	0.8	0					Between the faults are	12.45-13.1m: 1-2% py & trace
20.6	21	0.4	0.4	0					fractures //LCA, faced	aspy-sp-gn in qtz-veined zone.
21	21.3	0.3	0.3	0					with chlorite-muscovite.	13.1-14.5m: 2-5% py>sp-gn,
21.3	21.7	0.4	0.4	0					Basal contact 70/LCA	dissem & patches.
21.7	22.7	1	1	0					(// banding).	14.5-15.7m: +25% sp-gn-py, in
22.7	24.3	1.6	1.6	0						4 semi-massive bands 15-25cm
24.3	25.7	1.4	1.4	0						thick within dissem sulphs.
25.7	26.5	0.8	0.8	0						
26.5	27.3	0.8	0.8	0	15.7	22.05	CHLORITE-MAFIC-QUARTZ SKARN. Dark	Very strongly meta-	Banding 50-85/LCA,	15.7-16m: 5% po-py, trace sp-gn
27.3	28.8	1.5	1.5	0			green to pale greenish-grey, mostly hard.	somatized.	(averaging 60-75/LCA).	Elsewhere trace py-sp-gn.
28.8	30.3	1.5	1.5	0			Variable. Bands of true skarn composed of	Veinlets of serpentine.		18.5-19.5m: minor magnetite.
30.3	31.8	1.5	1.5	0			mafics (diopside/actinolite?), chlorite,			19.1m: 3.5cm band of sp-gn-py

562044

## JERVOIS MINING NL - DRILLHOLE LOG

<b>DRILLHOLE: NC06</b>					<b>Logged by: J.G.Purvis</b>			<b>Date: 7.11.98</b>		<b>Depth: 42.3m</b>		<b>Size: NTW</b>	
					<b>Co-ords: 4910N / 5900E (Grid)</b>			<b>RL: 516m (est)</b>		<b>Dip: -45</b>		<b>Azimuth: 213 AMG</b>	
<b>DRILL ADVANCE</b>					<b>LITHOLOGY</b>								
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION			
31.8	33.3	1.5	1.05	0.45			serpentine, garnet, carbonate & biotite, intercalated with zones of qtz-chlorite hornfels after			75/LCA.			
33.3	34.8	1.5	1.5	0			qtz sst. Remanent qtz grit (5mm clasts) in some of the skarn sections above 17m.						
34.8	36.3	1.5	1.5	0									
36.3	37.8	1.5	1.5	0									
37.8	39.3	1.5	1.5	0									
39.3	40.8	1.5	1.5	0	22.05	24.9	SULPHIDIC ZONE. Semi-massive sp-gn>py veins & bands, in skarn (diopside/actinolite?-chlorite>quartz-biotite>carbonate).	Strong to intense metasomatism.	Banding 60-65/LCA.	22.05-22.65m: Semi-massive sp-gn-py>mag>cp.			
40.8	42.3	1.5	1.5	0						22.65-22.95m: 2% sp-gn-py-mag			
										22.95-23.85m: semi-massive fi gr sp-gn-py>mag>cp, cut by coarse gr sp-gn veins to 3cm.			
										23.85-24.9m: 10% sp-gn>py>cp dissem & in sp-gn veins (Ba gangue) & py-cp veins. All veins to 1cm, 5-30/LCA, x-cut banding			
					24.9	42.3	QUARTZ-BIOTITE HORNFELS (metasomatized quartz sandstone, probably originally calcareous Brownish-grey, fi-med gr, massive, hard to very hard. Possible bioturbation features at 28.8m & 32.1m.	Strong biotite-silica>chlorite alteration. Patches of mafics & sericite. Low-angle fracture-fillings of greisenous chlorite-sericite-fluor (+sulphides), to 1cm.	Bedding 85/LCA at 27m, 34.5m & 41.2m. Fracture set above 35m at low angle to LCA.	Generally minor to 2% py-sp-gn, dissem & in microveinlets, with better zones as follows: 29.65-30.3m: band 50/LCA of 10-15% fine dissem sp-gn-py. 33.8-34m: band 70/LCA of 5% dissem sp-gn>py. 35.05-35.45m: 5% coarse gr sp-gn-py in 15/LCA greisen veinlets 35.65m: 2cm qtz-sp-gn-py vein 75/LCA. 39-39.55m & 40.85-42.3m: 3-5% finely dissem sp-gn-py.			
							END OF HOLE 42.3m						

562045

**JERVOIS MINING NL - ASSAY SHEET** **DRILLHOLE: NC06**

SAMPLED DEPTH		INTERVAL (m)	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm
From	To		Au	Au(R)	Au(R2)	Au(S)	Au(av)	Cu	Pb	Zn	Ag	As	Sn	W
0	0.95	0.95	0.07	0.08			0.07	0.03	0.15	0.02	<5			
0.95	1.7	0.75	0.13					<0.01	0.16	0.01	<5			
1.7	2.5	0.8	0.25					<0.01	0.09	0.01	<5			
2.5	3.3	0.8	0.5	0.48			0.49	0.11	0.24	0.02	<5			
3.3	4.2	0.9	0.1					<0.01	0.13	0.07	<5			
4.2	5	0.8	0.08					<0.01	0.17	0.08	<5			
5	5.6	0.6	0.05					<0.01	0.18	0.07	<5			
5.6	6.2	0.6	<0.01					<0.01	0.08	0.03	<5			
6.2	6.95	0.75	0.05			0.04		<0.01	0.08	0.05	<5			
6.95	7.5	0.55	0.52					<0.01	0.04	0.01	<5			
7.5	8.1	0.6	3.12	3.22			3.17	0.01	0.02	0.03	<5			
8.1	8.7	0.6	0.47					<0.01	0.02	0.01	<5			
8.7	9.3	0.6	0.04					<0.01	0.03	0.02	<5			
9.3	9.8	0.5	0.24					0.01	0.02	0.03	<5			
9.8	10.25	0.45	0.03					0.03	0.04	0.03	<5			
10.25	10.5	0.25	10.2	10.48			10.34	0.14	6.02	5.08	57			
10.5	11.05	0.55	0.62					0.07	0.6	0.4	7			
11.05	11.85	0.8	0.09	0.08			0.08	0.02	0.07	0.13	<5			
11.85	12.45	0.6	<0.01					0.01	0.04	0.03	<5			
12.45	13.1	0.65	<0.01	<0.01			<0.01	0.01	0.06	0.05	<5			
13.1	13.6	0.5	<0.01	<0.01			<0.01	0.02	0.06	0.03	<5			
13.6	14.5	0.9	0.05					0.06	0.13	0.01	<5			
14.5	15.05	0.55	11.8	17.4	17.2		15.47	0.09	4.55	3.7	<5			
15.05	15.7	0.65	36.7	10.4	11.9		19.67	0.11	7.08	5.1	60			
15.7	16.3	0.6	0.64					0.03	0.02	0.14	<5			
16.3	16.9	0.6	0.05					<0.01	0.03	0.04	<5			
16.9	17.5	0.6	0.14					<0.01	0.01	<0.01	<5			
17.5	18.1	0.6	0.4					<0.01	<0.01	0.02	<5			
18.1	18.7	0.6	0.05					<0.01	0.01	0.01	<5			
18.7	19.3	0.6	0.17					0.01	0.4	0.46	<5			
19.3	19.9	0.6	0.03					<0.01	0.02	0.01	<5			
19.9	20.5	0.6	0.15	0.15			0.15	<0.01	0.07	0.04	<5			
Laboratory: Analabs, Coosee		Method :	F650	F650	F650	F650		A103	A103	A103	A103		X401	X401

562046

JERVOIS MINING NL - ASSAY SHEET											DRILLHOLE: NC06			
SAMPLED DEPTH		INTERVAL (m)	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm
From	To		Au	Au(R)	Au(R2)	Au(S)	Au(av)	Cu	Pb	Zn	Ag	As	Sn	W
20.5	21.1	0.6	0.04					<0.01	0.07	0.02	<5			
21.1	21.6	0.5	1.22					<0.01	0.05	0.18	<5			
21.6	22.05	0.45	0.47			0.48	0.47	<0.01	0.23	0.32	6			
22.05	22.65	0.6	13.4	7.05	40		20.15	0.19	4.88	4.69	376			
22.65	22.95	0.3	0.21					<0.01	0.56	0.72	<5			
22.95	23.4	0.45	11.9	3.5	7.42		7.61	0.11	7.83	4.72	64			
23.4	23.85	0.45	2.5	5.18	3.13		3.6	0.12	4.07	5.47	58			
23.85	24.3	0.45	0.1					0.03	0.02	0.19	<5			
24.3	24.9	0.6	0.51					0.11	1.55	2.74	33			
24.9	25.5	0.6	0.05					0.02	0.5	0.58	9			
25.5	26.1	0.6	<0.01					<0.01	0.09	0.21	<5			
26.1	26.7	0.6	<0.01					<0.01	0.01	<0.01	<5			
26.7	27.3	0.6	<0.01					<0.01	0.02	<0.01	<5			
27.3	27.9	0.6	<0.01					<0.01	0.04	0.03	<5			
27.9	28.5	0.6	<0.01					<0.01	0.01	0.01	<5			
28.5	29.1	0.6	<0.01	<0.01			<0.01	<0.01	0.02	0.01	<5			
29.1	29.65	0.55	<0.01					<0.01	0.03	0.02	<5			
29.65	30.3	0.65	0.01	0.02			0.01	0.04	1.14	1.46	16			
30.3	30.9	0.6	<0.01					0.02	0.11	0.4	<5			
30.9	31.5	0.6	<0.01	<0.01			<0.01	0.01	0.05	0.08	<5			
31.5	32.1	0.6	<0.01					0.01	0.06	0.08	<5			
32.1	32.9	0.8	0.02					<0.01	0.18	0.29	<5			
32.9	33.5	0.6	<0.01					<0.01	0.11	0.03	<5			
33.5	34.1	0.6	<0.01					0.01	0.41	0.48	5			
34.1	34.8	0.7	<0.01					<0.01	0.02	0.03	<5			
34.8	35.45	0.65	0.03					0.02	1.2	0.87	21			
35.45	36	0.55	0.02					0.02	0.42	0.32	9			
36	36.6	0.6	0.02	0.02			0.02	0.01	0.45	0.39	6			
36.6	37.2	0.6	0.02					0.01	0.43	0.38	6			
37.2	37.8	0.6	0.01			0.01	0.01	0.01	0.22	0.28	<5			
37.8	38.4	0.6	0.03					0.01	0.27	0.44	5			
38.4	39	0.6	0.01					0.01	0.34	0.45	7			
Laboratory: Analabs, Coee		Method :	F650	F650	F650	F650		A103	A103	A103	A103		X401	X401

502047



## JERVOIS MINING NL - DRILLHOLE LOG

<b>DRILLHOLE: NC07</b>					<b>Logged by: J.G.Purvis</b>			<b>Date: 11.11.98</b>		<b>Depth: 27.8m</b>		<b>Size: NTW</b>	
					<b>Co-ords: 4908N / 5875E (Grid)</b>			<b>RL: 517m (est)</b>		<b>Dip: - 45</b>		<b>Azimuth 213 AMG</b>	
DRILL ADVANCE					LITHOLOGY								
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION			
0	1.2	1.2	0.1	1.1	0	1.2	SOIL & OVERBURDEN.						
1.2	1.8	0.6	0.25	0.35									
1.8	2.3	0.5	0.1	0.4	1.2	2.3	QUARTZ SANDSTONE. White, fi-med gr, hard. Band of qtz microconglomerate at 2m.	Strongly oxidized. Silicified.	Bedding 30/LCA.	Minor limonite stains.			
2.3	3.3	1	0.9	0.1									
3.3	4.8	1.5	1	0.5									
4.8	5.5	0.7	0.1	0.6	2.3	4	CHLORITIC CARBONACEOUS SILTSTONE. Some sandstone & shaley laminae. Dark greenish-black, soft.	Partly oxidized. Chlorite biotite altered with pink carbonate spotting.	Bedding 20-25/LCA. Basal contact 15/LCA (bedding).	Limonite on fractures.			
5.5	6.3	0.8	0.8	0									
6.3	7.1	0.8	0.8	0									
7.1	7.8	0.7	0.2	0.5									
7.8	8.5	0.7	0.5	0.2	4	4.8	CONTACT ZONE. 50% above siltstone & 50% creamy leached mineralized qtz sst band.	Carbonate spotting.	Contact 15/LCA.	Mineralized zone has 5-10% dissem py, minor sp-gn.			
8.5	9.3	0.8	0.8	0									
9.3	10.3	1	0.4	0.6									
10.3	10.8	0.5	0.4	0.1	4.8	5.9	PYRITIC QUARTZ VEIN. Fractured grey qtz. 0.5m recovered, only 0.1m above 5.5m.		Badly broken. Basal contact sharp, 45/LCA.	20% py>>cp-chalcocite & trace sp-gn-asy, dissem & in fract.			
10.8	12.3	1.5	1.3	0.2									
12.3	12.7	0.4	0.25	0.15									
12.7	13.3	0.6	0.35	0.25	5.9	6.7	SULPHIDIC QUARTZ-CHLORITE-MAFIC SKARN. Hard.	Strongly metasomatized	Banding 25/LCA.	25% dissem & banded py>po.			
13.3	13.7	0.4	0.1	0.3									
13.7	15.3	1.6	0.35	1.25									
15.3	15.5	0.2	0.2	0	6.7	7.5	LEACHED QUARTZ-SULPHIDE ROCK. Med gr, sugary textured. After altered qtz sst.	Originally silicified, now vughy & porous.	Very broken. Banding 20/LCA.	15% py>>sp-gn, dissem arranged in bands.			
15.5	15.6	0.1	0.1	0									
15.6	16.3	0.7	0.6	0.1									
16.3	16.8	0.5	0	0.5	7.5	10.3	FAULT ZONE. Soft rotten clayey rock flanking interval of flowing black puggy sulphidic sand at 8.5-8.6m. Originally a highly altered non-siliceous rock (carbonate?), banded above 8.5m and coarsely granular below.	Highly oxidized & clay-altered, over-printing strong chlorite-epidote-garnet? alteration.	Soft & crumbly. Banding 10/LCA above 8.5m.	7.5-8.5m: 10% dissem py>sp-gn 8.5-8.6m: 40cm of flowing sand with +25% py, minor sp-gn. 8.6-10.3m: 10% py, minor sp-gn, dissem, +5% from sand above.			
16.8	17.3	0.5	0.4	0.1									
17.3	17.6	0.3	0.3	0									
17.6	18.1	0.5	0.5	0									
18.1	19.2	1.1	1.1	0									
19.2	19.8	0.6	0.6	0									
19.8	20.7	0.9	0.3	0.6	10.3	14	HORNFELS. Khaki-green & fawn, very fine & even-grained, siliceous>chlorite-epidote-albite-biotite rock.	Mild alteration, mainly silif-chlorite-epidote. Bleaching along fract	At top: mildly fractured & hard. Becoming broken, leached & cleaved (55/LCA) below 12m.	10.3-11m: 3% dissem po>py. No sulphides below 11m.			
20.7	21.1	0.4	0.1	0.3									
21.1	21.3	0.2	0.15	0.05									
21.3	22	0.7	0.6	0.1									

