

SOUTHERN RIO RESOURCES LTD.

SUMMARY REPORT

**THE SPRING, 2003 DIAMOND DRILLING PROGRAM
ON THE TAM PROPERTY, OMENICA MINING DIVISION,
CENTRAL B.C.**

NTS MAP SHEETS 93F/3E, 2W

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June 03, 2003

**GEOLOGICAL SURVEY BRANCH
SUMMARY REPORT**

27,177

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1. SUMMARY

During the period March 12 through April 07, 2003, Southern Rio Resources Ltd. completed a fourteen hole, 1,541.8 metre diamond drilling program on the Tam Property, located approximately 125 kilometres southwest of Vanderhoof, within the Omenica Mining Division of central British Columbia.

The Tam Property, comprised of two claims totaling 14 units and covering 350 hectares, is 100% owned by Southern Rio Resources Ltd. The property was acquired by staking in October, 2001. All claims comprising the property are currently in good standing until October 06, 2012.

The Tam Property has a relatively short exploration history. There is no record of exploration activity in the area prior to the discovery of auriferous quartz veins in 1993 by the B.C. Geological Survey (Diakow and Webster, 1994) on what is now the adjacent Tsacha Property. The discovery, which was announced at the Cordilleran Round-Up in Vancouver, in January, 1994, reported values up to 3.7 gpt Au and 41.8 gpt Ag from outcropping quartz veins. The showing was staked by Teck Corporation in 1994, as the Tsacha Property. At that time, Cogema Limited staked the Tam Property, and Phelps Dodge staked the Taken Property, both situated immediately east of the Tsacha Property.

Phelps Dodge subsequently optioned the Tam Property from Cogema in 1995, and during the period 1995-1996, completed programs of prospecting, mapping, trenching, and soil sampling. That work identified two showings, known as the Mint and Ted Veins, both of which were complex quartz-carbonate vein and vein stockworks hosted within a thick sequence of Jurassic aged porphyritic rhyolite tuffs. In 1996, Phelps Dodge drilled 9 holes totaling 1263.1 metres on the Tam Property (Fox, 1996). Two of the holes targeted the Mint Vein, from which the best reported results were 1.42 gpt Au and 34.6 gpt Ag over 7.0 metres, in hole 252-02. The remaining seven holes targeted the Ted Vein, from which the best reported results were 8.90 gpt Au and 394.0 gpt Ag over 22.0 metres in hole 252-09. Phelps Dodge did no further work on the property, and the option was allowed to lapse.

During 2002, Southern Rio Resources completed a program of limited line-cutting, resistivity surveying, and a four hole, 360.9 metre diamond drilling program on the property. The four holes completed by Southern Rio all targeted the Ted Vein, over a strike length of 110 metres. Three of the four holes encountered significant intercepts of silver-gold mineralization within a well developed epithermal quartz-carbonate vein, including, in Hole TT-02-10, a down-hole intersection of 1.29 gpt Au and 237.2 gpt Ag over 26.9 metres. The fourth hole was lost in overburden.

The recently completed fourteen hole program was designed to continue testing the Ted Vein, both along strike and internal to previously defined limits of the vein (Holes TT-03-14 through 21), as well as evaluate a second area of the property known as the "Mint Vein" (Holes TT-03-22 through 27), located 500 metres to the north.

Holes TT-03-14 and 15 were drilled from the same set-up, mid-point between previous intersections by Phelps Dodge in holes 252-06 and 07, and Southern Rio's Hole TT-02-10. Hole TT-03-14 intersected a sub-vertical microdiorite dyke followed by the flat lying microdiorite sill, proximal to the projected position of the Ted Vein. Hole TT-03-15 successfully intersected the Ted Vein between 71.1 and 97.8 metres, including, internal to that intersection, a 7.0 metre microdiorite dyke. Above the dyke, the uppermost Ted Vein intercept was only weakly anomalous, carrying 0.35 gpt Au and 33.6 gpt Ag over 6.80 metres. Below the dyke, the Ted Vein carried 1.08 gpt Au and 198.6 gpt Ag over 10.0 metres.

Hole TT-03-16 was collared 21.5 metres behind Hole TT-02-11, and designed to further test the Ted Vein down-dip from the TT-02-11 intersection returned (1.66 gpt Au and 476.2 gpt Ag over 7.09 metres). The hole intersected the Ted Vein approximately 50 metres below the intercept in Hole TT-02-11, and returned 3.78 gpt Au and 137.5 gpt Ag over 28.0 metres. Within that broad interval, several narrower high grade gold intercepts were returned, including 12.77 gpt Au and 99.6 gpt Ag over 5.5 metres. This hole returned the highest gold grades encountered to date by Southern Rio on the Ted Vein, and demonstrated the degree of grade variability over short vertical distances, as well as a possible increase in gold grade with depth.

Hole TT-03-17 was drilled 35 metres in front of and on section with Hole TT-02-10, and designed to test the immediate up-dip extension of the Ted Vein intercept in that hole (1.29 gpt Au and 237.2 gpt Ag over 26.9 metres). The hole intersected the Ted Vein from 21.0 to 38.7 metres down-hole, and approximately 50 metres up-dip from the intercept in Hole TT-02-10. The interval returned 0.83 gpt Au and 170.7 gpt Ag over 17.7 metres.

Hole TT-03-18 was drilled 25 metres in front of and on section with Hole TT-02-13, and designed to test the immediate up-dip extension of the Ted Vein intercept in that hole (2.47 gpt Au and 56.7 gpt Ag over 14.10 metres). The hole intersected a relatively narrow expression of the Ted Vein, from 47.1 to 53.0 metres, approximately 30 metres up-dip from the intersection in Hole TT-02-13. Of that intersection, a 3.70 metre interval carried 1.21 gpt Au and 122.0 gpt Ag. The intercept occurred within a zone of strong post-mineral fault gouge, which may have offset or consumed a significant portion of the vein.

Hole TT-03-19 was drilled 50 metres grid south of the intercepts in Holes TT-02-13 and TT-03-18, in an attempt to continue defining the vein along strike to the south. The hole did not intersect vein material of comparable width, grade or appearance to the Ted Vein. Instead, at the projected position of the Ted Vein

System, the hole intersected a broad zone of intense bleaching and silicification within the host rhyolites, with a significant pyrite content but no appreciable quartz vein component. A single narrow vein was encountered, from 80.7 to 82.0 metres, which returned 0.84 gpt Au and 13.5 gpt Ag over 1.3 metres. The Ted Vein at this location appears to have been displaced, either vertically or horizontally, although the presence of intense alteration and structural deformation at the projected position of the vein suggests that a major structure continues to cut stratigraphy along the Ted Vein trend.

Hole TT-03-20 was drilled 50 metres grid south of Hole TT-03-19. Again, the hole encountered a thick sequence of intensely bleached, pyritic RQFP along the projected trace of the Ted Vein, but with no appreciable quartz vein content. A single one metre sample carried anomalous gold content, of 0.52 gpt Au. This hole appears to have continued defining a controlling structure and associated alteration envelope to the Ted Vein System, but with no actual vein component, suggesting possible vertical displacement of the vein itself, or a southerly plunge to the vein, such that the hole basically overshot the target.

Hole TT-03-21 was drilled 100 metres grid north of the first Phelps Dodge section completed on the property (DDH 252-03, 04, and 05). The hole, the most northerly drilled to date, was designed to test for a possible northern extension of the Ted Vein System, on the north side of an ENE trending topographic linear that has previously been interpreted as a fault that has potentially offset the Ted Vein. The hole encountered unaltered rhyolite quartz feldspar porphyry ("RQFP") throughout, before encountering the microdiorite sill at depth. Immediately above the sill, a 20 cm chalcedonic quartz vein within a locally silicified section of RQFP returned a weakly anomalous gold value of 0.19 gpt. Given the uncertain trace of the Ted vein at this location, and the unexpectedly deep overburden, additional drilling is warranted on-section.

Holes TT-03-22, 23, 24 and 25 were drilled on the Mint Zone as a continuous four hole fence west across a strong resistivity anomaly defined by the 2002 geophysical program, and some 200 metres south and along strike from initial drilling completed by Phelps Dodge in 1996. The four hole fence was designed to cross the entire resistivity anomaly, with sufficient overlap to allow for any steep westerly dip of encountered veins, as well as test a showing area along the western flank of the anomaly, known as the Creek Showing. At that location, anomalous float samples in very close proximity to bedrock, returned values to 4.64 gpt Au and 24.8 pt Ag.

Hole TT-03-22, the easternmost hole, encountered two zones of significant stockwork quartz carbonate veining and associated alteration within rhyolite quartz feldspar porphyry, from 29.8 to 36.5 metres, and from 58.9 to 73.6 metres. The first zone returned no significantly anomalous precious metal values in excess of 200 ppb Au or 5 gpt Ag. The second zone yielded two narrow gold anomalies, of 1.25 gpt Au over 1.0 metres, and 0.76 gpt Au over 0.3 metres, with negligible silver values.

Hole TT-03-23 encountered the up-dip extension of the lower quartz carbonate stockwork in TT-02-22, between 7.10 and 19.30 metres. Within that interval, a 1.2 metre quartz vein returned an assay of 5.18 gpt Au and 26.3 gpt Ag.

Hole TT-03-24 encountered three zones of quartz carbonate stockwork veining within brick red altered RQFP. The first zone, from 41.30 metres to 51.40 metres, contained 20-25% veins to 30 cm. From 45.50 to 46.20 metres, a 0.70 metre interval returned values of 1.27 gpt Au and 64.8 gpt Ag. A second zone of veining was encountered between 56.80 metres and 67.0 metres, with individual veins to 55 cm. No significantly anomalous gold or silver values were returned from this zone (>200 ppb Au, 5.0 gpt Ag). A third zone of stockwork veining, from 75.0 to 78.90 metres, also failed to return any significant anomalies.

Hole TT-03-25 encountered a very broad zone of stockwork quartz-carbonate veining in rhyolite quartz feldspar porphyry, from its collar into bedrock down through 78.0 metres, before entering a barren RQFP to 87.8 metres, followed by the microdiorite sill (from 87.8 to 93.3 metres). Veining intensity ranged from 10% to 75% throughout, with local intervals containing up to 90% vein material. Two intervals returned appreciable gold-silver anomalies. From 28.0 to 30.0 metres, a 2.0 metre section carrying 90% vein material ran 5.48 gpt Au and 127.3 gpt Ag. This zone appears to be the down-dip expression of the Creek Showing. A second interval, from 55.2 to 56.7 metres, returned 3.89 gpt Au and 42.6 gpt Ag from a fault breccia/rubble zone within the RQFP.

Holes TT-03-26 and 27 were drilled from east to west as a continuous two hole fence across the resistivity anomaly mid-point between the previous fence on Line 48+00 North, and the Phelps Dodge fence on Line 50+00 North. Both holes also cross an area of abundant coarse quartz-carbonate float on surface, from which grab samples have returned values to 6.76 gpt Au and 79.3 gpt Ag, as well as a gold in soil geochemical anomaly defined by Phelps Dodge in 1995.

Hole TT-03-26 intersected predominantly barren, unaltered rhyolite quartz feldspar porphyry from 3.0 to 101.9 metres, before entering the microdiorite sill. Three samples were split for analysis. A 60 cm quartz vein, from 18.4 to 19.0 metres, returned 1.31 gpt Au and 10.3 gpt Ag over 0.6 metres.

Hole TT-03-27 encountered a wide banded quartz carbonate vein and vein breccia zone from 56.1 to 65.7 metres, that, over a 4.9 metre interval between 56.1 and 61.0 metres, carried 4.00 gpt Au and 43.8 gpt Ag. The remainder of the hole encountered RQFP before bottoming in the microdiorite sill.

The spring 2003 diamond drilling program on the Ted Vein Target of the Tam Property continued to return ore-grade intercepts internal to the previously defined strike length of the vein system. The program

returned the highest gold values encountered by Southern Rio to date, in Hole TT-03-16, but also demonstrated the degree of local variability in both grade and width of the vein system along its currently defined strike length of 230 metre strike length. Attempts to expand the previously defined strike length of the Ted Vein, both to the north and south, were unsuccessful. Two southern holes intersected significant zones of alteration, but with no vein component or significant gold-silver intercepts. The vein appears to have been structurally offset, or may plunge south such that the two holes overshot the target. To the north, a narrow vein intercept in Hole TT-03-21 at the immediate interface between rhyolite and microdiorite may represent the Ted Vein, but additional drilling will be required on-section to ascertain if that is true. On-going work on the Ted Vein should concentrate on locating strike and down-dip extensions to the known vein, including drilling beneath the microdiorite sill, north along strike in the vicinity of TT-03-21, and south below the alteration intercepts in Holes TT-03-19 and 20. The drilling below the microdiorite sill, which, based on a single drill hole through the sill by Phelps Dodge, is approximately 90 metres thick, will require drill holes of approximately 350 to 400 metres, depending on location along the defined strike-length.

Drilling on the Mint Vein System returned multiple zones of stockwork quartz carbonate veining on two separate sections. The intercepts in Holes TT-03-27 and 25 warrant additional testing along strike in both directions. Given the shallow overburden depth in the immediate vicinity of these intercepts, trenching may be an alternate and more cost effective means of continued evaluation, as permitting allows.

On-going work in 2003 should include;

- Detailed project-wide (Tsacha-Tam-Taken) compilation of all existing data.
- Detailed grid development over the Ted Vein and its immediate potential strike extensions, followed by detailed float mapping.
- Orientation scale MMI geochemistry over the Ted Vein, to determine its effectiveness as an exploration tool in the area.
- Limited stripping over the Mint Vein area, as permitting and surface conditions allow.
- Detailed grid development over portions of the adjacent Taken claim, in areas of anomalous float geochemistry, followed by detailed float mapping.
- Orientation shallow IP over the Ted Vein, and if successful, projected strike extensions of the Ted Vein.
- Orientation deep "Real Section" IP over the Ted Vein, after a review of similar case histories, and discussion with Quantec as to the ability to "see through" the microdiorite sill.
- Additional drilling as warranted, both below the sill on the Ted Vein, north and south along strike on the Ted Vein, and on secondary targets developed elsewhere on the Tam and Taken properties.

Estimated costs to compete the above program, including 2500 metres of additional diamond drilling, are \$440,000.

Total costs incurred in completing the drilling program on the Tam property, as outlined in this report, were \$208,692.08.

2. RECOMMENDATIONS AND ON-GOING YEAR 2003 EXPLORATION BUDGET

The spring diamond drilling program on the Ted Vein target of the Tam Property continued to return economically significant gold-silver grades over estimated true widths up to 14.0 metres. The drilling did not, however, add to the known strike length of the Ted vein, and drilling internal to previously defined vein limits demonstrated the degree of grade and width variability within the system.

Initial Southern Rio drilling on the Mint Vein returned strong gold dominant intercepts in two holes that warrant additional follow-up exploration.

Prior to completing additional drilling on the property, a concerted effort should be made to develop alternative exploration methods to expand target size on the Ted and Mint Veins, and to generate additional drill targets on other portions of the Tam and adjacent Taken properties. On completion of that work, a significant drill program targeting numerous prospective areas in addition to strike and dip extensions of the Ted and Mint Vein systems, offers a higher potential success ratio. To that end, the following 2003 work is proposed for the Tam and adjacent Taken Properties;

- Detailed project-wide (Tsacha-Tam-Taken) compilation of all existing data.
- Detailed grid development over the Ted Vein and its immediate potential strike extensions, followed by detailed float mapping.
- Orientation scale MMI geochemistry over the Ted Vein, to determine its effectiveness as an exploration tool in the area.
- Limited stripping over the Mint Vein area, as permitting and surface conditions allow.
- Detailed grid development over portions of the adjacent Taken claim, in areas of anomalous float geochemistry, followed by detailed float mapping.
- Orientation shallow IP over the Ted vein, and if successful, projected strike extensions of the Ted Vein.
- Orientation deep "Real Section" IP over the Ted Vein, after a review of similar case histories, and discussion with Quantec as to the ability to "see through" the microdiorite sill.
- Additional drilling as warranted, both below the sill on the Ted Vein, north along strike on the Ted Vein, and on secondary targets developed elsewhere on the Tam and Taken properties.

The estimated costs to complete this program is approximately as follows;

Finalize data compilation:	\$3,250
Line-cutting: 30 line-kilometres at \$350 per kilometre	\$10,500
IP (Dipole-Dipole): 5 line-kilometres at \$1,250 per kilometre	\$6,250
IP (Orientation Deep Real Time): – 2 Sections/2 Days	\$5,000
Geological Mapping and Sampling (Tam and Taken Grids):	\$27,000
Orientation MMI – Ted and Mint Vein Areas:	\$8,000
Limited Stripping and Channel Sampling, Mint Vein:	\$5,000
Diamond Drilling: 2,500 metres at \$150 per metre all inclusive costs	\$375,000
Total On-Going 2003 Exploration Program:	\$440,000

3. INTRODUCTION

This report summarizes the results of a fourteen hole, 1,541.8 metre diamond drilling program completed on the Tam Property during the period March 12 through April 07, 2003.

4. LOCATION, ACCESS AND PHYSIOGRAPHY

The Tam property is located 125 kilometres southwest of the town of Vanderhoof, B.C., within the Omenica Mining Division, NTS Map Sheets 93F/3E and 2W. Latitude and longitude of the property is 53 degrees, 2 minutes north and 125 degrees, 2 minutes west, respectively.

Access to the property is relatively good, via the Kenney Dam Road southwest from Vanderhoof for 25 kilometres, to the Kluskus-Ootsa Forest Service Road. That road extends 161 kilometres southwest, at which point the 5 km long Green 9000 Road provides access to the northernmost portion of the property. Drill roads extending south from this road provide access to both the camp location, on the adjacent Tsacha Property and all portions of the property, including the Ted Vein area.

The Kluskus-Ootsa Forest Service Road is an extremely busy logging road, with heavy traffic of loaded twelve foot wide logging trucks running north to service mills in both Vanderhoof and Prince George during week days. All commercial traffic on the roads use radios and a series of pull-outs to facilitate outbound traffic flow, and any visitors to the property should either obtain radios, or travel inbound in convoy with other radio equipped vehicles.

There is no fuel available on the Kluskus-Ootsa Road, and with a round trip distance of approximately 400 km., requiring almost six to seven hours, it is recommended all vehicles carry additional fuel in Jerry cans.

The property lies within the Naglico Hills of the Nechako Plateau, which consists of low to moderate rounded hills interspersed with wet lowlands and dotted with numerous, small lakes. Elevation on the property ranges between 1065 and 1280 metres ASL. Till cover is extensive, and outcrop exposure rare. Vegetation is comprised almost exclusively of jackpine, with lesser spruce and rare poplar and tamarack in small deciduous stands. The pine forest has been heavily damaged by the Mountain Pine Beetle infestation, with close to 30% kill in the area. Because of the kill, blow down and forest fire are serious problems in the area, making access in the bush difficult in places.

5. CLAIM DESCRIPTION AND STATUS

The Tam Property is comprised of two claims, totalling 14 units and covering approximately 350 hectares, as summarized in Table 1 below and illustrated in Figure 2. The claims were acquired by staking in October, 2001, and are 100% owned by Southern Rio Resources Ltd. The claims are currently in good standing until October 06, 2012.

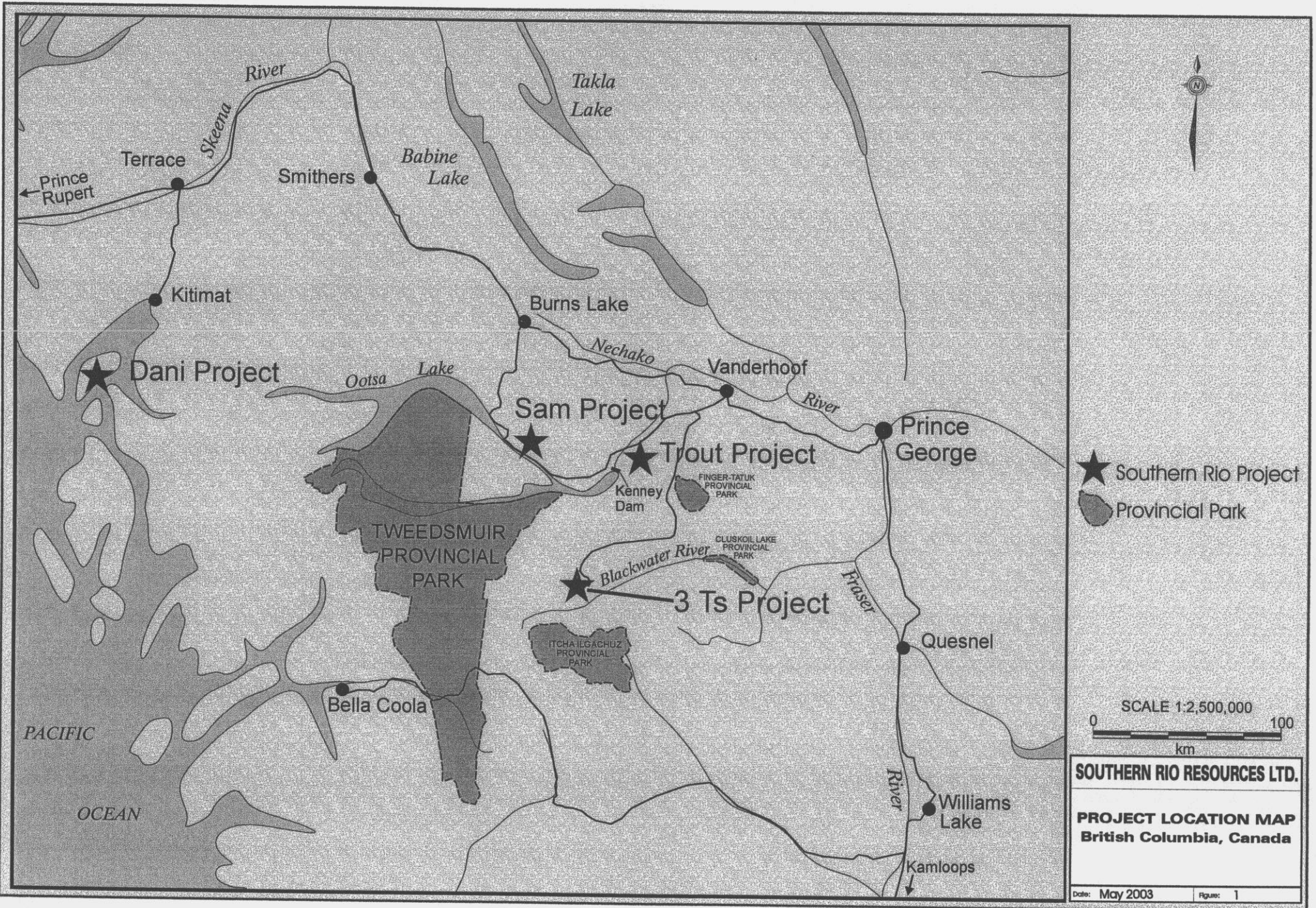
The claims are registered in the name of Robert Weicker, who acquired the property on behalf of Southern Rio Resources Ltd.

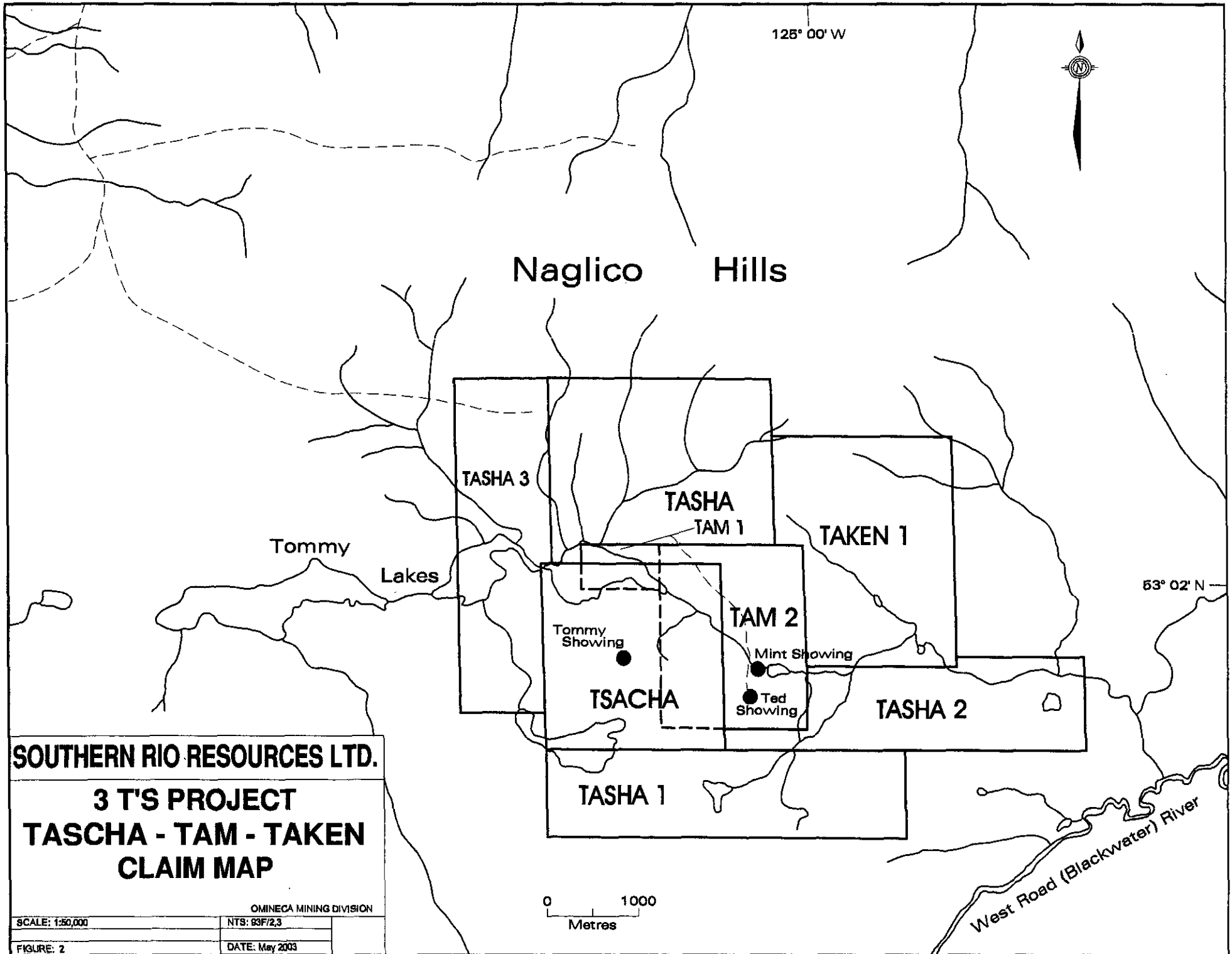
Table 1
Tam Property Claim Data

<u>Claim Name</u>	<u>Tenure No.</u>	<u>No. of Units</u>	<u>Current Expiry Date</u>
Tam 1	390162	2	October 06, 2012
Tam 2	390163	12	October 06, 2012

6. PROPERTY HISTORY

The Tam Property and Tommy Lakes area has had only a brief exploration history. There is no record of exploration activity in the area prior to the discovery of auriferous quartz veins in 1993 by the B.C. Geological Survey (Diakow and Webster, 1994). The discovery, which was announced at the Cordilleran Round-Up in Vancouver in January 1994, reported values up to 3.7 g/t Au and 41.8 g/t Ag from outcropping quartz veins. The showing was staked by Teck Corporation in 1994 as the Tsacha Property, with other companies, including Cogema Limited and Phelps Dodge Corporation of Canada, acquiring claims in the area





Naglico Hills

125° 00' W



TASHA 3

TASHA
TAM 1

TAKEN 1

Tommy

Lakes

53° 02' N

Tommy
Showing

TAM 2

Mint Showing

TSACHA

Ted
Showing

TASHA 2

TASHA 1

West Road (Blackwater) River

SOUTHERN RIO RESOURCES LTD.
3 T'S PROJECT
TASCHA - TAM - TAKEN
CLAIM MAP

0 1000
Metres

SCALE: 1:50,000	OMINECA MINING DIVISION
NTS: B3F/2,3	
FIGURE: 2	DATE: May 2003

soon after. Cogema acquired the Tam Property, and Phelps Dodge the adjacent Taken Property, both situated immediately east of the Teck ground position.

