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**EL2/92  
Lisle**

**Annual Report July 2003 - August 2004.**

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July 24<sup>th</sup>, 2004**

## **SUMMARY AND COVER NOTE**

EL2/92 Lisle, currently held by TasGold Limited is due for expiry on the 27<sup>th</sup> July 2004. This report is the 2003-2004 Annual Report and also forms part of an application for a Term of Extension of the EL to enable work commitments to be fulfilled.

EL2/92 hosts many prospects that have a high probability of hosting significant economic gold resources. Both low grade bulk tonnage prospects such as Potoroo and parts of the Enterprise-Gold Crest system, and medium to high grade narrow vein prospects such as Enterprise and the West Vein are located within the EL. All of these prospects remain open and require resource definition drilling.

TasGold plan to continue aggressively exploring this district over the next year with the aim of assessing the significant resource potential of the Enterprise, Potoroo, Panama and Gold Crest prospects, as well as completing first pass exploration drilling of additional Au-As B-horizon soil anomalies. Exploration will be completed mostly with a man portable diamond drill rig. Drilling at Potoroo is currently underway with a significant drilling program at Panama to follow. A further one year extension to the exploration licence is required to complete the exploration programs underway. The drilling to-date by TasGold (and associated company Macmin) on their Lisle Project entails 57 drill holes totalling 3470m, providing ample evidence of the companies commitment to the exploration on the EL.

Further drilling is required to test the entire system with many prospects remaining open and requiring resource definition drilling. In addition, there are extensive areas of previously defined Au-As soil anomalies and old workings containing high-grade veins (Gold Crest, Panama) surrounding these prospects that are as yet untested. These require first pass exploration drilling planned to be completed in the upcoming year.

Reporting for exploration conducted over the previous tenure year was undertaken whilst an exploration program was underway. This report details the remainder of that program and new work currently underway. Recent exploration has identified significant arsenopyrite-quartz-veining host within pyrrhotite mineralised granodiorite at Potoroo. Mineralisation at Potoroo remains open, particularly to the north and west. The current drilling is designed to test the near surface potential of the western margins of the prospect. This program commenced in early June with two of the planned four drill holes completed to date. A recently completed ground magnetic program has delineated a significant magnetic anomaly to the NW of drilled portion of the Potoroo Prospect. This anomaly lies adjacent to the projected NW strike of as yet un-assayed arsenopyrite-quartz veins identified in the current drilling. Interim program results are provided.

Both Potoroo and Enterprise have good potential to host economic resources capable of supporting a centralised mill. Both bulk tonnage low grade mineralisation (Potoroo) and low tonnage high grade mineralisation

(Enterprise) has been identified to date. An example of significant gold mineralisation that has been identified in many drill holes is the best of result of 4m @ 12.8 g/t Au (E009 6 to 10m) from the Enterprise Prospect. The Main Enterprise reef has been tested over a 400m strike length and an Inferred Resource calculation is planned. Under explored parallel structures such as the West Vein and E014 intersection need to be assessed with further infill drilling. All prospects within the EL are near surface and probably amenable to open cut mining techniques with processing at a centralised mill.

TasGold are committed to a significant exploration project at the Panama Prospect, following Potoroo drilling (see Callaghan, 2003). Two drill holes at the untested Goldcrest workings are also planned and further diamond drilling to extend the currently drilled prospects is likely.

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## **INTRODUCTION**

EL2/92 Lisle, currently held by TasGold Limited is due for expiry on the 27<sup>th</sup> July 2004. This report is the 2003-2004 Annual Report and also forms part of an application for a Term of Extension of the EL to enable work commitments to be fulfilled. TasGold (formerly TasEx Resources) were granted a Term of Extension to EL2/92 in July 2002 to allow work to be completed following capital raising through listing on the ASX. The capital was successfully raised through the floating of TasGold in April 2003 and a share rights issue is planned for the immediate future to obtain further exploration funding. The combination of delays in capital raising, other summer season only exploration commitments, rig availability (prior to acquisition of the company drill rig) and environmental constraints have hindered exploration progress to-date, resulting in TasGold need for a further extension to complete the planned work programs on the significant resources identified.

Current exploration and that conducted on the EL during this past year of tenure has been focused on drilling aimed at defining the resource potential of the main prospects. This work is detailed here along with outstanding assay results from the past tenure year. However current drilling in progress at Potoroo is not fully reported and only the exploration programs of immediate priority are detailed. Readers are referred to Callaghan (2003) for detailed background on the EL's exploration history, geology, exploration potential, Land Usage and Access, TasGold's exploration philosophy and further potential work programs.

### **1.1 Location**

E.L. 2/92 "Lisle" lies in the north-east of Tasmania, about 30km from Launceston (see Figure 1).

### **1.2 Tenure**

E.L. 2/92 "Lisle" was issued to R.D. & R.J. McNeil on 24 July 1992. On 16/10/92 the title was transferred to MACMIN N.L and in 2001 to Tasmine Pty Ltd that later changed it's name to TasEx Resources Ltd. The title has since transferred to TasGold Ltd, a new company listing on the ASX in April 2003.

E.L. 2/92 was roughly bounded by A.M.G. lines 5443000m N and 5431000m N to the north and south respectively and A.M.G. lines 523000m E and 529000m E to the west and east respectively.

Thirty-six sub-blocks were relinquished in March 1998 and thirty-six sub-blocks were retained. Twenty four additional sub-blocks were relinquished in April 2002, retaining only the northern 1/3 of the license.

There are a number of exclusions, these being M.L.s held by prospectors chasing alluvial gold.