562049

## JERVOIS MINING NL - DRILLHOLE LOG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
DRILLHOLE: NC07					Logged by: J.G.Purvis			Date: 11.11.98	Depth: 27.8m	Size: NTW
					Co-ords: 4908N / 5875E (Grid)			RL: 517m (est)	Dip: -45	Azimuth: 213 AMG
22	22.4	0.4	0	0.4	14	15.5	FAULT. Rock type change. To 14.5m, khaki-green puggy clay after intensely epidote-chlorite altered, non-siliceous rock. Below 14.5m creamy-grey cataclasite comprising puggy clay with leached quartzose sst frags.			Minor py to 14.5m. Below 14.5m: 2% dissem py, minor sp-gn.
22.4	22.5	0.1	0.1	0						
22.5	22.8	0.3	0.3	0						
22.8	23.3	0.5	0.25	0.25						
23.3	24.2	0.9	0.5	0.4						
24.2	25	0.8	0.7	0.1						
25	25.2	0.2	0.2	0	15.5	16.3	SULPHIDE BAND. Band of semi-massive sp-gn-py in granular quartz-carbonate gangue after altered qtz sst.		Indistinct banding 55-60 LCA.	40-50% sp-gn-py, minor cp.
25.2	26.3	1.1	0.6	0.5						
26.3	27.8	1.5	1.5	0						
					16.3	17	FAULT. Pale grey rotten puggy leached quartz sandstone. Only 0.2m recovered.		Crumbly.	Minor py-sp-gn.
					17	19.65	FRACTURED QUARTZOSE SANDSTONE. Creamy-grey, leached. Originally with slight carbonate content?	Weakly sericitized, esp along fractures / faults. Patchy silicification.	Lineation: 50/LCA. Badly fractured & broken with crumbly fault seams 10/LCA. Fault at base.	1-5% py>sp-gn, dissem in thin vein-like silicified zones & as microveinlets on fract. 1.5cm qtz-py vein 70/LCA at 17.8m.
					19.65	25.2	SULPHIDIC MAJOR FAULT. Largely rubble with much core loss. Centred on cataclasite zone 21-23m. Host rock is quartzose sst.	Clayey, leached & bleached. Patchy silif. Strong sericitization in cataclasite.	Very badly broken with clayey pug & zones of cataclasite with minor frags of vein qtz to 1cm.	19.65-22.5m: 7-10% py>sp-gn, dissem>veinlets to 1cm. 22.5-23.1m: 2% py, minor sp-gn 23.1-24m: 10% sp-gn>py as banded dissem (60/LCA). 24-25.2m: 5-7% dissem py.
					25.2	27.8	QUARTZOSE SANDSTONE. Pale yellowish or greenish-grey, fi-med gr.	Sericitized. Leached, bleached & weakly clay altered.	Less broken than above but still friable with crumbly zones. Weak lineation 35-50/LCA.	2% py, trace sp-gn, dissem & in veinlets on fract 35/LCA (opp sense to lineation).
					END OF HOLE 27.8m					

562050

JERVOIS MINING NL - ASSAY SHEET												DRILLHOLE: NC07			
SAMPLED DEPTH		INTERVAL (m)	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm	
From	To		Au	Au(R)	Au(R2)	Au(S)	Au(av)	Cu	Pb	Zn	Ag	As	Sn	W	
1.2	2.3	1.1	0.01					<0.01	0.01	0.01	<5				
2.3	3.1	0.8	0.12					<0.01	0.03	0.03	<5				
3.1	3.9	0.8	0.69	0.58			0.63	0.01	0.06	0.02	<5				
3.9	4.8	0.9	0.65	0.79		0.89	0.78	0.05	0.13	0.03	<5				
4.8	5.9	1.1	1.36	1.44		2.5	1.77	0.16	0.1	0.04	<5				
5.9	6.7	0.8	1.26	1.28			1.27	0.14	0.05	0.08	<5				
6.7	7.5	0.8	1.71	1.65			1.68	0.1	0.71	0.17	<5				
7.5	8.5	1	0.98					0.12	0.37	0.06	<5				
8.5	8.6	0.1	1.58	1.62			1.6	0.25	0.48	0.06	<5				
8.6	10.3	1.7	0.76	0.88		0.97	0.87	0.25	0.32	0.05	<5				
10.3	11	0.7	0.16					0.03	0.03	0.04	<5				
11	11.7	0.7	0.03					<0.01	0.02	0.3	<5				
11.7	12.5	0.8	<0.01					<0.01	0.01	0.02	<5				
12.5	13.1	0.6	<0.01					<0.01	0.02	0.04	<5				
13.1	14	0.9	<0.01	<0.01			<0.01	<0.01	0.02	0.05	<5				
14	15.3	1.3	0.04					0.03	0.05	0.12	<5				
15.3	15.6	0.3	0.15	0.12			0.13	0.13	0.1	0.35	<5				
15.6	16.3	0.7	13.5	11.2		10.6	11.77	0.21	10.3	6.92	92				
16.8	17.6	0.8	0.07					0.02	0.08	0.12	<5				
17.6	18.2	0.6	0.09					0.01	0.01	0.03	<5				
18.2	19	0.8	0.05					0.01	0.03	0.02	<5				
19	19.65	0.65	0.61	0.68			0.64	0.01	0.01	0.02	<5				
19.65	21.15	1.5	0.45	0.78		0.87	0.7	0.13	0.26	0.88	9				
21.15	22	0.85	1.76	1.74			1.75	0.17	0.01	0.26	<5				
22.4	22.5	0.1	0.14					0.06	0.01	0.09	<5				
22.5	23.1	0.6	0.04					0.01	0.01	0.07	<5				
23.1	24	0.9	0.41	0.34			0.37	0.11	1.32	2	30				
24	24.6	0.6	0.13					0.02	0.02	0.08	<5				
24.6	25.2	0.6	0.09					0.01	0.04	0.18	<5				
25.2	26.35	1.15	0.02	0.02			0.02	0.01	0.03	0.04	<5				
26.35	27.1	0.75	0.35	0.31			0.33	0.04	0.02	0.03	<5				
27.1	27.8	0.7	<0.01					<0.01	0.01	0.03	<5				
Laboratory: Analabs, Coosee		Method :	F650	F650	F650	F650		A103	A103	A103	A103		X401	X401	

562051

## JERVOIS MINING NL - DRILLHOLE LOG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
DRILLHOLE: NC08					Logged by: J.G.Purvis			Date: 13.11.98	Depth: 21.3m	Size: NTW
					Co-ords: 4905N / 5850E (Grid)			RL: 518m (est)	Dip: - 45	Azimuth: 213 AMG
0	1.4	1.4	1.2	0.2	0	17.65	MILDLY BIOTITIZED QUARTZ SANDSTONE.	Oxidized to 2m.	Mildly fractured, apart	Strong limonite stains to 2.5m.
1.4	1.8	0.4	0.4	0			Pale grey & brownish-grey, very hard, fi-med	Strong silicification &	from set of strong fract	Minor to 2% py>sp-gn through-
1.8	3.1	1.3	1.3	0			gr, massive & uniform. In places there is a	moderate patchy biotite	10/LCA at 15-17m.	out, dissem, in microveinlets,
3.1	3.6	0.5	0.5	0			blotchy pattern suggestive of bioturbation (eg:	alt (strongest 8-15m).	Lineation (after bedding)	on fractures, & in qtz veins.
3.6	4.8	1.2	1.1	0.1			3m & 5-5.5m).	Patchy chlorite-sericite	55-60/LCA (dips N at	From 3-8m some py is dendritic
4.8	5.7	0.9	0.9	0				alt (eg: assoc with	75-80).	2-3% py on fract 15-16.6m.
5.7	6.3	0.6	0.6	0				fractures 15-17m).	Lower contact a shear	
6.3	7.8	1.5	1.5	0				Common qtz veins &	40/LCA.	
7.8	8.7	0.9	0.9	0				veinlets throughout, to		
8.7	8.9	0.2	0.2	0				5cm & mostly +60/LCA		
8.9	10.5	1.6	1.6	0						
10.5	12	1.5	1.5	0	17.65	18.2	ALTERED SANDY MICROBRECCIO-	Strong chlorite-garnet	Well bedded: 50-60/LCA	1% py. Minor magnetite,
12	13.4	1.4	1.4	0			CONGLOMERATE. Green & purplish-pink,	alteration, with minor		hematite & sp.
13.4	14.9	1.5	1.5	0			with silic frags & grains to 11mm. Garnet-	sericite & biotite.		
14.9	15.8	0.9	0.85	0.05			rich flecks to 7mm, possibly after carbonate			
15.8	16.6	0.8	0.65	0.15			clots or shell frags. Qtz content of rock is not			
16.6	17.2	0.6	0.6	0			high & it may have been an impure carbonate.			
17.2	17.5	0.3	0.3	0						
17.5	18.3	0.8	0.8	0	18.2	21.3	BIOTITIZED & SILICIFIED IMPURE	Strong biotite-silica alt,	Bedding: 40/LCA at 20m.	To 20m: 1% py-sp-gn in veinlets
18.3	19.8	1.5	1.5	0			CARBONATE? Greyish-brown, hard sandy	with minor garnet.		sub-// bedding.
19.8	21.3	1.5	1.5	0			rock with banded & mottled texture typical of	19.75-20.7m: Yellow		Trace sulphides below 20m.
							carbonates. Common detrital qtz grains &	oxidized zone with		
							frags to 5mm. 5cm bed of qtz grit at 19.8m.	strong sericite-garnet-		
								magnetite alteration.		
							END OF HOLE 21.3m			

562052



## JERVOIS MINING NL - DRILLHOLE LOG

<b>DRILLHOLE:</b> NC09	<b>Logged by:</b> J.G.Purvis	<b>Date:</b> 17.11.98	<b>Depth:</b> 19.3m	<b>Size:</b> NTW
	<b>Co-ords:</b> 4880N / 5797E (Grid)	<b>RL:</b> 524m (est)	<b>Dip:</b> - 45	<b>Azimuth:</b> 213 AMG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
0	1.1	1.1	0.35	0.75	0	1.8	FILL? Variable interval. 0-1.3m: ox & unox			
1.1	1.7	0.6	0.4	0.2			qtz sst; 1.3-1.7m: pyritic qtz sst with possible			
1.7	2.7	1	0.9	0.1			VISIBLE GOLD; 1.7-1.8m: qtz micro-			
2.7	3.2	0.5	0.45	0.05			conglomerate.			
3.2	4	0.8	0.8	0						
4	4.7	0.7	0.65	0.05	1.8	3.3	OXIDIZED ALTERED QUARTZOSE	Oxidized & leached.	Mildly fractured & broken	Strong limonite stains.
4.7	5.3	0.6	0.55	0.05			SANDSTONE. Creamy, fi-med gr.	Remanent blotchy silica	Weakly developed	
5.3	6.2	0.9	0.9	0				chlorite alt. Irregular qtz	banding 55/LCA.	
6.2	7.4	1.2	1.2	0				veinlets sub-// banding.		
7.4	9.2	1.8	1.8	0				Veinlets of chlorite.		
9.2	10.7	1.5	1.5	0						
10.7	12.2	1.5	1.5	0	3.3	6.8	ALTERED QUARTZOSE SANDSTONE. Dark	Strongly silif & chlorite-	Mildly fractured & broken,	2% dissem & microveinlet py,
12.2	13.7	1.5	1.5	0			greenish-grey, hard, fine to coarse grained,	biotite altered. Actinolite	stronger fract's low angle	except 5.0-6.1m: 3-5% dissem
13.7	15.2	1.5	1.5	0			quartz-chlorite-biotite(+epidote) rock. Detrital	on fract's. Qtz-sericite	to LCA. Banding	py assoc with grey qtz flooding
15.2	16.7	1.5	1.5	0			quartz visible within altered matrix.	alt assoc with shear	(bedding?) 40-55/LCA.	parallel banding.
16.7	18.2	1.5	1.5	0				50/LCA at 5.1-5.4m.	Lower contact 50/LCA,	
18.2	19.3	1.1	1.1	0					abrupt along banding.	
					6.8	19.3	SILICIFIED QUARTZ SANDSTONE.	Strong to intense silif,	Cleavage (defined by	6.8-12m: 3-5% py mostly in dark
							"Quartzite". Med gr, hard to extremely hard,	increasing with depth,	sericite threads) above	fine dendritic pattern, also as
							uniform, becoming very bland below 15m.	incl silica-flooding in	12m (50-75/LCA), where	microveinlets in fractures
								high-angle vein-like	strongest has common	(orthogonal to cleavage & best
								zones. Mild sericite alt	qtz(+py) veinlets & qtz-	in qtz-flooded zones).
								assoc with cleaved zone	flooding along cleavage.	12 - 13.85m: 2-3% py.
								above 12m. Biotite-	Broken below 17m by	13.85-14.6m: 2% po-py.
								chlorite alt 13.9-14.6m	strong fracture //LCA	14.6-19.3m: 1-2% py in veinlets
								assoc with shear 70/	occupied by greisenous	on fract's >dissem & dendritic.
								LCA at 14.5m. Specks	veinlet of qtz-fluor-ser-py	Sulphides minor at base.
								of fuchsite below 12m.	(cuts py microveinlets).	
							END OF HOLE 19.3m			

862054





## JERVOIS MINING NL - DRILLHOLE LOG

<b>DRILLHOLE:</b> NC10	<b>Logged by:</b> J.G.Purvis	<b>Date:</b> 18.11.98	<b>Depth:</b> 44.4m	<b>Size:</b> NTW
	<b>Co-ords:</b> 4896N / 5745E (Grid)	<b>RL:</b> 528m (est)	<b>Dip:</b> -45	<b>Azimuth:</b> 213 AMG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
27.7	28	0.3	0.3	0			top margin of sericitic siltstone band 36-36.4m.	Best sericite assoc	Shear 80/LCA 26.3-27m	40m), dissem & on frags.
28	28.6	0.6	0.6	0				with cleaved/sheared	with qtz veins to 4.5cm.	At 35m: 1cm py band 80/LCA.
28.6	30.1	1.5	1.5	0				zones. Occasional	Bedding 80/LCA at 36m.	
30.1	31.6	1.5	1.5	0				fuchsite grains. Weak	Mildly fractured & broken	
31.6	33.1	1.5	1.5	0				fuchsite stains 32-36m.	with strongest frags 5-	
33.1	34.4	1.3	1.3	0				Qtz-fluor-musc-py on	20/LCA. Badly broken	
34.4	34.6	0.2	0.2	0				frags 28-32m.	around fault <20/LCA	
34.6	36.1	1.5	1.5	0					at 37.2-37.9m.	
36.1	37.3	1.2	1.2	0						
37.3	37.7	0.4	0.4	0	40	42.5	STRONG FAULT 5-10/LCA. Creamy-grey,	Sericite alt assoc with	Very badly broken (30%	2% py, dissem & on fault planes
37.7	37.9	0.2	0.2	0			clayey cataclasite with frags of shattered qtz	fault. To 41.5m sst	core loss).	Mostly in the fault rather than the
37.9	39.1	1.2	1.2	0			sst. Fault centred 40.3-41.5m where qtz sst	frags are qtz-sericite		wallrocks. Minor aspy(?)
39.1	40.1	1	0.9	0.1			is highly crushed.	alt, while below this		smearred on fault planes.
40.1	40.6	0.5	0.25	0.25				frags are sericite-		
40.6	41.1	0.5	0.2	0.3				chlorite-biotite altered.		
41.1	41.5	0.4	0.35	0.05						
41.5	42.1	0.6	0.55	0.05	42.5	44.4	FRACTURED & ALTERED QUARTZOSE	Moderately sericitized,	Badly broken by strong	2% py at top, decreasing to
42.1	43.2	1.1	1.1	0			SANDSTONE. Greenish-grey. Not as	with weaker silica-	frags & small faults,	minor at base. Dissem & in 1-
43.2	43.8	0.6	0.6	0			siliceous & hard as rock above the fault.	chlorite>biotite alt	mainly 5-10/LCA.	2mm veinlets on stronger frags
43.8	44.4	0.6	0.6	0				(latter two sometimes	1cm qtz vein 80/LCA at	Minor aspy(?) on frags to 43.5m
								conc along the frags).	44.05m.	
							END OF HOLE 44.4m			