In 1994, both Cogema and Phelps Dodge conducted preliminary sampling and prospecting of the Tam and Taken Properties. Two prospective zones were identified by Cogema on the Tam Property, known as the Mint Showing, which returned up to 5,060 ppb Au from samples of quartz veining in bedrock, and the Ted Showing, which returned values to 1,490 ppb Au from a similar geological setting.

Phelps Dodge optioned the Tam Property from Cogema in January, 1995, and continued prospecting work that year, as well as limited grid cutting, mapping, trenching, and soil sampling.

In 1996, Phelps Dodge completed a 9 hole, 1263.1 metre diamond drilling program on the Tam Property (Fox, 1996). Two holes (252-1 and 252-2) targeted the Mint Vein, and seven holes (252-3 to 9) targeted the Ted Vein. Results of that drilling program are discussed in Section 7.v) of this report.

On the adjacent Tsacha Property, Teck completed extensive programs of trenching and drilling during the period 1994 through 1998. In total Teck completed 81 diamond drill holes on the property, totalling over 16,000 metres, primarily on the Tommy Vein target. That work resulted in an inferred resource of 470,000 tonnes grading 7.40 gpt Au and 65.2 gpt Ag for the Tommy Vein, as recalculated by Southern Rio (Wallis and Fier, 2002) in compliance with NI 43-101 reporting standards.

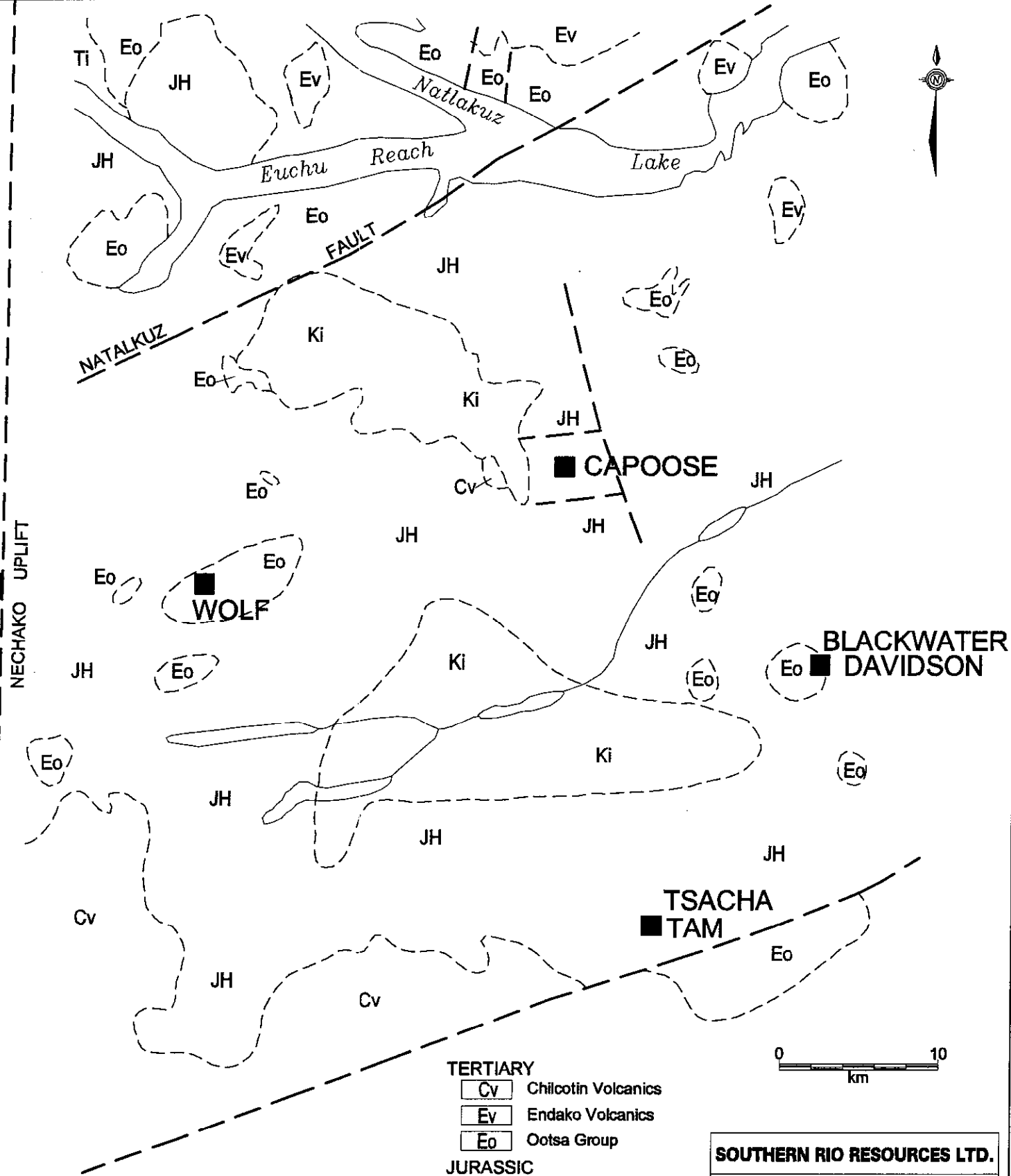
In October, 2001, Southern Rio acquired the Tam property by staking. In early 2002, Southern Rio entered into agreements with Teck Cominco Ltd., and Phelps Dodge Canada Ltd., to acquire 100% interests in the Tsacha and Taken Properties, respectively, and upon consolidation of the land position, commenced exploration activity. The 2002 exploration program on Tsacha comprised line-cutting, limited prospecting, resistivity surveys, and a seven hole, 951.6 metre diamond drilling program (McIvor, 2002). The 2002 program on the Tam Property included limited line cutting, resistivity surveys, and a four hole 360.9 metre diamond drilling program (McIvor, 2002).

7. GEOLOGICAL SETTING

7.1 Regional Setting

The Tam Property is situated within the Naglico Hills of the southern Nechako Plateau within the Stikine Terrane of the Intermontane Belt of the Canadian Cordillera (see Figure 3).

The Nechako Plateau is an area of subdued relief. Glacial drift is extensive and bedrock exposure is limited to between 5-10% of the area. The geology of the area was first mapped at a regional scale



- TERTIARY**
- Cv Chilcotin Volcanics
 - Ev Endako Volcanics
 - Eo Ootsa Group
- JURASSIC**
- JH Hazelton Group
- INTRUSIONS**
- Ti Tertiary Intrusions
 - Ki Cretaceous Intrusions
- — Fault



SOUTHERN RIO RESOURCES LTD.

3T'S PROJECT
TSACHA/TAM PROPERTIES

REGIONAL GEOLOGY

after Diakow et al, 1993, 1994

Date: Nov. 2002 Figure: 3

NECHAKO UPLIFT

NATALKUZ

FAULT

Natlakuz

Euchu Reach

Lake

■ CAPOOSE

■ WOLF

■ BLACKWATER DAVIDSON

■ TSACHA TAM

(1:250,000) by Tipper (1963). More detailed mapping of the southern Nechako Plateau was recently conducted by Diakow and Webster (1994) and Diakow *et. al.* (1993, 1994). This mapping included the Tam Property, which is within the Fawnie Creek Map area (NTS 93F/3).

The Fawnie Creek Map area is situated near the southern margin of a northeast-trending, structurally raised area referred to as the Nechako Uplift (Diakow and Webster, 1994). The uplift, bounded by the Nataalkuz Fault to the north and Blackwater Fault to the south, provides a window through younger cover to underlying volcanic and sedimentary rocks of the regionally extensive Lower to Middle Jurassic Hazelton Group and Late Jurassic Bowser Lake Group. These strata are intruded by the Late Cretaceous Capoose Batholith, a granodiorite to quartz monzonite intrusion that has been unroofed in broad areas north and south of Entiako Spur. Eocene volcanic rocks of the Ootsa Lake and Endako Groups are locally extensive. Isolated cappings of Miocene Chilcotin Group olivine basalt are rare within the uplift.

In the Naglico Hills, volcanic rocks of the Hazelton Group predominate; pyroxene-phyric basalt flows and tuffs of the Naglico Formation are extensive, but the Tommy Lakes area, and specifically the Tsacha and Tam properties, are also underlain by quartz-phyric rhyolite tuffs and flows of the Entiako Formation, forming the base of the Hazelton Group.

7.2 Property Geology

The Tam property is primarily underlain by felsic and andesitic flows and tuffs of the Entiako Formation of the Jurassic Hazelton Group. Feldspar and augite porphyritic basaltic andesite flows, with minor volcanoclastic sedimentary rocks, mapped as Naglico Formation of the Hazelton Group, overlie the Entiako Formation. An augite porphyry plug is exposed in the southern property area. The above units are intruded by late Cretaceous microdiorite dykes and sills.

A felsic quartz and feldspar phyric tuff of the Entiako Formation is the most extensive unit on the property and typically contains 15-10% quartz and 15-40% feldspar phenocrysts in variably welded crystal-lithic tuffs. The unit is magnetic when fresh, typically with a dark, almost black to grey-green to maroon coloured matrix, often glassy with quartz and feldspar phenocrysts. The latter are commonly sausseritized. The maroon colour is due to pervasive secondary hematite alteration. Lighter coloured compressed (welded) lithic fragments in the rhyolite tuff define the fabric, which resembles flow banding. The welding has shown that the unit has a shallow (<10°) southerly dip. Basaltic andesite lapilli fragments also occur but are not compressed. They are generally a few millimetres across but an occasional fragment may be up to 5-10 cm diameter.

A late Cretaceous microdiorite intrusive occurs as sills and dykes on the property. The sill outcrops on the property along the east boundary of the Tam 2 Claim, and along a low ridge in the southwest corner of the Tam 2 Claim. The sill has also been encountered at depth during drilling, where it occurs as a flat to gently south dipping sill up to 85 metres in thickness and as narrow cross cutting dykes.

7.3 Structural Geology

A regional northwest trending lineament follows Tommy Creek. This lineament may have economic significance in that it passes through the Wolf and Clisbako properties (see Diakow and Webster, 1994). The lineament is most evident on the airborne magnetic map of the Interior Plateau, GSC Open File 2785.

The southern boundary of the Nechako Uplift follows the Blackwater River, just south of the property and it is believed to represent a major ENE trending regional fault. Similar east-northeasterly trends are evident on the property through Carter Lake and another north of Tommy Lake and are best observed on the 1:15,000 scale aerial photographs of the area.

Locally northerly trends are less evident but are manifested in the north-south striking veins observed on the property. Throughout this region the north trending structures are believed related to Tertiary extension. However, the presence of older pre-existing structures is confirmed by the pre-Late Cretaceous Ted Vein System.

Numerous faults have been identified on the property. Faulting and zones of extensive fault gouge occur with the Ted Vein system throughout its defined strike length, and in many cases the faults are post-mineral and have complicated vein continuity to some degree.

7.4 Target Deposit Model

Numerous styles of base and precious metal mineralization, including epithermal, porphyry, and skarn, are known in the region (Schroeter and Lane, 1994).

The target deposit type or model is low sulphidation epithermal style gold-silver veins and stockwork zones similar to the style of mineralization at the Midas Mine of Franco Nevada in Nevada, the El Penon Mine of Meridian Minerals in Chile, and the former Blackdome Mine in Southern BC. Mineralization is typically volcanic hosted, in back-arc tectonic settings (Cooke and Simmons, 2000; Corbett and Leach, 1999). Gold-silver mineralization in these deposits is associated with a variety of quartz vein textures and grain sizes. Included are chalcedonic to coarse-grained quartz occurring in banded, saccharoidal, comb, and bladed carbonate-replacement vein textures. These gold deposits typically contain high-grade sections, often with

important silver credits, high silver to gold ratios, "clean" metallurgy, and good recoveries. The Tam property has returned significant precious metal (gold and silver) values and has excellent potential to uncover additional mineralization.

7.5 Mineralization

To date, two significant veins have been found and explored on the property. All are hosted by the felsic welded quartz feldspar crystal-lithic tuff and intruded by the microdiorite. The major veins are all subparallel and generally strike north-south, with minor variations as detailed below.

Mint Vein

The Mint Vein consists of a series of north to northeasterly striking, steeply dipping banded quartz carbonate veins and stockworks hosted within reddish quartz-feldspar porphyritic rhyolite tuff. Veins range up to 1 metre in thickness where exposed in a creek bed on the Tam 2 claim. Massive to banded milk coloured quartz veins locally exhibit crude banding and layering, with sugary textured, vuggy cores flanked by massive quartz, carbonate, chalcedony and light and dark gray layers of very fine grained sulphides. Angular fragments of rhyolite often occur in the veins, and are usually strongly silicified. Sulphide mineralization consists of disseminated pyrite, galena, and black sphalerite, and possibly some associated argentite, tetrahedrite, and stephanite, as noted in the Tommy Vein system further to the west (Pautler, 1994). Surface sampling by Cogema in 1994 returned gold values of between 240 and 5,320 ppb Au.

In 1996, two holes (252-1 and 252-2) were completed by Phelps Dodge on the Mint Vein. Both holes encountered appreciable thicknesses of stockwork veining within the rhyolite tuff. Hole 252-02 returned a 7.0 metre intersection grading 1.42 gpt Au and 34.6 gpt Ag.

Ted Vein

The Ted Vein, located 500 metres south of the Mint Vein, consists of massive quartz veins and stockworks similar to the vein exposed at the Mint Prospect. The main vein is up to 14.6 metres thick as defined in drilling, strikes at approximately 170-350 degrees, and appears to dip steeply to the west at 80 degrees. In drill core, the vein is comprised of a complex, often strongly banded and brecciated sequence of milky white quartz, gray chalcedonic silica, and tan to buff coloured Fe/Mg carbonates, with lesser white calcite. Well mineralized portions of the vein contain bands of sulphide rich (to 20%) silica and carbonate, as well as sulphide fracture filling and a pervasive very fine grained disseminated mineralization. Sulphides identified to date within the vein include pyrite, sphalerite, galena, and chalcopyrite. A sooty gray to black

sulphide, possibly argentite and/or tetrahedrite, is also common within the strongly mineralized portions of the vein.

During 1996, Phelps Dodge completed seven holes on the Ted Vein, in three sections over a strike length of 130 metres. (See Map in Appendix 3).

The most northerly section comprised three holes (252-3, 4, and 5) all drilled from a single pad, at -45, -60, and -80 degrees respectively. Hole 252-3 returned 0.31 gpt Au and 15.0 gpt Ag over 15.0 metres from a broad zone of stockwork veining. Beneath that intersection, Hole 252-4 returned 1.90 gpt Au and 16.8 gpt Ag from an 8.0 metre vein intercept. The third and steepest hole intersected the microdiorite dyke before encountering the Ted Vein.

Fifty metres to the south, a second section of three holes (252-6, 7, and 9) successfully defined an extension of the Ted Vein. Hole 252-6 returned an intercept of 0.30 gpt Au and 54.4 gpt Ag over 11.60 metres. Beneath that intercept, Hole 252-7 encountered 1.43 gpt Au and 15.9 gpt Ag over 9.0 metres. From the same collar location, Hole 252-9 was turned 35 degrees to the south, and drilled obliquely across the Ted Vein. That hole returned an excellent intersection, grading 8.90 gpt Au and 394.0 gpt Ag across 22.0 metres, with an estimated true width of 6.5 metres.

Eighty metres further south, a single hole (252-8) failed to intersect the vein, and appears to have encountered the microdiorite sill and proximal dykes where the vein trace was expected to occur.

During late 2002, Southern Rio Resources completed a four hole, 360.9 metre diamond drilling program on the Ted Vein portion of the property. Hole locations and significant intersections are summarized in Tables 2 and 3 below.

Table 2
Summary of 2002 Diamond Drill Holes, Tam Property

<u>Hole No.</u>	<u>Collar Location (UTM's)</u>	<u>Azimuth/Dip</u>	<u>Length</u>	<u>Target</u>
TT-02-10	5876580 N, 364918 E	240/-45	136.3 m	Ted Vein
TT-02-11	5876543 N, 364924 E	240/-45	84.7 m	Ted Vein
TS-02-12	5876556 N, 364944 E	240/-55	27.4 m	Ted Vein
TT-02-13	5876500 N, 364947 E	240/-45	112.5 m	Ted Vein

Table 3
Tam Property – Summary of Significant Intersections

<u>HOLE NUMBER</u>	<u>FROM/TO (m)</u>	<u>WIDTH (m)</u>	<u>EST. TRUE WIDTH (m)</u>	<u>COMMENTS</u>		
TT-02-10 INCLUDING	88.30 - 115.20	26.90	14.66	TED VEIN		
	95.00 - 108.20	13.20	7.13	TED VEIN		
	112.00 - 115.20	3.20	1.73	TED VEIN		
	123.50 - 123.90	040	0.22	SMALL VEIN		
	127.00 - 127.50	0.50	0.27	SMALL VEIN		
TT-02-11	36.56 - 43.65	7.09	3.86	TED VEIN		
	43.65 - 52.00	8.35	4.51	WESTERN STOCKWORK		
	62.36 - 62.88	0.52	0.28	SMALL VEIN		
	77.58 - 78.37	0.79	0.28	SMALL VEIN		
TT-02-13 INCLUDING	83.90 - 98.00	14.10	7.61	TED VEIN		
	93.10 - 98.00	4.90	2.65	TED VEIN		
	104.00 - 108.30	4.30	2.32	WESTERN STOCKWORK		
<u>HOLE NUMBER</u>	<u>FROM/TO (m)</u>	<u>WIDTH (m)</u>	<u>Au (gpt)</u>	<u>Ag (gpt)</u>	<u>AuEq (gpt)</u>	<u>AgEq (gpt)</u>
TT-02-10 INCLUDING	88.30 - 115.20	26.90	1.29	237.2	4.68	327.5
	95.00 - 108.20	13.20	1.94	357.9	7.05	493.7
	112.00 - 115.20	3.20	2.12	426.3	8.21	574.7
	123.50 - 123.90	040	4.27	63.2	NOT RELEVANT	
	127.00 - 127.50	0.50	12.20	148.0	NOT RELEVANT	
TT-02-11	36.56 - 43.65	7.09	1.66	476.2	8.46	592.4
	43.65 - 52.00	8.35	0.66	62.4	1.55	108.6
	62.36 - 62.88	0.52	3.19	45.8	NOT RELEVANT	
	77.58 - 78.37	0.79	4.13	43.7	NOT RELEVANT	
TT-02-13 INCLUDING	83.90 - 98.00	14.10	2.47	56.7	3.28	229.6
	93.10 - 98.00	4.90	4.87	65.8	5.81	406.7
	104.00 - 108.30	4.30	2.99	23.4	3.32	232.7

Hole TT-02-10 was designed to test the Ted Vein in the immediate vicinity of the very high grade intercept reported in Phelps Dodge hole 252-9. That hole returned a reported intercept of 22 metres grading 8.90 gpt Au and 394 gpt Ag, from a very sulphide rich section of the Ted vein.

The hole successfully encountered the Ted Vein Complex, between 88.30 to 115.20 metres. From 88.30 to 108.2 metres, the hole intersected a true quartz-carbonate vein. The upper portions of the vein, from 88.3 to 95.0 metres, were relatively sulphide poor, but from 95.0 to 102.0, mineralization dramatically increased to 2% pyrite, 2-3% black tetrahedrite/argentite(?), and trace amounts of sphalerite, galena, and chalcopyrite. From 108.2 to 115.2 metres, the Ted Vein Complex is more a series of stockwork zones within intensely silicified rhyolite quartz-feldspar porphyry, the host lithology. Individual veins to 1.55 metres were present within the stockwork zone, which often were mineralized with up to 5-7% combined sulphides (pyrite, black argentite/tetrahedrite(?), chalcopyrite, sphalerite, and galena).

Over the 26.90 metre interval, the Ted Vein Complex returned 1.29 gpt Au and 237.2 gpt Ag. Narrower intervals within the broad intersection returned higher grades, including 1.94 gpt Au and 357.9gpt Ag over 13.20 metres from 95.0 to 108.2 metres, and 2.12 gpt Au and 426.3 gpt Ag over 3.20 metres from 112.0 to 115.2 metres.

Lower in the hole, two narrow veins returned strong grades, including, from 123.50 to 123.90 metres, 4.27 gpt Au and 63.2 gpt Ag over 0.40 metres, and from 127.0 to 127.50 metres, 12.20 gpt Au and 148.0 gpt Ag over 0.50 metres.

The main intercept of the Ted Vein, with an estimated true width of 14.53 metres, is significantly wider than the reported intercept in the Phelps Dodge hole. While reported gold grades are not as strong, the Phelps Dodge average grade is skewed by a single very high grade interval. Silver grades are consistent with those reported in the Phelps Dodge hole.

Hole TT-02-11 stepped fifty metres south along strike and further tested the Ted Vein. The hole successfully encountered the vein between 36.56 and 43.65 metres, followed by an additional 8.35 metre zone, from 43.65 to 52.0 metres, of bleaching, alteration, brecciation, and quartz-carbonate stockwork veining in the host rhyolite.

The Ted Vein itself returned 1.66 gpt Au and 476.2 gpt Ag over 7.09 metres. The underlying stockwork zone returned 0.66 gpt Au and 62.4 gpt Ag over 8.35 metres. The intersection in the Ted Vein, while appreciably thinner than in TT-02-10, continued to carry economic precious metal grades, and in particular, a very high grade silver content.

Hole TT-02-12 attempted to test the Ted Vein at depth below the intercept in TT-02-11. It was also designed to provide a second pierce point on a single section, to confirm the interpreted 80 degree west dip of the Ted Vein Complex. Unfortunately, due to significantly deeper and very difficult overburden, the hole was abandoned after the casing snapped at 27.4 metres.

Hole TT-02-13 was designed to continue testing the southern extension of the Ted Vein, by stepping 50 metres south and along strike from the intercept in Hole TT-02-11.

The hole successfully encountered the Ted Vein Complex from 83.90 – 98.00 metres. Over this interval, the Vein returned 2.47 gpt Au and 56.7 gpt Ag over 14.10 metres. A narrower higher grade interval, of 4.87 gpt Au and 65.8 gpt Ag over 4.90 metres, was encountered from 93.10 to 98.00 metres.

Beneath the Ted Vein, a zone of stockwork veining within the host rhyolite, from 104.0 to 108.3 metres, returned 2.99 gpt Au and 23.4 gpt Ag over 4.30 metres.

With an estimated true width of 7.61 metres, the intercept in Hole TT-02-13 continued to define a vein of significant width. The grades in the hole were surprising, both in the relative strength of gold values and weakness in silver values. The vein in this hole was relatively sulphide poor, and clearly there is a strong correlation between sulphide content and silver grade.

8. ADJACENT PROPERTIES

Two adjoining properties show evidence of similar mineralization to that at Tam. On the Tsacha Property to the west, currently under option to Southern Rio from Teck, significant gold mineralization has been defined within a major vein system (the Tommy Vein) over 600 metres of strike extent, and to depths in excess of 400 metres below surface. An inferred resource of 470,700 tonnes grading 7.40 gpt Au and 65.2 gpt Ag, using a 4.0 gpt Au cut-off grade, was recently calculated and released by Southern Rio (News Release dated November 18, 2002).

Extensive quartz vein float is present on the Taken claim, located immediately east of the Tam Property, with linear trends evident and values up to 19.2 g/t Au and 148 g/t Ag. Other linear gold and silver soil anomalies occur on the Taken properties, with values up to 252 ppb Au, which may reflect additional veins (Fox, 1999).

9. 2003 DIAMOND DRILLING PROGRAM

During the period March 12 through April 07, 2003, Southern Rio Resources completed a fourteen hole, 1,541.8 metre diamond drilling program on the property. The drilling was completed by Falcon Drilling Ltd., a Prince George based contractor, using its own custom build hydraulic drill rig. All samples were assayed by Eco-Tech Laboratories, of Kamloops, with check assaying completed by Acme Analytical Laboratories, of Vancouver. On-site supervision of the drill program was provided by the author, and Robert Weicker, P. Geo, who acts as Southern Rio's chief consulting geologist. Jointly, McIvor and Weicker acted as the Qualified Persons under reporting guidelines outlined in National Policy 43-101. A discussion of QAQC measures in place during the drilling program are summarized in Section 9.15 of this report.

All core is stored at an existing core storage facility on the Property.

Appendix 1 contains detailed drill logs for the fourteen holes, and relevant sections. Appendix 2 contains all original assay data from the drilling program. Appendix 3 contains a collar location map for the fourteen holes, in relation to previous drilling completed by Phelps Dodge and Southern Rio. Appendix 4 contains a schematic Longitudinal Section for the Ted Vein.

Table 4, below, summarizes all collar locations, hole orientations and depths. Table 5 summarizes significant intersections returned from the drilling program.