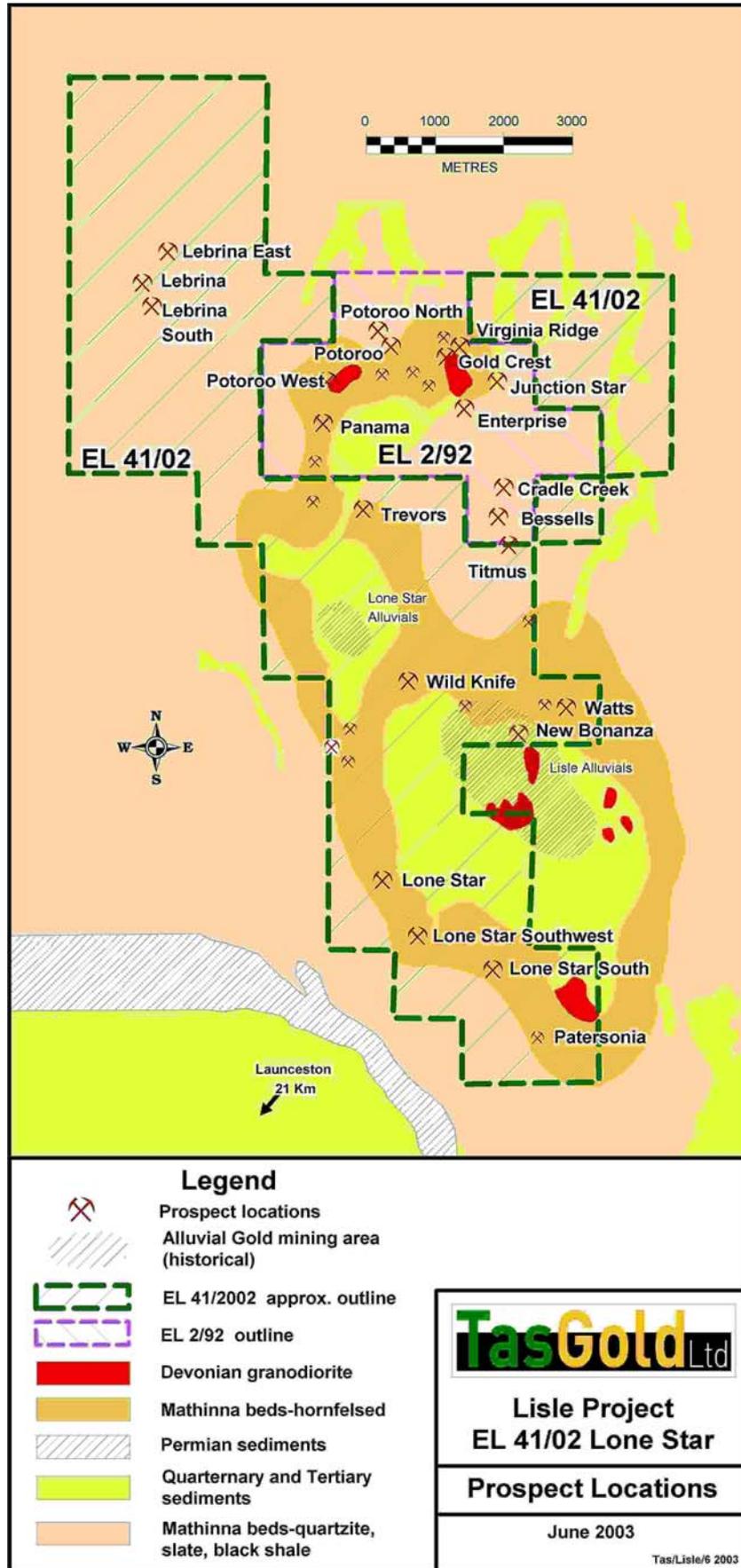


Figure 1. EL 2/92 prospect locations.

## 2 Ore Deposit Models

The majority of NE Tasmania gold deposits are typical slate belt style, mesothermal gold deposits similar to the Victorian goldfields. The best known and single largest reef (including Victoria) is the Tasmania Reef at Beaconsfield which contains >2.91 Mt @ 19.8 g/t Au. The Tasmania Reef consists of a quartz + carbonate + sulphide filled fracture that is transgressive to the host sediments and is fault controlled. The reef varies in width from less than 1 m to approximately 5 m and has a strike length of 350 to 400 m. The reef remains open at depth.

Unlike most of the NE Tasmanian gold deposits, the Lisle-Golconda reef deposits appear to be related to the reduced granodiorites of the Scottsdale batholith. There is an obvious spatial relationship between late stage intrusives and gold mineralisation. Gold is hosted in quartz-sulphide veins and disseminations within intrusives and structurally controlled veins within the contact aureole. Sulphides includes arsenopyrite and pyrite with lesser chalcopyrite, bismuthinite, stibnite and molybdenite. Geochemically, the mineralisation has a Au, Ag, Bi and Mo association.

Intrusion – related gold deposits (associated with tungsten – tin deposits) are an under recognised and economically important class of gold deposits. These deposits include sheeted veins, quartz stock-works and bulk mine-able disseminated gold deposits spatially and geochemically associated with reduced intrusives.

Examples of these styles of deposits are known in Alaska, the Czech Republic, Spain, Kazakhstan, Bolivia and Australia. The Kidston (Queensland) and Timbarra (New South Wales) deposits are Australian examples.

World class Alaskan deposits of this style include Pogo and Fort Knox. Pogo is reported to host more than 9.0 million(M) tonnes(t) at 17.8 g/t Au for more than 5.0 million(M) ounces(oz) contained gold. Mineralisation occurs in three or more tabular, gently dipping quartz bodies associated with early biotite and later quartz – sericite stockwork and sericite – dolomite alteration. The quartz bodies occur 1.5 km south of a Cretaceous batholith and are hosted primarily in gneiss.

Fort Knox occurs as a structurally controlled stockwork and shear quartz veins in a granodiorite pluton. It is reported to host 158.3 Mt at 0.83 g/t Au for more than 4.0 million oz contained gold.