562057

JERVOIS MINING NL - ASSAY SHEET														DRILLHOLE: NC10	
SAMPLED DEPTH		INTERVAL	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm	
From	To	(m)	Au	Au(R)	Au(R2)	Au(S)		Cu	Pb	Zn	Ag	As	Sn	W	
0.3	1.5	1.2	<0.01												
1.5	2.5	1	<0.01												
2.5	3.5	1	<0.01												
3.5	4.3	0.8	<0.01												
4.3	5	0.7	<0.01												
5	5.7	0.7	<0.01												
5.7	6.4	0.7	<0.01												
6.4	7.1	0.7	<0.01												
7.1	7.9	0.8	<0.01												
7.9	8.6	0.7	<0.01												
8.6	9.2	0.6	<0.01												
9.2	9.8	0.6	0.02												
9.8	10.4	0.6	<0.01												
10.4	11	0.6	<0.01												
11	11.6	0.6	<0.01												
11.6	12.2	0.6	<0.01	<0.01				<0.01							
12.2	12.8	0.6	<0.01												
12.8	13.4	0.6	<0.01												
13.4	14	0.6	0.01												
14	16.6	2.6	<0.01												
14.6	15.2	0.6	<0.01												
15.2	15.8	0.6	<0.01												
15.8	16.4	0.6	0.03												
16.4	17	0.6	<0.01												
17	17.6	0.6	<0.01												
17.6	18.2	0.6	0.05												
18.2	18.8	0.6	0.03			0.02	0.02								
18.8	19.4	0.6	<0.01												
19.4	20	0.6	<0.01												
20	20.6	0.6	<0.01												
20.6	21.2	0.6	<0.01												
21.2	21.8	0.6	<0.01												
Laboratory: Analabs, Coocoe		Method :	F650	F650	F650	F650		A103	A103	A103	A103		X401	X401	

862058

JERVOIS MINING NL - ASSAY SHEET														DRILLHOLE: NC10	
SAMPLED DEPTH		INTERVAL	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm	
From	To	(m)	Au	Au(R)	Au(R2)	Au(S)	Au(av)	Cu	Pb	Zn	Ag	As	Sn	W	
21.8	22.4	0.6	0.02												
22.4	23	0.6	<0.01												
23	23.6	0.6	<0.01	<0.01			<0.01								
23.6	24.2	0.6	<0.01												
24.2	24.8	0.6	<0.01												
24.8	25.4	0.6	<0.01												
25.4	26	0.6	<0.01												
26	26.6	0.6	<0.01												
26.6	27.2	0.6	0.01												
27.2	27.8	0.6	<0.01												
27.8	28.4	0.6	<0.01												
28.4	29	0.6	<0.01												
29	29.6	0.6	<0.01												
29.6	30.2	0.6	0.01												
30.2	30.8	0.6	<0.01												
30.8	31.4	0.6	<0.01												
31.4	32	0.6	<0.01												
32	32.6	0.6	<0.01												
32.6	33.2	0.6	<0.01												
33.2	33.8	0.6	<0.01			<0.01	<0.01								
33.8	34.4	0.6	<0.01												
34.4	35	0.6	<0.01												
35	35.6	0.6	<0.01												
35.6	36.2	0.6	<0.01												
36.2	36.8	0.6	<0.01	<0.01			<0.01								
36.8	37.4	0.6	<0.01												
37.4	38	0.6	<0.01	<0.01			<0.01								
38	38.6	0.6	0.01												
38.6	39.2	0.6	<0.01												
39.2	39.9	0.7	<0.01												
39.9	41.1	1.2	1.82	1.79			1.8								
41.1	41.8	0.7	0.06	0.04			0.05								
Laboratory: Analabs, Cooeee		Method :	F650	F650	F650	F650		A103	A103	A103	A103		X401	X401	

562059



## JERVOIS MINING NL - DRILLHOLE LOG

<b>DRILLHOLE:</b> NC11	<b>Logged by:</b> J.G.Purvis	<b>Date:</b> 25.11.98	<b>Depth:</b> 24.1m	<b>Size:</b> NTW
	<b>Co-ords:</b> 4881N / 5775E (Grid)	<b>RL:</b> 525m (est)	<b>Dip:</b> - 45	<b>Azimuth:</b> 213 AMG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
0	1.6	1.6	0.3	1.3	0	1	QUARTZ SAND. Fine gr, white.			
1.6	2.1	0.5	0.4	0.1						
2.1	2.3	0.2	0.2	0	1	4.2	OXIDIZED QUARTZ SANDSTONE.	Strongly silicified &	Mildly broken by fracts	Limonite stains, esp on fracts.
2.3	3	0.7	0.7	0			Greyish-white, fi-med gr, hard. Uniform & pure.	oxidized. 2cm qtz vein	10-15/LCA.	
3	3.4	0.4	0.4	0				70/LCA at 3.65m.		
3.4	4.4	1	1	0				Minor fuchsite grains.		
4.4	5.4	1	0.9	0.1						
5.4	6.6	1.2	1.2	0	4.2	11.45	QUARTZ -CHLORITE-EPIDOTE-BIOTITE	Partly oxidized to 5.5m.	Fractured & broken to	Minor limonite on fracts to 5m.
6.6	7.6	1	1	0			HORNFELS. After very altered quartzose sst.	Strong silica-chlorite>	5.7m, then generally	4.2-4.95m: 1-2% dissem &
7.6	9.1	1.5	1.5	0			Greenish-grey, very hard, fi-med gr, massive.	epidote alt, increasing	unbroken. Weakly	microfracture py>sp-gn.
9.1	10.6	1.5	1.5	0				with depth. Minor biotite,	lined: bedding 77/LCA	4.95-8.6m: minor dissem py.
10.6	11.7	1.1	1.1	0				actinolite & rare garnet.	at 7.5m & cleavage 60/	8.6-9.5m: 2% dissem py>po.
11.7	12.3	0.6	0.6	0				Biotite often assoc with	LCA at 11m.	9.5-11.45m: 3% coarse dissem
12.3	13.6	1.3	1.3	0				high-angle qtz veinlets	Abrupt basal contact 75/	py, in clots & stringers.
13.6	15.1	1.5	1.5	0				(1/m). At 9m: 1.5cm	LCA (// lineation).	
15.1	16.6	1.5	1.5	0				90/LCA vein of qtz-		
16.6	18.1	1.5	1.5	0				chlorite-epidote-py.		
18.1	19.6	1.5	1.5	0						
19.6	21.1	1.5	1.5	0	11.45	24.1	SILICIFIED QUARTZ SANDSTONE.	Strong to very strong	Cleaved in sericitized	Fine dissem, microveinlet &
21.1	22.6	1.5	1.5	0			"Quartzite". Grey, very hard, med gr, massive,	silification (best below	zones (prob // bedding):	fracture-filling py throughout,
22.6	24.1	1.5	1.5	0			fairly pure & uniform. Possible bioturbation	19m incl vein-like qtz-	70/LCA at 13.6m, 75/LCA	much in dendritic form:
							(large worm burrows?) at 13.5-14m & 14.5-16m.	flooded zones), & mild	at 16m & 19m.	11.45-16m: 2-5% py.
								patchy sericite-py alt	Some high-angle qtz(+py)	16-18.3m: 2% py, trace wolfram
								(none below 19m).	veinlets, esp in cleaved	18.3-19m: 2-3% py-po.
								Band of qtz-chlorite-	intervals & below 19m.	19-21.7m: 2% py
								biotite hornfels at 18.2-	Fractures 5-35/LCA	21.7-24.1m: 1% py (trace moly,
								19m. Weak fuchsite alt,	throughout, strongest	sp-gn & wolfram, on fracts).
								on fracts, as grains, &	below 19m & filled with	
								as stains below 23.5m.	py-fluor-musc-fuchsite(+	
									rare wolfram, moly or bi)	
							END OF HOLE 24.1m			

002001

**JERVOIS MINING NL - ASSAY SHEET**

**DRILLHOLE: NC11**

SAMPLED DEPTH		INTERVAL	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm
From	To	(m)	Au	Au(R)	Au(R2)	Au(S)	Au(av)	Cu	Pb	Zn	Ag	As	Sn	W
0	1.6	1.6	0.31	0.4			0.35							
1.6	2.4	0.8	<0.01											
2.4	3	0.6	<0.01											
3	3.6	0.6	<0.01											
3.6	4.2	0.6	<0.01											
4.2	4.95	0.75	<0.01											
4.95	5.6	0.65	<0.01											
5.6	6.2	0.6	0.02	<0.01			0.01							
6.2	6.8	0.6	<0.01											
6.8	7.4	0.6	<0.01											
7.4	8	0.6	<0.01											
8	8.6	0.6	<0.01											
8.6	9.2	0.6	<0.01											
9.2	9.8	0.6	<0.01											
9.8	10.4	0.6	<0.01											
10.4	11	0.6	<0.01											
11	11.6	0.6	<0.01											
11.6	12.2	0.6	<0.01											
12.2	12.8	0.6	<0.01											
12.8	13.4	0.6	<0.01											
13.4	14	0.6	<0.01											
14	14.6	0.6	<0.01											
14.6	15.2	0.6	<0.01											
15.2	15.8	0.6	<0.01											
15.8	16.4	0.6	0.02											
16.4	17	0.6	<0.01											
17	17.6	0.6	<0.01											
17.6	18.2	0.6	<0.01	<0.01			<0.01							
18.2	18.8	0.6	<0.01											
18.8	19.4	0.6	<0.01											
19.4	20	0.6	<0.01											
20	20.6	0.6	<0.01											
Laboratory: Analabs, Coee		Method :	F650	F650	F650	F650		A103	A103	A103	A103		X401	X401

562062



**JERVOIS MINING NL - ASSAY SHEET** **DRILLHOLE: NC11**

SAMPLED DEPTH		INTERVAL (m)	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm
From	To		Au	Au(R)	Au(R2)	Au(S)	Au(av)	Cu	Pb	Zn	Ag	As	Sn	W
0	1.6	1.8	0.31	0.4			0.35							
1.6	2.4	0.8	<0.01											
2.4	3	0.6	<0.01											
3	3.6	0.6	<0.01											
3.6	4.2	0.6	<0.01											
4.2	4.95	0.75	<0.01											
4.95	5.6	0.65	<0.01											
5.6	6.2	0.6	0.02	<0.01			0.01							
6.2	6.8	0.6	<0.01											
6.8	7.4	0.6	<0.01											
7.4	8	0.6	<0.01											
8	8.6	0.6	<0.01											
8.6	9.2	0.6	<0.01											
9.2	9.8	0.6	<0.01											
9.8	10.4	0.6	<0.01											
10.4	11	0.6	<0.01											
11	11.6	0.6	<0.01											
11.6	12.2	0.6	<0.01											
12.2	12.8	0.6	<0.01											
12.8	13.4	0.6	<0.01											
13.4	14	0.6	<0.01											
14	14.6	0.6	<0.01											
14.6	15.2	0.6	<0.01											
15.2	15.8	0.6	<0.01											
15.8	16.4	0.6	0.02											
16.4	17	0.6	<0.01											
17	17.6	0.6	<0.01											
17.6	18.2	0.6	<0.01	<0.01			<0.01							
18.2	18.8	0.6	<0.01											
18.8	19.4	0.6	<0.01											
19.4	20	0.6	<0.01											
20	20.6	0.6	<0.01											
Laboratory: Analabs, Coosee		Method:	F650	F650	F650	F650		A103	A103	A103	A103		X401	X401

562064



## JERVOIS MINING NL - DRILLHOLE LOG

DRILLHOLE: NC12	Logged by: J.G.Purvis	Date: 28.11.98	Depth: 40.7m	Size: NTW
	Co-ords: 4918N / 5920E (Grid)	RL: 514m (est)	Dip: -45	Azimuth: 213 AMG

DRILL ADVANCE					LITHOLOGY					
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION
0	1.5	1.5	1.15	0.35	0	0.8	HIGHLY OXIDIZED & LIMONITIC SANDSTONE		Crumbly.	Limonite-stained with boxworks
1.5	2	0.5	0.5	0			Yellowish-brown, clayey, med gr quartzose sst.			of limonite & MnOx on fract
2	2.5	0.5	0.5	0						
2.5	3.9	1.4	1.4	0	0.8	22.2	VARIABLE ALTERED SULPHIDIC SEDIMENTS	Strong patchy biotite>	Lineated & banded:	Conformable bands of dissem to
3.9	4.7	0.8	0.8	0			Pale grey with brown sections. Hard,	silica alt usually assoc	50/LCA at 7.2m	semi-massive sulphides (py/po-
4.7	5.9	1.2	1.2	0			interbanded sequence of highly biotitized	with sulphides. Strong	55/LCA at 11.3m	sp-gn) with vein-like qtz-sulphide
5.9	7.4	1.5	1.5	0			sulphidic rock, quartzose sst, & sericite-biotite	silica>sericite alt	60/LCA at 13.5m	segregations; intercalated with
7.4	9	1.6	1.6	0			altered blotchy rock possibly after carbonate.	elsewhere.	70/LCA at 20.2m	zones of 1-3% dissem & veinlet
9	10.6	1.6	1.55	0.05			Typically fi-med gr, sandy-textured & qtzose,	Biotite alt increases	Broken by fract to 13m,	(many greisenous) py/po>>sp-gn
10.6	12.1	1.5	1.5	0			but ranges from silty (non-qtzose) to coarsely	with depth, as does	strongest 5-20/LCA.	Best sulphides:
12.1	13.7	1.6	1.6	0			sandy (detrital qtz to 2-3mm), & occasional	"greisenous" alteration	Unbroken below 13m.	2.15-2.6m: band 75/LCA (dips N
13.7	15.2	1.5	1.5	0			zones with lithic frags to 1.5cm. Many biotitized	comprising qtz-fluor-		at 60) of 20% dissem py-sp-gn
15.2	16.7	1.5	1.5	0			bands have below-average primary qtz content.	musc-carb-actinolite-		3.75-3.95m: 5-7% dissem py.
16.7	18.2	1.5	1.5	0				sulphide veining to		6.6-6.7m: band 60/LCA 20% py
18.2	19.7	1.5	1.5	0				2cm both high-angle &		6.7-7.1m: 3% py>>sp-gn, dissem
19.7	21.2	1.5	1.5	0				low-angle in opp		7.1-8.4m: semi-massive band
21.2	22.7	1.5	1.5	0				sense to lineation.		65/LCA of py-sp-gn (baritic?)
22.7	24	1.3	1.3	0				Occasional qtz veins,		13-13.7m: 10% dissem py-sp-gn
24	25.5	1.5	1.5	0				high-angle & <5cm		14.6-15.25m: 3-5% py-sp-gn.
25.5	27.1	1.6	1.6	0				except: 8.85-9.65m		15.25-16.25m: 2% py>sp-gn, in
27.1	28.7	1.6	1.6	0				abundant irreg qtz veins		strong sulphide veinlets //
28.7	30.2	1.5	1.5	0				to 20cm thick; & 20.7-		lineation, incl at 15.4m: 5mm
30.2	31.7	1.5	1.5	0				21.2m: qtz vein 70/LCA		gn>>py veinlet 55/LCA with 24
31.7	33.2	1.5	1.5	0				with 30% rock		grains of VISIBLE GOLD.
33.2	34.7	1.5	1.35	0.15				inclusions.		18.6-19.75m: semi-massive
34.7	36.2	1.5	1.5	0						band 70/LCA of po-sp-gn>py,
36.2	37.7	1.5	1.5	0						with 6 grains of VISIBLE GOLD.
37.7	39.2	1.5	1.5	0						19.75-20.2m: 10-15% dissem
39.2	40.7	1.5	1.5	0						po-sp-gn.
										21.2-22.2m: 3-10% dissem po>
										py>sp-gn, increasing with depth.