TABLE 4

SUMMARY OF 2003 DIAMOND DRILL HOLES, TAM PROPERTY

<u>HOLE NO.</u>	<u>COLLAR LOCATION</u>		<u>AZIMUTH/ DIP</u>	<u>LENGTH</u>
	<u>UTM's</u>	<u>GRID</u>		
<u>TED VEIN AREA</u>				
TT-03-14	364905E, 5876608N	NA	240/-56	126.8 M
TT-03-15	364905E, 5876608N	NA	240/-43	150.9 M
TT-03-16	364942E, 5876553N	NA	240/-55	190.2 M
TT-03-17	364887E, 5876563N	NA	240/-45	62.8 M
TT-03-18	364925E, 5876487N	NA	240/-45	78.0 M
TT-03-19	364960E, 5876440N	NA	240/-45	108.5 M

<u>HOLE NO.</u>	<u>COLLAR LOCATION</u>		<u>AZIMUTH/ DIP</u>	<u>LENGTH</u>
	<u>UTM's</u>	<u>GRID</u>		
TT-03-20	364981E, 5876397N	NA	240/-45	145.1 M
TT-03-21	364865E, 5876790N	L46+60N, 62+18E	240/-45	117.4 M
<u>MINT VEIN AREA</u>				
TT-03-22	365097E, 5876947N	L48+00N, 64+60E	270/-45	85.7 M
TT-03-23	365058E, 5876948N	L48+00N, 64+20E	270/-45	78.1 M
TT-03-24	365017E, 5876946N	L48+00N, 63+80E	270/-45	87.2 M
TT-03-25	364985E, 5876964N	L48+20N, 63+40E	270/-45	93.3 M
TT-03-26	365049E, 5877047N	L49+00N, 64+10E	270/-45	108.5 M
TT-03-27	365007E, 5877047N	L49+00N, 63+70E	270/-45	109.3 M
TOTAL DRILLED:				1,541.8 M

Table 5
Summary of Significant 2003 Intersections (>0.50 gpt Au)
(* Denotes Ted Vein Intercept – NA is “Not Applicable”)
(Gold EQ is based on a 70:1 Au/Ag Ratio)

<u>Hole No.</u>	<u>From/To (M)</u>	<u>Width (M)</u>	<u>Au (gpt)</u>	<u>Ag (gpt)</u>	<u>AuEQ (gpt)</u>	<u>AgEQ (gpt)</u>
TED VEIN AREA						
TT-03-14	No Significant Intersections (Encountered sill prior to expected vein pierce point)					
TT-03-15	25.20 – 26.40	1.20	0.46	64.5	NA	NA
	72.00 – 78.80*	6.80	0.35	33.6	0.83	58.1
	85.80 – 95.80*	10.00	1.08	198.6	3.92	274.2
	109.00 – 109.80	0.80	1.30	272.0	NA	NA
TT-03-16	100.00 – 128.00*	28.00	3.78	137.5	5.74	402.1
	130.00 – 131.00	1.00	1.18	18.4	NA	NA
	132.00 – 132.50	0.50	3.91	10.8	NA	NA
TT-03-17	21.00 – 38.70*	17.70	0.83	170.7	3.27	228.8
	43.70 – 44.20	0.50	0.81	164.0	NA	NA
	49.30 – 50.20	0.90	1.29	174.0	NA	NA
TT-03-18	49.30 – 53.00*	3.70	1.21	122.0	2.95	206.7
TT-03-19	80.70 – 82.00	1.30	0.84	13.5	NA	NA
TT-03-20	71.00 – 72.00	1.00	0.52	<0.1	NA	NA

Hole No.	From/To (M)	Width (M)	Au (gpt)	Ag (gpt)	AuEQ (gpt)	AgEQ (gpt)
TT-03-21	No Significant Intersections (May have hit sill prior to vein pierce point)					
MINT VEIN AREA						
TT-03-22	63.00 – 64.00	1.00	1.25	0.1	NA	NA
	67.00 – 67.30	0.30	0.76	8.0	NA	NA
TT-03-23	18.10 – 19.30	1.20	5.18	26.3	NA	NA
TT-03-24	45.50 – 46.20	0.70	1.27	64.8	NA	NA
TT-03-25	28.00 – 30.00	2.00	5.48	127.3	7.30	510.9
	55.20 – 56.70	1.50	3.89	42.6	4.50	314.9
TT-03-26	18.40 – 19.00	0.60	1.31	10.3	NA	NA
TT-03-27	56.10 – 61.00	4.90	4.00	43.8	4.63	323.8
	64.00 – 65.70	1.70	1.57	16.1	NA	NA

Below is a hole by hole description of results.

9.1 DDH TT-03-14

Collar Location: 30 Metres at 337 Degrees From DDH TT-02-10 (Collar is not tied into the Southern Rio Grid at this location)

UTM Co-ordinates (NAD 83): 364905E, 5876608N

Azimuth/Dip: 240 Degrees/-56 Degrees

Length: 126.8 Metres

This hole was drilled to test the Ted Vein approximately mid-point between a drill fence completed by Phelps Dodge in 1996 (Holes 252-06 and 07) and Hole TT-02-10, completed by Southern Rio in 2002. Phelps Dodge hole 252-06, drilled grid east at -45 degrees, returned an intercept of 8.6 metres grading 0.44 gpt Au and 68.5 gpt Ag. Phelps Dodge hole 252-07, drilled grid east at - 60 degrees from the same set-up, returned a broad low-grade intercept of 22 metres grading 0.87 gpt Au and 13.3 gpt Ag, with narrower higher grade intervals to 1.71 gpt Au and 35.2 gpt Ag over 4.0 metres. Southern Rio's hole TT-02-10 returned a strong intercept of 1.29 gpt Au and 237.2 gpt Ag over 26.9 metres. All of the above intercepts are from the main Ted Vein.

Hole TT-03-14 encountered weakly altered and weakly quartz-carbonate veined rhyolite quartz feldspar porphyry ("RQFP") from 6.1 metres to 107.6 metres, before encountering a sub-vertical microdiorite dyke, followed by the underlying and relatively flat-lying microdiorite sill. The hole appears to have intersected the dyke and sill proximal to the projected pierce point of the Ted Vein.

As such, only seventeen samples were split for analysis, none of which returned significant gold values. One sample, from a narrow 50 cm quartz vein proximal to the sill contact, contained 35.2 gpt Ag over the 50 cm. sample interval.

In order to evaluate this section, Hole 15 (summarized below) was drilled from the same set-up, at a shallower angle as to intercept the Ted vein above the microdiorite sill.

9.2 DDH TT-03-15

Collar Location: 30 Metres at 337 Degrees From DDH TT-02-10 (Same Set-up as TT-03-14 – Collar is not tied into the Southern Rio Grid at this location)
UTM Co-ordinates (NAD 83): 364905E, 5876608N
Azimuth/Dip: 240 Degrees/-45 Degrees
Length: 150.9 Metres

This hole, drilled from the same set-up as TT-03-14, was designed to test the Ted Vein at a shallower depth, above the microdiorite sill.

The hole successfully encountered the Ted Vein between 71.1 metres and 97.8 metres down-hole. Internal to that intersection, a 7.0 metre diorite dyke was encountered between 78.8 and 85.8 metres. The vein, in general, was relatively sulphide poor, with the exception of a 1.2 metre interval between 86.4 and 87.6 metres, which carried 7-10% fine specks of chalcopyrite, galena, sphalerite, pyrite, and an unidentified black sulphide.

The uppermost Ted Vein intercept, between 71.1 and 78.8 metres, returned 0.35 gpt Au and 33.6 gpt Ag over a 6.80 metre interval (72.0-78.8 m). The lower portion of the vein, below the diorite dyke, returned 1.08 gpt Au and 198.6 gpt Ag over 10.0 metres, from 85.8 to 95.8 metres.

The remainder of the hole encountered variably, though generally weakly altered and veined RQFP, before encountering the microdiorite sill at 145.7 metres. Two veins were encountered in the RQFP west of the main Ted Vein intersection.

The "West Vein" was intersected between 109.0 and 109.8 metres, and returned 1.30 gpt Au and 272 gpt Ag over 0.80 metres.

The "Far West Vein" was encountered between 122.0 and 123.0 metres, and returned 0.22 gpt Au and 23.1 gpt Ag over 1.0 metres.

The Ted Vein intercept in this hole is of comparable width to intersections on adjacent sections. Grades are, generally speaking, marginally better than those encountered in the Phelps Dodge drilling to the north, and marginally poorer than those encountered in hole TT-02-10 to the south, re-enforcing a previous interpretation of improving grade moving south on the Ted Vein where drill defined to date.

9.3 DDH TT-03-16

Collar Location: 21.5 Metres at 060 Degrees From TT-02-11 (Collar is not tied into the Southern Rio Grid at this location)
UTM Co-ordinates (NAD 83): 364942E, 5876553N
Azimuth/Dip: 240 Degrees/-55 Degrees
Length: 190.2 Metres

Hole TT-03-16 was collared 21.5 metres behind and on section with hole TT-02-11, and designed to re-test the Ted Vein down-dip from the intersection returned in that hole. Hole TT-02-11, drilled grid east at -45 degrees, encountered the Ted Vein between 36.56 and 43.65 metres, and returned an intercept of 1.66 gpt Au and 476.2 gpt Ag over that 7.09 metre interval. Immediately below the Ted Vein, a stockwork zone, from 43.65 to 52.0 metres, returned 0.66 gpt Au and 62.4 gpt Ag over 8.35 metres. In addition to the main Ted Vein and adjacent stockwork zone, two "western veins" returned intercepts of 3.19 gpt Au and 45.8 gpt Ag over 0.52 metres, and 4.13 gpt Au and 43.7 gpt Ag over 0.79 metres.

Hole TT-03-16, which intersected the Ted Vein approximately 50 metres below the intercept in hole TT-02-11, encountered a significant intercept, of 29.8 metres down-hole, between 98.2 and 128.0 metres. From 100.0 to 128.0 metres, the vein returned a weighted average grade of 3.78 gpt Au and 137.5 gpt Ag, over an estimated true width of 12.0-14.0 metres. Within that broad interval, significantly higher grade gold values were encountered, including, from 112.0 to 128.0 metres, 5.96 gpt Au and 136.6 gpt Ag over 16.0 metres. That intersection included a 5.5 metre interval, from between 121.7 metres and 127.2 metres, grading 12.77 gpt Au and 99.6 gpt Ag. The very high gold numbers, with corresponding relatively weak silver values, would suggest two possible mineralizing events, with a late stage gold silica pulse that resulted in the much higher gold grades. The vein itself clearly is multiphase, with substantial brecciation of early stage silica-carbonate vein material, healed by later phases of both silica only (often as chalcedonic quartz, carbonate only (often calcite) and sulphide mineralization. Sulphide content through the vein is substantial, with locally up to 30% very fine grained sulphides comprised of, in decreasing abundance, black unidentified sulphide species, galena, pyrite, sphalerite, and chalcopyrite. As in Hole TT-02-11, Hole TT-03-16 also

encountered vein intercepts west of the main Ted Vein, which returned anomalous gold-silver values. Those include, from 130.0-131.0 metres, 1.18 gpt Au and 18.4 gpt Ag over 1.0 metres, and from 132.0 – 132.5 metres, 3.91 gpt Au and 10.8 gpt Ag over 0.5 metres.

Hole TT-03-16, importantly, provided the first two-intercept section at sufficiently wide down-dip spacing to confirm a suspected westerly dip to the Ted Vein, which, on this section, is approximately 77 degrees.

The broad intersection in hole TT-03-16, with the significantly higher gold values (and correspondingly lower silver values) than encountered only fifty metres up-dip in hole TT-02-11, point to the degree of variability within the Ted Vein system. The identification of a high grade gold dominant intercept in this hole also suggests that there is potential to encounter bonanza type gold grades internal to an overall envelope of intermediate grade.

9.4 DDH TT-03-17

Collar Location: 35 Metres at 240 Degrees From DDH TT-02-10 (Collar is not tied into the Southern Rio Grid at this location)
UTM Co-ordinates (NAD 83): 364887E, 5876563N
Azimuth/Dip: 240 Degrees/-45 Degrees
Length: 62.80 Metres

This hole was collared 35 metres in front of and on section with Hole TT-02-10, and designed to test the immediate up-dip extension of the Ted Vein encountered in that hole. Hole TT-02-10 intersected the Ted Vein between 88.30 and 115.2 metres, and returned 1.29 gpt Au and 237.2 gpt Ag over 29.9 metres (estimated true width of 14.5 metres). Further down hole, two “western veins” returned values of 4.27 gpt Au and 63.2 gpt Ag over 0.4 metres, and 12.2 gpt Au and 148 gpt Ag over 0.5 metres.

The hole intersected the Ted Vein from 21.0 to 38.7 metres downhole, and approximately 50 metres up-dip from the intercept in TT-02-10. The interval returned 0.83 gpt Au and 170.7 gpt Ag over that 17.7 metres, with an estimated true width of approximately 9.0 metres. The two intercepts define a west dipping vein at approximately 70 degrees. While the encountered vein width in Hole TT-03-17 is comparable to the intercept in hole TT-02-10, grades are appreciably lower, and point to grade variations over relatively short distances.

As in Hole TT-02-10, this hole also encountered anomalous quartz-carbonate veins west of the main Ted Vein intercept, which returned, from 43.70-44.20 metres, 0.81 gpt Au and 164.0 gpt Ag over 0.5 metres, and from 49.30-50.20 metres, 1.29 gpt Au and 174.0 gpt Ag over 0.9 metres. Both above and below the

Ted Vein intercept, several other zones of stockwork quartz-carbonate veining were encountered, but no significant intercepts, with the exception of the two westerly veins referred to above, were returned.

9.5 DDH TT-03-18

Collar Location: 25 Metres at 240 Degrees From DDH TT-02-13 (Collar is not tied into the Southern Rio Grid at this location)
UTM Co-ordinates (NAD 83): 364925E, 5876487N
Azimuth/Dip: 240 Degrees/-45 Degrees
Length: 78.05 Metres

Hole TT-03-18 was drilled 25 metres in front of and on the same section as hole TT-02-13, and designed to test the immediate up-dip extension of the Ted Vein intercept in that hole. Hole TT-02-13 intersected the Ted Vein between 83.90 and 98.0 metres, and returned 2.47 gpt Au and 56.7 gpt Ag over that 14.10 metre interval (estimated true width of 8.01 metres). Within that interval, a narrower higher grade zone of 4.87 gpt Au and 65.8 gpt Ag was returned between 93.20 and 98.0 metres. A second zone of stockwork veining was encountered between 104.0 and 108.3 metres, and returned 2.99 gpt Au and 23.4 gpt Ag over 4.30 metres.

Hole TT-03-18 intersected the Ted Vein some 30 metres vertically above the intercept in Hole TT-02-13. The hole encountered the vein from 47.1 to 53.0 metres, of which a 3.70 metre interval, from 49.30 metres to 53.0 metres, returned 1.21 gpt Au and 122.0 gpt Ag. The two holes define the Ted Vein as dipping at 78 degrees to the west on this section. The intercept in this hole is again indicative of the degree of variability of both vein width and grade within the Ted Vein.

9.6 DDH TT-03-19

Collar Location: 52 Metres at 160 Degrees From DDH TT-02-13 (Collar is not tied into the Southern Rio Grid at this location)
UTM Co-ordinates (NAD 83): 364960E, 5876440N
Azimuth/Dip: 240 Degrees/-45 Degrees
Length: 108.54 Metres

Hole TT-03-19 was collared 52 metres at 160 degrees from Hole TT-02-13, and drilled to test the Ted Vein 50 metres grid south of the intercepts in Holes TT-02-13 and TT-03-18. Based on projecting intercepts in

those two holes, Hole TT-03-19 should have encountered the Ted Vein between 60 and 80 metres downhole.

Instead, between the interval of 57.70 metres and 80.7 metres, the hole intersected an intensely altered, bleached, and silicified felsic fragmental rock, with up to 7% very fine grained disseminated pyrite throughout. The interval also contained several zones of intense brecciation and/or fault gouge. The zone contained no appreciable quartz vein content, except for a narrow interval between 76.00 and 80.7 metres. From 80.7 to 82.0 metres, the hole intersected a more coherent quartz vein, which returned 0.84 gpt Au and 13.5 gpt Ag over the 1.3 metres.

The style and intensity of alteration within the hole, along with the high and pervasive pyrite content, numerous zones of intense brecciation and fault gouge, and lack of appreciable widths of quartz veining, are dramatically different than all other holes drilled to date on the Ted Vein system. The vein appears to have been faulted off, either horizontally, or vertically, or both. The presence of the intensely altered, brecciated and mineralized interval almost precisely along the projected trace of the Ted Vein suggests that a major structure continues to cut stratigraphy along the Ted Vein trend, and that perhaps the vein offset has been more vertical than horizontal, and the hole encountered a different depth controlled expression of the epithermal alteration and mineralizing assemblage. Despite a very appreciable thickness of that alteration, with a significant introduction of pyrite, there are no significantly elevated Au-Ag values away from the very narrow quartz vein encountered in the hole.

9.vii) DDH TT-03-20

Collar Location:	50 Metres at 150 Degrees From DDH TT-03-19 (Collar is not tied into the Southern Rio Grid at this location)
UTM Co-ordinates (NAD 83):	364981E, 5876397N
Azimuth/Dip:	240 Degrees/-45 Degrees
Length:	145.12 Metres

This hole was collared 50 metres at 150 degrees from hole TT-03-19, and designed to continue testing for southern extensions of the Ted Vein.

Again, the hole encountered a thick sequence of intensely bleached, mineralized (with 3-5% very fine grained disseminated pyrite) felsic fragmental rock between 51.0 metres and 119.80 metres, bracketed by relatively fresh rhyolite quartz feldspar porphyry. The alteration was of an intensity that almost all primary textures in the felsic fragmental were obliterated. Throughout the interval, there was no significant quartz-carbonate vein content, although the projected trace of the Ted Vein coincided almost exactly with the zone

of intense alteration. Both the gold and silver values throughout the broad altered and mineralized interval were low, and in most cases below detection limit. One sample, from 71.0 to 72.0 metres, returned an anomalous gold value of 0.52 gpt Au (with <0.1 gpt Ag).

Again, the style and intensity of alteration encountered in this hole, while similar to that encountered in Hole TT-02-19, is very different from all other drilling to date on the Ted Vein system, and would seem to indicate a very different position within a classically zoned epithermal mineralizing system. As in Hole TT-03-19, the presence of the altered and mineralized horizon along the projected trace of the Ted Vein suggests the continued presence of a controlling structure, but with no appreciable vein component, and almost no elevated precious metal values. Additional work is warranted to fully understand the significance of these intensely altered intervals in relation to the Ted Vein, that may include additional fence drilling on section and down dip in an attempt to re-locate possible extensions of the vein itself.

9.8 DDH TT-03-21

Collar Location: 20 Metres at 060 degrees From Cross Line 62E, 46+50 N, or
100 metres at 344 degrees from Phelps Dodge Holes 252-03, 04 and
05.
UTM Co-ordinates (NAD 83): 364865E, 5876790N
Azimuth/Dip: 240 Degrees/-45 Degrees
Length: 117.38 Metres

This hole was drilled 100 metres grid north (approximately) of the first Phelps Dodge drill section completed on the property (DDH 252-03, 04 and 05). The hole, the most northerly drilled to date, was designed to test for a possible northern extension of the Ted Vein system, on the north side of a major ENE trending topographic linear that has previously been interpreted as a fault that has possibly offset any northerly extension to the vein.

The hole encountered unaltered rhyolite quartz-feldspar porphyry from the overburden interface at 34.00 metres, to the microdiorite sill at 106.50 metres. At the immediate contact with the microdiorite sill, a 20 cm chalcedonic quartz carbonate vein was encountered within a locally silicified portion of the RQFP. A half metre sample around the vein returned an anomalous gold value of 0.19 gpt.

Given the uncertainty involved in projecting the Ted Vein over 100 metres, and across a possible fault that may have some horizontal offset component, a second hole should be drilled on this section, collared 50 metres grid west from the existing collar, to continue testing for a possible extension of the Ted Vein, and

to determine if the very narrow vein encountered at the microdiorite contact thickens into an appreciable intercept up-dip.

9.9 DDH TT-03-22

Collar Location: L48+00N, 64+60E
UTM Co-ordinates (NAD 83): 365097E, 5876947N
Azimuth/Dip: 270 Degrees/-45 Degrees
Length: 85.67 Metres

This hole is the first of a four hole fence drilled due west across a strong resistivity anomaly defined by the 2002 geophysical program on the property, and some 200 metres south and along strike from initial drilling completed by Phelps Dodge in 1996 on the Mint Vein. That drilling was comprised of a two hole fence that intersected broad zones of stockwork quartz-carbonate veining in rhyolite quartz feldspar porphyry, that included, in Hole 252-02, a 13.0 metre intersection carrying 0.95 gpt Au and 28.2 gpt Ag. The targeted resistivity anomaly has been traced over a strike length of 200 metres, extending south from the Phelps Dodge holes, located approximately on Line 50+00 North, to this drill section on Line 48+00North. The anomaly, some 60 to 100 metres wide, trends at 340 degrees, and sits beneath a coincident gold in soil geochemical anomaly, as defined by Phelps Dodge. The four hole fence was designed to cross the entire resistivity anomaly, with sufficient overlap to allow for any steep westerly dip of encountered veins, as well as test a showing area along the western flank of the anomaly, known as the Creek Showing. At that location, anomalous float samples in very close proximity to bedrock, returned values to 4.64 gpt Au and 24.8 pt Ag.

The hole encountered rhyolite quartz feldspar porphyry from 6.10 metres to 73.60 metres, before encountering the relatively flat lying microdiorite sill. Within the RQFP, two significant zones of stockwork quartz carbonate veining and associated alteration were encountered. From 29.8 to 36.5 metres, the hole intersected a zone of strong bleaching, silicification, and quartz stockwork veining, with individual veins to 80 cm. Included within the interval was a 1 metre section of intense fault gouge, suggesting a structural control to the alteration and veining. No anomalous gold or silver values were returned from this interval. A second zone of veining and alteration was encountered from 58.90 to 73.60 metres, again with numerous individual veins up to 70 and 80 cm. Assay results through this interval were also low, with two samples yielding gold values to 1.25 gpt over 1 metre, and 0.76 gpt over 0.30 metres. Silver values were for the most part negligible.

The veining encountered in this hole, while displaying excellent epithermal textures (chalcedonic and colliform banding, brecciation and healing by secondary silica/carbonate), contained negligible sulphide

mineralization. The lack of sulphides may explain the very low assay results, as there is a strong grade – sulphide association within the Ted Vein. That relationship is not true of the Tommy Vein, however, located on the adjacent Tsacha Property, and visually the veins encountered in this hole are similar in appearance to the Tommy Vein system.

9.10 DDH TT-03-23

Collar Location: L48+00N, 64+20E
UTM Co-ordinates (NAD 83): 365058E, 5876948N
Azimuth/Dip: 270 Degrees/-45 Degrees
Length: 78.05 Metres

Hole TT-03-23 is the second of four holes drilled across the resistivity anomaly as discussed above. The hole encountered, from 7.10 metres to 19.30 metres, a quartz carbonate stockwork zone within bleached and silicified rhyolite quartz feldspar porphyry, including, from 18.10 to 19.30 metres, a 1.2 metre vein. This zone appears to be the immediate up-dip extension to the lower alteration zone intersected in Hole TT-03-22, which, based on the two pierce points, dips vertically. Assay results from the stockwork and alteration zone were low, but the 1.2 metre vein intercept returned a value of 5.18 gpt Au and 26.3 gpt Ag. The vein contained no visible sulphide mineralization, and the relatively strong gold values suggest the vein may be more analogous to the Tommy system than the Ted system.

The remainder of the hole, to 73.30 metres, intersected unaltered RQFP, before drilling into the flat lying microdiorite sill.

9.11 DDH TT-03-24

Collar Location: L48+00N, 63+80E
UTM Co-ordinates (NAD 83): 365017E, 5876946N
Azimuth/Dip: 270 Degrees/-45 Degrees
Length: 37.20 Metres

Hole TT-03-24 is the third of four holes drilled across the resistivity anomaly discussed above. The hole encountered three zones of quartz carbonate stockwork veining within an otherwise relatively unaltered, brick red rhyolite quartz feldspar porphyry. The first zone, from 41.30 metres to 51.40 metres, contained 20-25% veins to 30 cm. One sample, from 45.50 to 46.20 metres, returned values of 1.27 gpt Au and 64.8 gpt Ag. A second zone of veining was encountered between 56.80 metres and 67.0 metres, with individual veins to 55 cm. No significantly anomalous gold or silver values were returned from this zone. A third zone

of stockwork veining, from 75.0 to 78.90 metres, also contained no significant anomalies, and the hole ended in the flat microdiorite sill (from 78.90 to 87.20 metres).

9.12 DDH TT-03-25

Collar Location: L48+20N, 63+40E
UTM Co-ordinates (NAD 83): 365985E, 5876964N
Azimuth/Dip: 270 Degrees/-45 Degrees
Length: 93.30 Metres

Hole TT-03-25 is the last of the four hole fence across the resistivity anomaly, and was also designed to test the down-dip extension of the Creek Showing, where bedrock proximal float returned grab values to 4.64 gpt Au and 24.8 gpt Ag. The hole was offset 20 metres north of the previous three holes, in order to drill directly beneath the Creek Showing area.

The hole encountered a very broad zone of stockwork quartz-carbonate veining in rhyolite quartz feldspar porphyry, from its collar into bedrock down through 78.0 metres, before entering a barren RQFP to 87.8 metres, followed by the flat lying microdiorite sill (from 87.8 to 93.3 metres). Veining intensity ranged from 10% to 75% throughout, with, local intervals containing up to 90% vein material. Two intervals returned appreciable gold silver anomalies. From 28.0 to 30.0 metres, a 2.0 metre section carrying 90% vein material ran 5.48 gpt Au and 127.3 gpt Ag. This zone appears to be the down-dip expression of the Creek Showing. A second interval, from 55.2 to 56.7 metres, returned 3.89 gpt Au and 42.6 gpt Ag from a fault breccia/rubble zone within the RQFP.

9.13 DDH TT-03-26

Collar Location: L49+00N, 64+10E
UTM Co-ordinates (NAD 83): 365049E, 5877047N
Azimuth/Dip: 270 Degrees/-45 Degrees
Length: 108.5 Metres

This hole is the first of a two hole fence, drilled from east to west across the resistivity anomaly mid-point between the previous fence on Line 48+00 North, and the Phelps Dodge fence on Line 50+00 North. Both holes also cross an area of abundant coarse quartz-carbonate float on surface, from which grab samples have returned values to 6.76 gpt Au and 79.3 gpt Ag, as well as a gold in soil geochemical anomaly defined by Phelps Dodge in 1995.

The hole intersected predominantly barren, unaltered rhyolite quartz feldspar porphyry from 3.0 to 101.9 metres, before entering the microdiorite sill. Only three samples were split for analysis. A single 60 cm. quartz vein, from 18.4 to 19.0 metres, returned 1.31 gpt Au and 10.3 gpt Ag over 0.6 metres. The hole, otherwise, contained no significant veining, alteration, or mineralization.