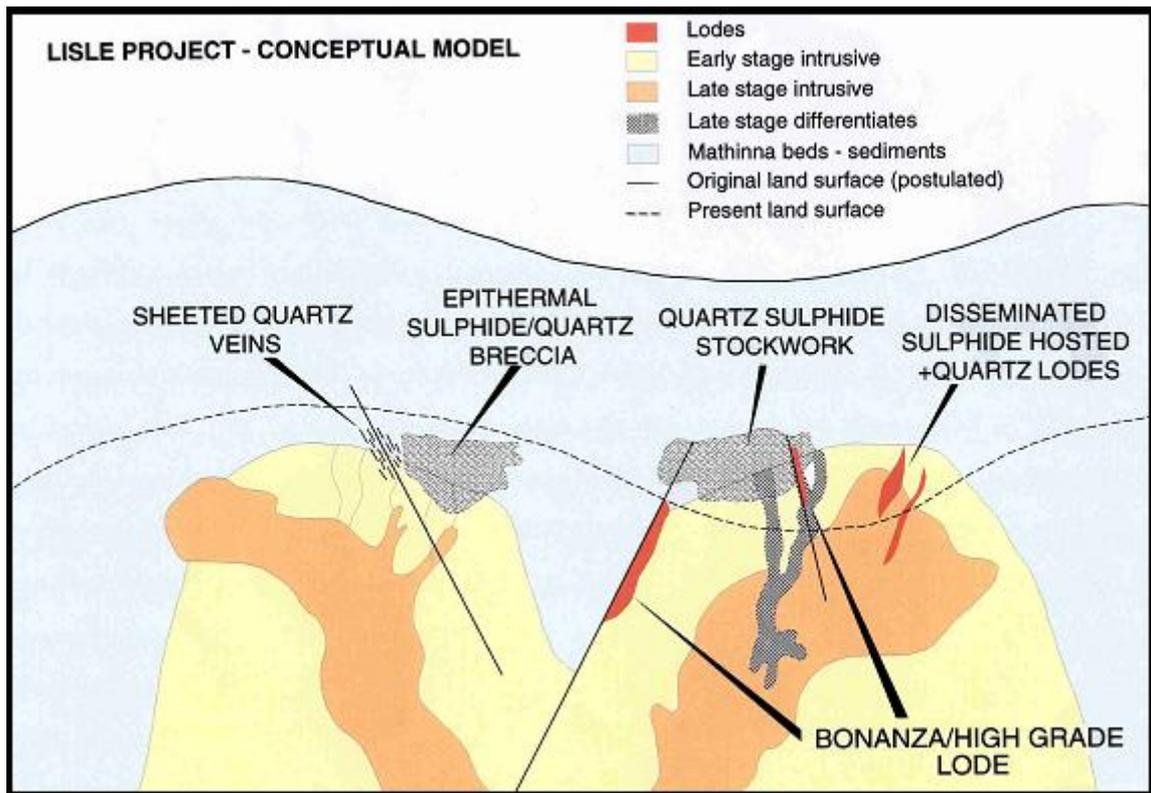


Figure 2. Lisle Project Conceptual Models.

## 2.1 Exploration Targeting

Obvious features within the MRT Open File aeromagnetic data are variable magnetic high's associated with granodiorite intrusions, contrasting with the even low magnetic susceptibility of the host Mathinna Beds. Testing of prominent magnetic highs interpreted to be associated with potentially mineralised pyrrhotitic granodiorite intrusions within EL2/92 has been targeted with assistance from structural analysis of the data, completed by Bruce Craven (see Callaghan, 2003).

Detailed follow up in areas of granodiorite via ground magnetics and possibly IP is planned to improve drill targeting. Noting that the resolution of the MRT data is suitable only for regional scale interpretation.

The Enterprise/Gold Crest Prospects are associated with a magnetic low within the generally magnetic granodiorite body. This has possibly resulted from magnetite destruction due to hydrothermal activity.

Prominent NW lineaments are obvious within the granodiorite. These are on the same orientation as major regional faults in the NE Tasmanian terrain. It is likely that the granodiorite intruded along dilatant zones associated with these major faults, possibly related to transfer structures. The strongest of these lineaments is also associated with the Enterprise-Gold Crest and

Potoroo Prospects. Post intrusion reactivation of these faults during late stage devolatilisation has focussed hydrothermal alteration within the EL.

Detailed description of the EL's various significant prospects is given in Callaghan (2003).

### **3 WORK COMPLETED JULY 2003-JULY 2004**

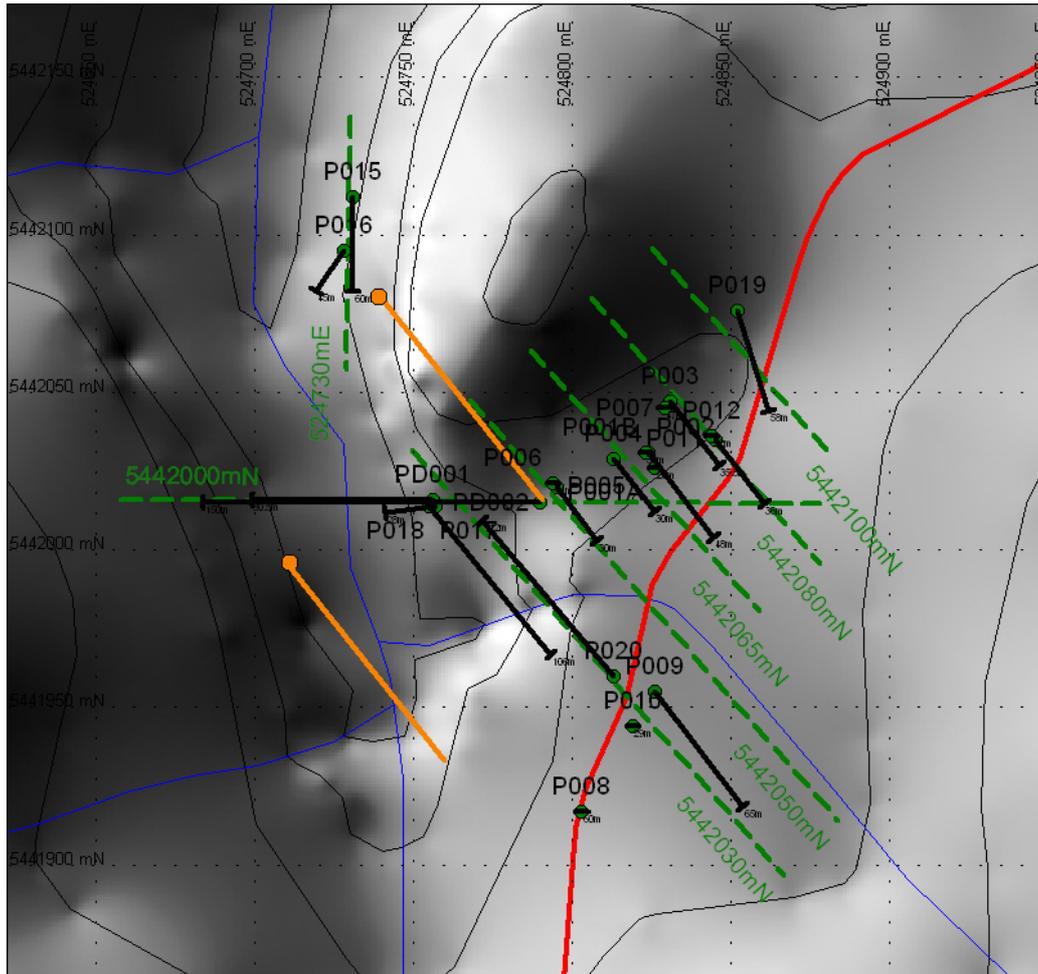
#### **3.1 Potoroo Drilling**

The Potoroo Prospect is located at the eastern end of the Panama Valley. The prospect contains small granodiorite intrusions into hornfelsed Mathinna Beds. The granodiorite has been deeply weathered and forms topographic lows largely obscured by Quaternary Talus.

Mineralisation consists of sheeted gold-bearing quartz-pyrite-arsenopyrite veins and disseminated sulphides in extensively silica-sericite-pyrrhotite-pyrite altered granodiorite. The Mathinna Beds are apparently less mineralised than the granodiorite. Several trenches, 16 RC and 2 diamond drill holes have been completed at the prospect. RC drilling of the prospect has defined significant low grade intersections within a limited area (Table 2). The mineralised zone remains open to the north, south and west. Results suggest the prospect has good potential to host a bulk tonnage low-grade deposit (Fort Knox Style).