562066

## JERVOIS MINING NL - DRILLHOLE LOG

<b>DRILLHOLE: NC12</b>					<b>Logged by: J.G.Purvis</b>			<b>Date: 28.11.98</b>		<b>Depth: 40.7m</b>		<b>Size: NTW</b>	
					<b>Co-ords 4918N / 5920E (Grid)</b>			<b>RL: 514m (est)</b>		<b>Dip: - 45</b>		<b>Azimuth: 213 AMG</b>	
<b>DRILL ADVANCE</b>					<b>LITHOLOGY</b>								
From	To	Interval	Recovered	Lost	From	To	DESCRIPTION	ALTERATION	STRUCTURE	MINERALIZATION			
					22.2	32.5	<p>INTENSELY BIOTITIZED &amp; SULPHIDIC SEDIMENTS. Dark brown, massive to finely banded. Moderately hard (quite soft where biotitization most intense). Composed largely of of qtz (mainly detrital) and metasomatic biotite. After interbedded fi-med gr qtzose sst, qtzose siltstone &amp; qtz microconglomerate (rounded qtz clasts usually 3-4mm, rarely to 1cm). Sulphides preferentially in coarser gr zones, biotitization best in finer-gr zones.</p>	<p>Intense biotitization, patchy silicification (usually outside biotite zones). 28.8-29.1m: qtz&gt;barite veining with py-sp-gn, to 2cm // bedding.</p>	<p>Marked lack of fracturing- almost unbroken. Also marked lack of non-sulphide veining, apart from some high-angle greisenous qtz-fluor&gt;po-sp-gn veining to 24.5m. Well-developed regular bedding: 65/LCA at 23.4m. 72/LCA at 24.9m &amp; 26m. 75/LCA at 28.8m.</p>	<p>Common bedded bands of heavily dissem to semi-massive po-py sp-gn(+ba?). Occasional veins to 2cm (65/LCA) &amp; irreg patches, of coarse gr gn&gt;sp. Fi gr dissem sulphides throughout. Best sulphides: 22.2-25.75m: Bands of semi-massive po&gt;gn-sp&gt;py, averaging 30cm thick, separated by 15cm zones of 3-20% dissem sulphides Semi-massive po-qtz-fluor veins at 23m (4cm 70/LCA) &amp; 23.5m (8cm 80/LCA), opp sense to So. 26.25-27.8m: 5-7% gn-sp-po-py. 27.8-28.7m: band (70/LCA) of 15% dissem po-gn-sp&gt;py. 28.7-29.6m: 20% gn-sp&gt;po&gt;py. dissem &amp; common strong veins 29.85-31.5m: 20% dissem gn-sp&gt;po&gt;py (baritic?). 31.5-32.5m: 15% sp-gn&gt;po-py mainly in veinlets 60-70/LCA, incl at 31.5m: 7mm sp&gt;gn veinlet 65/LCA with 1.5mm GOLD grain.</p>			
					32.5	40.7	<p>ALTERED FINE QUARTZOSE SANDSTONE. Grey &amp; brown, hard to very hard, massive &amp; fairly uniform. More siliceous &amp; less metasomatized than unit above.</p>	<p>Strong patchy silif &amp; lesser biotitization, with former overprinting the latter. Veining minor, except in strongest</p>	<p>Generally unbanded &amp; mostly unbroken. Bedding 75/LCA at 34.5m &amp; 65/LCA at 36m</p>	<p>Minor sulphide veining. 32.5-36.2m: 1% py&gt;po-gn-sp, mainly dissem. 36.2-37m: 5-10% gn-sp&gt;py&gt;po in veining &amp; fine dissem.</p>			

002007



JERVOIS MINING NL - ASSAY SHEET														DRILLHOLE: NC12	
SAMPLED DEPTH		INTERVAL (m)	ppm	ppm	ppm	ppm	ppm	%	%	%	ppm	ppm	ppm	ppm	
From	To		Au	Au(R)	Au(R2)	Au(S)	Au(av)	Cu	Pb	Zn	Ag	As	Sn	W	
0	1	1	0.22					0.01	0.05	0.01	<5				
1	2.1	1.1	0.16	0.16			0.16	<0.01	0.06	0.05	<5				
2.1	2.6	0.5	0.34					0.08	2.69	2.91	24				
2.6	3.7	1.1	0.07					<0.01	0.06	0.11	<5				
3.7	4.8	1.1	<0.01					0.02	0.03	0.02	<5				
4.8	5.9	1.1	<0.01					0.01	0.02	0.01	<5				
5.9	7.1	1.2	0.02					0.02	0.01	0.03	<5				
7.1	8.4	1.3	19.7	20.5			20.1	0.08	4.92	4.05	49				
8.4	9.65	1.25	0.24					0.03	0.03	0.02	<5				
9.65	10.85	1.2	0.68					0.02	0.01	0.01	<5				
10.85	12	1.15	1.86	1.38	1.48		1.57	0.02	0.03	0.02	<5				
12	13	1	9.38	8	8.14		8.51	0.03	0.04	0.02	<5				
13	13.7	0.7	1.35	3.78	4		3.04	0.07	1.98	1.7	23				
13.7	14.6	0.9	0.53					0.01	0.21	0.17	9				
14.6	15.25	0.65	0.36					0.02	1.09	0.8	21				
15.25	16.25	1	8.04	17.9	16.7		14.21	0.01	0.54	0.07	10				
16.25	17.4	1.15	4.62	5.94	5.64		5.4	0.02	0.01	0.01	<5				
17.4	18.6	1.2	0.06	0.11			0.08	0.01	0.01	0.01	<5				
18.6	19.75	1.15	7.98	19	9.42		12.1	0.1	5.26	5.27	67				
19.75	20.2	0.45	1.41	1.19			1.3	0.04	1.62	1.32	16				
20.2	21.25	1.05	0.11					0.01	0.04	0.01	<5				
21.25	22	0.75	1.72	1.47	3.24		2.14	0.02	0.04	0.03	<5				
22	23	1	1.31	1.89	1.38		1.53	0.09	2.46	2.16	35				
23	24	1	4.93	7.84	6.76		6.51	0.09	5.09	2.46	65				
24	25	1	2.59	1.64	2.13		2.12	0.09	3.58	2.19	38				
25	25.75	0.75	2.31	2.5	2.27		2.36	0.1	2.12	1.9	21				
25.75	26.25	0.5	0.51					0.01	0.38	0.35	<5				
26.25	27.5	1.25	6.91	1.76	3.87		4.18	0.02	1.35	1.06	18				
27.5	28.7	1.2	0.63	0.74	1		0.79	0.05	2.11	1.56	21				
28.7	29.6	0.9	2.22	7.86	1.65		3.91	0.05	6.4	3.94	63				
29.6	30.5	0.9	2.88	5.9	2.34		3.71	0.06	2.71	2.42	27				
30.5	31.5	1	3.47	8.14	9.46		7.02	0.09	5.87	4.34	56				
Laboratory: Analabs, Cocee			Method:	F650	F650	F650	F650	A103	A103	A103	A103		X401	X401	

562069



**DOLCOATH EL 37/97  
First Progress Report**

**FIGURES**





5050N

SOUTH

5100N

NORTH

2m @ 0.05



2m @ 0.36

### NARRAWA REWARD MINE (Au)

Adit entrance 7m W of section

NC02  
-45°

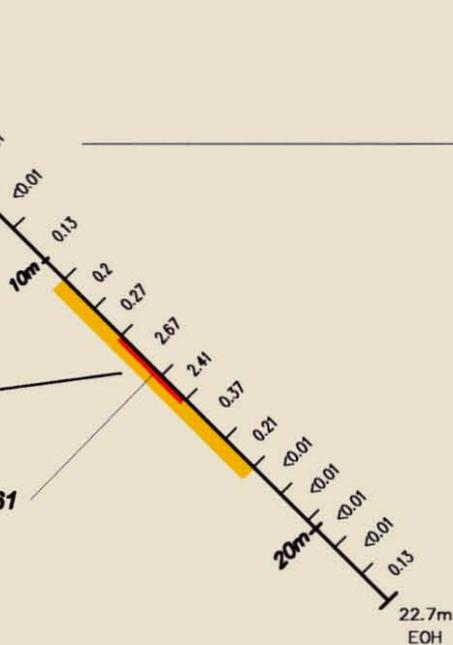
Old CRA Drill Access Track

500mR.L.

500mR.L.

7m @ 1.06, 0.6, 0.5, 27

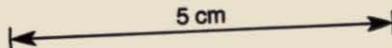
2.4m @ 2.57, 1.0, 1.0, 61



562074

#### KEY TO ASSAY VALUES

- In drillhole Au g/t, Ag g/t, Pb %, Zn %
- Other Au g/t
- 1.5m @ 4.11 GFEL channel sample at angle to section
- 0.12 GFEL channel sample parallel to section
- (0.058) Soil sample



## JERVOIS MINING N.L.

A.C.N. 007 026 575

COMPILED : J.G.Purvis
DATE : December 1998
DRAWN : G.M.Bennett
LOCATION : Tasmania
FILE : NC02 Assays

DOLCOATH - EL 37/97  
 NARRAWA CREEK  
**ASSAYS**  
**DRILL SECTION NC02**  
**(5946E)**  
 LOOKING WEST SECTION BEARS 033° AMG

DRAWING No.	SCALE 1:200	0 4 m	FIG. No. 6
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5050N

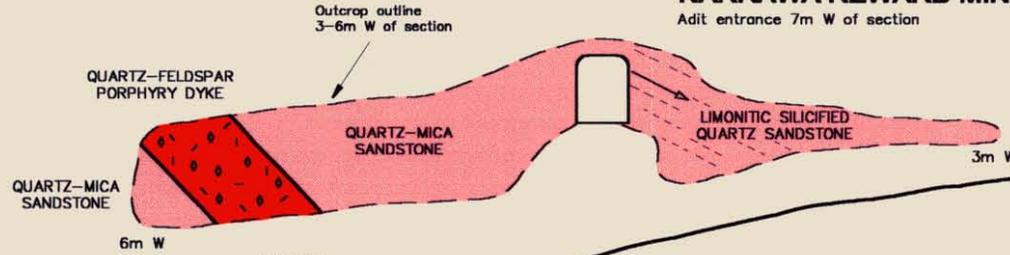
SOUTH

5100N

NORTH

### NARRAWA REWARD MINE (Au)

Adit entrance 7m W of section



Old CRA Drill Access Track

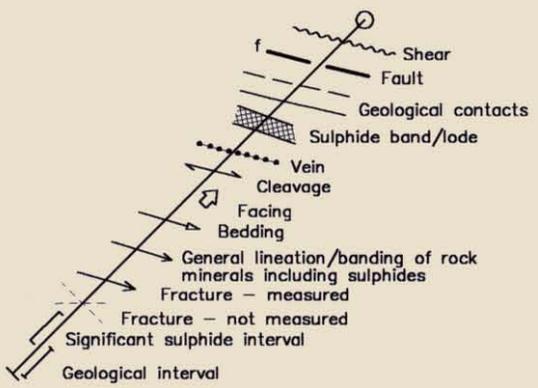
NC02  
45°

500mR.L.

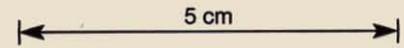
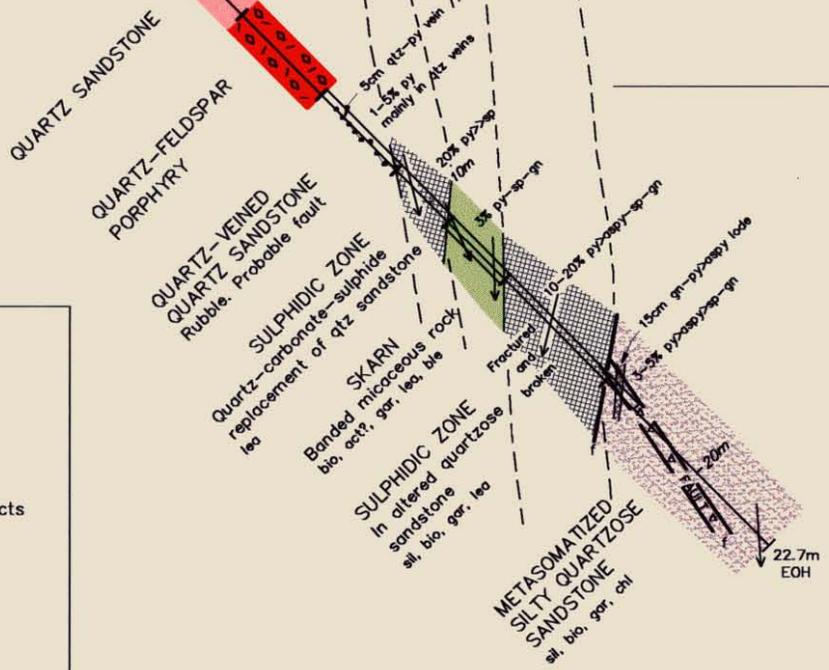
#### ABBREVIATIONS

- act actinolite
- alb albite
- bio biotite
- ble bleached
- cb carbonate
- chl chlorite
- clay clayey/clay-altered
- flour flourite
- fract fractures/fractured
- fuc fuchsite
- gar garnets
- hem hematite
- lea leached
- lim limonite
- mag magnetite
- musc muscovite
- ox oxidised
- ser sericite
- serp serpentine
- sil silicification
- wol wollastonite

#### LEGEND



NOTE: Zones of 2% sulphides or less generally not shown



562075

 <b>JERVOIS MINING N.L.</b> <small>A.C.N. 007 626 575</small>	
COMPILED : J.G.Purvis DATE : December 1998 DRAWN : G.M.Bennett	<b>DOLCOATH - EL 37/97</b> <b>NARRAWA CREEK</b> <b>DRILL SECTION NC02</b> <b>(5946E)</b> <b>LOOKING WEST. SECTION BEARS 033° AMG</b>
LOCATION : Tasmania FILE : Section NC02	SCALE 1:200 
DRAWING No.	FIG. No. <b>7</b>

SOUTH

562076 NORTH

5025N

NC03

-45°

Link Track

(2.1)  
5025N

Creek Track

All  
Values  
<0.05g/t Au

500mR.L.

500mR.L.