9.14 DDH TT-03-27

Collar Location: L49+00N, 63+70E
UTM Co-ordinates (NAD 83): 365007E, 5877047N
Azimuth/Dip: 270 Degrees/-45 Degrees
Length: 109.3 Metres

Hole TT-03-27 is the second of a two hole fence across the resistivity anomaly discussed above. The hole intersected unaltered RQFP from collar to 37.8 metres, followed by a diorite dyke from 37.8 to 56.1 metres. From 56.1 to 65.7 metres, the hole encountered a wide banded quartz carbonate vein and vein breccia zone, that, over a 4.9 metre interval between 56.1 and 61.0 metres, carried 4.15 gpt Au and 45.8 gpt Ag. The remainder of the hole encountered unaltered, veined or mineralized RQFP to 100.4 metres, and the flat lying microdiorite sill from 100.4 metres to hole end at 109.3 metres. The relatively wide vein intersection in this hole, of 9.6 metres, with an estimated true width of 6.8 metres, is significant, as are the relatively strong gold grades over a 4.9 metre portion of that vein. The intercept warrants additional drilling immediately along strike.

9.15 QAQC Controls In Place During This Drilling Program

During the drilling program, representatives of Southern Rio monitored the drilling, core recovery, and core handling on a regular basis, and at least twice daily during regular drill shift changes. All core was picked and brought to Southern Rio's core logging and sampling facility by Southern Rio personnel or by representatives of Falcon Drilling Ltd. Similarly, all core was logged and sampled by Southern Rio personnel.

Bagged samples were sealed in rice bags for shipment to Eco-Tech Laboratories in Kamloops by bus from Vanderhoof. Southern Rio personnel delivered the samples to the bus station in Vanderhoof, and the samples were then delivered directly to the lab in Kamloops.

Within the samples submitted, Southern Rio routinely inserted "blank" samples known to contain no appreciable quantities of gold or silver mineralization. The barren microdiorite dyke was utilized for this purpose, with metre sections split and inserted into the sample sequence, approximately every thirty

samples. All blanks inserted by Southern Rio appear on the respective logs. No anomalous and therefore erroneous gold or silver values were returned from any of the blank samples.

Eco-Tech, as part of their own QAQC program, routinely re-split from reject and analyzed approximately every 35th sample. They also routinely and randomly re-assayed pulps, and re-assayed any samples with significantly anomalous gold values. Finally, Eco-Tech systematically inserted Certified gold and silver standards at the end of every 40 sample run, and compared their own analytical results with those of the standards. All standards and check assays were in excellent agreement.

10. DETAILED COST STATEMENT

Outlined below are costs incurred in completing the drilling program summarized in this report.

Direct Drilling Costs (as Invoiced by Falcon Drilling Ltd.)

Invoices SR2003-01, 02, and 03, covering drilling costs for all fourteen holes, and related direct drilling expenditures (core boxes, fuel, consumables, mobilization and demobilization, crew travel, and crew accommodation):

Total Invoiced Drilling Costs: \$152,411.56

Geological Consulting Costs: (Includes Target Selection, Logging, Report Preparation, and Management Supervision)

McIvor Invoices:

Office Rate of \$300 per Day:

Feb. 20, Mar 07,18,(Drill Target Selection, Permitting, and other Preparation)

May 14, 15, 20-23, 26-30 (Analyze Results, Internal Reports, Assessment Reports)

14 Days at \$300 \$4,200

Plus GST: \$294

Field Rate of \$325 per Day:

Mar 19 – April 05 (Drill Supervision); 18 Days at \$325 \$5,850

Plus GST: \$409.50

Total McIvor Invoices: \$10,753.50

Weicker Invoices:

(Robert Weicker is Southern Rio's Senior Consulting Geologist, who was on site during the period March 11 to 21 and April 04 through 08, and was also involved in the planning stages, and post-drilling interpretive stages of the program).

As billed to Southern Rio: \$9,756.31

Les Allan Invoices:

(Les Allan is a geotechnician who acted as core-splitter and general field assistant during the program.)

As billed to Southern Rio: \$4,400.00

Total Geological Consulting Costs: \$24,909.81

Direct Camp Costs

Atco Trailer Rental (Including Mob-Demob, and Cleaning/Minimum
Damage Repairs); \$1,580.00

Total Camp Costs: \$1,580.00

Field Support Costs (Including Travel)

McIvor Expense Accounts: (Includes miscellaneous charges for sample shipping, spare tires, fuel, and
overweight baggage) \$238.83

Weicker Expense Accounts: (Includes miscellaneous charges for food, fuel, airfares, baggage, field
supplies, etc.) \$4,535.50

Bottomer Expense Accounts: (Includes Travel and miscellaneous field costs) \$1,073.35

Vehicle Rental Charges (as Invoiced by Bowmac, Prince George – Two F350 Vehicles For 1 Month plus
minor damage repairs) \$4,759.43

Miscellaneous Food, Fuel and Supplies as Invoiced by Vanderhoof Co-op: \$1,964.98

Satellite Phone Rental and Usage Costs: \$1,186.00

Total Field Support Costs: \$13,758.09

Analytical Costs (as Invoiced by Eco-Tech Laboratories)

521 Samples (Fire Assay Gold-Silver) Plus Standards, Repeats; \$10,740.33

Total Tam Analytical Costs: \$10,740.33

Other Report Writing Costs

Plan Map and Section Drafting, as Invoiced by Ibex Drafting: \$3,433.29
Data Entry (Diamond Drill Logs) as Invoiced by J. Stritychuk \$500.00

Total Other Report Writing Costs \$3,933.29

Reclamation and Remediation Costs

As invoiced by Barry Mills, Local Contractor, who completed minor Cat reclamation of drill pads, and falling and bucking of timber on drill pads; \$1,359.00

Total Reclamation and Remediation: \$1,359.00

Total Spring 2003 Drilling Program Costs: \$208,692.08

11. CONCLUSIONS

The Spring 2003 diamond drilling program on the Ted Vein Target of the Tam Property continued to return ore-grade intercepts internal to the previously defined strike length of the vein system. The program returned the highest gold values encountered by Southern Rio to date, in Hole TT-03-16, but drilling also demonstrated the degree of variability in both grade and width of the vein system along its 230 metre strike length. Attempts to expand the previously defined strike length of the Ted Vein, both to the north and south, were unsuccessful. Two southern holes intersected significant zones of alteration, but with no vein component or significant gold-silver intercepts. The vein appears to have been structurally offset, or may plunge south such that the two holes overshot the target. To the north, a narrow vein intercept in Hole TT-03-21 at the immediate interface between rhyolite and microdiorite may represent the Ted Vein, but additional drilling will be required on-section to ascertain if that is true.

Additional work on the Ted Vein should concentrate on locating strike and down-dip extensions to the known vein, including drilling beneath the microdiorite sill.

Drilling on the Mint Vein System returned multiple zones of stockwork quartz carbonate veining on two separate sections. Two intercepts, in Holes TT-03-25 and 27, returned strong gold grades that require additional follow-up. Given the shallow overburden depth in the immediate vicinity of these intercepts, trenching may be a cost effective means of continued evaluation, as permitting allows.

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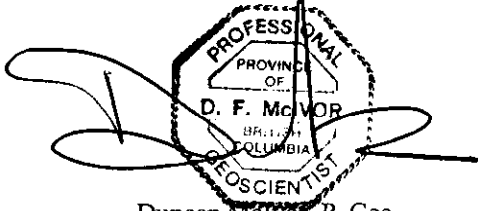
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13. CERTIFICATE OF AUTHOR

I, Duncan F. McIvor, do hereby declare that;

- 1) I am currently a self-employed consulting geologist with an office at 5429 River Road, Delta, B.C., V4K 1S8, in British Columbia, Canada.
- 2) I graduated with an Honours Bachelor of Applied Science (Earth Sciences) from the University of Waterloo in 1983.
- 3) I am a member of the Association of Professional Engineers and Geoscientists of British Columbia, Registration Number 19922.
- 4) I have worked as a geologist for a total of 20 years since graduation from University, and prior to graduation, as a student and or geo-technician for a period of 9 additional years.
- 5) I have read the definition of "Qualified Person" set out in National Instrument 43-101("NI 43-101") and certify that by reason of my education, affiliation with a professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person" for the purposes of NI 43-101.
- 6) I am solely responsible for the preparation of this report. I was on site at the Tam (a) Property during the period March 19 through April 04, 2003, and oversaw all drilling, logging, and sampling on the property. Robert Weicker, P.Geo, was on site March 11 through 21 and April 04 through April 08, and completed a portion of the drill logging.
- 7) I am not aware of any material fact or material change with respect to the subject matter of this report, the omission to disclose which makes this report misleading.
- 8) I am not independent of the issuer applying all tests in Section 1.5 of NI 43-101 in that I currently own securities in Southern Rio Resources. Other than by normal fee for supervising the drilling program summarized herein, and for the preparation of this report, I do not expect to receive any benefits from Southern Rio Resources including any specific interest in the property or any specific securities of the company.
- 9) I have read NI 43-101 and Form 43-101F1, and this report has been prepared in compliance with that instrument and form.
- 10) I consent to the filing of this report with any stock exchange or regulatory authority and any publication by them, including electronic publication in the public company files on their websites accessible by the public.

Dated this 03 day of June, 2003



Duncan McVOR, P. Geo.

APPENDIX 1

DIAMOND DRILL LOGS

DIAMOND DRILL LOG				HOLE: TT-03-14				STARTED: Mar. 12 2003				LENGTH: 126.8m			
NORTHING:				AZIMUTH: 240°				COMPLETED: Mar. 14 2003				CORE SIZE: NQ			
EASTING:				DIP: -45°				LOGGED:				17 samples split for assay			
ELEVATION: m				DIP TESTS: End of hole -61° @126.8M				LOGGED BY: R. Weicker							
SECTION:				PURPOSE: TEST TED VEIN BETWEEN TT-02-10 & PH-252-07											
LITHOLOGY				SAMPLES											
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	
FROM	TO	FROM	TO	FINAL	FINAL	FINAL	FINAL	FINAL	FINAL	FINAL	FINAL	FINAL	FINAL	FINAL	
0.00	6.10														
		OVERBURDEN (CASING)													
6.10	10.40														
		SILICIFIED RQFP & CARBONATE (QTZ) VEINING - RQFP	21001	6.10	7.00	0.90	<0.03				<0.03	<0.1		<0.1	
		-reddish brown, with 20-15% fspar phenox 5-7% qtz phenox	21002	7.00	7.60	0.60	0.03				0.03	0.9		0.9	
		-very hard, moderate to strongly siliceous, 40% calcite (qtz) veining & rhodochrosite (pink carb)	21003	7.60	8.90	1.30	<0.03				<0.03	0.4		0.4	
		-rubbly broken, core @ bedrock interface	21004	8.90	9.60	0.70	<0.03				<0.03	<0.1		<0.1	
		-carb/(qtz) vein - Upper contact broken, Lower contact 45° to core axis, broken 6.8-7.0m	21005	9.60	10.40	0.80	<0.03				<0.03	0.6		0.6	
		-siliceous RQFP - 7% carb/qtz stringers 2-10cm irregular													
		-carb/(qtz) vein - lower contact breccia 70° to core axis - leached texture @ 9.6m													
		-Breccia RQFP frag in carb (qtz) vein 40% RQFP 60°													
10.40	14.80														
		RQFP													
		-red to brick red, with pink feldspar phenox, moderately siliceous													
		-irregular, brecciated network, qtz-carb veinlets (15%)													
14.80	17.50														
		CARB/(QTZ) VEINING 60-65% & RQFP - BRECCIA RQFP													
		-frequently up to 5cm, irregular veining													
17.50	41.55														
		BRICK RED RQFP													
		-generally red brown to brick red, with red-orange to pink feldspar phenocrysts, rare phenocrysts with chlorite centres, qtz ph. 3-5%, bleached siliceous sections were noted													
		-intensely siliceous with wispy gray qtz veining upper contact-fracture 40° to core axis, fracture weakly oxidized													
		-blocky, broken core fracture/fault 40° to core axis													
		-20-25% carb (qtz) veinlets & stringers, irregular discrete veinlets 2-5mm to 15mm parallel to core - oxidized fractures 50-60° to core axis													
		-40% irregular qtz veining - brecciated RQFP in vein matrix													
41.55	51.60														
		LIGHT PINK/GRAY RQFP	21006	41.50	43.00	1.50	0.03				0.03	0.7		0.7	
		-as above but light pink to gray, bleached, silica	21007	43.00	44.50	1.50	<0.03				<0.03	0.7		0.7	
		-brecciated RQFP - fragments up to 3X3cm - subangular in qtz/silica matrix, with cloudy qtz vein 42.2m @ 20° to core axis - 2.5cm	21008	44.50	46.00	1.50	<0.03				<0.03	1.4		1.4	
		gray RQFP, intensely siliceous	21009	46.00	47.00	1.00	0.04				0.04	2.8		2.8	
		-qtz vein with chlorite fracture filling, 15° to core axis and parallel to core	21010	47.00	48.00	1.00	0.06				0.06	2.7		2.7	
		-40% qtz veining - 30° to core axis & 80° to core axis - fine chlorite +/- sulphide fracture fillings	21011	BLANK			<0.03				<0.03	<0.1		<0.1	
		-banded, chalcedonic qtz vein 40° to core axis, bladed texture	21012	49.90	50.60	0.70	<0.03				<0.03	2.6		2.6	
		-Calc vein - gray to white to gray stringers													
51.60	72.70														
		BRICK RED RQFP													
		-brick red to red brown colour, feldspar @ qtz phenox as above, porphyritic w/10% narrow qtz stringer & fracture fillings @ 59.3m - 2.5cm chalcedonic banded qtz vein 20° to core axis with chlorite along margins													
		-chalcedonic banded qtz vein 10-15° to core axis, 2-5cm thick, chlorite along margins													
		-qtz veining - light gray, with dark gray wisps and bands, creamy bladed texture, upper contact irregular 20° to core axis, lower contact 20° to core axis - very fine grained chlorite +/- sulphides - @ 64.3	21013	64.00	65.50	1.50	0.07				0.07	7.3		7.3	

LITHOLOGY				SAMPLES														
MAJOR UNIT FROM	MAJOR UNIT TO	MINOR UNIT FROM	MINOR UNIT TO	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
		68.70	68.90	-bleached, light gray, siliceous, fractures parallel to core axis, chloritic 1.5cm qtz stringer 20° to core axis	21014	65.50	66.50	1.0	0.08				0.08	12.3				12.3
		71.70		-1.5cm qtz stringer 20° to core axis	21015	66.50	67.50	1.0	0.07				0.07	5.6				5.6
72.70	107.60			RQFP														
				-as above <5%, narrow qtz carb stringers/fracture filling														
				-brown red to brown colour, feldspar altered to chlorite +? Sericite 3%, chlorite along fractures & fracture filling														
		88.60		-1cm gray qtz stringer 20° to core axis														
		99.80	100.50	-qtz vein 15° to core axis - multiphase, chalcedonic late banding	21016	99.7	100.6	0.9	0.10				0.10	10.1				10.1
		101.90	102.20	-qtz veining, irregular - gray with feldspar/chlorite/sericite	21017	101.9	102.4	0.5	0.10	0.12			0.11	35.2	36.2			35.7
		99.50	107.60	-increase in chlorite/sericite alteration, clots and patches, light green to yellowish green														
		105.40	105.40	-Qtz vein 25° to core axis - gray, with chlorite														
107.60	126.80			DIORITE DYKE INTO SILL														
				-dark green, fine grained homogeneous microdiorite - 1% narrow qtz-carb fracture fillings														
				END OF HOLE														
				<i>Robert Macleod</i>														

DIAMOND DRILL LOG				HOLE: JT-09-15				STARTED: Mar. 14 2003				LENGTH: 150.9m									
NORTHING:				AZIMUTH: 240°				COMPLETED: Mar. 17 2003				CORE SIZE: NQ									
EASTING:				DIP: -43° on head				LOGGED: Mar. 2003				LOGGED BY: R. Weicker									
ELEVATION: m				SECTION:				PURPOSE:				56 samples split for assay									
LITHOLOGY				SAMPLES																	
MAJOR UNIT	FROM	TO	MINOR UNIT	FROM	TO	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL	
	0.00	2.40				CASING - OVERBURDEN - DRILL RIG ON ACCESS ROAD															
						-bedrock just north of rig															
	2.40	9.80				RQFP & CARB/QTZ VEINING RQFP	16901	2.60	3.10	0.50	0.12	0.12	0.14		0.13	1.3	1.3	1.3		1.3	
						-red brown to pink in colour, 20-30% feldspar phenox, 5-7% qtz phenox	16902	3.10	3.90	0.80	0.06				0.06	0.8				0.8	
				2.50	3.10	Carb/qtz vein - leached fracture 28m @ 35° to core axis lower contact 90° to core axis - sharp - minor rhodochrosite pink calcite															
				4.50	4.90	-carb/qtz vein - lower contact sharp 70° to core axis - banded qtz upper contact - sharp 35° to core axis, minor pink rhodochrosite															
				5.20	5.90	fracture 45° to core axis @ 15° - core broken, rubbly 5.7-5.9m															
				6.70		-1.2 cm qtz-carb vein 15° to core axis with breccia vein fragments chlorite/calcite/qtz 3cm X 2cm															
				7.20	7.55	-carb/qtz vein lower contact 70° to core axis - lower contact broken	16903	7.20	8.00	0.80	<0.03				<0.03	0.5				0.5	
				7.70	7.80	-RQFP 60-70% qtz-carb veinlet/stringers/breccia, 30-40%, matrix strongly siliceous, veinlets slightly leached	16904	8.00	9.00	1.00	0.03				0.03	0.5					0.5
							16905	9.00	10.00	1.00	0.03				0.03	0.7					0.7
	9.80	54.30				RED RQFP															
						-red to reddish brown, feldspar & qtz phenox as above, mud - strongly siliceous, very hard, 7-10%, irregular qtz-carb stringers & fracture fillings															
				10.80		weakly - mud oxidized irregular fracture 45° to core axis															
				11.70	16.00	-RQFP - strongly siliceous, light red/pink colour, 20% irregular narrow 2-15mm qtz-carb stringers with fine, gray sulphides in vein material	16906	12.00	13.00	1.00	0.05				0.05	0.4					0.4
				13.60	14.40	broken core, slightly leached, irregular joint/fracture															
				19.50	23.00	-fractures 7-10 per metre, 35° to core axis, & 15° to core axis - weakly oxidized with chlorite/calcite															
				25.20	26.40	-qtz-carb vein - brecciated qtz (gray) & wispy chlorite with fine gray sulphides to 25.5m, then white, "bull" qtz (minor calcite) to 26.0m, then rehealed calcite/qtz to 26.1, then gray, fine grained qtz to 26.3 with oxidized, limonite/calcite fracture @ 35° to core axis @ 26.4	16907	25.20	26.40	1.20	0.46				0.46	64.5					64.5
				29.80		-5 cm qtz vein @ 25° to core axis, fine chlorite wisps	16908	29.80	31.00	1.20	0.04				0.04	2.5					2.5
				30.30	33.00	-RQFP - gray-red to gray, intensely siliceous, fine qtz fracture fillings & veinlets, fracture 15-30° to core axis, pink & white feldspar phenox	16909	31.00	32.00	1.00	0.04				0.04	2.3					2.3
				41.20	44.80	-fractured, large disks 4-8cm, chlorite slips @ 40° to core axis & secondary set at 70° to core axis															
				50.20	50.30	-carb-qtz vein 20° to core axis - pink rhodochrosite															
				51.20	51.50	-brecciated carb/qtz vein contacts 35-40° to core axis, fine gray fracture fillings cross-cutting vein, fine sulphides upper contact - slight gouge along fracture	16910	51.20	51.70	0.50	0.15	0.13			0.14	3.9	4.2				4.1
				51.60	51.70	-1.5cm carb/qtz veinlet 17° to core axis - cross cutting fine mafic fracture filling															
				54.00	54.30	-gray, siliceous RQFP with .5-1.2cm qtz-carb cross cutting	16911	54.00	54.30	0.30	0.11				0.11	2.0					2.0
	54.30	71.10				RQFP & QUARTZ-CARB STOCKWORK & VEINING	16912	54.30	55.30	1.00	0.06				0.06	0.9					0.9
						-stringers & fracture fillings except where discrete carb/qtz vein noted -overall 80-70% RQFP 20-30%															
				54.80	55.20	-series of narrow 1-10mm, qtz-carb fracture filling 20° to core axis	16913	55.30	56.30	1.00	0.04				0.04	1.5					1.5

DIAMOND DRILL LOG				HOLE	TT-03-15		PAGE		2	OF		3	LITHOLOGY				
LITHOLOGY													SAMPLES				
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t			
FROM	TO	FROM	TO	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t			
				FINAL	FINAL						FINAL	FINAL	FINAL	FINAL			
		55.50	56.30	-qtz-carb stringer 2-10mm parallel to core, slightly banded @ 56.0 chlorite/talc fracture filling													
		57.20	57.40	-qtz-carb vein 20° to core axis													
		58.40	58.70	-qtz vein/brecciated 20° to core axis with fracture filling & dots of chlorite & talc	16914	58.40	58.90	0.50	0.04		0.04	2.9		2.9			
		58.90	60.20	-composite qtz-carb vein @ 58.9 irregular sharp upper contact White qtz-carb vein with banded, feature some chlorite & sulphides @ 59.6 to 59.8 - brecciated rehealed qtz vein/RQFP siliceous? Frag 59.8-60.2 gray to white, series narrow qtz 0.5-1cm 20° to core axis, intensely siliceous	16915	58.90	60.20	1.30	0.05		0.05	3.5		3.5			
		60.20	64.60	-RQFP - strongly siliceous, 20-30% narrow qtz stringers & fracture filling 20-30° to core axis	16916	60.2	61.2	1.00	0.04		0.04	7.1		7.1			
					16935	70.1	71.1	1.00	0.08		0.08	4.7		4.7			
71.10	78.80			TED VEIN - UPPER PORTION	16936	71.1	72.1	1.00	0.10	0.12	0.08	10.3		10.3			
				-sharp cross cut upper contact @ 35° to core axis - white & cloudy mixed qtz (carb) veining; some sections slightly leached 15% creamy coloured irregular clots, fracture fillings & veinlets - some fine grained secondary calcite cement fine sulphides, sparse throughout but increasing below 77.0m	16937	72.1	73.0	0.90	0.19		0.19	62.4		62.4			
				-73.0-74.0 - 30% creamy veining, black tourmaline? Blebs	16938	73.0	74.0	1.00	0.36		0.36	56.8		56.8			
				-77.0-78.8 - 25-30% creamy veining, increase fine black sulphides +/- tourmaline, pink fracture fillings & green/chlorite	16939	74.0	75.0	1.00	0.32		0.32	37.2		37.2			
					16940	75.0	76.0	1.00	0.26		0.26	22.2		22.2			
78.80	85.80			DIORITE DYKE	16941	76.0	77.0	1.00	0.25		0.25	22.1		22.1			
				-cross cutting to strike of vein, upper contact 45° to core axis - bleached, light green for 8cm; diorite dark green fine grained, homogeneous, faint, light gray-green phenox, weakly porphyritic	16942	77.0	78.0	1.00	0.29		0.29	10.9		10.9			
		82.80	82.90	-light green bleached @ 82.8 narrow 5mm qtz stringer 30° to core axis, with 1-2mm qtz fracture filling to 82.9, pink-red hematite fracture filling	16943	78.0	78.8	0.80	0.92	1.03	0.98	20.9		20.9			
		84.40	85.80	-contact alteration zone - green to light green, porphyritic 1-2mm chlorite 2/- qtz fracture fillings 30° to core axis - broken with slight gouge at 85.8 contact 25-30° to core axis													
				QTZ VEIN & RQFP	16944	85.8	86.8	1.00	1.82	1.85	1.84	452.0		452.0			
				-siliceous, porphyritic, buff-gray pink													
86.20	97.80			TED VEIN - LOWER PORTION	16945	86.8	87.8	1.00	2.25	2.16	2.21	784.0		784.0			
				-gray to white qtz vein with pink to red & creamy coloured intervals - some sections good, fine sulphides in qtz matrix	16946	87.8	88.8	1.00	4.09	4.06	4.08	384.0		384.0			
		86.20	86.40	-light pink, creamy qtz Clots & veining intergrown with gray glassy qtz	16948	88.8	89.8	1.00	1.08	1.12	1.10	122.0	124.0	123.0			
		86.40	87.60	-qtz-carb vein with moderate, fine sulphides "Juicy" good looking													
				-estimate 7-10%, several specks of chalcocopyrite, minor galena, & sphalerite, spare specks of electrum, native silver?	16947	89.8	90.8	1.00	0.16		0.16	16.0		16.0			
				-gray, vaguely banded matrix 30° to core axis, chlorite & pink (hematite) colouration of qtz vein, rare Bright red bleb 2-	16949	90.8	91.8	1.00	0.14		0.14	10.7		10.7			
		88.00		-1cm banded qtz @ 25°, 50° & 35° to core axis, @ 89.4 creamy ankerite	16950				<0.03		<0.03	0.2		0.2			
		92.60	93.40	RQFP-intensely siliceous with 20% qtz stringers & veinlets	21252	91.8	92.8	1.00	0.32		0.32	20.6		20.6			
		93.80	94.35	as above	21253	92.8	93.8	1.00	0.30		0.30	36.7		36.7			
		95.60	95.80	-qtz vein 15°-20° to core axis with fine gray/black sulphides	21254	93.8	94.8	1.00	0.25		0.25	90.0		90.0			
		96.50	96.80	-banded, rimmed classic epithermal colliform banding 20° to core axis but contorted, followed by rimmed infilled vugs/centres with light green chlorite	21255	94.8	95.8	1.00	0.39		0.39	101.0		101.0			
		97.80		-lower contact with siliceous RQFP 15° to core axis to parallel to core axis	21256	95.8	96.8	1.00	0.24		0.24	7.2		7.2			
					21257	96.8	97.8	1.00	0.53		0.53	21.8		21.8			
97.80	100.50			RQFP (SILICEOUS) & QTZ-CARB VEINING 60%-40%	16917	97.8	98.8	1.00	0.14		0.14	14.9		14.9			
				-qtz-carb vein - 98.3 - 20° to core axis - chlorite fracture filling, hematitic fragments, narrow 2-3mm parallel to core, contorted, narrowed ? To 98.95	16918	98.8	99.4	0.60	0.11		0.11	35.8		35.8			
				-99.1-99.25 - Qtz Vein - slightly ground core @ 99.1 - upper contact - lower contact - with clay gouge & gray banded 2-4m fine sulphides in gray, banded qtz - chlorite, galena, rare chalco & hematite - narrow 2-3mm qtz stringer parallel to core; Qtz(carb) vein, vuggy, slightly leached white/cloudy & glass gray qtz; clay in filling vugs fracture fillings, wispy fine hematite - 100.4-100.5 - chloritic lower contact - irregular with chlorite fracture filling brecciated	16919	99.4	100.5	1.10	0.66	0.68	0.67	16.8	17.0	16.9			