Six RC holes were completed on the Potoroo Prospect during the previous EL tenure year (Callaghan, 2003). Outstanding assay results from this drilling are appended, along with details of all drilling undertaken on Potoroo (and the Lisle Project) to date (Appendix 2; Access Database). Drill hole locations are presented in Figure 3 and a series of drill sections are presented in Appendix 1.

The current diamond drilling program to test the western extension of Potoroo has evolved with developing understanding of vein orientations. This 4 diamond hole program for a total of 500m commenced in June 2004. Two drill holes, PD001 & 2 totalling 230m have been completed to date. Drill hole PD001, intersected a pyrite veined fault near surface, as well as pyrite-pyrrhotite bearing sericite-altered granodiorite. Whereas, pyrrhotitic biotite-granodiorite dominates hole PD002 and two as yet un-assayed intervals of arsenopyrite-pyrite-quartz veining have been intersected.



**Figure 3: Potoroo Drill Collars (Remaining current program holes in orange, drill section lines in green)**

Mathinna Beds within PD001 mostly comprise grey hornfels mg to fg/mg greywacke. The weathered zone contained disseminated pink hm flecks, possibly after pyrite. Thin bedding is locally evident, with variable BCA's. Fuzzy grey hornfels / pervasive silicification is evident at sharp contacts with some granodiorite units, whereas spotty hornfels is evident at more diffuse contacts.

Granitoids are evident in several varieties, varying from typical granodiorite to aplitic to migmatitic; indicative of active fractionation and multi-phase intrusion. Typically, the granodiorite is mg with near complete sericitisation of ferromagnesian minerals. Disseminated pyrite and pyrrhotite (to 5% combined) is widespread and hornfels xenoliths are sparse. Sericite alteration is weaker and doesn't alter a zone of primary biotite within a more mafic mg granodiorite at 32m. A mg/cg weakly porphyritic intrusion from 22 to 25m with zoned feldspar phenocrysts apparently contains less pyrrhotite (mag(w)), but to 5+% sulphides (Py>>Po, Aspy?, Mo?). A 5cm aplite intrusion / vein, bearing only trace relict ferromags and no sulphide is evident at 24.8m. This intrusion similarly displays weak zoning of feldspars, a feature not evident the bulk of the granodiorite.

Granitoid contacts in the upper portion of the PD001 are typically sharp, but locally somewhat wavy with intrusive migmatitic type form. Further down hole more pervasive migmatitic textures with comparatively less sulphide are evident, with zones of “spotty” hornfels appearing rock blending with recognisable granitoid. The more pervasive migmatitic granitoids are possibly formed early in a relatively high pressure - ductile environment with the sharper edged more mineralised (/fractionated) dykes intruding along faults during more brittle late stage pressure release. Supporting is the observed spatial correspondence of weakly porphyritic mineralised dykes and faulting, with some of the granitoids displaying obviously well zoned feldspar “phenocrysts”, indicative of relatively rapid ascent (during faulting) after long residence within the parent batholith.

Within PD002, pyrrhotitic biotite granodiorite is widespread with only an isolated interval or xenolith of hornfels Mathinna Beds included. Disseminated pyrrhotite typically varies from 2 to 7%. Hornblende is apparently sparse to absent.

Pyrite occurs disseminated to 5% and as sparse veinlets within the granodiorite. Whereas within the greywacke, veinlets (<2%) on joints and fractures are the dominant form with only trace disseminations (<0.5%). The pyritic veinlets are rarely vuggy, displaying euhedral/drusy quartz linings in hornfels. Pyrrhotite apparently only occurs in disseminated form in the granitoids. It appears that disseminated sulphide within the intrusions is primary magmatic, whereas in the sediments it's secondary. Regionally, it's notable that fresh granitoid eluvium samples from Lone Star South are hematite rich; granite fractionation from relatively sulphur-rich (pyritic), through sulphur-poor (pyrrhotitic), crossing the redox boundary to sulphur depleted and O<sub>2</sub>-rich (hematitic) is suggested.

Quartz only veins are sparse in both of the main lithologies, whereas carbonate veinlets on fractures/joints are a little more common, but similarly sparse (<1% locally).

The upper portion of PD001 (8.9 to 22.1m) is commonly broken and jointed. The most sulphidic granodiorite is located within this zone. Broken core in the upper part of the hole probably lies within a faulted zone, since despite this interval being weathered, similar broken greywacke core near 17.7m displays Fe oxidised (after Py) joint planes / veinlets and one sub parallel to core (5°), 8mm wide hornfels fragment-bearing fault gouge zone. A rapid change in BCA's near 17.7m also reveals the fault and it maybe anticline focused since a 5° BCA is evident proximal to this zone. Further, considering that a fault gouge zone is orientated sub parallel to core and that PD001 has -45° W dip, then the fault may be of similar orientation to the 221/60NW faulting mapped in the nearby trench.