19.9m  
EOH

5 cm

**KEY TO ASSAY VALUES**

- In drillhole      Au g/t, Ag g/t, Pb %, Zn %
- Other              Au g/t
- 1.5m @ 4.11      GFEL channel sample at angle to section
- 0.12              GFEL channel sample parallel to section
- (0.050)          Soil sample



**JERVOIS MINING N.L.**

A.G.S. 007 626 973

COMPILED : J.G.Purvis

DATE : December 1968

DRAWN : G.M.Bennett

LOCATION : Tasmania

FILE : NC03-Assays

DRAWING No.

DOLGOATH - EL 37197

NARRAWA CREEK

**ASSAYS**

**DRILL SECTION NC03**

(6000E)

LOOKING WEST. SECTION BEARS 033° ANG

SCALE 1:200

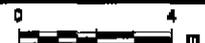


FIG. No.

8

SOUTH

562077 NORTH

5025N

NC03  
-45°

Link Track

5025N

Creek Track

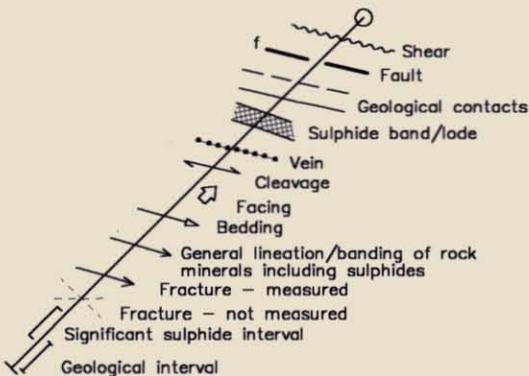
500mR.L.

500mR.L.

19.9m  
EOH

5 cm

**LEGEND**



NOTE: Zones of 2% sulphides or less generally not shown

**ABBREVIATIONS**

act	actinolite
alb	albite
bio	biotite
ble	bleached
cb	carbonate
chl	chlorite
clay	clayey/clay-altered
fluor	flourite
fract	fractures/fractured
fuc	fuchsite
gar	garnets
hem	hematite
lea	leached
lim	limonite
mag	magnetite
musc	muscovite
ox	oxidised
ser	sericite
serp	serpentine
sil	silicification
wol	wollastonite

**JERVOIS MINING N.L.**

A.C.N. 087 636 575

COMPILED : J.G.Purvis

DATE : December 1998

DRAWN : G.M.Bennett

LOCATION : Tasmania

FILE : Section NC03

DRAWING No.

**DOLCOATH - EL 37/97**

**NARRAWA CREEK**

**DRILL SECTION NC03  
(6000E)**

**LOOKING WEST. SECTION BEARS 033° AMG**

SCALE 1:200

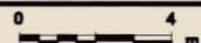


FIG. No.  
9

SOUTH

5250N

562078

NORTH

(0.03)  
5250N

500mR.L.

500mR.L.

(0.72)  
5275N

NC04  
-45°

6.9m @ 1.0g/t Au

0.6m @ 4.88g/t Au

10m

475mR.L.

20.1m  
EOH

475mR.L.

5 cm

**KEY TO ASSAY VALUES**

- In drillhole Au g/t, Ag g/t, Pb %, Zn %
- Other Au g/t
- 1.5m @ 4.11 GFEL channel sample at angle to section
- 0.12 GFEL channel sample parallel to section
- (0.058) Soil sample

<b>JERVOIS MINING N.L.</b> <small>A.C.N. 007 026 975</small>	
COMPILED : J.G.Purvis	<b>DOLCOATH - EL 37/97 NARRAWA CREEK ASSAYS DRILL SECTION NC04 (6200E) LOOKING WEST. SECTION BEARS 033° AMG</b>
DATE : December 1996	
DRAWN : G.M.Bennett	
LOCATION : Tasmania	
FILE : NC04 Assays	SCALE 1:200
DRAWING No.	
0 4 m	
FIG. No. 10	

SOUTH

5250N

NORTH

562079

5300N

5250N

HORNFELS sub outcrop. Green to black, fine-grained and partly banded, very hard

500mR.L.

500mR.L.

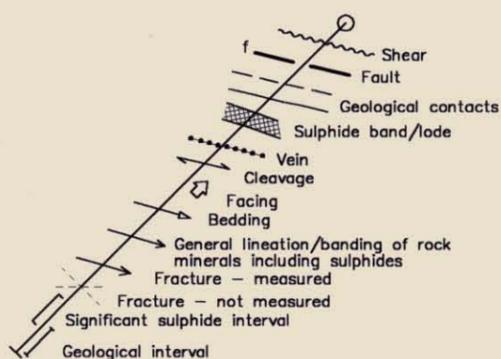
NC04  
-45°

5 cm

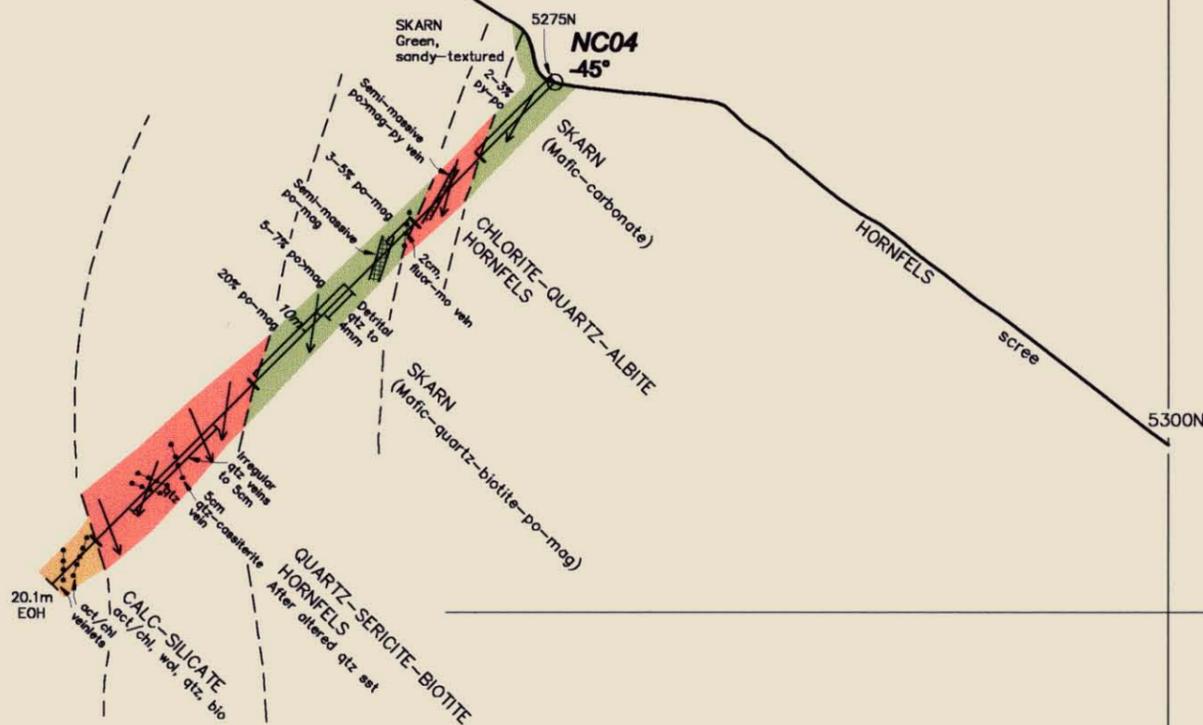
475mR.L.

475mR.L.

LEGEND



NOTE: Zones of 2% sulphides or less generally not shown



**ABBREVIATIONS**

act	actinolite
alb	albite
bio	biotite
ble	bleached
cb	carbonate
chl	chlorite
clay	clayey/clay-altered
fluor	flourite
fract	fractures/fractured
fuc	fuchsite
gar	garnets
hem	hematite
lea	leached
lim	limonite
mag	magnetite
musc	muscovite
ox	oxidised
ser	sericite
serp	serpentine
sil	silicification
wol	wollastonite

**JERVOIS MINING N.L.**  
A.C.N. 007 036 575

COMPILED: J.G.Purvis  
DATE: December 1998  
DRAWN: G.M.Bennett

LOCATION: Tasmania

FILE: Section NC04

DRAWING No. SCALE 1:200

**DOLCOATH - EL 37/97**  
**NARRAWA CREEK**  
**DRILL SECTION NC04**  
**(6200E)**  
LOOKING WEST. SECTION BEARS 033° AMG

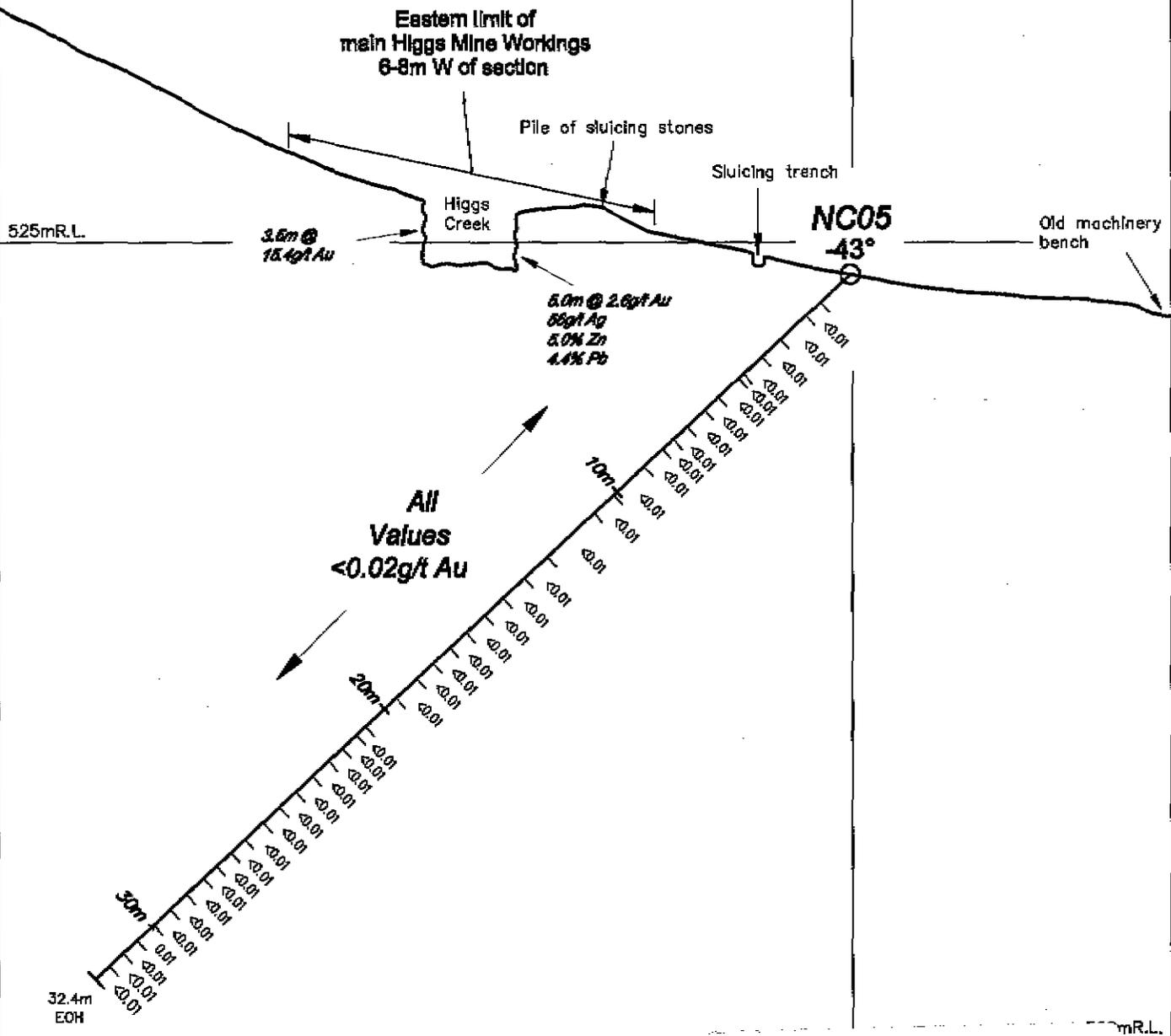
FIG. No. 11

SOUTH

562080

4900N

NORTH



**KEY TO ASSAY VALUES**

- In drillhole Au g/t, Ag g/t, Pb %, Zn %
- Other Au g/t
- 1.6m @ 4.11 GFEL channel sample at angle to section
- 0.12 GFEL channel sample parallel to section
- (0.058) Soil sample

<b>JERVOIS MINING N.L.</b> <small>A.C.N. 007 626 775</small>	
COMPILED: J.G.Purvis	<b>DOLCOATH - EL 3787 NARRAWA CREEK ASSAYS DRILL SECTION NC05 (5958E) LOOKING WEST. SECTION BEARS 033° AMG</b>
DATE: December 1999	
DRAWN: G.M.Bennett	
LOCATION: Teanerik	SCALE 1:200 0 4 m
FILE: NC05 Assays	
DRAWING No.	FIG. No. 12

562081

SOUTH

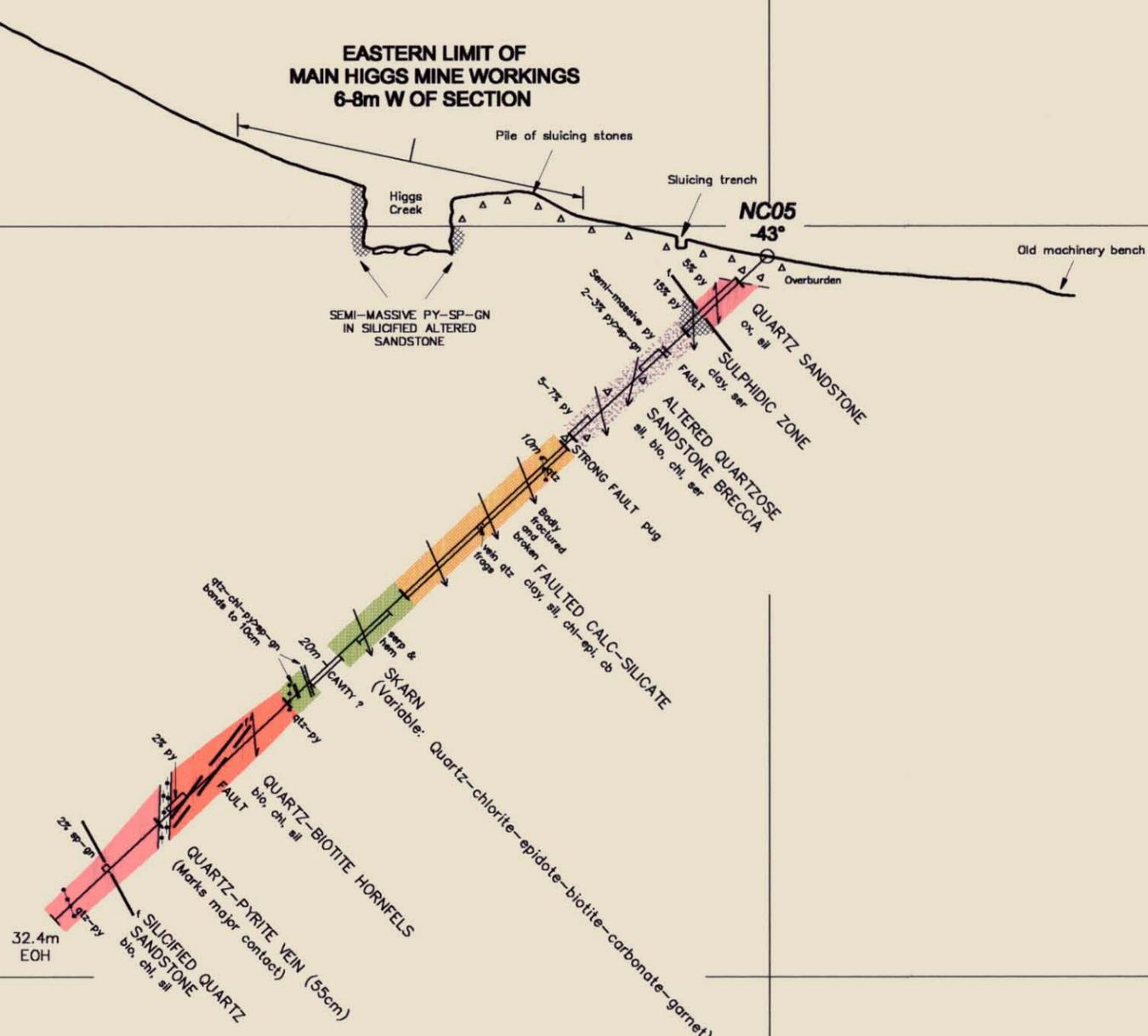
NORTH

EASTERN LIMIT OF  
MAIN HIGGS MINE WORKINGS  
6-8m W OF SECTION

525mR.L.