LITHOLOGY				SAMPLES															
MAJOR UNIT		MINOR UNIT		DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL	
FROM	TO	FROM	TO																
					16920	100.5	101.5	1.00	0.07				0.07	4.2					4.2
100.50	109.10			RQFP (QUARTZ VEINING & STOCKWORK)	16921	105.0	106.0	1.0	0.13				0.13	5.9					5.9
				-80-85% qtz veinlets & stringers, fracture filling 15-20%, porphyritic red brown to brown matrix, 20% feldspar phenox - veining 10° to 30° to core axis & narrow 1-4mm cross cutting fine sulphides with veining (less than 1%)	16922	106.0	107.0	1.0	0.09				0.09	2.1					2.1
					16923	107.0	108.0	1.0	0.03	0.03			0.03	1.3					1.3
					16925	108.0	109.0	1.0	0.27				0.27	11.8					11.8
					16926	109.0	109.8	0.8	1.21	1.38			1.30	272.0					272.0
					16927	109.8	111.0	1.2	0.12				0.12	6.4					6.4
					16924	BLANK			<0.03				<0.03	<0.1					<0.1
109.10	109.60			WEST VEIN															
				-composite qtz (carb) veining upper contact 45° to core axis, lower contact 45° to core axis, strong sulphide 109.1-109.6 - 15% sulphide, galena, chalcopyrite, pyrite, minor sphalerite - bright hematite, good looking vein															
109.60	118.80			RQFP															
				-as above & 7-10% qtz veinlets/stringers, fracture filling 10-30° to core axis, rimmed with chlorite, also chlorite fracture filling															
		116.70	118.60	RQFP - siliceous, brown-gray to gray colour, mixed with qtz veinlets & stockwork with chlorite fracture filling, 121.2 - purple fluorite															
118.60	145.65			RQFP (MINOR QUARTZ VEINING)															
				-feldspar phenox up to 0.5cm, more fabric 35-45° to core axis, chloritic clots & phenox & fracture filling 3-5%, slightly softer, elongated frag, gray-gray-brown rhyolite															
		118.60	120.40	RQFP - chlorite fracture fillings, fracture irregular, parallel to core axis	16928	121.00	122.00	1.0	0.27				0.27	5.0					5.0
		122.00	122.50	FAR WEST VEIN - white qtz with green chloritic fracture filling with fine sulphides 40° to core axis, blue qtz fragments (galena?) Contact 40° to core axis	16929	122.00	123.00	1.0	0.22				0.22	23.1					23.1
		122.80	122.93	-qtz vein 30° to core axis	16930	123.00	124.00	1.0	<0.03				<0.03	1.1					1.1
		126.80	130.00	-as above general description, pale pink brown colour, 10-15% qtz stringers, sparse pyrite	16931	127.00	128.00	1.0	0.05				0.05	2.2					2.2
		133.20	134.40	-carb-chlorite stringer parallel to core; broken core	16932	128.00	129.00	1.0	0.07	0.10			0.09	2.1					2.1
		134.80	135.20	-breccia - chlorite rimmed fragments, with carbonate cement frag up to 3cm X 4cm; also @ 135.9-136.1	16933	129.00	130.00	1.0	0.07				0.07	1.9					1.9
				-@136.7 - 2cm, dyke 45° to core axis, fine grained, dark brown diorite															
				-@137.3 - 6cm dyke as above															
		143.90		-1cm qtz veinlet, 25° to core axis - fine pyrite	16934	143.80	144.80	1.0	0.05				0.05	2.2					2.2
		144.50	144.70	-narrow .7-1cm qtz vein 20° to core axis															
		145.65		-Contact with diorite sill - knife sharp 80° to core axis, cold, brittle rough contact, no alteration rim on RQFP, 0.5-0.7cm contact zone on diorite, dk brown-green colour, very fine grained															
145.65	150.90			DIORITE SILL															
				-fine grained, homogeneous, green to dark gray-green, 1-2% feldspar phenox white 45° to core axis; 1-3% microfracture filling, & qtz veinlets															
		149.20	149.60	-microveinlet - qtz (minor calcite) parallel to core, to 10° to core axis, continuous but irregular, slightly bleached 1cm on either side of veinlet															
	150.90			END OF HOLE															

Print attached

DIAMOND DRILL LOG				HOLE: TT-03-16		PAGE 2 OF 3		SAMPLES									
LITHOLOGY				SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL	
MAJOR UNIT	MINOR UNIT	DESCRIPTION	FROM	TO	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL	
		-fracture 15° to core axis - slight chloritic, mud on rough fracture	55.70	55.90													
		-contact with diorite sill - 30° to core axis - chloritic, mud on rough contact	58.70														
58.70	62.15	DIORITE DYKE															
		-microdiorite - fine grained, homogeneous dark green with 3% microveinlets & fracture filling qtz (carb)															
		-58.7-59.2 - fracture zone at contact, broken core, strongly chloritic, some mud/fault gouge on surfaces															
		-2cm qtz/carb veinlet 30° to core axis - pink core, bleached green for 8cm on downcore side in diorite sill	58.27														
		-bleached, brecciated, light green colour, chloritic mud at 62.15, contact 80° to core axis	61.70	62.15													
62.15	96.30	RQFP															
		-as from 45.5-58.7, increase in chloritic/sericitic phenox, 57%, qtz/carb veining 7-10%, very competent rock															
		-silicified band & qtz-carbonate vein 70° to core axis	88.50	88.90	16953	88.50	89.00	0.50	0.09			0.09	1.5			1.5	
		-0.5-1.5 contorted, carb-qtz veinlet 10° to core axis; gray sulphides	91.70		16954	91.50	92.00	0.50	<0.03			<0.03	0.4			0.4	
					16955	96.20	97.20	1.00	0.26	0.30		0.28	6.3	6.4		6.4	
96.30	98.20	RQFP			16956	97.20	98.20	1.00	0.13			0.13	2.9			2.9	
		-strongly siliceous, slightly bleached, 10% narrow qtz-carb stringers & fracture fillings, fine gray sulphides - pyrite 97.9-98.2, intensely siliceous next to Ted vein, veinlets chloritic, dominant 25-30° to core axis															
98.20	128.00	TED VEIN			16957	98.20	99.00	0.80	0.20			0.20	7.2			7.2	
		-white, massive quartz vein and brecciated vein, creamy & gray to dark gray portions, late narrow 1-5mm microveinlets, sprinkling of very fine gray-black sulphides; pyrite			16958	99.00	100.00	1.00	0.07			0.07	6.9			6.9	
		-intensely siliceous, qtz breccia - gray-dark gray, @ 98.7 - fracture, chloritic mud	98.20	99.10	16959	100.00	101.00	1.00	0.74			0.74	216.0			216.0	
		-57% fine black sulphides, clear-pink qtz fragment in creamy qtz matrix	100.40	100.70	16960	101.00	102.00	1.00	0.81			0.81	177.0			177.0	
		-colloform-rimmed banded qtz 1/2 core	102.40		16961	102.00	103.00	1.00	2.93	2.98		2.96	518.0			518.0	
		-banded, rimmed qtz, fine black sulphides rimming bands, large +5cm qtz breccia fragments in matrix with speckled fine pyrite	102.80	103.50	16962	103.00	104.00	1.00	0.91	0.90		0.91	201.0			201.0	
		-composite quartz vein, multi-coloured white, creamy, gray pink, with black, fracture fillings and speckled very fine black sulphides, short sections brecciated, total estimated mafic % - 3-7%, flecks of galena, & rare chalcocopyrite	103.70	106.20	16963	104.00	105.00	1.00	0.54			0.54	68.3			68.3	
		107.6-107.9; 108.0-180.4 - composite vein, brecciated, gray-dark gray qtz, late cross cutting veinlet & fracture filling; 3-5% fine sulphides			16964	105.00	106.00	1.00	0.41			0.41	66.1			66.1	
		-fault-leached, broken zone, moderate clay gouge	108.90	109.10	16965	106.00	107.00	1.00	0.31			0.31	42.7			42.7	
		-white "bullish" qtz, <1% fine sulphides	109.10	110.00	16966	107.00	108.00	1.00	0.95			0.95	145.0			145.0	
		-brecciated gray qtz, fine sulphide fracture filling 20° to core axis	110.00	110.30	16967	108.00	108.90	0.90	1.08			1.08	170.0			170.0	
		-white qtz, <1% sulphide in fracture filling	110.30	112.00	16968	108.90	110.00	1.10	0.32			0.32	14.4			14.4	
		-white qtz with brecciated gray qtz frag & white, creamy qtz (carb) cement around fragments, <1% sulphides except 114.0-114.6 - fracture fillings of black, fine sulphides & chlorite 20-15° to core axis & rimmed vein textures	112.00	115.10	16969	110.00	111.00	1.00	0.84			0.84	36.4			36.4	
		-white, clear, cloudy & pinkish qtz veining, multi-phased banded chalcedonic qtz & qtz fragments, brecciated	115.00	116.30	16970	111.00	112.00	1.00	0.66			0.66	25.8			25.8	
		-gray, dark gray composite - multiphase qtz vein with creamy to white late veinlets & qtz fracture filling, feldspathic (pink) clots & creamy (ankerite/+/- actinolite?) blebs & clots, 3% diss fine sulphides	116.30	117.60	16971	112.00	113.00	1.00	3.89	3.88		3.89	56.3			56.3	
		-gray - multiphase qtz vein, black tourmaline frags, brecciated 3% scattered fine dark sulphides	117.60	118.50	16972	113.00	114.00	1.00	3.64	3.25	3.6	3.5	50.1			50.1	
		-"PAYDIRT" quartz vein, dark gray to almost black, due to strong, fine sulphide mineralization, est 10-20% sulphide sections 10-15% overall, late chalcedonic qtz veinlets & fracture fillings cut dark gray sulphide matrix, bands and layers of dark gray-black sulphides 20-35° to core axis, galena, pyrite abundant, chalcocopyrite scattered, & rare sphalerite; 120-120.4 pink-brown feldspathic zone 121.4-121.9 - white & glassy qtz with late chalcedonic banding & veinlets	118.50	123.20	16973	114.00	115.00	1.00	1.18			1.18	38.3			38.3	
		-light brown to buff-gray silicified zone, silicified RQFP & qtz brecciated, massive to 123.6, becoming more porphyritic to 124.5, strong irregular band, dark gray black sulphides 124.2 galena, pyrite, chlorite; in interval estimate 50% RQFP/50% qtz veining	123.20	125.50	16974	115.00	116.00	1.00	1.12			1.12	46.3			46.3	
		-Quartz vein - multiphase veining, brecciated, rehealed, late white -creamy irregular veinlets & fracture fillings, short intervals of strong sulphide mineralization @ 125.7-126.1 - 30% black fine sulphides, galena, pyrite, chalcocopyrite, sphalerite	125.50	128.00	16975	116.00	117.00	1.00	2.78	2.67		2.73	214.0			214.0	

DIAMOND DRILL LOG				HOLE: TT-03-16				PAGE 3 OF 3				SAMPLES					
LITHOLOGY				DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
MAJOR UNIT	MINOR UNIT	FROM	TO														
				@ 126.8 - 1cm band of fine black sulphides 30 degrees to core axis, cut by late white chalcedonic veinlets with 1cm offset, @ 128.0 lower contact 20 degrees to core axis	16976	117.00	117.65	0.65	2.76	2.74			2.75	320.0			320.0
					16977	117.65	118.70	1.05	2.81				2.81	163.0			163.0
					16978	118.70	119.70	1.00	4.40	4.45			4.43	468.0			468.0
					16979	119.70	120.70	1.00	0.89				0.89	256.0			256.0
					16980	120.70	121.70	1.00	1.53				1.53	116.0			116.0
					16981	121.70	122.70	1.00	6.10	6.30			6.2	122.0			122.0
					16982	122.70	123.60	0.90	9.25	9.20			9.23	136.0			136.0
					16983	BLANK			<0.03	<0.03			<0.03	1.3			1.3
					16984	123.60	124.60	1.00	10.30	10.60			10.45	43.2			43.2
					16985	124.60	125.60	1.00	22.10	21.70			21.9	54.6			54.6
					16986	125.60	126.60	1.00	17.10	17.40			17.25	172.0			172.0
					16987	126.60	127.20	0.60	10.40	10.00			10.2	55.6			55.6
					16988	127.20	128.00	0.80	0.99	1.06			1.03	17.0	16.9		17.0
128.00	132.50			RQFP	16989	128.00	129.00	1.00	0.30				0.30	23.5			23.5
				-128.7-128.9 - 5 (.5-1cm) qtz veinlets 35° to core axis with fine sulphides	16990	129.00	130.00	1.00	0.34				0.34	5.6			5.6
				-130.0-130.1 qtz vein 30° to core axis - fine black sulphides on vein margin	16991	130.00	131.00	1.00	1.18				1.18	18.4			18.4
				-132.1-132.4 - brecciated qtz vein, chlorite wisps, <1% fine sulphide	16992	131.00	132.00	1.00	0.12				0.12	2.5			2.5
					16993	BLANK			<0.03				<0.03	<0.1			<0.1
					16994	132.00	132.50	0.50	3.91				3.91	10.8			10.8
					16995	132.50	133.50	1.00	0.27				0.27	5.0			5.0
132.50	146.80			RQFP - SILICIFIED, WITH 10-15% QUARTZ VEINING													
				-veining .5 to 10cm, with siliceous bands 10-25cm, RQFP red brown, porphyritic, feldspar phenox 30%, 2-7mm, occasional chloritic fragment 5-7cm													
				-136.5-137.1 - broken core, fracture 35° to core axis & 60° to core axis, silicified, microfractures chlorite & sericite to clay, 137.1-137.3 veins 1-1.5cm 30° to core axis													
		140.00	140.50	-chloritic fracture 45° to core axis & parallel to core, bleached with qtz fragments													
		142.30	142.40	-quartz vein 17° to core axis	16996	142.00	143.00	1.00	0.07				0.07	1.4			1.4
		143.20	144.50	-silicified zone & qtz veining at 143.9-144.0, brecciated dark gray/gray silica & veining, late chalcedonic fracture filling 0.5-1% fine sulphides, crushed breccia at 144.5	16997	143.00	144.50	1.50	0.12	0.12			0.12	2.7	2.5		2.6
		146.30	146.80	-white qtz stringers 1-1.5cm parallel to core													
146.80	182.60			RQFP - FRAGMENTAL													
				-red brown, 25% red feldspar phenox, dark gray to gray green subangular/angular fragments up to 2.5cm X 2.0 cm but generally less than 1X1cm, 5% distinct qtz-carb stringers & fracture fillings													
		148.70		-brecciated qtz-carbonate vein 0.5-1.5cm 15° to core axis													
		149.70		-0.5cm gray qtz stringer, with fine pyrite/chlorite													
		152.50	153.10	-slightly broken core, narrow 1-7mm qtz stringer 10° to core axis & parallel to core with chlorite slips													
		157.70	158.10	-irregular, quartz veinlets brecciated, broken with chlorite patches and fracture fillings													
		167.50		-2 cm qtz stringer, strong chlorite on margins 15° to core axis													
		171.5	173.50	-slightly bleached, siliceous, qtz vein at 173.1 - 3cm @ 10-15° to core axis, with chlorite wisps; entire section chloritic large chloritic frag 5cm X 4cm, at 172.7 with feldspar													
		174.10	176.20	-irregular qtz vein, with black chlorite, often rimming qtz margins, 7-10% veining													
		177.00	177.30	-chlorite slip with qtz vein 10° to core axis													
		179.00	179.10	-chloritic fragments subrounded, rimmed with sericite & sericitic altered frag													
		179.40	179.50	-banded qtz stringer 2-2.5cm @ 15° to core axis with chlorite/sericite													
		179.50	180.70	-bright? Red-pink, slightly bleached, siliceous, qtz vein with chlorite at 180.7 - 45° to core axis with fracture													
		182.40	182.60	-broken core, slight gouge near sill contact at 45° to core axis													
182.60	190.20			DIORITE SILL													
				-very fine grained, homogeneous, microdiorite, rare 1-5mm qtz fracture filling 30o to core axis													
		190.20		End of Hole March 21, 2003													

Robert Williams

DIAMOND DRILL LOG		HOLE: TT-03-17		STARTED: Mar. 21 2003		LENGTH: 62.80										
NORTHING:		AZIMUTH: 240° Collar is 35m @ 240° from TT-02-10, then & 5m @150°		COMPLETED: Mar. 22 2003		CORE SIZE: NQ										
EASTING:		DIP: -46°		LOGGED: Mar. 22 2003		49 samples split for analysis										
ELEVATION: m		DIP TESTS: Dip test @ 62.80 m - 40°		LOGGED BY: Duncan McIvor												
SECTION:																
PURPOSE: Test immediate up-dip Ted Vein extension from TT-02-10																
LITHOLOGY				SAMPLES												
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Ag (1) g/t	Au (2) g/t	Ag (2) g/t	Au (3) g/t	Ag (3) g/t	Au (4) g/t	Ag (4) g/t	Au g/t FINAL	Ag g/t FINAL
0.00	3.00	OVERBURDEN (CASING)														
3.00	13.10	RHYOLITE QUARTZ FELDSPAR PORPHYRY (RQFP) -pink to red aphanitic, siliceous groundmass, w/ 25% fspar, 10% qtz phenox to 3 mm & a few 0.5-1cm pyroclastic to lithic appearing frags -v. weak foliation @ 50 degrees to core axis -weakly, sporadically oxidized, from 3.0-9.04 -moderately fractured to brecciated in places, @ 0 degrees, 45 degrees to core axis, with silica, calcite fracture filling -variably, but generally weakly silicified, as halos to 1-2cm on silica filled fractures, & qtz-carb vns - alteration increases towards 13.1m -contains 5%, 5mm-2cm qtz carb veins, generally parallel foliation -no significant sulphides -from 4.5-5.0m, a few 2 cm qtz carb veins & silicified zones -from 11.0-11.2, strongly brecciated by thin silica-calcite stringers -from 12.0-13.1, silicification affects 30% of unit	21258	12.00	13.10	1.10	0.08	0.09				0.09	3.1	3.3		3.2
13.10	14.25	QUARTZ (MINOR CARBONATE) VEIN & ADJACENT INTENSELY SILICIFIED RQFP HALOS -predominantly a white to light gray qtz vein, cut by & often brecciated by 25%, 2mm-5mm calcite stringers @ all orientations-some minor beige Fe carb. & hard white fspar - minor hematite staining on fractures -true "vein" is from 13.60-14.0 & from 13.10-13.60 and 14.0-14.25, rock is gray, intensely silicified RQFP, with almost complete silica replacement. -vein & silicified halos contain only trace Py	21259	13.10	14.25	1.15	0.08					0.08	1.4			1.4
14.25	17.15	MODERATELY TO STRONGLY SILICIFIED, QTZ-CARB VEINED RQFP -RQFP is as above, but with mod to strong silicification affecting 30-40% of rock, as halos on qtz filled fractures, & around qtz carb veins -contains 30% 1-3cm qtz-calc-minor Fe carb veins, usually at 30-40degrees to core axis - veins often strongly brecciate host RQFP -vns in places are dark gray, cherty appearing, & are occasionally banded -vns contain minor hem, black Mn? - only trace - 0.25% Py as halos on qtz vns	21260 21261 21262	14.25 15.25 16.25	15.25 16.25 17.15	1.00 1.00 0.90	0.13 0.07 0.09					0.13 0.07 0.09	3.7 2.6 6.7			3.7 2.6 6.7
17.15	18.95	STRONGLY BRECCIATED, MULTI-PHASE QUARTZ-CARBONATE VEIN -strongly brecciated qtz-carb vein, comprised of <5mm to 5cm white to gray, cherty appearing, often angular qtz fragments in a carbonate matrix - frags to 50-80% - also contains a few (20%) 1-2cm brecciated fragments of intensely silicified RQFP -entire unit is cut by late stage qtz carb veins to 5cm -both brecciated vns & late veins contain trace Py & vfg black sulphide, as well as minor hematite, but generally v. sulphide poor	21263 21264	17.15 18.00	18.00 18.95	0.85 0.95	0.06 0.14					0.06 0.14	10.4 10.3			10.4 10.3
18.95	21.00	MODERATELY SILICIFIED, QTZ-CARB VEINS RQFP -as from 14.25 - 17.15 -locally 30% 1-10cm qtz-minor calc. Fe carb vns, often cherty, banded appearing, & @ 30-40 degrees to core axis - surrounding sil all halos affect 25% of unit -veins & surrounding wallrock contain only tr -0.25% vfg diss Py -@ 20.70, 10cm banded chalc qtz vn @ 40 degrees to core axis	21265 21266	18.95 20.00	20.00 21.00	1.05 1.00	0.10 0.10					0.10 0.10	2.5 2.5			2.5 2.5

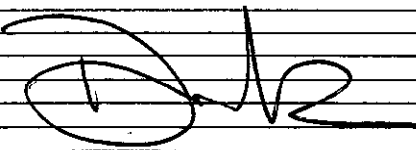
DIAMOND DRILL LOG				HOLE: TT-05-17		PAGE 2 OF 3		SAMPLES											
LITHOLOGY				DESCRIPTION		SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
21.00	38.70			BANDED TO INTENSELY BRECCIATED QUARTZ-CARBONATE VEIN (TED VEIN COMPLEX)		21267	21.00	22.00	1.00	0.31	0.30			0.31	7	6.8			6.9
				-complex, multiphase qtz-carbonate vein		21268	22.00	23.00	1.00	0.34				0.34	74.2				74.2
				-comprised predominantly of white to gray qtz, often banded & chalcedonic appearing, cut by a series of later calcite & harder Fe/MG carbonate stringers @ all orientations - late calcite stringers often v. strongly brecciate vein in places, into angular 1-2cm fragments		21269	23.00	24.00	1.00	1.34				1.34	172.0				172.0
				-a third phase of 1-5cm qtz-carb veins cut above sequence		21270	24.00	25.00	1.00	2.18	2.00			2.09	402.0				402.0
				-highly variable sulphide content, as noted below		21271	25.00	26.00	1.00	0.98				0.98	182.0				182.0
				-vein is vuggy in places (first noted vugs in Ted Vein)		21272	26.00	27.00	1.00	0.25				0.25	9.9				9.9
				-from 21.0-22.5, no visible sulphides		21273	27.00	28.00	1.00	0.20				0.20	18.8				18.8
		21.00	22.50	-@22.3-22.4, excellent chalcedonic banding in vein		21274	28.00	29.00	1.00	0.21				0.21	16.9				16.9
				-from 22.5-27.0m, sulphides increase to 1% Py, 2% vfg black sulph, as diss.mineralization throughout-black sulphides lends jet black appearance to vein & brecciated vein fragments in places-locally sulphides approach 5% over a few 10-20 zones-also as fracture filling		21275	29.00	30.00	1.00	0.28				0.28	40.6				40.6
		22.50	27.00	-from 22.5-27.0m, sulphides increase to 1% Py, 2% vfg black sulph, as diss.mineralization throughout-black sulphides lends jet black appearance to vein & brecciated vein fragments in places-locally sulphides approach 5% over a few 10-20 zones-also as fracture filling		21276	30.00	31.00	1.00	0.58	0.58			0.58	92.0				92.0
				-from 24.0-25.0, locally 5% sulphides (3% black sulphide, 2%Py) as frac fill & diss min, & associated with margins of late qtz-carb vns		21277	31.00	32.00	1.00	0.56				0.56	122.0				122.0
				-from 25.4-25.5, locally 2% Py, 3% vfg black sulphide, tr. Cpy, galena, sphalerite as thin 5mm semi-massive seams haloing a 5cm late qtz vn		21278	32.00	33.00	1.00	0.90				0.90	316.0				316.0
				-sulphide content gradationally decreases from 26.0-27.0m		21279	33.00	34.00	1.00	1.72	1.74			1.73	536.0				536.0
		27.00	31.20	-from 27.0-31.2, sulphide content generally decreases to 0.25% Py, 0.5% vfg black sulphide, usually as fracture filling & as halos on late stage qtz-carb veins-locally excellent chalc banding features in qtz veining		21280	34.00	35.00	1.00	1.06				1.06	242.0				242.0
		31.20	36.00	-sulphide content increases to 1.5% Py, 2.5% vfg black sulphide, tr Cpy and trace Gn, as vfg diss.min. often in brecciated vein fragments, and as fracture filling, and as semi-massive halos on late stage qtz-carb vns		21281	35.00	36.00	1.00	1.01				1.01	208.0				208.0
		36.00	37.00	-from 36.0-sulphides decrease to tr.Py, tr.black sulphide		21282	36.00	37.00	1.00	0.55				0.55	92.4				92.4
		37.00	38.70	-sulphides increase to 2% Py, 3% vfg black sulphide, 0.5% Gn, tr.Cpy, sph, usually as semi-massive bands to 1 cm haloing late stage qtz-carb veins-locally from 38.2-38.7, sulphides increase to 8-10%, w/ Py-Gn-Cpy-black sulphide blebs to 1cm & seams to 1cm along contact w/ irregular underlying RQFP-contact is @ 0-30° to core axis.		21283	37.00	38.00	1.00	0.97				0.97	242.0				242.0
						21284	38.00	38.70	0.70	1.87	1.85			1.86	354.0				354.0
38.70	49.30			VARIABLY BLEACHED, QTZ-CARB VEINED RHYOLITE QUARTZ FELDSPAR PORPHYRY		21285	38.70	39.60	0.90	0.20				0.20	42.6				42.6
				-unit is predominantly a brick red, massive RQFP, but with several 10-50cm zones of intense bleaching & silicification, as noted below, & several well mineralized qtz-carb veins, as noted below		21286	39.60	40.60	1.00	0.11				0.11	15.4				15.4
				-away from bleached & veined zones, average sulphide content is only tr.Py, black sulphide.		21287	40.60	41.60	1.00	0.04				0.04	2.6				2.6
		39.10	39.60	-intensely bleached, silicified zone as halo on several 1-2cm qtz-carb vns @ 25-30° to core axis-zone has 2% Gn, 2% Py, 2% vfg black sulphide, & trace Cpy as immediate margins on veins & finer grained disseminated mineralization		21288	41.60	42.60	1.00	0.03				0.03	3.0				3.0
		40.50	40.60	-@40.5, 10cm banded qtz-carb vn @ 35° to core axis w/ 2% black sulphide, 1% Gn, 2% Py, tr. Cpy															
		42.60	42.70	-from 42.6-42.7, 10 cm banded qtz-carb vn @ 35° to core axis, with 2% vfg black sulphide, 1% Py		21289	42.60	43.40	0.80	<0.03				<0.03	3.2				3.2
		43.50		-@43.5, 3cm qtz-carb vn @ 30° to core axis with 10% Gn, tr.Py, black sulphide, as semi-massive seams to 5mm @ vn margins		21290	43.40	43.70	0.30	0.23				0.23	58.1				58.1
		43.70	44.20	-50cm qtz-carb vn, with 20% 1-3cm fragments of brecciated RQFP		21291	43.70	44.20	0.50	0.81					164.0				164.0
				-vein contains 2% galena, 2% vfg black sulphide, 1%Py, as semi-massive blebs to 0.5cm & thin seams along later stage 5 10cm qtz-carb vns (similar to Ted Vein)		21292	44.20	45.20	1.00	0.04					3.8				3.8
		46.10	46.30	-locally several 1-5cm calcite qtz vns @ all orientation w/ tr.Py, Gn, black sulphide		21293	45.20	46.30	1.10	0.08	0.06	0.08		0.07	3.5	3.1	3.6		3.4
		47.30	47.50	-20 cm qtz-calcite vn @ 20° to core axis, w/ only tr.Py, black sulphide		21294	46.30	47.30	1.00	0.04					3.2				3.2
		47.50	47.80	-qtz-calc vn @ 0° to core axis w/ 1% black sulph, tr.Gn, Py		21295	47.30	48.30	1.00	0.09					6.9				6.9
						21296	48.30	49.30	1.00	0.06					3.6				3.6
49.30	56.30			BLEACHED, SILICIFIED QTZ CARB VEINED RQFP															
				-as above, but qtz-carb veining much more frequent, to 30% of unit & up to 0.9 m in width															
				-in addition, groundmass to RQFP is more pervasively bleached, silicified, to a light grayish green colour															
				-major veins within this unit are as follows:															
		49.30	50.20	-90cm strongly brecciated, vuggy qtz-carb vein w/ 3% vfg black sulphide as semi-massive seams & blebs to 1cm, 2% Py, tr.Gn, Cpy		21297	49.30	50.20	0.90	1.28	1.29			1.29	174.0				174.0