Hole_ID	Easting (m AMG)	Northing (m AMG)	RL (m)	Azimuth (TN)	Dip	Depth	From	To	Significant Interval
P001A	524826	5442026	130	0	-90	25	11	12	1m @0.77g/t Au, 2g/t Ag, 0.04% As, 0.0048% Bi
P001B	524824	5442031	128	143	-45	48	18	19	1m @0.656g/t Au, 3g/t Ag, 0.03% As, 0.0051% Bi
							32	34	2m @0.657g/t Au, 2g/t Ag, 0.05% As, 0.0046% Bi
							11	12	1m @4.75g/t Au, 3g/t Ag, 0.4% As, 0.003% Bi
P003	524831	5442047	129	143	-45	35.5	14	16	2m @0.521g/t Au, 1g/t Ag, 0.06% As, 0.0056% Bi
							4	6	2m @0.527g/t Au, 1g/t Ag, 0.18% As, 0.0046% Bi
							31	32	1m @0.729g/t Au, 5g/t Ag, 0.83% As, 0.0038% Bi
							30	31	1m @2.495g/t Au, 3g/t Ag, 0.4% As, 0.0094% Bi
P004	524813	5442029	128	143	-45	30	13	14	1m @3.869g/t Au, 4g/t Ag, 0.15% As, 0.0069% Bi
							12	13	1m @4.635g/t Au, 9g/t Ag, 0.48% As, 0.0076% Bi
P005	524795	5442020	126	143	-45	30	20	21	1m @0.629g/t Au, 2g/t Ag, 0.1% As, 0.0038% Bi
							19	20	1m @1.147g/t Au, 4g/t Ag, 0.23% As, 0.0045% Bi
							6	7	1m @2.96g/t Au, 3g/t Ag, 0.18% As, 0.0035% Bi
							5	6	1m @6.06g/t Au, 29g/t Ag, 1.2% As, 0.0063% Bi
P006	524794	5442021	126	0	-90	31	12	13	1m @1.673g/t Au, 7g/t Ag, 0.8% As, 0.0022% Bi
P007	524829	5442045	129	0	-90	47	18	19	1m @1.66g/t Au, 5g/t Ag, 1.19% As, 0.0038% Bi
							12	13	1m @6.442g/t Au, 24g/t Ag, 0.68% As, 0.0074% Bi
P010	524819	5441944	134	0	-90	29	23	24	1m @0.529g/t Au, 2g/t Ag, 0.2% As, 0.0065% Bi
							21	22	1m @1.5g/t Au, 3g/t Ag, 0.14% As, 0.0102% Bi
P011	524845	5442035	131	143	-45	36	24	25	1m @0.662g/t Au, 3g/t Ag, 0.06% As, 0.0101% Bi
							27	28	1m @1.68g/t Au, 5g/t Ag, 0.32% As, 0.0035% Bi
P012	524844	5442036	130	0	-90	32	1	2	1m @0.586g/t Au, -1g/t Ag, 0.35% As, 0.0035% Bi
P015	524731	5442112	126	180	-60	60	43	44	1m @0.7 g/t Au
P016	524728	5442095	126	214	-70	45	19	20	1m @0.4 g/t Au
P017	524755	5442014	124	141	-55	106	81	88	7m @0.3 g/t Au
							93	100	7m @0.3 g/t Au
							5	49	44m @0.4 g/t Au
							19	20	1m @1.8 g/t Au
							42	43	1m @2.5 g/t Au
P018	524757	5442014	124	262	-55	28	2	28	26m @0.6 g/t Au
P019	524852	5442076	132	163	-55	58	16	19	3m @0.2 g/t Au
							32	37	5m @0.2 g/t Au
P020	524813	5441960	133	320	-55	112	58	61	3m @0.2 g/t Au
							20	54	34m @0.3 g/t Au
							70	71	1m @0.4 g/t Au
							72	73	1m @0.5 g/t Au
							66	67	1m @0.8 g/t Au

**Table 1: Potoroo RC Drill Collars and Significant Intersections**

### 3.2 Digital Data Capture

Capture of digital data for TasGold's Lisle exploration is in progress. This compilation will include geochemical sampling, geology, geophysics, trenching and drilling. All Lisle Project drilling to date is provided in the appended access database. The table structure presented is appropriate for use with the Mapinfo add on Discover.

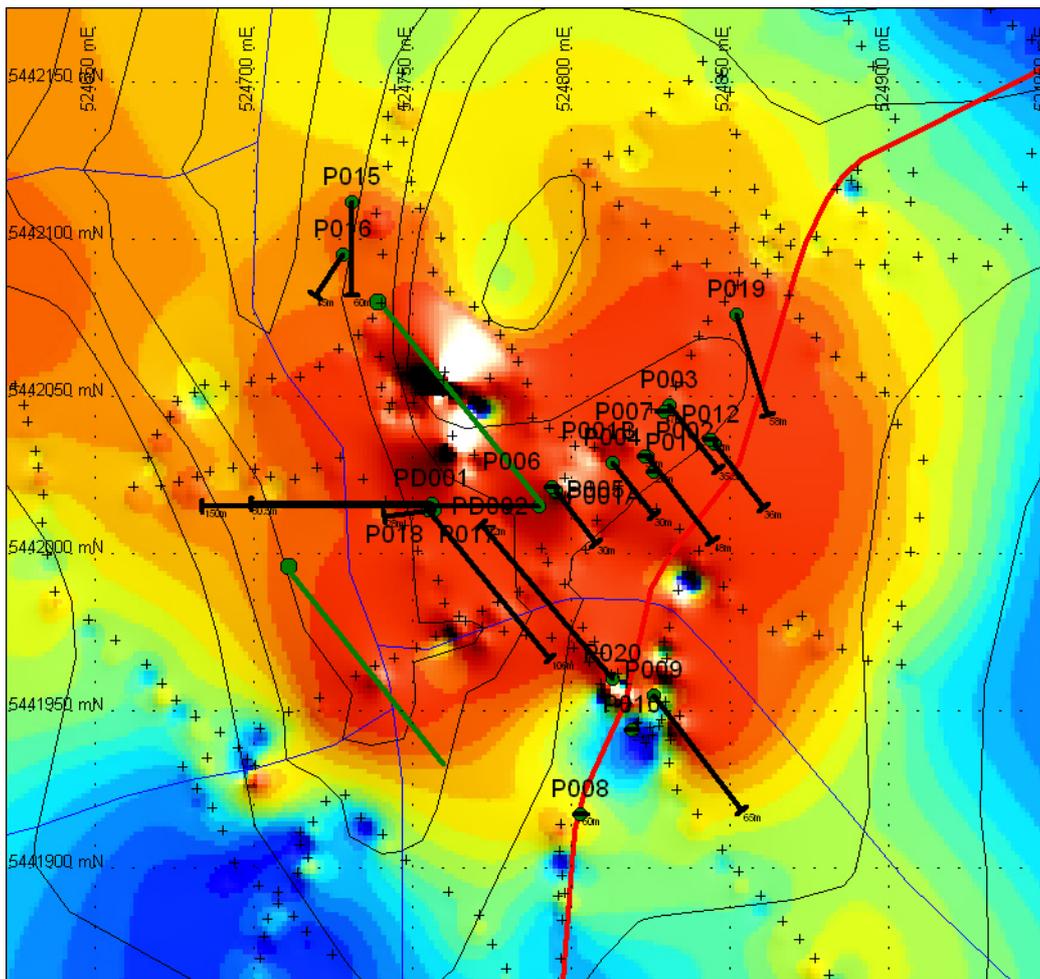
### 3.3 Ground Magnetics

Two G856 magnetometers were hired from MRT to conduct the survey over the Potoroo area. Survey points were GPS located, along informally 135degree orientated lines at 50 to 75m spacing, crossing and extending beyond the Prospect's known mineralisation trace. Linking cross lines at 45

degrees and opportunistic open areas such as roads and trench lines were also read at approximately 10m sample spacing. A base mag was utilised for diurnal correction with data included in the appended access database.

The survey is planned to extend SW linking with the Panama Prospect. This work may be undertaken by a CODES geophysics honours student.

The survey readily highlighted the distribution of magnetic pyrrhotite bearing granodiorite at Potoroo (Figure 2), providing a considerable improvement to the existing aerial survey data, which is too widely spaced for prospect scale interpretation.