525mR.L.

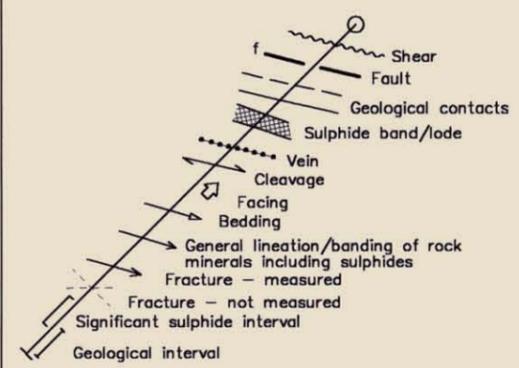
NC05  
43°



500mR.L.

500mR.L.

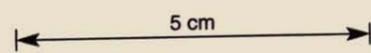
**LEGEND**



**ABBREVIATIONS**

act	actinolite
alb	albite
bio	biotite
ble	bleached
cb	carbonate
chl	chlorite
clay	clayey/clay-altered
fluor	flourite
fract	fractures/fractured
fuc	fuchsite
gar	garnets
hem	hematite
lea	leached
lim	limonite
mag	magnetite
musc	muscovite
ox	oxidised
ser	sericite
serp	serpentine
sil	silicification
wol	wollastonite

NOTE: Zones of 2% sulphides or less generally not shown



<b>JERVOIS MINING N.L.</b> <small>A.C.N. 007 036 575</small>			
COMPILED : J.G.Purvis	<b>DOLCOATH - EL 37/97 NARRAWA CREEK DRILL SECTION NC05 (5958E)</b>		
DATE : December 1988			
DRAWN : G.M.Bennett			
LOCATION : Tasmania	<b>LOOKING WEST. SECTION BEARS 033° AMG</b>		
FILE : Section NC05			
DRAWING No.	SCALE 1:200	0  4 m	FIG. No. 13

SOUTH

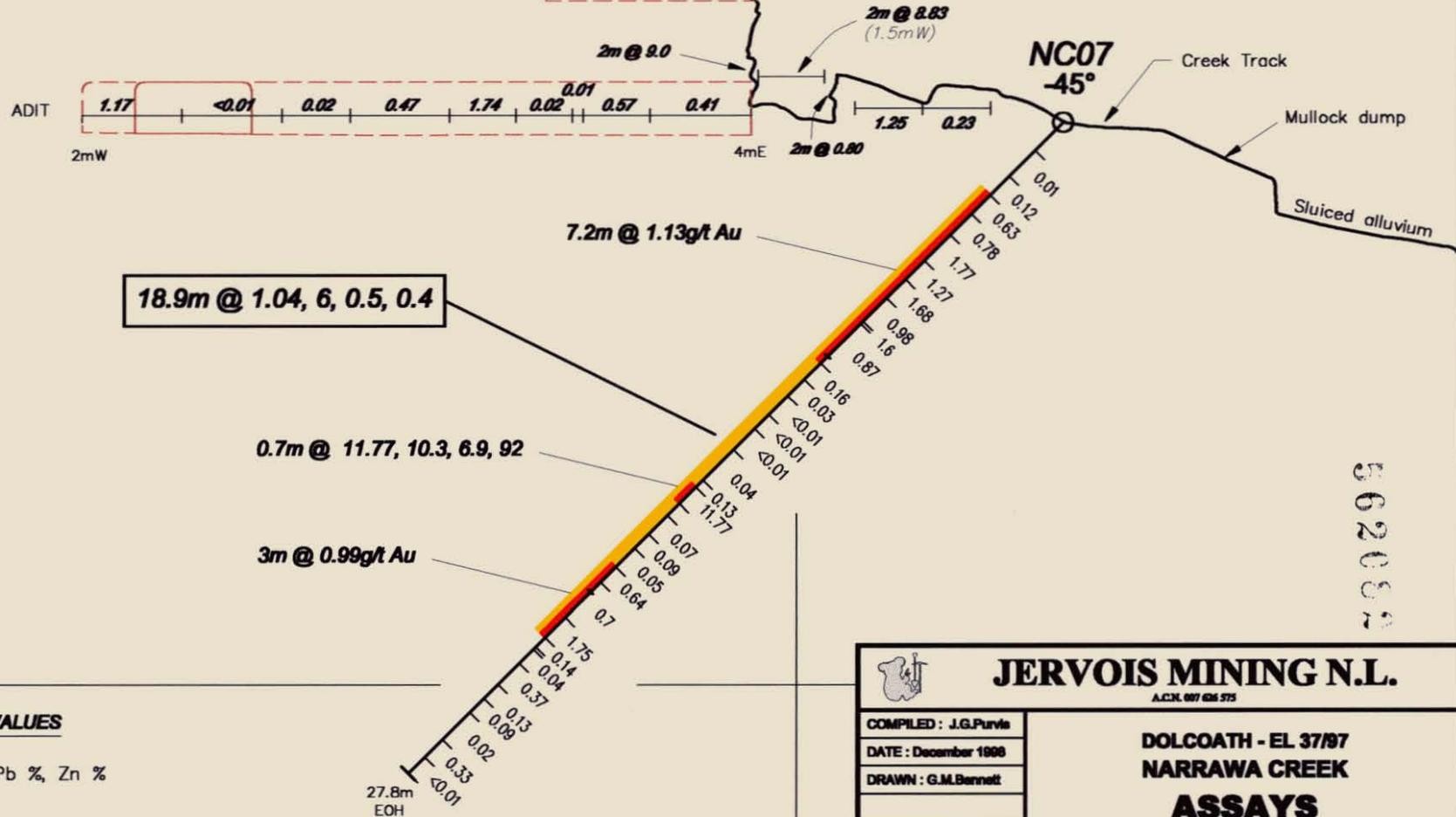
NORTH

525mR.L.

525mR.L.

Numerous small sluicing channels

Mine workings



500mR.L.

**KEY TO ASSAY VALUES**

- In drillhole Au g/t, Ag g/t, Pb %, Zn %
- Other Au g/t
- 1.5m @ 4.11 GFEL channel sample at angle to section
- 0.12 GFEL channel sample parallel to section
- (0.058) Soil sample

**JERVOIS MINING N.L.**  
A.C.N. 007 626 575

COMPILED : J.G.Purvie  
DATE : December 1998  
DRAWN : G.M.Bennett

LOCATION : Tasmania

FILE : NC07 Assays

DRAWING No. SCALE 1:200

0 4 m

FIG. No. 14

**DOLCOATH - EL 37/97  
NARRAWA CREEK  
ASSAYS  
DRILL SECTION NC07  
(5875E)  
LOOKING WEST. SECTION BEARS 033° AMG**

562032

SOUTH

NORTH 562083

40081

525mR.L.

525mR.L.

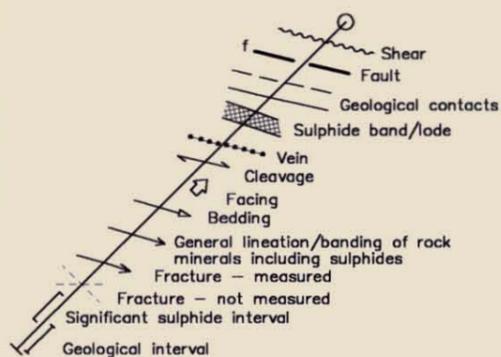
(Geology in adit after Roberts, 1987)



500mR.L.

500mR.L.

LEGEND



NOTE: Zones of 2% sulphides or less generally not shown

ABBREVIATIONS

act	actinolite
alb	albite
bio	biotite
ble	bleached
cb	carbonate
chl	chlorite
clay	clayey/clay-altered
fluor	flourite
fract	fractures/fractured
fuc	fuchsite
gar	garnets
hem	hematite
lea	leached
lim	limonite
mag	magnetite
musc	muscovite
ox	oxidised
ser	sericite
serp	serpentine
sil	silicification
wol	wollastonite

**JERVOIS MINING N.L.**  
A.C.N. 917 636 575

COMPILED : J.G.Purvis  
DATE : December 1988  
DRAWN : G.M.Bernett

LOCATION : Tasmania

FILE : Section NC07

DRAWING No. SCALE 1:200 0 2 4 m FIG. No. 15

**DOLCOATH - EL 37/97**  
**NARRAWA CREEK**  
**DRILL SECTION NC07**  
**(5875E)**  
LOOKING WEST. SECTION BEARS 033° AMG

SOUTH

(0.03)  
4875N

Water race

Sluiced ground

1m deep sluicing "Long Tom"  
1-2m E of section

Peg 5850E/4900N  
1.5m E of section

500mR.L.

500mR.L.

NORTH

NC08  
-45°

Creek Track

Mine debris

Alluvium

Narrawa Creek

Alluvium

562084

7m @ 0.47g/t Au

1m @ 0.98g/t Au

21.3m  
EOH

5 cm

**KEY TO ASSAY VALUES**

- In drillhole Au g/t, Ag g/t, Pb %, Zn %
- Other Au g/t
- 1.5m @ 4.11 GFEL channel sample at angle to section
- 0.12 GFEL channel sample parallel to section
- (0.058) Soil sample

		<b>JERVOIS MINING N.L.</b>		
		<small>A.C.N. 607 636 575</small>		
COMPILED : J.G.Purvis	<b>DOLCOATH - EL 37/97 NARRAWA CREEK ASSAYS DRILL SECTION NC08 (5850E) LOOKING WEST. SECTION BEARS 033° AMG</b>			
DATE : December 1986				
DRAWN : G.M.Bennett				
LOCATION : Tasmania				
FILE : NC08 Assays	DRAWING No.	SCALE 1:200	0 4 m	FIG. No. 16

SOUTH

NORTH

562085

4900N

4875N

Water race

Sluiced ground

1m deep sluicing "Long Tom"  
1-2m E of section

Peg 5850E/4900N  
1.5m E of section

NC08  
45°

Creek Track

Mine debris

Alluvium

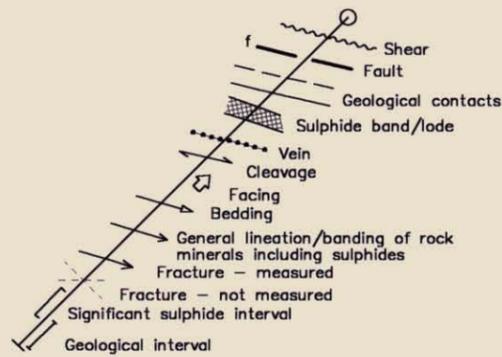
Narrawa Creek

Alluvium

500mR.L.

500mR.L.

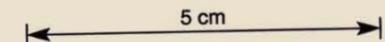
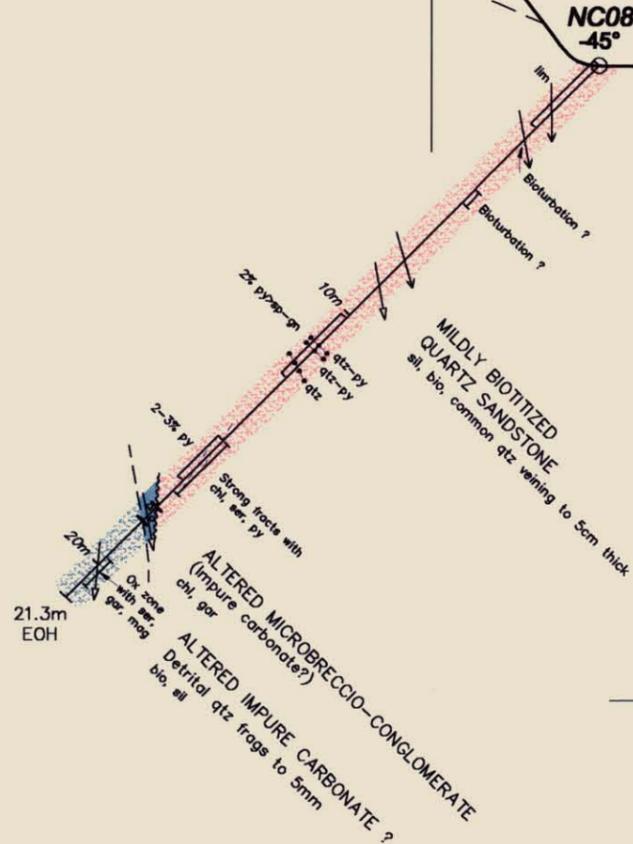
LEGEND



NOTE: Zones of 2% sulphides or less generally not shown

ABBREVIATIONS

- act actinolite
- alb albite
- bio biotite
- ble bleached
- cb carbonate
- chl chlorite
- clay clayey/clay-altered
- fluor flourite
- fract fractures/fractured
- fuc fuchsite
- gar garnets
- hem hematite
- lea leached
- lim limonite
- mag magnetite
- muscovite muscovite
- ox oxidised
- ser sericite
- serp serpentine
- sil silicification
- wol wollastonite



475mR.L.