DIAMOND DRILL LOG				HOLE: TT-03-17				PAGE 3 OF 3								
LITHOLOGY				SAMPLES												
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
	52.30	54.10		21298	50.20	51.20	1.00	0.07			0.07	5.9				5.9
	55.20	55.60	-zone of intense bleaching & silicification, w/ 40% 1-20 cm qtz carb vns @ all orientations, containing 2% vfg black sulphide, 1% Py, tr.Gn, usually as halos on veins	21299	51.20	52.30	1.10	0.09			0.09	11.5				11.5
	55.90	56.30	-40 cm qtz-carb vein w/ only 1% combined Py-black sulphide	21300	52.30	53.20	0.90	0.28			0.28	56.3				56.3
			-locally 70% of unit is qtz-carb veins to 20 cm, w/ 2% combined Py-black sulphide	21051	53.20	54.10	0.90	0.40			0.40	54.5				54.5
			-contact @ 56.30 is based on decrease in vein content and degree of alteration	21052	54.10	55.20	1.10	0.17			0.17	4.9				4.9
			-this is the "Western Zone" stockwork	21053	55.20	55.90	0.70	0.32			0.32	27.8				27.8
				21054	55.90	56.30	0.40	0.32			0.32	22.5				22.5
56.30	62.80		BRICK RED RHYOLITE QUARTZ FELDSPAR PORPHYRY (RQFP)	21055	56.30	57.00	0.70	0.14			0.14	21.1				21.1
			-essentially massive, red, unaltered RQFP, but w/ a few narrow qtz-carb vns with associated silicification halos as follows;	21056	59.50	60.00	0.50	0.10			0.10	6.5				6.5
			-@ 56.9, 8cm qtz-carb vn @ 45° to core axis with 1% combined Py-black sulphide													
	59.70	60.00	-30cm silicified zones haloing a few 1-3cm qtz-carb vns 2w/ 3% Gn, tr.Py, black sulphide, usually haloing veins													
			-@62.0, 5cm pred calc-minor qtz vein @ 25° to core axis, no sig sulphides													
			END OF HOLE @ 62.80 M - LOGGED BY DUNCAN MCIVOR, MARCH 22, 2003													

DIAMOND DRILL LOG HOLE: TT-03-13
NORTHING: AZIMUTH: 240 ° Hole is collared 20 m @ 240° from Hole TT-02-13 **STARTED:** Mar. 22, 2003 **LENGTH:** 78.04 m
EASTING: DIP: - 45 ° **COMPLETED:** Mar. 23, 2003 **CORE SIZE:** NQ
ELEVATION: m **DIP TESTS:** Dip test @ 78.04m - 37° **LOGGED:** Mar. 24, 2003
SECTION: TT-02-13 **LOGGED BY:** Duncan McIvor **32 samples split for analysis**
PURPOSE: Test immediate up-dip extension to Hole TT-02-13

LITHOLOGY				SAMPLES																
MAJOR UNIT FROM	TO	MINOR UNIT FROM	TO	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL		
0.00	33.54			OVERBURDEN (CASING)																
33.54	47.10			BLEACHED RHYOLITE QUARTZ-FELDSPAR PORPHYRY -light gray, bleached & wkly silicified RQFP (normal brick red colour is gone) -wkly foliated @ 45° to core axis -contains numerous (15-20%) 1-5cm zones of more intense silicification, usually as distinct alteration halos on narrow 1-5cm qtz-carb veins, as documented below -contains a few 0.5% vfg diss Py throughout unit - locally sulphide content rises to 2-3% in more intensely altered zone, as documented below	21057	BLANK			<0.03				<0.03	1.2					1.2	
		33.54	35.00	-from 33.54-35.0, locally vfg diss Py to 1.5-2% - unusual for RQFP	21058	38.50	39.50	1.00	0.05				0.05	2.3					2.3	
		38.80	39.10	-30 cm zone of intense silicification & brecciation w/ 4-5% vfg diss Py	21067	39.50	41.00	1.50	<0.03				<0.03	1.5					1.5	
		41.00	41.25	-25 cm zone of Fe carb-sil alteration (possibly a vein) @ 10° to core axis, with only trace Py	21059	41.00	41.50	0.50	0.08				0.08	1.4					1.4	
		42.20	43.30	-1.1m zone of very strong brecciation by narrow calc, Fe/Mg carb & silica stringers, @ all orientations - host RQFP is brecciated into 0.5-1cm frags & is strongly silicified - contains 2% vfg diss Py - a few qtz vn breccia fragments also in zone	21060	42.20	43.30	1.10	0.17				0.17	3.1					3.1	
		44.30	44.38	-8 cm brecciated qtz-calc vn @ 50° to core axis, w/ trace Py	21061	44.70	45.70	1.00	0.28	0.30			0.29	4.9	4.6				4.8	
		44.70	47.10	-qtz-calc veins & vein breccia zones from 1 to 20 cm become 30% of unit - vns are at all orientations - both vns & wallrock are sulphide poor, with only trace - 0.25% vfg diss Py. Calc is dominant over qtz locally -grades into "Possible Ted Vein"	21062	45.70	46.70	1.00	0.11				0.11	4.1					4.1	
					21063	46.30	47.10	0.40	0.11				0.11	4.3					4.3	
47.10	53.00			BRECCIATED QUARTZ-CARBONATE VEIN (POSSIBLE TED VEIN COMPLEX) -complex multiphase, strongly brecciated qtz-carbonate vein - comprised of white to gray cherty qtz & grey to black extremely well banded chaledonic qtz, as brecciated fragments from <1cm to 2-3 cm in a finer grained matrix of calcite-silica - also contains, proximal to contact, a few brecciated fragments of RQFP -in some places, bluish gray opaline silica appears to have filled open spaces -unit is cut by late, predominantly carb filled fractures @ all orientations & a few late 1-5cm qtz-carb vns @ all orientations -from 47.1-49.30, unit is v. sulphide poor, with only tr -0.25% diss Py	21064	47.10	48.20	1.10	0.42				0.42	11.2					11.2	
					21065	48.20	49.30	1.10	0.25				0.25	10.3					10.3	
		49.30	49.60	-30 cm zone of black, mylonitic gouge - jet black gouge matrix with 30% << 5mm to 1 cm qtz vein fragments & a few 1-2 cm RQFP fragments - locally 0.5% Py diss in gouge matrix	21066	49.30	49.60	0.30	0.75				0.75	44.2					44.2	
		49.60	50.10	-50 cm calcite vein, with chlorite fracture filling-no significant sulphides	21068	49.60	50.10	0.50	0.13				0.13	6.5					6.5	
		50.10	53.00	-unit becomes intensely brecciated -w/ angular, <<5 mm to 3 cm silicified RQFP frags to 30%, & 70% brecciated qtz-carb vn frags, in a matrix of silica-carbonate - sulphide content is highly variable, as noted below -from 50.10 to 51.40, only trace Py -from 51.4-53.0 becomes 1% galena, 0.5% Cpy, tr. Py & tr. Vfg black sulphide (sphalerite?) as vfg diss min & fracture filling in breccia - a few galena blebs to 1 cm in places -contact @ 53.0m is marked by 10 cm late Fe carb-qtz & soft green talc vein @ 30° to core axis	21069	50.10	50.80	0.70	0.76				0.76	38.5						38.5
					21070	50.80	51.40	0.60	3.12	3.24			3.18	416					416	
					21071	51.40	52.00	0.60	2.14	2.03			2.09	212					212	
					21072	52.00	53.00	1.00	0.49				0.49	34.2					34.2	
53.00	62.50			VARIABLY BLEACHED, SILICIFIED & CHLORITIZED RQFP -unit is predominantly a light gray to grayish green, bleached, & moderately silicified RHYOLITE QUARTZ FELDSPAR PORPHYRY - contains a few 1-2 m intervals of less altered, more typically brick red RQFP	21073	53.00	54.00	1.00	0.10				0.10	3.9					3.9	
					21074	54.00	54.60	0.60	0.05				0.05	5.2					5.2	

DIAMOND DRILL LOG				HOLE: TT-03-18				PAGE 2 OF 2		LITHOLOGY									
MAJOR UNIT		MINOR UNIT		DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL	
FROM	TO	FROM	TO																
				-also contains several 50cm -1m sections with strong chlorite alteration, where 5mm-1cm chlorite seams/filled fractures also have strong chlorite alteration haloes - these chloritic zones usually have 2-3% vvfq diss Py															
				-unit is strongly fractured, @ all orientations, with qtz, calc, talc & chlorite fracture filling															
				-contains 5% -5mm to 3cm qtz-carb vns @ all orientations															
				-average sulphide content is 1% vvfq diss Py, but locally variable, as noted below															
		54.60	55.20	-locally intensely silicified & moderately brecciated zone, with 3% vvfq diss Py	21075	54.60	55.20	0.60	0.22				0.22	4.8				4.8	
		56.20	56.60	-1-2 cm banded, chalcedonic qtz vns @ 40°, 0° to core axis to 20% of interval-no significant sulphides	21076	56.20	56.60	1.00	0.12				0.12	2.1				2.1	
		56.70	58.40	-strongly chloritic zone, as fracture filling & related haloes, w/ 3-4% vvfq diss Py	21077	56.20	56.60	0.40	0.24				0.24	2.9				2.9	
		58.60	59.00	.3 cm qtz-calc-chl vn @ 20° to core axis	21078	56.60	57.60	1.00	0.05	0.06	0.05		0.05	2.1	2.1	2.0		2.1	
		60.50	61.00	-begin seeing black, graphitic-chloritic fracture filling & slips on a few qtz-carb vns - Py content increases to 2-3% vvfq diss min	21079	57.60	58.40	0.80	<0.03				<0.03	1.8				1.8	
		61.50	62.50	-locally intensely silicified zone, w/ numerous 1-10 cm qtz-carb & hard beige Fe carb vns @ 20-40° to core axis & associated 3% vvfq diss Py	21080	58.40	59.50	1.10	0.10				0.10	1.7				1.7	
				-from 61.1-61.4, numerous graphitic seams, in what appears to be a large argillaceous fragment	21081	59.50	60.50	1.00	0.03				0.03	1.7				1.7	
				-very distinct contact w/ underlying much more coarsely fragmental unit	21082	60.50	61.50	1.00	<0.03				<0.03	1.7				1.7	
					21083	61.50	62.50	1.00	0.05				0.05	2.9				2.9	
62.50	78.05			WEAKLY SHEARED, COARSELY FRAGMENTAL RQFP															
				-unit remains RQFP, with a brick red siliceous groundmass & 25-30% fspar phenox, 10% qtz phenox, but very fragmental, w/ 10-15% 5mm-2cm light green to yellow to gray, "argillaceous" fragments, often stretched elongate a pervasive wk to moderate shear fabric @ 45-55° to core axis															
				-largely unaltered, but does contain a few 10-30cm zones of wk-mod silicification															
				-moderately fractured @ all orientations with qtz, calc, chlorite, fracture filling															
				-occasional thin graphitic filled fracture															
				-contains average 0.5% vvfq diss Py, but increases where altered (noted below)															
		64.70	65.80	-broad zone of mod to strong silicification & chloritization, as halos on numerous 1-2 cm qtz-carb vns & soft, chloritic filled fractures - locally contains 1% vvfq Py, usually associated w/ chlorite filled fractures & chlorite alteration halos	21084	64.70	65.80	1.10	0.04				0.04	2.7				2.7	
			67.10	-5cm argillaceous "fragment" @ 10° to core axis															
		67.10	68.70	-shearing intensity increases, & changes orientation to more 50-70° to core axis - rock becomes increasingly bleached, altered & often micro-brecciated by thin qtz-carb stringers - fspar in porphyry altered to soft, light green chl (talc?)	21085	67.10	68.70	1.60	<0.03				<0.03	0.4				0.4	
		68.70	69.00	-30 cm zone of graphitic fault gouge seams to 10 cm @ 30° to core axis	21086	68.70	69.00	0.30	0.05				0.05	7.5				7.5	
		69.00	78.05	-as in from 67.10-68.70, more strongly sheared with numerous narrow 1-20 cm zones of "gouge", including @ 73.6, 5cm zone; @ 74.2, 5cm gouge zone; @ 74.9, 5cm gouge zone; @ 76.4-76.8, 40cm gouge zone - gouge is typical qtz vn & fragments in unconsolidated clay matrix - gouge also often wkly graphitic	21087	74.00	75.00	1.00	<0.03				<0.03	0.5				0.5	
					21088	75.00	76.00	1.00	<0.03				<0.03	1.1				1.1	
					21089	76.00	77.00	1.00	<0.03				<0.03	0.7				0.7	
				EOH @ 78.05 March 23, 2003 Duncan McIvor															



DIAMOND DRILL LOG		HOLE: TT-03-19		STARTED: Mar. 24 2003	LENGTH: 108.54m
NORTHING:	AZIMUTH: 240° Collar is 52m @ 160° from TT-02-13	COMPLETED: Mar. 25 2003	CORE SIZE: NQ		
EASTING:	DIP: -45°	LOGGED: Mar. 25-26, 2003	40 samples split for assay		
ELEVATION: m	DIP TESTS: @108.54M, 41°	LOGGED BY: Duncan Mclvor			
SECTION:	PURPOSE: Test for Southern Extension of Ted Vein				

LITHOLOGY				SAMPLES													
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL	
0.00	27.44	CASING															
		-OVERBURDEN TO 25.91M, THEN HQ RQFP TO 27.44M (DISCARDED)															
27.44	48.60	FRAGMENTAL RHYOLITE QUARTZ-FELDSPAR PORPHYRY															
		-rock comprised of a brick red siliceous groundmass, with 20% 1mm-5mm fspar phenox, 10% 1mm-5mm qtz phenox, & 15% 5mm-3cm pyroclastic fragments															
		-pyroclastic frags are often altered to soft, light green montmorillonite? Talc?, as are, in some places, fspars															
		-fragments are often stretched parallel to a weak foliation @ 65-75° to core axis															
		-a few wkly bleached, altered zones, where groundmass becomes grayish green, usually proximal to prominent mont-talc filled fractures															
		- wkly fractured @ all orientations, with soft green mont/talc, minor qtz-carb fracture filling															
		- contains only a very few (<1%) thin (to 2cm) qtz-carb vns @ all orientations															
		-average sulphide content only trace vfg diss Py & minor Py halos on fractures															
	27.60	27.80															
	29.70	30.20															
		-zone of strong bleaching & light green, soft talc-mont alteration															
		-several 10 cm zones of strong bleaching & soft talc-mont alteration, as halos around thin (<1cm) talc-mont vns/filled fractures - locally 1% vfg diss Py															
	37.70	37.90															
		-20cm zone of bleaching, & soft light green mont-talc alteration															
		40.70															
		-3cm qtz-carb-mont/talc vn @ 35° to core axis, w/ 1% vfg Py @ vn margins															
	41.60	41.80															
		-20cm light greenish gray bleached zone	21090	BLANK													
	42.00	42.60															
		-approx 40% of interval is bleached, altered to soft green mont/talc, as halos on a few thin 1-2 cm qtz-carb-mont vns - locally 1% vfg diss Py	21091	42.00	43.00	1.00	<0.03	<0.03	<0.03	<0.03		0.9	1.1	1.0			1.0
	43.00	43.20															
		-soft green talc/mont alt zone as halo on thin qtz-carb vn, w/ 1% vfg diss Py	21092	43.00	44.00	1.00	<0.03			<0.03		1.0					1.0
	43.50	43.80															
		-light greenish gray bleached zone															
	45.10	45.30															
		-talc/mont-qtz-carb filled frac @ 15° to core axis, w/ 10% coarse Py, & 2-3% Py/5cm halo on filled fracture	21093	45.00	46.00	1.00	<0.03			<0.03		1.0					1.0
	45.70	46.00															
		-30 cm zone of intense soft green talc/mont alteration & patches of intense silicification around a few thin qtz-carb veins - locally this alteration zone contains 5% vfg diss Py	21094	46.00	47.00	1.00	0.19			0.19		0.9					0.9
	46.30	46.30															
		-5cm qtz-carb vein @ 40° to core axis w/ 3% coarse (to 3mm) Py	21095	47.00	48.00	1.00	<0.03			<0.03		0.8					0.8
	46.80	46.80															
		-1cm qtz-carb vn @ 30° to core axis with 3% Py/5cm haloing vein	21096	48.00	48.60	0.60	0.03			0.03		1.4					1.4
	47.00	48.00															
		-sulphides increase to 2% vfg diss Py															
		*contact @ 48.60 is arbitrary, based on pervasive "bleached" appearance to groundmass, & much finer grained, less porphyritic texture - more of a fragmental unit - very distinctive change from RQFP															
48.60	57.70	BLEACHED, FELSIC FRAGMENTAL															
		(ALTERED, FINE GRAINED EQUIVALENT TO OVERLYING UNIT)															
		-rock comprised of a vfg-aphanitic gray to light pinkish gray siliceous groundmass, with only 5-10% fspar phenox, to 1-2mm, & 5% qtz phenox to 2-3mm															
		-very fragmental, w/ 10-15%, 2mm-2cm pyroclastic fragments of similar composition, often stretched elongate weak foliation @ 60-70° to core axis															
		-unit contains 5% 1-2cm qtz-carb-mont/talc veins @ all orientations - veins often have 3-5cm intense soft green mont/talc alteration halos															
		-unit is very pyritic, w/ 3-4% vfg diss Py throughout - often to 5% in immediate halos to altered veins															
	48.60	49.50															
		-numerous 5mm qtz-calc filled fractures @ 0-20° to core axis, w/ locally 5% Py haloing fractures	21097	48.60	49.50	0.90	<0.03			<0.03		0.9					0.9
		-from 49.80-50.50, locally 5% vfg diss Py as halos on a few thin qtz-carb veins & infilled fractures	21098	49.50	50.50	1.00	<0.03			<0.03		0.9					0.9

DIAMOND DRILL LOG				HOLE: TT-03-19	PAGE 2 OF 3												
LITHOLOGY					SAMPLES												
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	
FROM	TO	FROM	TO														
		51.40		-3cm qtz-carb vein @ 20° to core axis w/ pyritic halo	21099	50.50	51.50	1.00	0.03				0.03	1.3			1.3
		52.90	53.30	-intensely bleached, light grayish green zone as alteration halo around 5mm calc-Py-mont/talc filled fracture @ 0° to core axis	21100	51.50	52.50	1.00	<0.03	<0.03			<0.03	1.0	1.2		1.1
				-from 53.5, begin seeing blood red hematite with chalcedonic qtz as fracture filling, & locally texture becomes very "mottled" appearing	21101	52.50	53.50	1.00	<0.03				<0.03	1.2			1.2
					21102	53.50	55.00	1.50	0.03				0.03	1.5			1.5
					21103	55.00	56.50	1.50	<0.03				<0.03	1.4			1.4
					21104	56.50	57.70	1.20	<0.03				<0.03	1.4			1.4
57.90	61.40			MINERALIZED, BLEACHED, SILICIFIED FELSIC FRAGMENTAL													
				-as in preceding unit, but bleaching becomes intense, to a light beige colour, & silicification becomes a major alteration affecting 30-40% of interval - silicification occurs as broad halos around numerous (10%) 1-3cm, chalc qtz (minor carb) veins, with minor associated mont/talc @ all orientations	21105	57.70	58.70	1.00	<0.03				<0.03	1.5			1.5
				-unit is strongly fractured @ all orientations, w/ qtz-carb-mont/talc & Py fracture filling	21106	58.70	59.70	1.00	<0.03				<0.03	1.8			1.8
				-unit is strongly mineralized, w/ 5% Py, as pervasive vvfq diss min & coarser blebs & patches haloing qtz-carb veins	21107	59.70	60.70	1.00	<0.03				<0.03	2.0			2.0
					21108	60.70	61.40	0.70	<0.03				<0.03	1.9			1.9
61.40	62.60			QUARTZ/BLEACHED FELSIC FRAGMENTAL IN FAULT GOUGE ZONE	21109	61.40	62.60	1.20	<0.03	<0.03			<0.03	1.5	1.5		1.5
				-fault gouge (green to gray to black clay) with unconsolidated fragments of gray cherty qtz (30%) & bleached felsic fragmental (70%) - only tr Py observed in a few altered felsic fragmental pieces													
62.60	68.90			MINERALIZED, BLEACHED, SILICIFIED FELSIC FRAGMENTAL	21110	62.60	63.60	1.00	<0.03				<0.03	0.9			0.9
				-identical to interval from 57.70-61.40 m - locally slightly less pyritic, with an average 3-4% vvfq diss Py - contains a few 1cm Py "fragments"	21111	63.60	64.60	1.00	<0.03				<0.03	1.0			1.0
					21112	64.60	65.60	1.00	<0.03				<0.03	0.9			0.9
68.90	73.00			FAULT & GOUGE ZONE IN BLEACHED, SILICIFIED FELSIC FRAGMENTAL	21113	65.60	66.60	1.00	<0.03				<0.03	1.7			1.7
				-intense fault gouge zone, comprised of 70% <2mm to 3cm brecciated angular fragments of bleached, silicified felsic fragmental, set in a soft white to greenish white clay (mont) matrix	21114	66.60	67.60	1.00	<0.03				<0.03	2.0			2.0
				-gouge also contains a few (<5%) qtz vein fragments	21115	67.60	68.90	1.30	<0.03				<0.03	1.0			1.0
				-only 1-2% Py within fragments of bleached, silicified felsic unit	21116	68.90	70.00	1.10	<0.03				<0.03	1.3			1.3
					21117	70.00	71.00	1.00	<0.03				<0.03	0.8			0.8
					21118	71.00	72.00	1.00	<0.03				<0.03	0.8			0.8
					21119	72.00	73.00	1.00	<0.03				<0.03	1.0			1.0
73.00	76.60			BLEACHED SILICIFIED FELSIC FRAGMENTAL	21120	73.00	74.00	1.00	<0.03				<0.03	1.8			1.8
				-unit is light gray to beige, & intensely bleached, silicified, such that porphyritic and fragmental textures are almost completely obliterated	21121	74.00	75.00	1.00	<0.03				<0.03	1.8			1.8
				-contains 15-20% 1-10cm gray cherty to chalc qtz veins @ all orientations, with minor associated carb - intense silicification usually halos veings	21122	75.00	76.00	1.00	0.03				0.03	1.9			1.9
				-contains only 2% Py, intimately associated with qtz veining and adjacent silicification halos, as both vvfq min & blebs to 5mm	21123	76.00	76.60	0.60	0.03				0.03	1.8			1.8
76.60	80.70			FAULT AND GOUGE ZONE IN BLEACHED, SILICIFIED FELSIC FRAGMENTAL AND QUARTZ VEIN	21124	76.60	77.60	1.00	0.11				0.11	5.2			5.2
				-intense fault and gouge zone, comprised of ~50% angular <1mm to 2cm silicified felsic fragmental fragments, & 50% cherty gray to black to white qtz vein fragments set in a soft green, chloritic, to light gray clay rich matrix	21125	77.60	78.10	0.50	0.25				0.25	10.7			10.7
				-contains 3% Py as blebs & vfg diss min within altered felsic fragmentals, & occasionally with small qtz vns	21126	78.10	78.80	0.70	0.05	0.05	0.04		0.05	3.7	3.5	3.6	3.6
		77.60	78.10	-intact piece of veined, altered, silicified felsic fragmental, locally w/ 7% Py	21127	78.80	80.20	1.40	0.08				0.08	5.4			5.4
		78.80	80.20	-predominantly soft, dark gray clay - intense gouge zone	21128	80.20	80.70	0.50	0.16				0.16	6.4			6.4
				-sharp contact @ 80.70 with quartz vein													
80.70	82.00			BRECCIATED QUARTZ VEIN	21129	80.70	82.00	1.30	0.84				0.84	13.5			13.5
				-white to dk gray qtz vein - intensely fractured, predominantly @ 0° to core axis, to strongly brecciated in places, with calc, silica, tr Py, chl as fracture filling - only tr Py throughout vein - contains a few 1-2cm brecciated fragments of RQFP													
(FROM 57.70-82.0M MAY BE WEAK EXPRESSION OF "TED" EPITHERMAL SYSTEM)																	