**Figure 4: Potoroo Ground Magnetics Survey (crosses are survey reading sites.)**

#### **4 PROPOSED WORK**

EL 2/92 hosts many prospects that have a high probability of hosting significant economic gold resources. Both low grade bulk tonnage prospects such as Potoroo and parts of the Enterprise-Gold Crest system, and medium to high grade narrow vein prospects such as Enterprise and the West Vein are located within the EL. All of these prospects remain open and require resource definition drilling.

TasGold plan to continue actively exploring EL2/92 with the aim of assessing the resource potential of the Enterprise, Potoroo, Panama and Gold Crest prospects. Proposed exploration on Panama, to follow Potoroo drilling, is detailed along with other programs designed to assess the potential of the EL's prospects in Callaghan (2003). Such work will be assessed and, subject to evolving exploration strategy, undertaken in due course.

Follow up of previously defined B-horizon Au-As anomalies and numerous other untested prospective zones identified by the Bruce Craven magnetics interpretation of MRT-Netgold aeromagnetic data (see Callaghan, 2003) is planned. First pass exploration drilling of any prospects identified may be undertaken where warranted. Exploration will be completed mostly with a man portable diamond drill rig.

TasGold are currently supporting an Honours student Nick Fitzpatrick from CODES to characterise the geology and mineralisation and develop the genetic model for the Golconda – Panama area. An geophysics honours student may also commence soon, conducting detailed ground magnetics and IP focused upon this area.

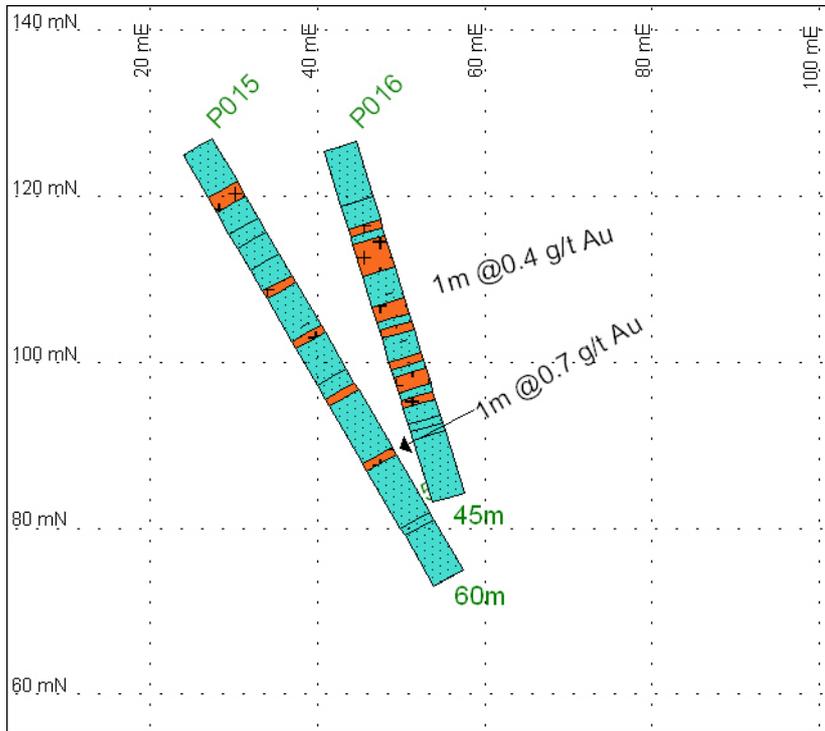
## REFERENCES

Bottrill, R. S. 1994. The Lisle-Golconda-Denison Goldfields (including some adjacent mining areas). *Unpublished Mineral Resources Tasmania Report, 1994/01.*

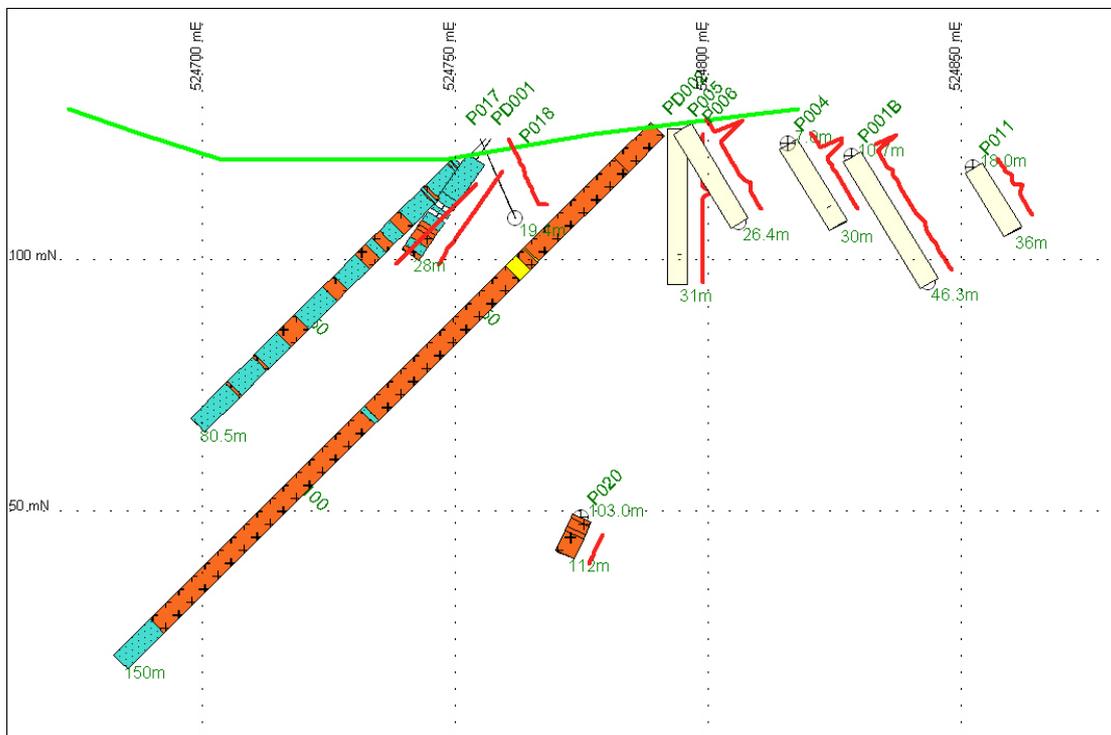
Callaghan, T., 2003. Annual Report on Exploration, EL 2/1992. TasGold Ltd. *Unpublished Mineral Resources Tasmania Report*