<b>JERVOIS MINING N.L.</b> <small>A.C.N. 007 026 573</small>	
COMPILED : J.G.Purvis	<b>DOLCOATH - EL 37/97</b> <b>NARRAWA CREEK</b> <b>DRILL SECTION NC08</b> <b>(5850E)</b> <b>LOOKING WEST. SECTION BEARS 033° AMG</b>
DATE : December 1998	
DRAWN : G.M.Bennett	
LOCATION : Tasmania	
FILE : Section NC08	
DRAWING No.	SCALE 1:200
	0 2 4 m
	FIG. No. 17

SOUTH

NORTH

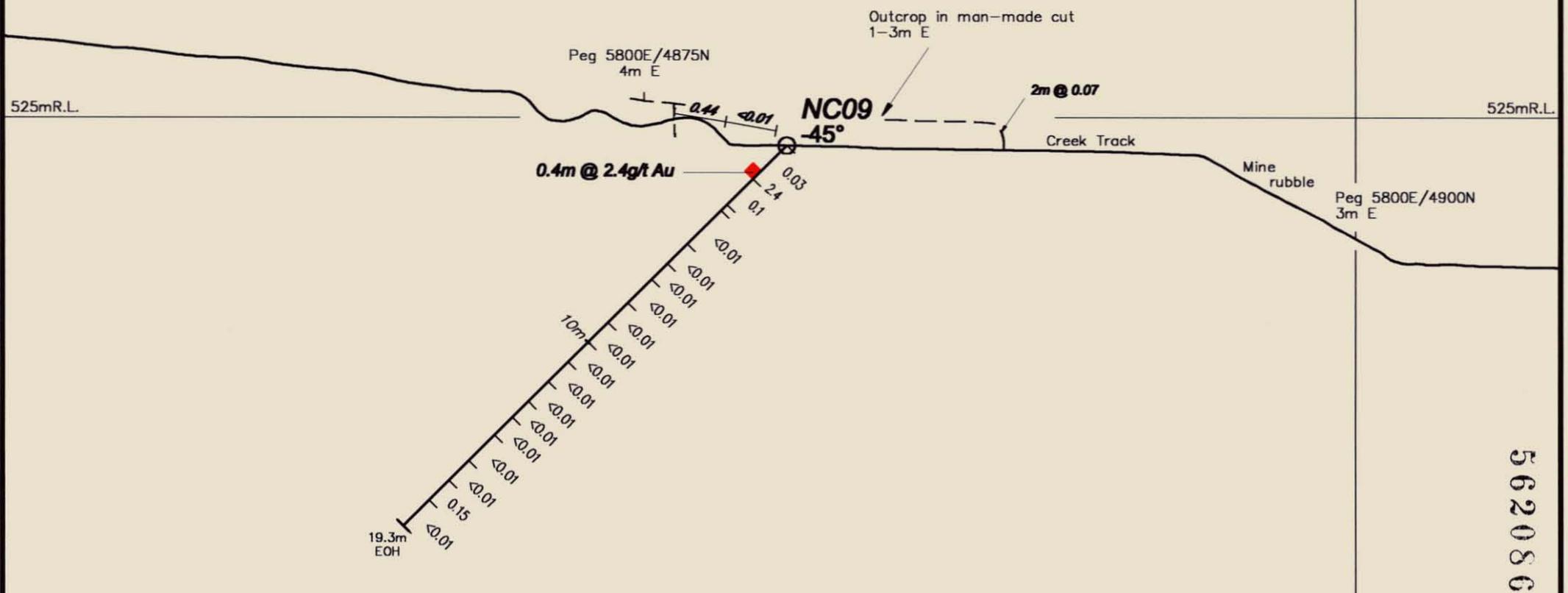
525mR.L.

525mR.L.

4900N

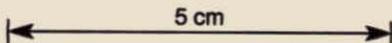
500mR.L.

562086



**KEY TO ASSAY VALUES**

- In drillhole Au g/t, Ag g/t, Pb %, Zn %
- Other Au g/t
- 1.5m @ 4.11** GFEL channel sample at angle to section
- 0.12** GFEL channel sample parallel to section
- (0.058)** Soil sample



**JERVOIS MINING N.L.**

A.C.N. 007 026 575

COMPILED : J.G.Purvis

DATE : December 1988

DRAWN : G.M.Bonnett

LOCATION : Tasmania

FILE : NC09 Assays

DRAWING No.

**DOLCOATH - EL 37/97**  
**NARRAWA CREEK**  
**ASSAYS**  
**DRILL SECTION NC09**  
**(5797E)**  
**LOOKING WEST. SECTION BEARS 033° AMG**

SCALE 1:200



FIG. No. 18

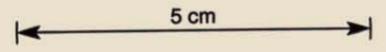
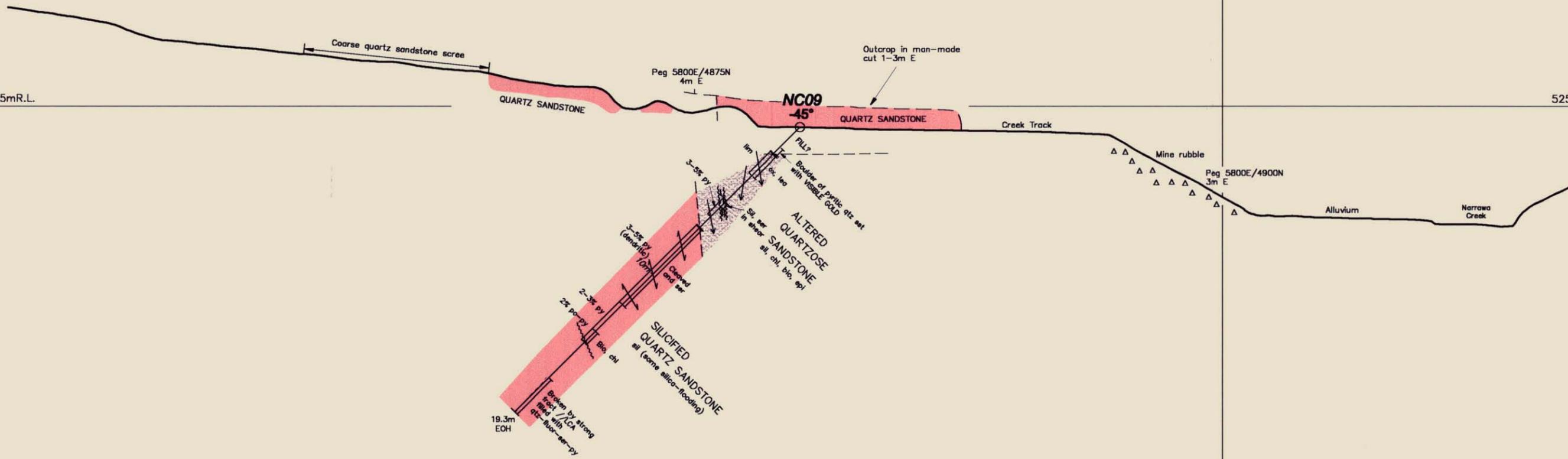
SOUTH

NORTH

525mR.L.

525mR.L.

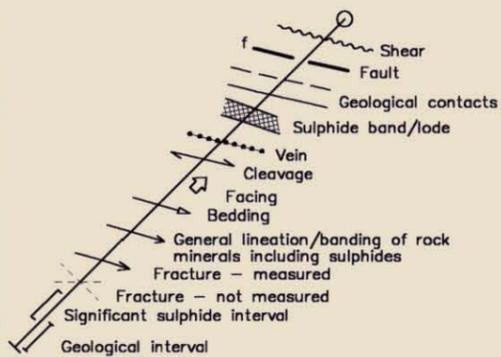
4900N



500mR.L.

500mR.L.

**LEGEND**



**ABBREVIATIONS**

act	actinolite
alb	albite
bio	biotite
ble	bleached
cb	carbonate
chl	chlorite
clay	clayey/clay-altered
fluor	flourite
fract	fractures/fractured
fuc	fuchsite
gar	garnets
hem	hematite
lea	leached
lim	limonite
mag	magnetite
musc	muscovite
ox	oxidised
ser	sericite
serp	serpentine
sil	silicification
wol	wollastonite

NOTE: Zones of 2% sulphides or less generally not shown

<b>JERVOIS MINING N.L.</b> <small>A.C.N. 007 026 573</small>			
COMPILED : J.G.Purvis	<b>DOLCOATH - EL 37/97</b> <b>NARRAWA CREEK</b> <b>DRILL SECTION NC09</b> <b>(5797E)</b>		
DATE : December 1998			
DRAWN : G.M.Bennett			
LOCATION : Tasmania	<b>LOOKING WEST. SECTION BEARS 033° AMG</b>		
FILE : Section NC09			
DRAWING No.	SCALE 1:200		FIG. No. <b>19</b>

SOUTH

NORTH

562088

4900N

### WEST HIGGS OPEN CUT

Excavated face  
4m W of section

88.87  
1.90  
2.00  
0.92  
1.65

Sluice working

Pile of sluicing stones

Sluicing "Long Tom"

NC10  
-45°  
Creek Track

525mR.L.

525mR.L.

5 cm

#### KEY TO ASSAY VALUES

- In drillhole Au g/t, Ag g/t, Pb %, Zn %
- Other Au g/t
- 1.5m @ 4.11 GFEL channel sample at angle to section
- 0.12 GFEL channel sample parallel to section
- (0.058) Soil sample

1.2m @ 1.80g/t Au

500mR.L.

44.4m  
ECH



## JERVOIS MINING N.L.

A.C.N. 007 636 375

COMPILED : J.G.Purvis

DATE : December 1998

DRAWN : G.M.Bennett

LOCATION : Tasmania

FILE : NC10 Assays

DRAWING No.

DOLCOATH - EL 37/97

NARRAWA CREEK

### ASSAYS DRILL SECTION NC10 (5745E)

LOOKING WEST. SECTION BEARS 033° AMG

SCALE 1:200

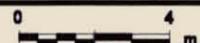


FIG. No.  
20

SOUTH

NORTH

4900N

0.3m wide brecciated quartz-pyrite lode

### WEST HIGGS OPEN CUT

SILICIFIED PYRITIZED QUARTZ SANDSTONE

Excavated face 4m W

Sluice working

Pile of sluicing stones

Sluicing "Long Tom"

NC10  
45°

Creek Track

OXIDIZED CLAYEY ROCK

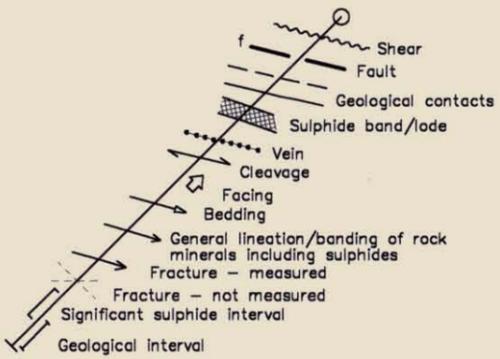
Creek

525mR.L.

500mR.L.

500mR.L.

### LEGEND



NOTE: Zones of 2% sulphides or less generally not shown



### ABBREVIATIONS

act	actinolite
alb	albite
bio	biotite
ble	bleached
cb	carbonate
chl	chlorite
clay	clayey/clay-altered
fluor	flourite
fract	fractures/fractured
fuc	fuchsite
gar	garnets
hem	hematite
lea	leached
lim	limonite
mag	magnetite
musc	muscovite
ox	oxidised
ser	sericite
serp	serpentine
sil	silicification
wol	wollastonite

562089

**JERVOIS MINING N.L.**  
A.C.N. 007 636 575

COMPILED : J.G.Purvis  
DATE : December 1988  
DRAWN : G.M.Bennett

LOCATION : Tasmania

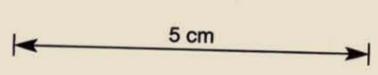
FILE : Section NC10

DRAWING No. SCALE 1:200

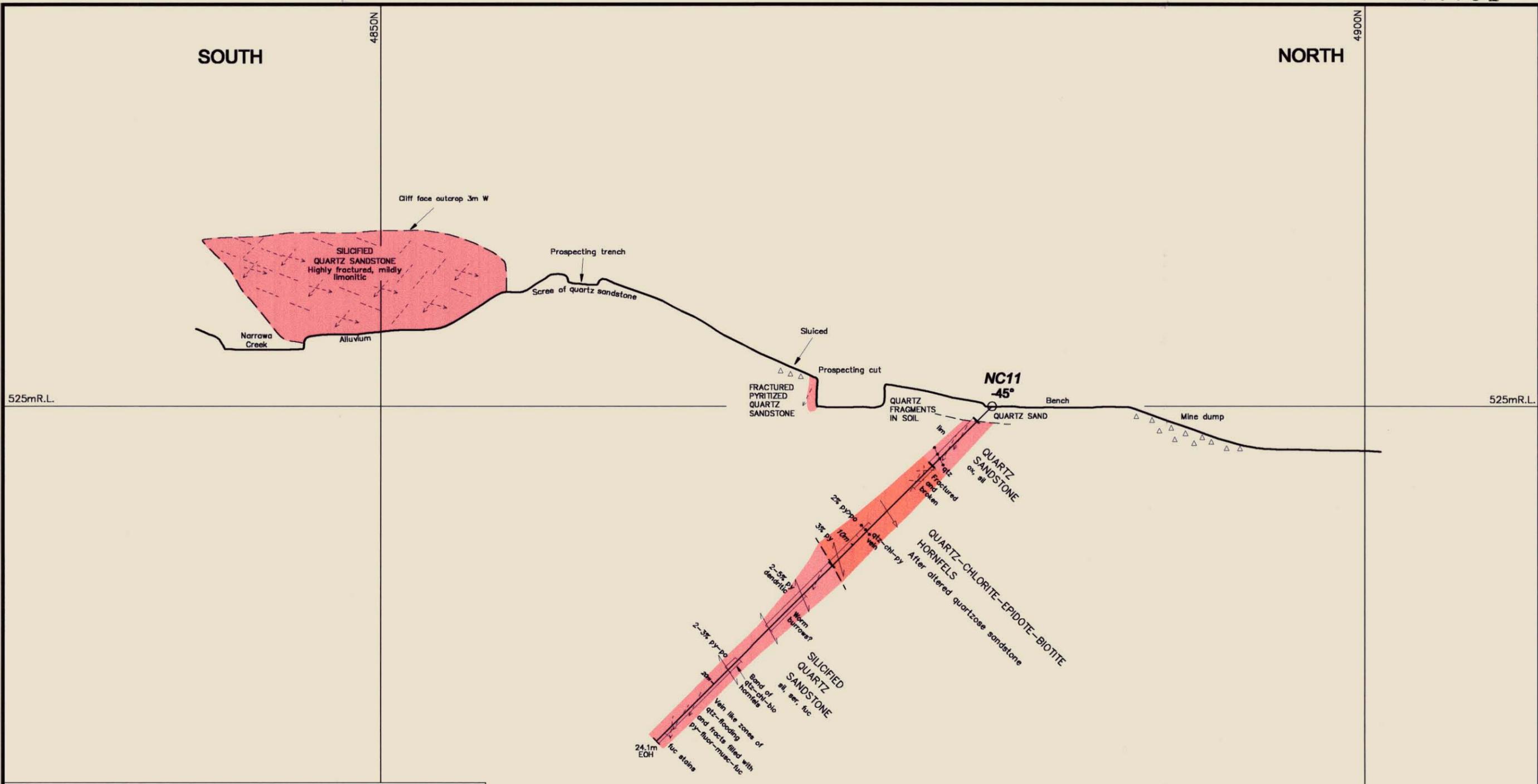
**DOLCOATH - EL 37/97**  
**NARRAWA CREEK**  
**DRILL SECTION NC10**  
**(5745E)**  
**LOOKING WEST. SECTION BEARS 033° AMG**

0 2 4 m

FIG. No. 21







**LEGEND**

**ABBREVIATIONS**

act	actinolite
alb	albite
bio	biotite
ble	bleached
cb	carbonate
chl	chlorite
clay	clayey/clay-altered
flur	flourite
fract	fractures/fractured
fuc	fuchsite
gar	garnets
hem	hematite
lea	leached
lim	limonite
mag	magnetite
musc	muscovite
ox	oxidised
ser	sericite
serp	serpentine
sil	silicification
wol	wollastonite

NOTE: Zones of 2% sulphides or less generally not shown

5 cm

**JERVOIS MINING N.L.**  
A.C.N. 007 636 575

COMPILED : J.G.Purvis	<b>DOLCOATH - EL 37/97</b> <b>NARRAWA CREEK</b> <b>DRILL SECTION NC11</b> <b>(5775E)</b> <b>LOOKING WEST - SECTION BEARS 033° AMG</b>
DATE : December 1988	
DRAWN : G.M.Bennett	
LOCATION : Tasmania	
FILE : Section NC11	SCALE 1:200
DRAWING No.	
FIG. No. 23	

SOUTH

NORTH

4900N

4900N

525mR.L.