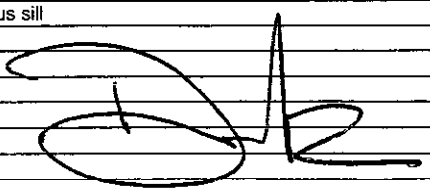
DIAMOND DRILL LOG				HOLE: TT-03-19				PAGE 3 OF 3											
LITHOLOGY				SAMPLES															
MAJOR UNIT		MINOR UNIT		DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1)	Au (2)	Au (3)	Au (4)	Au g/t FINAL	Ag (1)	Ag (2)	Ag (3)	Ag (4)	Ag g/t FINAL	
FROM	TO	FROM	TO						g/t	g/t	g/t	g/t	g/t	g/t	g/t	g/t	g/t	g/t	g/t
82.00	108.54			FRAGMENTAL RHYOLITE QUARTZ FELDSPAR PORPHYRY -unit is comprised of a brick red, aphanitic siliceous groundmass, w/ 25% 1-5mm fspar phenox, & 10% 2-5mm qtz phenox -also contains ~ 10% pyroclastic fragments to 1cm, usually light gray-green, soft, clay altered material -wkly foliated, @ between 30-45° to core axis -contains a few 5-30cm, wkly "bleached" zones, where groundmass becomes light grayish green -contains a few (<5%) 1-3cm qtz-carb vns, usually parallel weak foliation -average sulphide content is 0.25% vfg diss Py - occasional zones to 0.5% Py proximal to qtz-carb veins & prominent qtz-carb filled fractures															
		82.00	84.15	-groundmass is lighter grayish pink - wkly bleached - fspars locally are altered to soft green mont/talc	21130	82.00	83.00	1.00	<0.03				<0.03	2.1					2.1
			86.50	-a few 1-2cm qtz-carb-green mont/talc vns @ 45° to core axis															
			88.90	-2cm qtz-carb vn @ 30° to core axis															
		92.10	92.70	-locally groundmass is lighter grayish green, wkly bleached															
			95.20	-3cm qtz vn @ 80° to core axis with locally 1% Py/5cm as halo on vein															
		96.35	96.60	-3cm qtz-calc vn @ 20° to core axis															
			96.90	-1cm qtz carb vn @ 40° to core axis															
		102.40	105.10	-wk sporadic bleaching, with occasional thin qtz-carb vns															
				EOH @ 108.54 Duncan Mcivor March 26, 2003															

DIAMOND DRILL LOG				HOLE: FT-03-20		PAGE 2 OF 3		SAMPLES										
LITHOLOGY				DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
MAJOR UNIT	MINOR UNIT	FROM	TO															
				-contact @ 65.0m is arbitrary, based on intensity of alteration (becomes even more intense below 65.0m, almost completely obliterating porphyritic texture in places), & degree of calcite-qtz-mont-clay "microfracturing" of unit	21141	59.00	60.00	1.00	<0.03				<0.03	<0.1				<0.1
					21142	60.00	61.00	1.00	<0.03				<0.03	<0.1				<0.1
					21143	61.00	62.00	1.00	<0.03				<0.03	<0.1				<0.1
					21144	62.00	63.00	1.00	0.03	0.04			0.04	0.2	0.2			0.2
					21145	63.00	64.00	1.00	<0.03				<0.03	0.1				0.1
					21146	64.00	65.00	1.00	<0.03				<0.03	0.1				0.1
65.00	85.20			INTENSELY BLEACHED, MINERALIZED (Py) FELSIC FRAGMENTAL (AS PER ABOVE, BUT EVEN MORE STRONGLY ALTERED)	21147	65.00	66.00	1.00	<0.03				<0.03	0.3				0.3
				-groundmass is light gray to beige, & intensely bleached, (ser-carb-clay) altered - porphyritic & fragmental texture is largely obliterated throughout 30-40% of unit	21148	66.00	67.00	1.00	<0.03				<0.03	0.2				0.2
				-intensely "microfractured" @ all orientations, with clay gouge, mont/talc, some calc, qtz, Py fracture filling	21149	67.00	68.00	1.00	0.07				0.07	0.3				0.3
				-a few 1-5cm carb-qtz vns parallel w/ foliation @ 50° to core axis - though most veins are sheared into "gouge" zones	21150	68.00	69.00	1.00	<0.03				<0.03	0.2				0.2
				-remains strongly pyritic, w/ 3% vvfq diss Py, Py fracture filling, & Py in gouge	21151	69.00	70.00	1.00	<0.03				<0.03	0.3				0.3
		65.00	66.50	-30% 1-5cm zones of clay-carb rich gouge & gouge breccia seams	21152	70.00	71.00	1.00	<0.03				<0.03	0.3				0.3
			67.30	-10cm zone of gouge/breccia	21153	71.00	72.00	1.00	0.52				0.52	<0.1				<0.1
			68.30	-20cm zone with 1-3cm gouge seams @ 0-20° to core axis, with 10% associated Py	21154	72.00	73.00	1.00	<0.03				<0.03	0.2				0.2
			69.00	-from 69.0-73.50m sulphide (Py) content increases to 4-5%	21155	73.00	74.00	1.00	<0.03				<0.03	0.5				0.5
			73.30	-20cm zone of black clay gouge @ 45° to core axis	21156	74.00	75.00	1.00	<0.03				<0.03	0.2				0.2
			77.70	-porphyritic & fragmental textures are almost completely obliterated	21157	75.00	76.00	1.00	<0.03				<0.03	0.1				0.1
			82.10	-less pyritic, with only 1% vvfq diss Py	21158	76.00	77.00	1.00	<0.03				<0.03	<0.1				<0.1
			82.50	-30cm soft green talc/mont & minor carb-qtz "vein" @ 20° to core axis	21159	77.00	78.00	1.00	<0.03				<0.03	<0.1				<0.1
			82.80	-5cm soft green talc/mont seam @ 50° to core axis	21160	78.00	79.00	1.00	<0.03				<0.03	<0.1				<0.1
			83.30	-10cm soft green talc/mont seam @ 50° to core axis	21161	79.00	80.00	1.00	<0.03	<0.03	<0.03		<0.03	<0.1	<0.1	<0.1		<0.1
			83.50	-numerous 1-5cm bands/vns of gouge & talc/mont & qtz-carb @ all orientations	21162	80.00	81.50	1.50	<0.03				<0.03	0.1				0.1
				-contact @ 85.2 is based on reappearance of prominent porphyritic & fragmental textures, & a slight decrease in	21163	81.50	83.00	1.50	<0.03				<0.03	0.2				0.2
					21164	83.00	85.20	2.20	<0.03				<0.03	0.4				0.4
85.20	90.80			BLEACHED, ALTERED FELSIC FRAGMENTAL (ALTERED RQFP)	21165	85.20	86.70	1.50	<0.03				<0.03	0.7				0.7
				-unit becomes recognizably porphyritic and fragmental again, although groundmass remains light gray to beige in colour, v strongly bleached	21166	86.70	88.20	1.50	<0.03				<0.03	0.8				0.8
				-most fspar phenox & pyroclastic fragments remain altered to light green, soft talc/mont? (clay)	21167	88.20	89.70	1.50	<0.03				<0.03	0.8				0.8
				-still contains numerous (5%) 1-10cm zones of soft green talc/mont alteration & veining, as well as occasional "gouge" zones	21168	89.70	90.80	1.10	<0.03				<0.03	0.8				0.8
				-contains <5% qtz-carb vns to 1-5cm														
				-remains relatively pyritic, w/ 2% vvfq diss Py throughout unit, & as minor fracture filling & min associated with talc/mont seams & occasional qtz-carb vns														
		85.50	85.60	-10cm qtz vein or intensely silicified zone @ 20-45° to core axis, with adjacent vuggy carbonate veining & 3-5cm bands of fault gouge & breccia														
		89.20	90.10	-locally porphyritic & fragmental texture obliterated														
		90.10	90.80	-grades into significantly less altered, typical rhyolite quartz feldspar porphyry (RQFP)														
90.80	94.40			FRAGMENTAL RHYOLITE QUARTZ FELSPAR PORPHYRY														
				-light pinkish gray groundmass w/ 20% fspar, 10% qtz phenox from 2mm-5mm, & 10% 2mm-1cm pyroclastic fragments, in typical, only v. wkly bleached RQFP														
				-contains only trace vfg diss Py														
				-from 94.3-94.4m, grades into more strongly bleached, altered RQFP														
94.40	119.80			STRONGLY BLEACHED, FRAGMENTAL RHYOLITE QUARTZ FELSPAR PORPHYRY (RQFP)	21169	94.40	96.00	1.60	<0.03				<0.03	0.8				0.8
				-unit comprised of a light gray to beige, strongly bleached (ser-carb-clay?), altered siliceous groundmass, with a still recognizable porphyritic & fragmental texture, & with 20% fspar phenox (largely altered to soft, green talc/mont) to 5mm, phenox to 5mm, & 5-10% pyroclastic frags to 1cm (also largely talc/mont altered)	21170	96.00	97.50	1.50	<0.03	<0.03			<0.03	0.5	0.5			0.5
				-moderately to strongly fractured, @ all orientations, with talc/mont, qtz-carb & occasional Py fracture filling	21171	97.50	99.00	1.50	<0.03				<0.03	0.2				0.2
					21172	99.00	100.50	1.50	<0.03				<0.03	0.4				0.4
				-weakly foliated @ 45-55° to core axis - locally becomes strongly foliated in a few places	21173	100.50	102.00	1.50	<0.03				<0.03	0.8				0.8
					21174	102.00	103.50	1.50	<0.03				<0.03	0.7				0.7
				-relatively pyritic, with 1%-1.5% vvfq diss Py & Py associated w/ qtz, talc/mont veins/seams	21175	103.50	105.00	1.50	<0.03				<0.03	0.8				0.8

DIAMOND DRILL LOG				HOLE: TT-03-22				STARTED: Mar. 30 2003				LENGTH: 85.67									
NORTHING: L48 + 00N		AZIMUTH: 270°		COMPLETED: Mar. 31 2003		CORE SIZE: NQ															
EASTING: 64 + 60E		DIP: -45°		LOGGED: March 30, 31, 2003																	
ELEVATION: m		DIP TESTS: @37° @ 85.67m		LOGGED BY: Duncan McIvor		32 samples split for assay															
SECTION: Test resistivity anomaly south of Mint Vein - First of Four hole fence																					
PURPOSE:																					
LITHOLOGY								SAMPLES													
MAJOR UNIT		MINOR UNIT		DESCRIPTION				SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	As g/t FINAL	
FROM	TO	FROM	TO																		
0.00	6.10			CASING (OVERBURDEN)																	
6.10	16.90			RHYOLITE QUARTZ FELDSPAR PORPHYRY (RQFP) -aphanitic, siliceous, pink to brick red groundmass, w/ 20% 1-3mm fspar phenox, 16% 2-3mm qtz phenox - locally this RQFP is only wkly fragmental, w/ less than 2% 5mm-1cm pyroclastic fragments -rock is wkly @ moderately foliated @ 55-65° to core axis -only wkly fractured, @ all orientations, w/ predominantly calcite, minor qtz fracture filling - in places, where noted, unit is wkly brecciated by calcite fractures -only trace vfg diss Py -contains a few (<2%) 1-3cm calcite qtz vns @ all orientations (NOTE - section from 6.10-7.92m in core boxes drilled twice, when rods back down hole) -from 6.10-7.60m, blocky, locally limonite on fracture surfaces																	
		7.70	8.20	-locally 20% 1-10cm calcite-minor qtz vns @ all orientations wkly brecciate host				21197	7.70	8.20	0.50	<0.03				<0.03	0.4				0.4
			8.60	-3cm calcite vn @ 30° to core axis wkly brecciates host rock				21198	9.20	10.20	1.00	<0.03	<0.03			<0.03	0.3	0.3			0.3
		9.20	10.00	-unit is moderately brecciated by calcite-silica seams/fractures																	
			10.20	-1cm qtz-calc vn @ 45° to core axis -sharp contact @ 16.90 with andesitic/microdiorite dyke, crosscutting foliation @ 40° to core axis - marked by 0.5cm calcite vein																	
16.90	18.50			ANDESITIC/MICRODIORITIC DYKE -dark green, aphanitic groundmass, with 10% 2-3mm fspar phenox, @ a few calcite amyg? (not possible, unless thin intermediate flow?) - moderately fractured, @ all orientations, with calcite fracture filling - lower contact @ 45° to core axis																	
18.50	29.80			RHYOLITE QUARTZ FELDSPAR PORPHYRY -as in from 6.10-16.90m - locally more strongly foliated, @ 60° to core axis -contains numerous "bands" of hard white fspar/carb parallel to foliation - may be stretched, altered pyroclastic fragments -gradual wk clay alteration increases towards 29.80m, but otherwise identical to interval noted above																	
		25.10	25.70	-5mm calc, clay & chalcedonic qtz filled fracture @ 0° to core axis -relatively sharp contact @ 29.80m with underlying intensely bleached, clay altered RQFP																	
29.80	30.70			INTENSELY BLEACHED RQFP -as in preceding unit, but groundmass becomes light gray to beige, strongly bleached, & clay altered - still contains only trace vfg diss Py - grades into fault gouge @ 30.70m				21199	29.80	30.70	0.90	<0.03				<0.03	0.1				0.1
30.70	31.70			FAULT GOUGE -predominantly soft white, to greenish white to gray clay gouge, with 30% angular 0.5cm to 5cm fragments of intensely bleached RQFP, and 5% fragments to 2cm of gray qtz - sulphide poor, only tr Py				21200	30.70	31.70	1.00	<0.03				<0.03	1.0				1.0
31.70	32.50			QUARTZ-CARBONATE VEIN AND BRECCIA -interval is predominantly intensely bleached RQFP fragments to 2cm, set in a pink to white qtz-calcite groundmass, with 40% 1-10cm calc-qtz vns cutting breccia @ 40-50° to core axis - remains sulphide poor, with only 0.25% vfg diss Py				21201	31.70	32.50	0.80	<0.03				<0.03	0.9				0.9

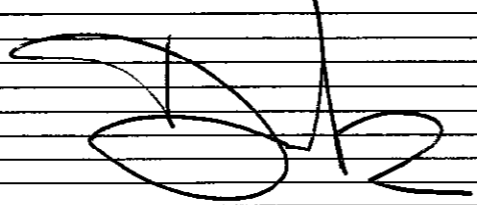
DIAMOND DRILL LOG				HOLE: TT-03-22				PAGE 2 OF 3									
LITHOLOGY				SAMPLES													
MAJOR UNIT	TO	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
32.50	33.20		BLEACHED, SILICIFIED RQFP -locally groundmass is bleached light grayish green & is w/ky silicified, with silica altered bands from 1-2cm, usually as halos on 5% thin (to 1cm) qtz-carb seams @ all orientations - contains only 0.25% vfg diss Py	21202	32.50	33.20	0.70	<0.03				<0.03	1.3				1.3
33.20	33.50		QUARTZ CARBONATE BRECCIA -intensely altered, brecciated RQFP fragments from 0.5cm-2cm & 60%, set in a qtz-calc matrix, with a few 1-2cm secondary qtz-carb vns @ 45° cutting breccia zone - remains sulphide poor, w/ 0.25% vfg diss Py	21203	33.20	33.50	0.30	<0.03				<0.03	0.8				0.8
33.50	36.50		BLEACHED, ALTERED RQFP -strongly bleached, altered RQFP - groundmass is gray to beige - locally strongly foliated, @ 50° to core axis	21204	33.50	34.50	1.00	0.03				0.03	0.6				0.6
			-contains 10% 1-5cm calcite-minor qtz vns, usually crosscutting foliation @ 40° to core axis - veining w/ky brecciates RQFP in places - contains 0.25% vfg diss Py	21205	34.50	35.50	1.00	<0.03				<0.03	0.5				0.5
			-contains 10% 1-5cm calcite-minor qtz vns, usually crosscutting foliation @ 40° to core axis - veining w/ky brecciates RQFP in places - contains 0.25% vfg diss Py	21206	35.50	36.50	1.00	<0.03				<0.03	0.2				0.2
		33.90	-7cm qtz-calc vn @ 40° to core axis														
36.50	58.90		RHYOLITE QUARTZ FELDSPAR PORPHYRY -pink to brick red groundmass, w/ 30% 2mm-6mm fspar phenocrysts, 1% 2-5mm qtz phenocrysts, & in this interval, 5% 0.5mm-1cm pyroclastic fragments -moderately to in places strongly foliated, @ 50-70° to core axis (steepens downhole) -contains <5% 0.5cm-3cm calc-minor qtz vns, @ all orientations - veining brecciates host rock in a few places, as noted -foliation lends "banded" appearance to rock -contains only trace to 0.25% vfg diss Py														
		38.70	-5% narrow (to 1cm) calcite minor qtz seams w/ky brecciate host rock														
		42.80	-a few (<5%) narrow (<1cm) qtz-calc vns @ 0-30° to core axis, with weak silicification halos														
		47.90	-7cm hard, red, jasperoidal appearing fragment														
		48.20	-interval is moderately to strongly brecciated in places, with 30% 5mm-1cm calc-qtz vns/filled fractures @ all orientations - brecciated RQFP fragments are w/ky silicified in a few places - contains only trace vfg diss Py	21207	48.20	49.30	1.10	<0.03	<0.03			<0.03	0.4	0.4			0.4
		52.90	-locally 20% 5mm-3cm qtz-calc vns @ 20-30° to core axis w/ky brecciate host rock	21208	52.90	53.40	0.50	<0.03				<0.03	0.4				0.4
		54.10	-1cm calc-minor qtz vn/filled fracture @ 20° to core axis														
		57.35	-2cm qtz vn @ 45° to core axis, w/ trace Py & black, vfg sulphide														
		57.70	-1cm qtz vn crosscutting foliation @ 45° to core axis -arbitrary contact @ 58.90m, based on amount of qtz(carb) veining														
58.90	61.60		WEAKLY QTZ-CARB VEINED (STOCKWORK), WKLY SILICIFIED RQFP -as in preceding unit, but is significantly harder, & appears to be pervasively, though weakly silicified, & contains 15% <0.5cm to 5cm qtz - minor carb veins, predominantly @ 45-50° to core axis, though other orientations present	21209	58.90	59.90	1.00	<0.03				<0.03	<0.1				<0.1
			-qtz vns & qtz filled fractures w/ky brecciate host in places, & often have immediate silicification halos - some qtz veins are well banded, chalcedonic	21210	59.90	60.90	1.00	<0.03				<0.03	0.6				0.6
			-narrow qtz vns & qtz filled fractures are often black, with vfg chl(?) minor sulph(?)	21211	60.90	61.60	0.70	<0.03				<0.03	0.8				0.8
		58.90	-from 58.90-59.20m, locally 30% 1-5cm hard, vuggy carb-qtz vns @ all orientations	21212	BLANK			<0.03				<0.03	<0.1				<0.1
		59.76	-black, qtz seams/filled fractures to 25% locally brecciate host rock														
		60.40	-locally 25% 1-3cm, gray, often chalcedonic qtz vns @ 30-45° to core axis, with 1% blebs to 1mm of black mineral														
		70.30	-5cm banded qtz-minor carb vn @ 30° to core axis -unit is sulphide poor, with only trace Py & minor black, possible vfg sulphide/sulfosalt														
61.60	62.40		QUARTZ (MINOR CARBONATE) VEIN -predominantly gray, cherty qtz, occasionally banded & chalcedonic appearing, with minor associated calcite, harder Fe/Mg carbonate -w/ky fractured, with vfg black mineral (chl?) & calc as fracture filling -only trace Py, & a few specks black sulphide -contains a few brecciated fragments of RQFP -both upper & lower contacts @ 45° to core axis	21213	61.60	62.40	0.80	<0.03				<0.03	5.1				5.1

LITHOLOGY				SAMPLES												
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
62.40	69.00	WKLY SILICIFIED RQFP	21214	62.40	63.00	0.60	<0.03				<0.03	0.9				0.9
		-pink, very hard, wkly & pervasively silicified rhyolite qtz-fspar porphyry	21215	63.00	64.00	1.00	1.25				1.25	0.1				0.1
		-moderately foliated, @ 60-70° to core axis	21216	64.00	65.00	1.00	<0.03				<0.03	0.4				0.4
		-moderately fractured, @ all orientations, with qtz, calc, & vvf black mineral (chl) associated with qtz fracture filling	21217	65.00	66.00	1.00	<0.03				<0.03	0.3				0.3
		-contains <5% 1-7cm gray, often chalcedonic qtz vns, with minor associated carbonate, & usually @ 40-50° to core axis - major vns are noted below - vns usually have vvf black mineral (chl?) @ margins	21218	66.00	67.00	1.00	<0.03				<0.03	0.2				0.2
		-remains sulphide poor, with only trace vfg diss Py														
		@ 66.4, 66.7, 1cm qtz vns @ 40° to core axis, rimmed by black mineral														
	67.00	67.30	21219	67.00	67.30	0.30	0.76				0.76	0.8				0.8
		-30cm zone with 50% 1-7cm banded, chalcedonic qtz veins @ 30° to core axis, w/ minor associated pink carbonate, & 2% vvf black mineral rimming vns														
		68.75	21220	67.30	68.00	0.70	<0.03				<0.03	0.2				0.2
		-2cm pink carb vn @ 45° to core axis														
		-contact @ 69.0m is based on amount of qtz-carb veining & degree of silicification	21221	68.00	69.00	1.00	<0.03				<0.03	0.2				0.2
69.00	70.30	QUARTZ CARBONATE VEINED (STOCKWORK) SILICIFIED RQFP	21222	69.00	69.60	0.60	<0.03				<0.03	1.1				1.1
		-as above, but RQFP becomes intensely silicified, as halos on 40% qtz-minor carb veins from 3-20cm, usually @ 45-60° to core axis														
		-veins are predominantly white to gray cherty, occasionally banded & chalcedonic appearing quartz, with minor associated calcite & harder Fe/Mg carbonate, some vfg black min, usually @ vn margins, & minor hematite - still sulphide poor, only trace Py														
		@ 69.10, 69.30, 5cm qtz-carb vns, as described above														
	69.60	69.80	21223	69.60	69.80	0.20	0.06				0.06	1.2				1.2
		-20cm qtz-carb vn, as described above														
	70.00	70.10	21224	69.80	70.30	0.50	0.12	0.15	0.12		0.13	1.5	1.8	1.6		1.7
		-10cm qtz-carb vein, as described above														
70.30	71.00	QUARTZ (MINOR CARBONATE) VEIN	21225	70.30	71.00	0.70	0.29				0.29	3.2				3.2
		-predominantly white to gray, often banded (@ 45° to core axis) & occasionally chalcedonic to colliform textured qtz vein, with minor associated calcite														
		-moderately fractured, w/ calcite & soft green chl/talc/mont fracture filling as well as hematite														
		-contains only tr Py & trace vvf black min (sulphide?)														
		-very strong, immediate (1-2cm) silicification halos														
71.00	71.80	QUARTZ-CARBONATE VEINED (STOCKWORK) SILICIFIED RQFP	21226	71.00	71.80	0.80	0.07				0.07	2.9				2.9
		-as in unit described from 69.0-70.30m														
		-locally contains 30% qtz-minor carb vns, from 5mm to 5cm, @ 40-45° to core axis, with 1% hematite, trace Py, trace black mineral, cutting a moderately silicified RQFP														
71.80	73.60	WEAKLY SILICIFIED RQFP	21227	71.80	72.70	0.90	<0.03				<0.03	0.6				0.6
		-degree of alteration & veining decreases - only wkly, pervasively, silicified, & only a few <1cm qtz-carb vns @ all orientations - only trace diss Py	21228	72.70	73.60	0.90	<0.03				<0.03	0.3				0.3
		-sharp contact with underlying microdiorite sill @ 45° to core axis														
73.60	85.07	MICRODIORITE SILL														
		-gray, vfg microdiorite, w/ a few small 1-3mm calc blebs - v homogenous sill														
		EOH@85.67M MARCH 31, 2003 Duncan Mclvor														



DIAMOND DRILL LOG				HOLE: TT-03-23				PAGE 2 OF 2								
LITHOLOGY				SAMPLES												
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
FROM	TO	FROM	TO													
19.30	73.30			RHYOLITE QUARTZ FELDSPAR PORPHYRY												
				-very hard, brick red, aphanitic siliceous groundmass, with 25% fspar, 10% qtz phenox to 3-5mm - moderately foliated @ 60-70° to core axis												
				-moderately fractured, with prominent sets @ 0-20° to core axis, 45-50° to core axis, with calc, silica fracture filling												
				-contains 5% 2mm-5cm qtz-carb vns, usually @ 30-50° to core axis - vns are often banded chalcedonic appearing - prominent vns are noted below												
				-sulphide poor, only trace vvf g diss Py												
		20.50	20.60	-a few narrow 5mm-1cm banded chalcedonic qtz vns @ 45° to core axis, no sulphides												
			22.50	-1cm banded chalcedonic qtz-carb vn @ 50° to core axis, no sulphides												
			24.30	-5cm vuggy carb-qtz vn @ 40° to core axis												
			30.15	-5cm qtz-carb vn @ 40° to core axis, with trace Py @ margins												
			31.10	-a few 1cm banded chalcedonic qtz vns @ 40° to core axis												
		31.60	31.80	-20cm carb-qtz vn @ 40° to core axis strongly brecciates host RQFP												
			32.10	-5cm qtz-carb vn crosscuts foliation @ 40° to core axis												
			32.60	-10cm vuggy carb-qtz vn @ 40° to core axis												
			33.20	-1cm qtz vn @ 25° to core axis												
			34.40	-1cm qtz-carb vn @ 60°, to core axis & @ 35.5, 3cm vn @ 40° to core axis												
			39.10	-2cm qtz-carb vn @ 45° to core axis												
		39.80	40.10	-2X 10cm banded, chalcedonic qtz-carb vns @ 40° to core axis, w/ tr Py, vvf g black sulphide												
		40.80	41.00	-5cm chalcedonic qtz-carb vn locally brecciates host RQFP												
			41.40	-3cm banded qtz-carb vn @ 40° to core axis												
		43.20	43.90	-70cm zone w/ 20% 5mm-1cm qtz & qtz-carb veinlets @ all orientations - small stockwork zone												
		43.90	44.10	-10cm banded qtz carb vn @ 25° to core axis												
		44.20	44.50	-30cm zone w/ 25% 1-3cm qtz-carb vns @ all orientations												
			44.60	-10cm carb-qtz vn @ 50° to core axis												
		47.10	47.30	-20cm zone of 20% 4mm-1cm qtz-carb veinlets @ 20-30° to core axis												
			47.50	-locally 20cm zone of 20% 1-3cm qtz-carb vns @ 40-50° to core axis, & locally host RQFP is strongly silicified as halos on veining - 1 narrow vein is anomalously pyrite w/ 2% vvf g diss Py												
		49.00	49.10	-10 cm banded chalcedonic qtz vein @ 45° to core axis												
		49.10	49.50	-RQFP is wkly brecciated by thin (<5mm) silica-carbonate stringers												
			50.50	-2cm carb vn @ 70° to core axis, with strong 5mm potassic alteration halo												
		51.40	51.60	-2X 2cm chalcedonic qtz-carb vns @ 30° to core axis, with strong 1-3cm potassic alteration halos												
			55.30	-3cm mottled appearing carbonate vein @ 60° to core axis												
		55.70	56.00	-30cm zone of weak bleaching, as halo around a few thin (<1cm) qtz-carb vns												
		57.00	57.30	-wkly brecciated by numerous thin qtz-calcite stringers												
			59.00	-1cm qtz carb vn @ 40° to core axis												
			59.80	-a few 1cm qtz-carb vns @ 50°, 70° to core axis												
		62.10	62.20	-5cm qtz-carb vn @ 40° to core axis strongly brecciates host rock												
				-from 60-73.30m, RQFP becomes notably more fragmental, w/ 5% 1-3cm pyroclastic fragments & begin seeing vvf g black mineral (chl) rimming all qtz-carb filled fractures												
		67.35	67.55	-mottled appearing zone w/ numerous carb-green talc/mont seams												
		68.60	69.00	-locally strongly silicified zone, as halos on a few thin qtz-carb veinlets, & locally 1% vvf g diss Py												
			69.00	-wkly to moderately silicified, with halos of silicification to 1-2cm on numerous qtz filled fractures												
			71.80	-1cm gouge seam @ 45° to core axis												
		73.30	73.30	-unit becomes moderately to strongly brecciated, with angular 5mm-3cm RQFP fragments in a calcite-silica matrix												
			72.90	-2cm chl-calc-qtz vn @ 30° to core axis												
				-sharp contact with sill @ 73.30m, @ 50° to core axis												
73.30	78.05			MICRODIORITE SILL												
				-light greenish gray, vfg microdiorite with a few 2mm-5mm calcite blebs, v. homogeneous unit												
EOL @ 78.05m				April 01, 2003				Duncan McIvor								