# Appendix 1

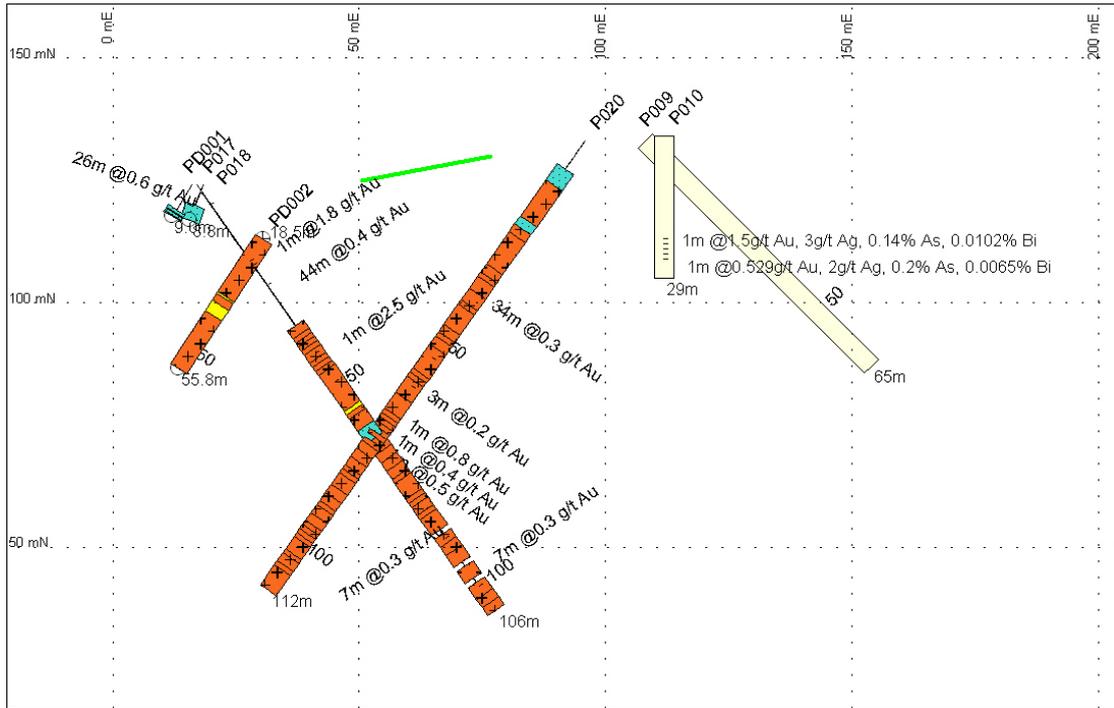
## Potoroo Drill Sections



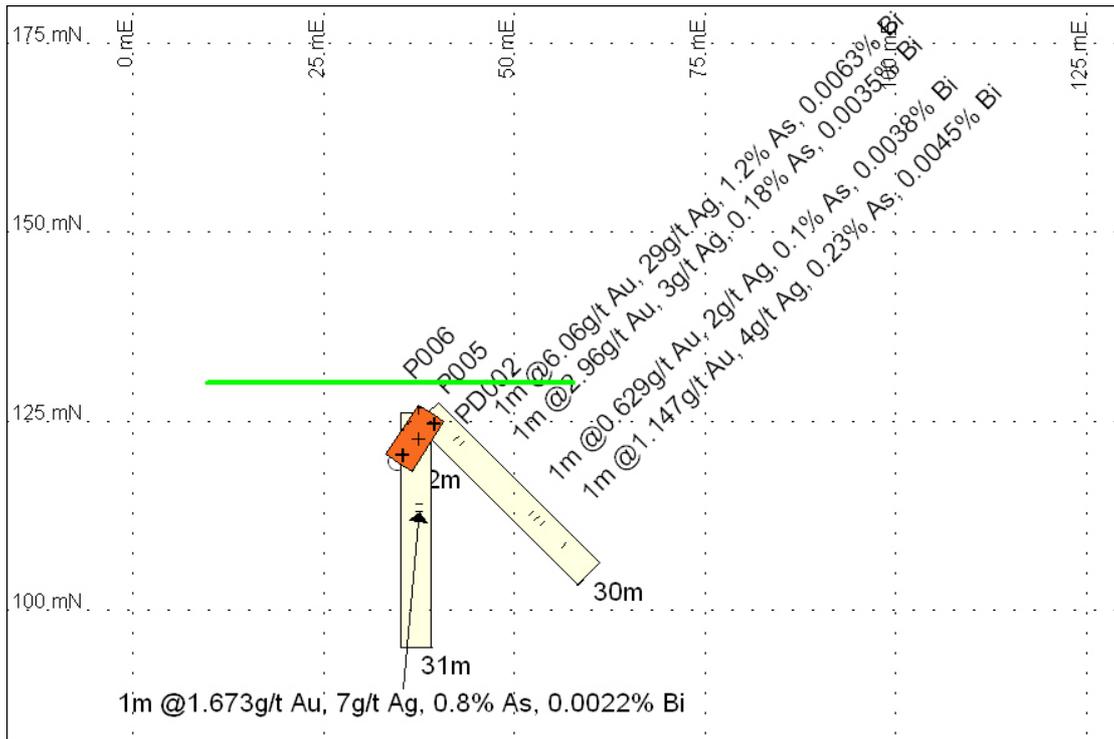
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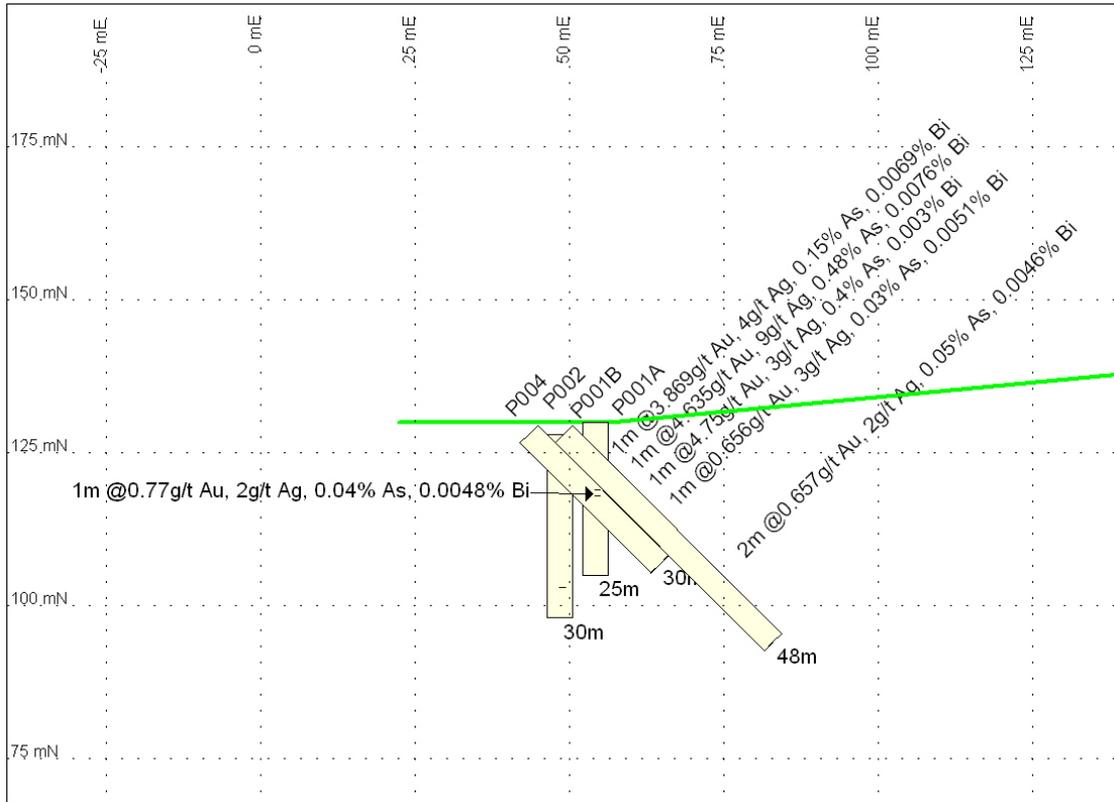
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