525mR.L.

500mR.L.

HIGGS MINE  
OPEN CUT

2m @ 7.20

2m @ 0.73

UNDERLAY  
SHAFT

CROWN  
PILLAR

Small  
pit

Bench

Sluiced

ADIT  
NC12  
-45°

Bench

Dump

Creek Track

HIGGS GOLD  
BODY

1.3m @ 20.1, 49, 4.9, 4.0

1.0m @ 8.51, <5, <0.1, <0.1

1m @ 14.21, 10, 0.5, <0.1

25.4m @ 4.33, 23, 2.0, 1.5

1.15m @ 12.13, 67, 5.3, 5.3

1.0m @ 8.51, 65, 5.1, 2.5

1.0m @ 7.02, 56, 5.9, 4.3

0.70  
0.36 3.00 0.45

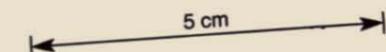
0.22  
0.16  
0.34  
0.07  
<0.01  
<0.01  
0.02

1.0m 0.24  
1.57  
3.04  
0.53  
14.21  
5.4

20m 0.08  
12.1  
1.3  
0.11  
2.14  
1.53  
6.51  
2.12  
2.36  
0.51  
4.18

30m 0.78  
3.91  
5.71  
7.02  
0.67  
0.65

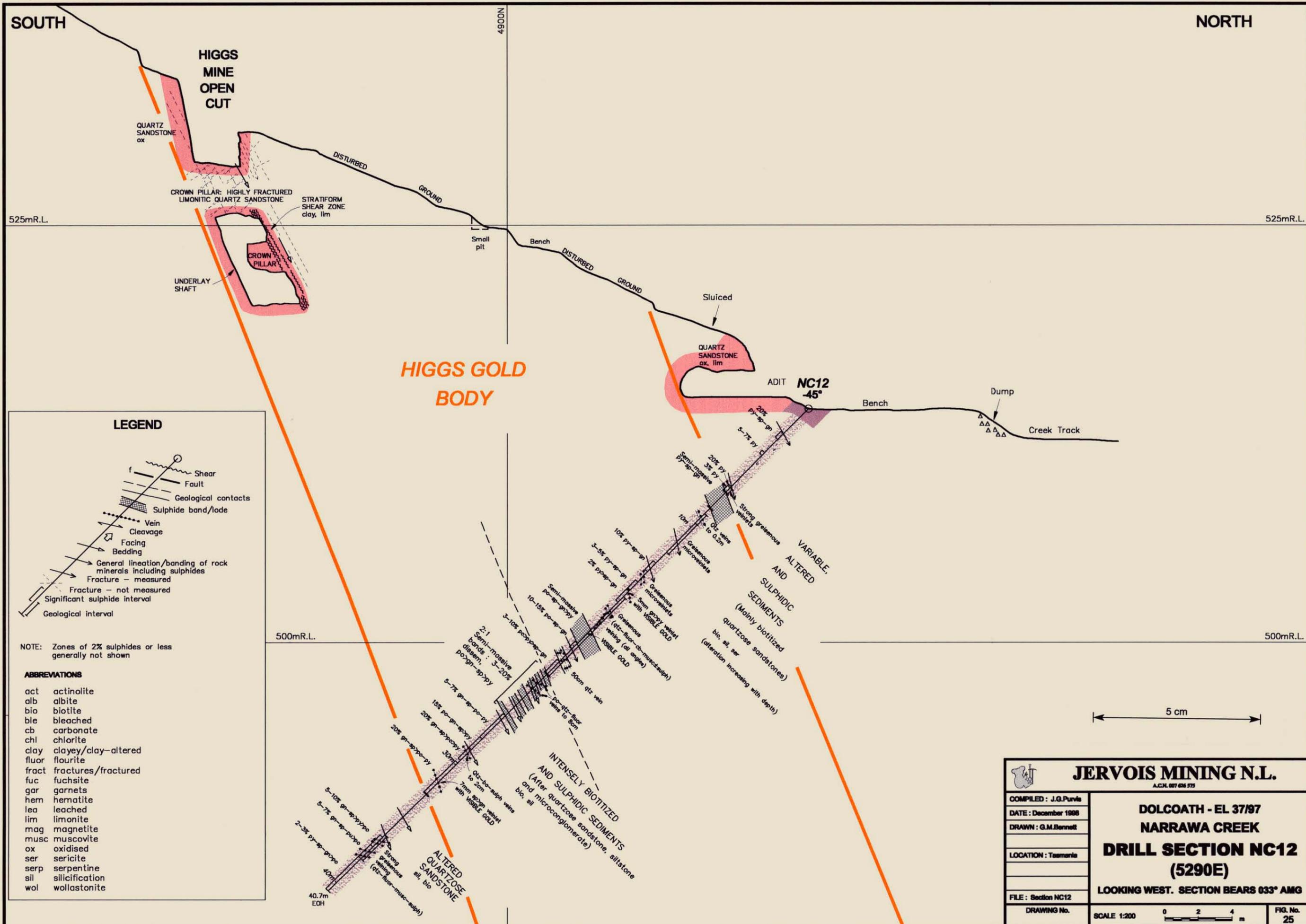
40m 0.02  
0.02  
0.21  
0.94  
40.7m  
EOL



KEY TO ASSAY VALUES

- In drillhole Au g/t, Ag g/t, Pb %, Zn %
- Other Au g/t
- 1.5m @ 4.11 GFEL channel sample at angle to section
- 0.12 GFEL channel sample parallel to section
- (0.058) Soil sample

 <b>JERVOIS MINING N.L.</b> <small>A.C.N. 007 626 575</small>	
COMPILED : J.G.Purvis DATE : December 1988 DRAWN : G.M.Barnett	<b>DOLCOATH - EL 37/87                  NARRAWA CREEK                  ASSAYS                  DRILL SECTION NC12                  (5920E)                  LOOKING WEST. SECTION BEARS 033° AMG</b>
LOCATION : Tasmania FILE : NC12 Assays	SCALE 1:200 
DRAWING No.	FIG. No. <b>24</b>



**JERVOIS MINING N.L.**  
A.C.N. 007 626 575

COMPILED : J.G.Purvis  
DATE : December 1988  
DRAWN : G.M.Bennett

LOCATION : Tasmania

FILE : Section NC12

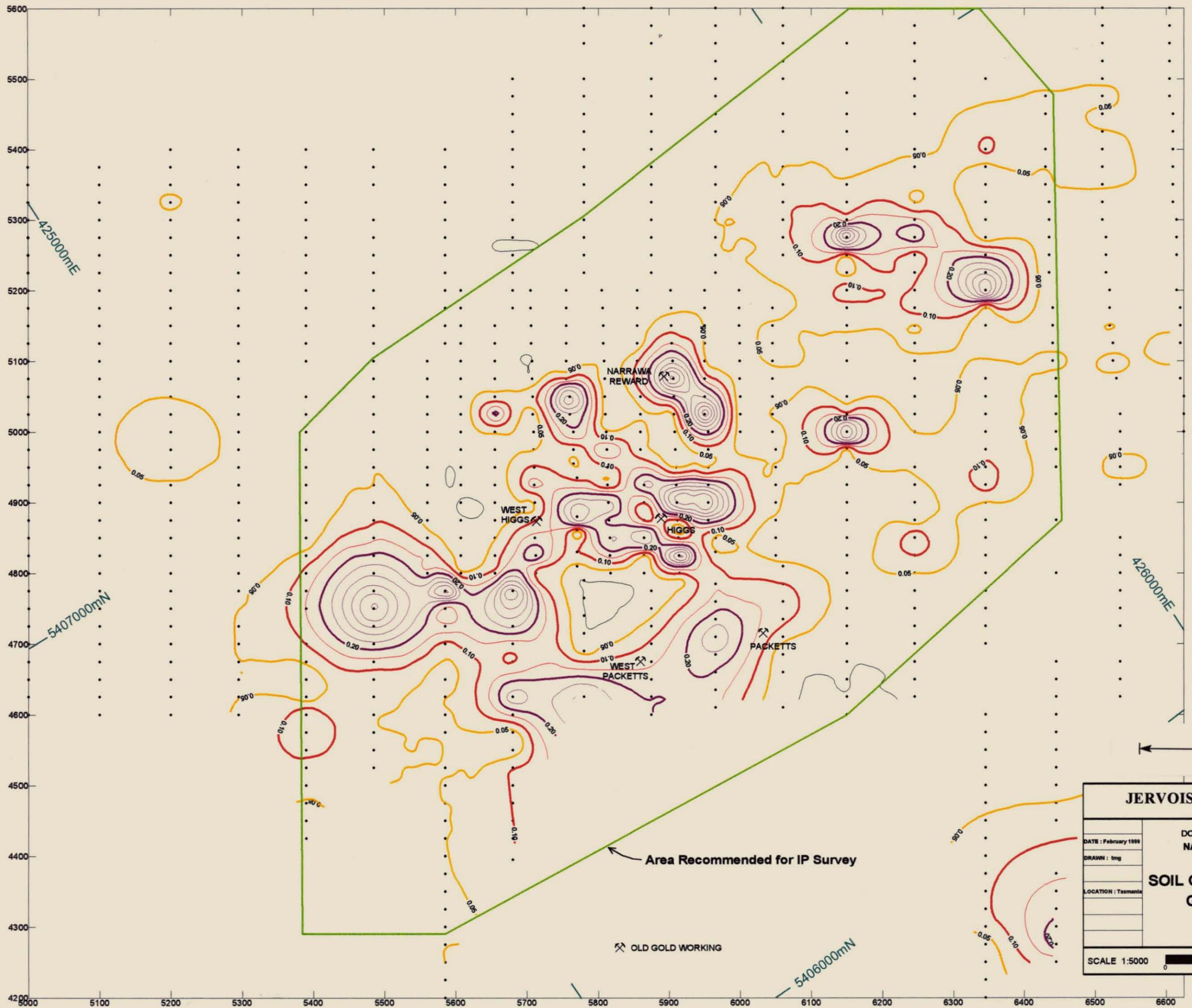
DRAWING No.

SCALE 1:200

0 2 4 m

FIG. No. 25

**DOLCOATH - EL 37/97**  
**NARRAWA CREEK**  
**DRILL SECTION NC12**  
**(5290E)**  
**LOOKING WEST. SECTION BEARS 033° AMG**

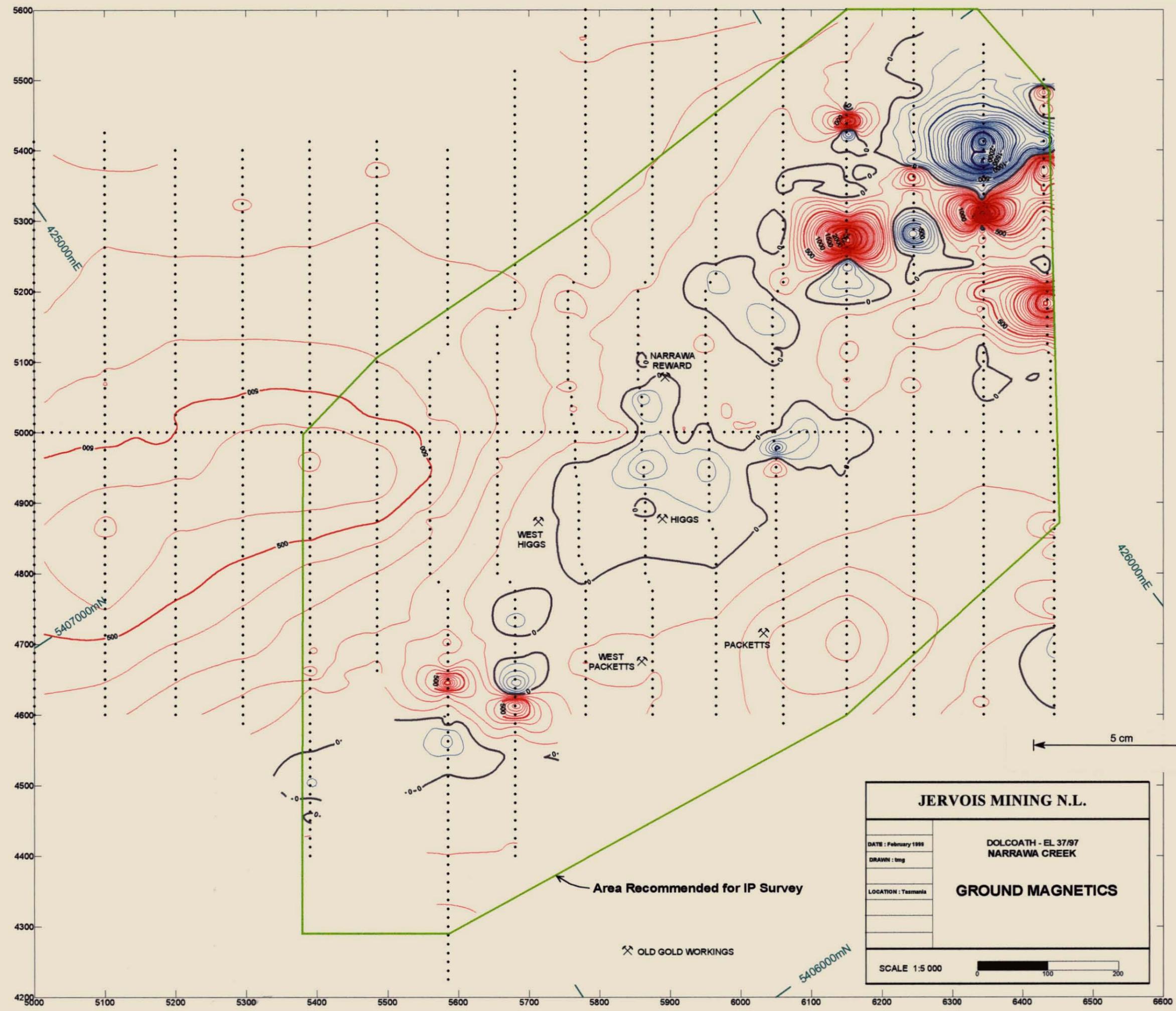


<b>JERVOIS MINING N.L.</b>	
DATE : February 1999	DOLCOATH - EL 37/97
DRAWN : tmg	NARRAWA CREEK
LOCATION : Tasmania	<b>SOIL GEOCHEMISTRY</b>
	<b>GOLD (ppm)</b>
SCALE 1:5000	

Area Recommended for IP Survey

OLD GOLD WORKING

Figure 26



<b>JERVOIS MINING N.L.</b>	
DATE : February 1988	<b>DOLCOATH - EL 37/97 NARRAWA CREEK</b>
DRAWN : tmg	
LOCATION : Tasmania	<b>GROUND MAGNETICS</b>
SCALE 1:5 000	

Figure 27