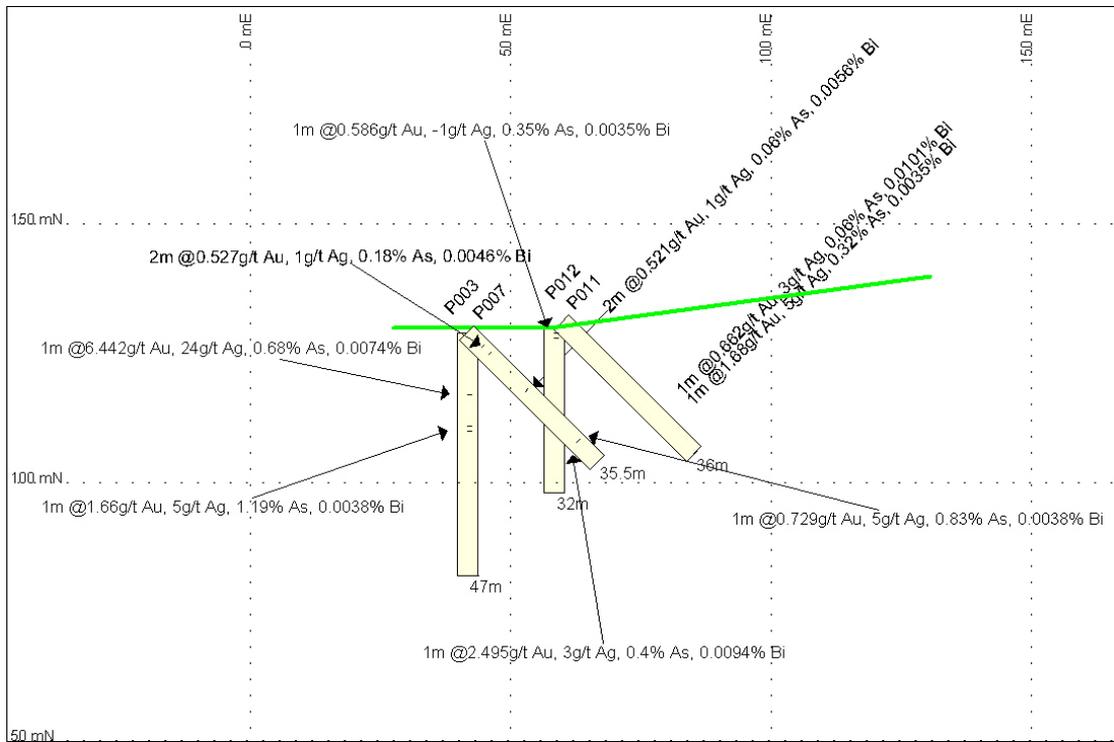
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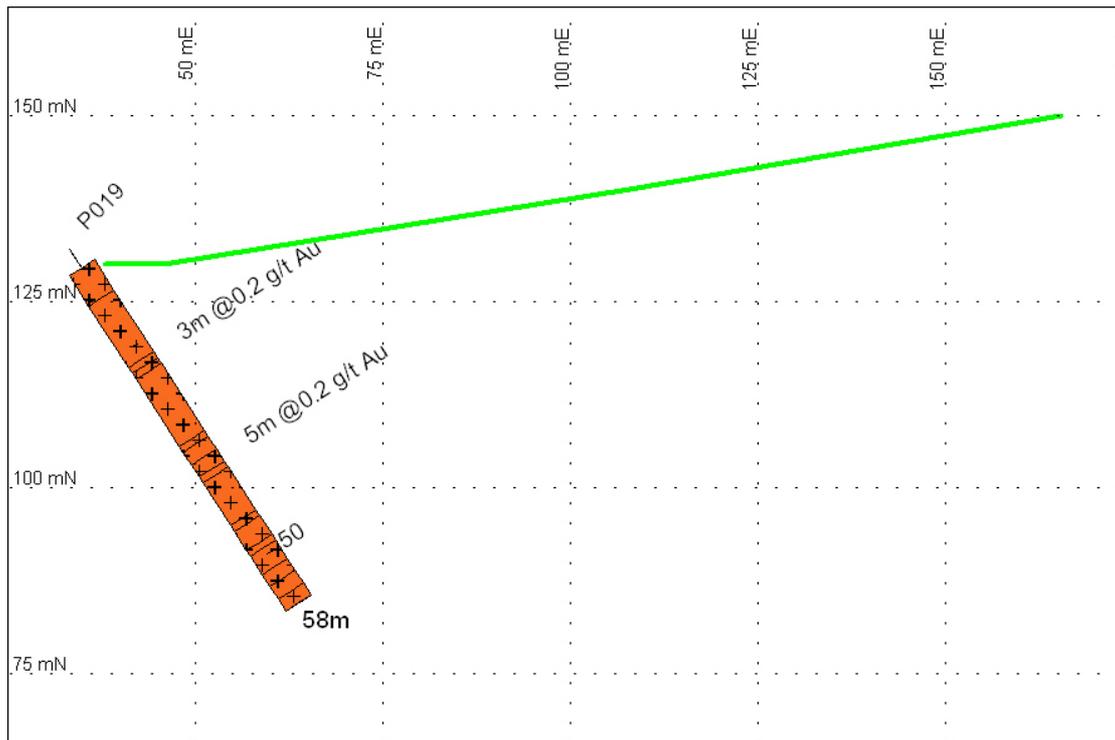
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Section 5402080N



Section 5402100N

## **Appendix 2**

Access database