DIAMOND DRILL LOG		HOLE TT-03-24		NORTHING: L48 + 00N				AZIMUTH: 270 ° COMMENT-Extremely hard, brick red RQFP - Resistivity may be defin-				STARTED: Apr. 01 2003		LENGTH: 87.20m			
EASTING: 63 + 80E		DIP: -45 °		inating broad potassic-silica alteration package, or distinct "flow"				COMPLETED: Apr. 03 2003		CORE SIZE: NQ							
ELEVATION: m		DIP TESTS: -37° @ 87.20m						LOGGED: Apr. 02, 03, 2003		LOGGED BY: Duncan McIntior		42 samples split for assay					
SECTION:		Third hole in fence across resistivity anomaly south of Mint Vein															
LITHOLOGY				SAMPLES													
MAJOR UNIT	MINOR UNIT	DESCRIPTION		SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
FROM	TO	FROM	TO														
0.00	7.50			OVERBURDEN -CASING DRIVEN TO 6.4M, THEN ADVANCED BY CORING													
7.50	41.30			BRICK RED, RHYOLITE QUARTZ FELDSPAR PORPHYRY (RQFP) -rock comprised of a very, very hard, brick red, siliceous groundmass, with 25% 2-5mm fspar phenox, & 15% 2-8mm gray qtz phenocrysts-weakly fragmented, w/ occasional (<5%) 1-2cm pyroclastic fragments of -weakly foliated, @ 45-60° to core axis -moderately fractured (to strong in places), with prominent set @ 20-30° to core axis, with silica, calcite, minor chl & soft green talc/mont fracture filling -contains 5% narrow (2-5mm) qtz (minor carb) "veins", usually @ 20-30° to core axis-vns are often banded chalcedonic appearing, & in places have "tight" silicification halos -average sulphide content only trace - 0.25% vvfq diss Py, & minor "black" sulphide w/ wns 7.90 -3cm banded qtz-carb vn @ 60° to core axis, w/ tr Py, & tr black vvfq sulphide @ vn margins 8.50 -1cm gray cherty qtz vn @ 40° to core axis, w/ 0.5% vfg diss Py 10.00 10.40 -intensely oxidized, fractured zone 11.10 11.30 -local intensely brecciated zone, with small 1-3mm RQFP fragments set in a carb-silica matrix 11.40 11.80 -locally 10% narrow chalc qtz stringers, w/ 1% ass vvfq diss Py, & wk silicification of RQFP 14.30 14.40 -5cm, vuggy hard carb-qtz vn @ 40° to core axis 18.40 18.50 -1-2cm banded carb-qtz vn @ 0° to core axis, with 0.5% diss Py @ margins 18.80 -1cm qtz-calc vn @ 30° to core axis 19.10 19.30 -20cm strongly brecciated zone, w/ 30% 5mm-2cm angular brecciated RQFP fragments in a silica-carb matrix (vein breccia) 19.80 21.60 -locally contains 15% 5mm-3cm banded chalcedonic qtz-minor carb vns, usually @ 30° to core axis, w/ locally 0.50% diss Py haloing vns, @ trace Gn in a few qtz vens - small "stockwork" zone 22.80 -5cm banded qtz-carb vein @ 70° to core axis, with trace Py 23.00 -2cm banded qtz-carb vn @ 70° to core axis 23.40 -5cm calc-minor qtz vn @ 50° to core axis, with a few 1mm blebs galena 23.60 -a few 1cm cherty gray qtz-carb vns @ 50° to core axis 24.10 24.50 -40cm zone of 40% 5mm-2cm qtz-carb vns @ all orientations, locally strongly brecciating host RQFP, which is wkly silicified 24.50 26.22 -NB-lost 50% of core (~0.85m) 29.90 30.00 -10cm qtz-carb vn @ 30° to core axis, w/ trace Py, black sulphide 30.80 -a few 1-2cm qtz carb vns @ 70° to core axis, locally strongly brecciating host RQFP 31.00 -2cm qtz-carb vn @ 70° to core axis strongly brecciates host RQFP 33.80 34.00 -20cm zone of intense brecciation by narrow calc-qtz stringers 34.00 -2cm qtz-carb vn @ 45° to core axis 34.30 -2cm qtz-carb vn @ 30° to core axis 35.10 -1cm qtz-carb vn @ 45° to core axis 35.90 36.40 -50cm zone with 15% 1-5cm calc-qtz vns @ 0-20° to core axis, locally strongly brecciating host RQFP 37.50 37.80 -2cm banded chalcedonic qtz vn @ 30° to core axis w/ trace galena, Py -contact @ 41.30 is based on qtz-carb vein content													
				21310	11.00	12.00	1.00	<0.03				<0.03	0.2				0.2
				21311	18.00	19.00	1.00	<0.03				<0.03	0.6				0.6
				21312	19.00	19.80	0.80	<0.03				<0.03	0.7				0.7
				21313	19.80	20.70	0.90	<0.03				<0.03	1.1				1.1
				21314	20.70	21.60	0.90	0.34				0.34	4.2				4.2
				21315	22.80	23.80	1.00	<0.03				<0.03	2.0				2.0
				21316	23.80	24.80	1.00	<0.03				<0.03	0.2				0.2
				21317	29.50	30.50	1.00	0.18				0.18	21.8				21.8
				21318	30.50	31.50	1.00	0.07	0.05			0.06	0.5	0.4			0.4
				21319	35.90	36.40	0.50	0.03				0.03	0.4				0.4
				21320	37.30	37.80	0.50	<0.03				<0.03	2.6				2.6

LITHOLOGY				SAMPLES													
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t BINA	
FROM	TO	FROM	TO														
78.90	87.20																
		MICRODIORITE SILL															
		-vfg, light grayish green, massive microdiorite, w/ a few small 1-3mm calcite blebs															
		EOH @ 87.20M APRIL 2003 Duncan McIvor															
																	

DIAMOND DRILL LOG				HOLE TT-03-25				PAGE 2 OF 2											
LITHOLOGY				SAMPLES															
MAJOR UNIT		MINOR UNIT		DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL	
FROM	TO	FROM	TO																
39.10	42.00			DIORITE DYKE & MIXED ALTERED RQFP	21434	38.00	39.70	1.70	0.05				0.05	3.8					3.8
				-Upper contact 20° to core axis, lower contact broken, fault, slight gouge 15° to core axis - 39.1-39.5 very fine grained, greenish contact margin															
42.00	52.20			RHYOLITE QUARTZ FELDSPAR PORPHYRY	21435	42.00	43.50	1.50	0.06				0.06	0.8					0.8
				-brick red as before, 10-15% qtz (carb) veining stringers & fracture filling, chlorite along fractures @ 30° to core axis	21436	43.50	45.00	1.50	0.05	0.06	0.05		0.05	1.1	1.1	1.0			1.1
				42.0-43.0 weakly oxidized fractures 45.0-46.0 chlorite fracture parallel to core	21437	45.00	46.50	1.50	0.06				0.06	1.9					1.9
		46.90	47.20	qtz vein & brecciated vein, fracture filling 1-5mm of fine, gray sulphides 11° to core axis	21438	46.50	48.00	1.50	0.18				0.18	5.8					5.8
		47.50	48.00	-brecciated gray/white qtz vein with 1% very fine sulphides	21439	48.00	49.50	1.50	0.17				0.17	3.1					3.1
		48.00	49.00	-chlorite fracture 10° to core axis @ 48.8 - 4cm brecciated zone, siliceous with late white 1cm qtz stringers 35° to core axis	21440	49.50	51.00	1.50	0.26				0.26	8.7					8.7
		49.40	49.60	-brecciated multiphase qtz vein 25° to core axis	21441	51.00	52.20	1.20	0.11				0.11	3.5					3.5
52.20	57.80			VEINING - MULTIPHASE - RHYOLITE QUARTZ FELDSPAR PORPHYRY	21442	52.20	53.20	1.00	0.09				0.09	10.3					10.3
				-veining-multiphase, banded 75%, siliceous RQFP 25%, sericite and chlorite clots & fracture fillings in vein	21443	53.20	54.20	1.00	0.07				0.07	6.3					6.3
				-clots, patches & rare banding of fine dark gray sulphides - @ 53.0, hematite fracture fillings & stringers	21444	BLANK			0.04				0.04	0.6					0.6
				55.2-57.8 moderately leached & broken, rubbly, possible fault zone	21445	54.20	55.20	1.00	0.31	0.30			0.31	21.8	21.6				21.7
					21446	55.20	56.70	1.50	3.98	3.79			3.89	42.6					42.6
					21447	56.70	57.80	1.10	0.41				0.41	9.3					9.3
57.80	61.00			DIORITE DYKE															
				-very fine grained, homogeneous, gray green colour & altered, light & dark gray upper contact oxidized 45° to core axis, lower contact fresh 60° to core axis															
61.00	78.00			ALTERED RHYOLITE QUARTZ FELDSPAR PORPHYRY/BRECCIATED VEIN/DIORITE DYKE	21448	61.0	62.5	1.50	0.08				0.08	3					3
				-bleached, light gray to creamy coloured RQFP, brecciated gray/white veining 30-35% recemented	21449	62.5	64.0	1.50	0.11				0.11	1.1					1.1
		61.00	63.50	-moderately leached, broken, fractured core, weakly oxidized, with hematite fracture fillings/patches	21450	64.0	65.5	1.50	0.15				0.15	4.6					4.6
		63.70	64.50	-healed breccia fault zone, sub-rounded altered RQFP in qtz/carb matrix @ 65.0 - 0.5cm galena/pyrite band 30° to core	21451	65.5	67.0	1.50	0.07				0.07	0.7					0.7
		67.80	68.10	-dark gray qtz vein, green (chlorite) fracture filling, brecciated frag, qtz & RQFP	21452	67.0	68.5	1.50	0.12				0.12	2.3					2.3
		68.90	70.50	-qtz vein, with moderate oxidized fractures	21453	68.5	69.5	1.00	0.35				0.35	4.5					4.5
		72.70	74.20	-diorite dyke & altered RQFP (20%)	21454	69.5	70.5	1.00	0.44	0.44			0.44	8.7	6.1				7.4
		74.60	75.60	-diorite dyke	21455	70.5	71.5	1.00	0.23				0.23	3.5					3.5
		76.30	78.00	-fault zone, gouge with hematite patch at 76.3-76.7, brecciated, gouge to 78	21456	71.5	72.5	1.00	0.14				0.14	3.2					3.2
					21458	72.5	73.5	1.00	0.20				0.20	2.8					2.8
					21459	73.5	74.6	1.10	0.31				0.31	2.6					2.6
					21461	74.6	75.5	0.90	<0.03				<0.03	<0.1					<0.1
					21462	75.5	76.5	1.00	0.22				0.22	3.2					3.2
					21463	76.5	77.5	1.00	0.33				0.33	2.2					2.2
					21464	77.5	79.1	1.60	3.2??				3.2??	5.6					5.6
78.00	87.80			ALTERED RQFP	21465	79.1	80.5	1.40	0.12				0.12	2.1					2.1
				-light brown to pinkish brown, feldspar, altered to sericite; chlorite 5-7% qtz veining	21467	80.5	82.0	1.50	0.08				0.08	0.7					0.7
		81.10	81.90	-altered diorite dyke															
		84.40	85.80	-altered diorite dyke upper contact 15° to core axis, lower contact 30° to core axis followed by weak to moderate?? clay gouge	21468	82.0	83.5	1.50	0.07				0.07	0.5					0.5
					21469	83.5	84.5	1.00	0.22				0.22	2.1					2.1
87.80	93.30			DIORITE SILL															
				-fine grained, homogeneous, dark green, the usual															
		93.30		End of Hole															

Robert Klecker

DIAMOND DRILL LOG HOLE: JT-03-26

NORTHING: L49 + 00N AZIMUTH: 240° STARTED: Apr. 4 2003 LENGTH: 108.50m
 EASTING: 64 + 10E DIP: -45° on head COMPLETED: Apr. 6 2003 CORE SIZE: NQ
 ELEVATION: m DIP TESTS: -43° @ 108.50m LOGGED: LOGGED BY: R. Weicker 3 samples split for assay

SECTION: L49 + 00N
 PURPOSE: Test Geochemical anomalies - Mint Area

LITHOLOGY				SAMPLES													
MAJOR UNIT	MINOR UNIT	DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Ag (3) g/t	Au (4) g/t	Au g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL	
0.00	3.00	CASING - OVERBURDEN 2.6-3.0 m; flat set-up															
3.00	6.80	RHYOLITE QUARTZ FELDSPAR PORPHYRY -moderately oxidized, purplish red colour, 20% feldspar phenox, very faint fabric 40-45° to core axis, moderate limonite fracture filling @ 4.8-5.2 rubbly fracture zone, overall 2%-7% fine late quartz (carb) fracture filling															
6.80	101.90	RHYOLITE QUARTZ FELDSPAR PORPHYRY -as above 15-20% feldspar phenox 5-7% quartz Phenox, very competent, moderately siliceous, homogenous unit, chlorite on slips & fractures -altered fragments slightly more chloritic from 40.0-101.9m -reddish to purplish brown gray colour, very "clay?" looking, "tombstone" rock -few significant veins or alteration zones, veining <5% -6.8-20.5m - very weakly oxidized along fractures and rare qtz-carb stringers															
	18.40	-3cm, narrow gray & white banded qtz stringer, 45° to core axis															
	18.7	18.90 -Qtz vein, healed breccia, cloudy gray qtz, chloritic along upper contact @45°, lower contact brecciated 45°	21470	18.40	19.00	0.60	1.31				1.31	10.3					10.3
	19.60	-altered frag lithic, 1.5X1.5cm, subangular in RQFP															
	22.70	-chloritic fracture 30° to core axis															
	29.55	-2cm qtz stringer 40° to core axis with green chloritic fracture filling															
	31.70	-2cm qtz breccia stringer 55° to core axis															
	37.80	38.40 -brecciated, silicified qtz vein upper contact @ 35° to core axis, frags of med green RQFP 3cmX1cm subrounded, breccia qtz frag in silica cement	21471	37.50	38.50	1.00	0.09				0.09	1.4					1.4
	39.00	-2X3cm brecciated qtz stringers	21472	38.50	39.50	1.00	<0.03				<0.03	<0.1					<0.1
	51.80	-2cm qtz stringer, 40° to core axis, brecciated, green chlorite															
	62.60	63.00 -chlorite slips on fracture 35° to core axis															
	67.80	-3cm qtz-carbonate (white/pink carb) @ 35° to core axis - sharp contacts															
	70.00	70.60 -broken, rubbly core, slight-moderate gouge, strong chlorite on slips, possible fault zone															
	78.80	83.00 -increase in chlorite, chlorite on fractures/slips @35° to core axis															
	85.00	86.00 -as above, strongly chloritic															
	95.00	98.30 -moderately chloritic, fractures 25° & 50° to core axis															
101.9	108.50	DIORITE SILL -105.0-108.5m carb stringers, slightly sheared															

R. Weicker

DIAMOND DRILL LOG				HOLE: FT-03-27				STARTED: Apr. 05 2003				LENGTH: 109.3m						
NORTHING: L49 + 00N		AZIMUTH: °		EASTING: 63 + 70E		DIP: -45° on head		COMPLETED: Apr. 07 2003		CORE SIZE: NQ								
ELEVATION: m		DIP TESTS: -40° @ 109.30m		LOGGED: Apr. 2003		LOGGED BY: R. Welcker				38 samples split for assay								
SECTION: L49 + 00N				PURPOSE: Test resistivity anomaly in vicinity of Mint Vein														
LITHOLOGY				SAMPLES														
MAJOR UNIT		MINOR UNIT		DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag g/t FINAL	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL
FROM	TO	FROM	TO															
0.00	3.00			CASING														
3.00	37.80			RQFP														
				-red brown to brick red, 25% feldspar phenox, very faint fabric by pheno/frag at 40-45° to core axis, 5-10% frag, 5% qtz phenox, very competent except where noted, <5% fracture filling & veinlets														
		3.00	9.00	-weakly oxidized, limonitic fractures, 3-4 per metre														
		20.60	25.50	-fault zone, rubbly & gouge, broken core, stretched core section, chloritic(?) gouge along slips @ 40° to core axis														
		25.50	37.80	-chlorite on fractures & slips														
37.80	56.10			DIORITE DYKE														
				-dark green, very fine to fine grained, homogeneous, 1% carbonate fracture filling														
		39.70	41.20	-carbonate/chlorite slips 10° to core axis, broken core														
		46.20	47.50	-as above														
		48.50	52.00	-gouge, clay, chlorite fault zone, some brecciation, carb stringer & fracture filling, gouge zones with calcite breccia 2-6cm @ 35-40° to core axis														
56.10	65.70			VEIN	21473	56.10	56.70	0.60	1.26				1.26	17.7				17.7
				-banded white, gray, creamy qtz veining, minor carbonate, buff & pink ankeritic sections, 95% vein	21474	56.70	58.00	1.30	1.08	1.07	1.16		1.10	20.9	21.4	20.9		21.1
		56.10	56.70	-50% qtz vein 50% diorite dyke; 1cm pale green, very fine grained chill margin on irregular contact parallel to core; sample the qtz section	21475	58.00	59.00	1.00	1.24	1.30			1.27	15.5				15.5
		56.70	57.10	-rimmed qtz fragments, green chlorite, .5% gray sulphides	21476	59.00	60.00	1.00	5.16	5.76			5.46	91.8				91.8
		57.10	57.30	-qtz breccia, multiphase veining, galena in vugs, .5cm, galena patch .5X.5cm, cs galena, minor chalcopyrite	21477	60.00	61.00	1.00	10.70	10.70			10.70	68.9				68.9
		57.30	62.00	-multiphase qtz vein, minor breccia, chloritic wisp & fracture filling; 1-2% scattered very fine gray sulphides	21478	MISSED												
		62.00	65.70	-ankerite, pink-buff banding, contorted & brecciated @ 65.5-65.7 dark gray veining	21479	61.00	62.00	1.00	0.19				0.19	25.4				25.4
					21480	62.00	63.00	1.00	0.09				0.09	13.3				13.3
					21481	63.00	64.00	1.00	0.08				0.08	20.3				20.3
					21482	64.00	65.70	1.70	1.52	1.62			1.57	16.1				16.1
65.70	80.00			RQFP	21483	65.70	66.00	0.30	0.05				0.05	6.9				6.9
				-as above and distinct qtz veining & stockwork - 15-25% veining 80-75% RQFP, qtz veins/stringers & fracture filling generally 45° to core axis but some chaotic fracture filling	21484	66.00	67.00	1.00	<0.03	<0.03			<0.03	0.4	0.4			0.4
		65.70	68.00	-RQFP - 90% - veining 10-15%, chlorite fracturing 65.8 to 66.0 - highly broken core	21486	67.00	68.00	1.00	0.04				0.04	0.4				0.4
					21487	68.00	69.00	1.00	0.04				0.04	0.9				0.9
					21488	69.00	70.00	1.00	<0.03				<0.03	0.5				0.5
					21489	70.00	70.90	0.90	<0.03				<0.03	0.4				0.4
					21490	70.90	72.50	1.60	0.06				0.06	3.2				3.2
					21491	72.50	73.50	1.00	0.05				0.05	1.7				1.7
					21492	BLANK			0.03				0.03	2.9				2.9
					21493	73.50	74.50	1.00	0.06				0.06	3.1				3.1
					21494	74.50	75.50	1.00	<0.03	<0.03			<0.03	1.3	1.3			1.3
					21495	75.50	77.00	1.50	0.04				0.04	1.1				1.1
					21496	77.00	78.50	1.50	0.06				0.06	1.3				1.3
					21497	78.50	80.00	1.50	0.03				0.03	1.0				1.0

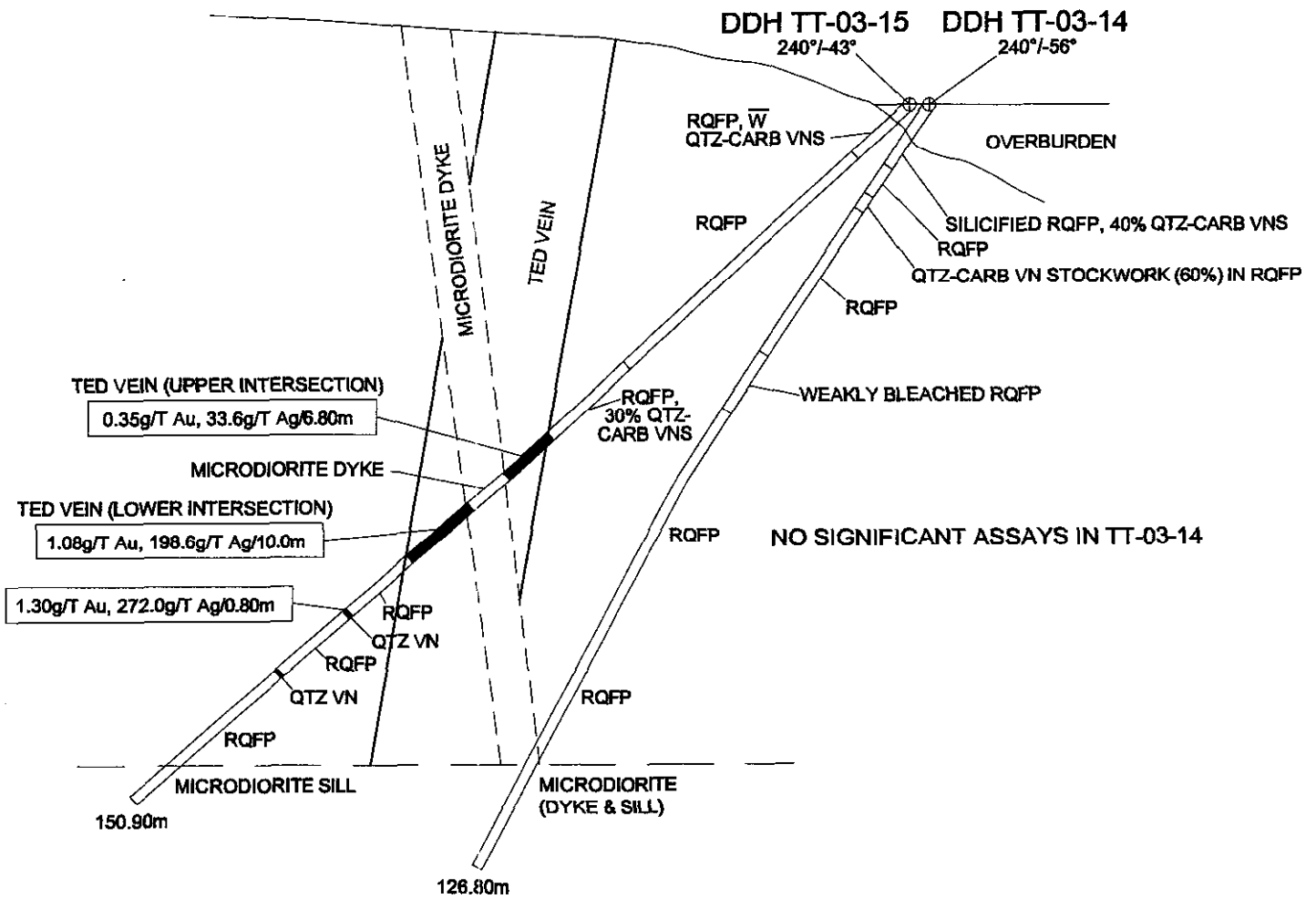
LITHOLOGY				SAMPLES														
MAJOR UNIT		MINOR UNIT		DESCRIPTION	SAMPLE NUMBER	FROM	TO	LENGTH (m)	Au (1) g/t	Au (2) g/t	Au (3) g/t	Au (4) g/t	Ag (1) g/t	Ag (2) g/t	Ag (3) g/t	Ag (4) g/t	Ag g/t FINAL	
FROM	TO	FROM	TO															
80.00	100.40			RQFP	21498	80.00	81.50	1.50	0.04				0.04	1.5				1.5
				-as before, distinct qtz stringers & veinlets, overall 10-15% veining, 35-40 degrees to core axis	21499	81.50	83.00	1.50	10.03				10.03	1.4				1.4
		82.20	82.40	-banded qtz vein, clear & white, coll (?) banding, contorted with 2cm rehealed, crushed qtz band 60° to core axis, and 0.5cm brecciated RQFP band, 70° to core axis	21500	83.00	84.50	1.50	0.03				0.03	1.1				1.1
		89.50	90.20	-75-50% qtz veining, clear & white & creamy qtz with moderate chlorite fracture filling & clots & minor fluorite, chlorite along fractures & contacts @ 40° to core axis, slight gouge	21501	84.50	86.00	1.50	0.05				0.05	2.4				2.4
		94.00	96.50	-60% qtz veining, fracture filling fine gray sulphides, minor fluorite, moderate chlorite, 1-3% fine sulphide in vein portions	21502	86.00	87.50	1.50	<0.03				<0.03	0.6				0.6
					21503	87.50	89.50	2.00	<0.03				<0.03	1.4				1.4
					21504	89.50	90.20	0.70	0.09				0.09	12.9				12.9
					21505	90.20	91.00	0.80	<0.03				<0.03	1.7				1.7
					21506	91.00	92.50	1.50	<0.03				<0.03	0.8				0.8
					21507	92.50	94.00	1.50	0.03				0.03	1.8				1.8
					21508	94.00	95.00	1.00	0.05				0.05	10.0				10.0
					21509	95.00	96.50	1.50	0.03				0.03	1.9				1.9
					21510	96.50	98.00	1.50	0.03				0.03	2.1				2.1
					21511	98.00	99.50	1.50	0.03	0.03	0.03		0.03	1.4	1.2	1.2		1.3
					21512	99.50	100.40	0.90	0.05				0.05	0.2				0.2
100.40	109.30			DIORITE SILL														
				-green, fine grained homogeneous microdiorite sill														
				END OF HOLE														

Robert W. [Signature]

APPENDIX 1
DIAMOND DRILL SECTIONS

27,177

W 240°



SCALE 1:1000



LEGEND

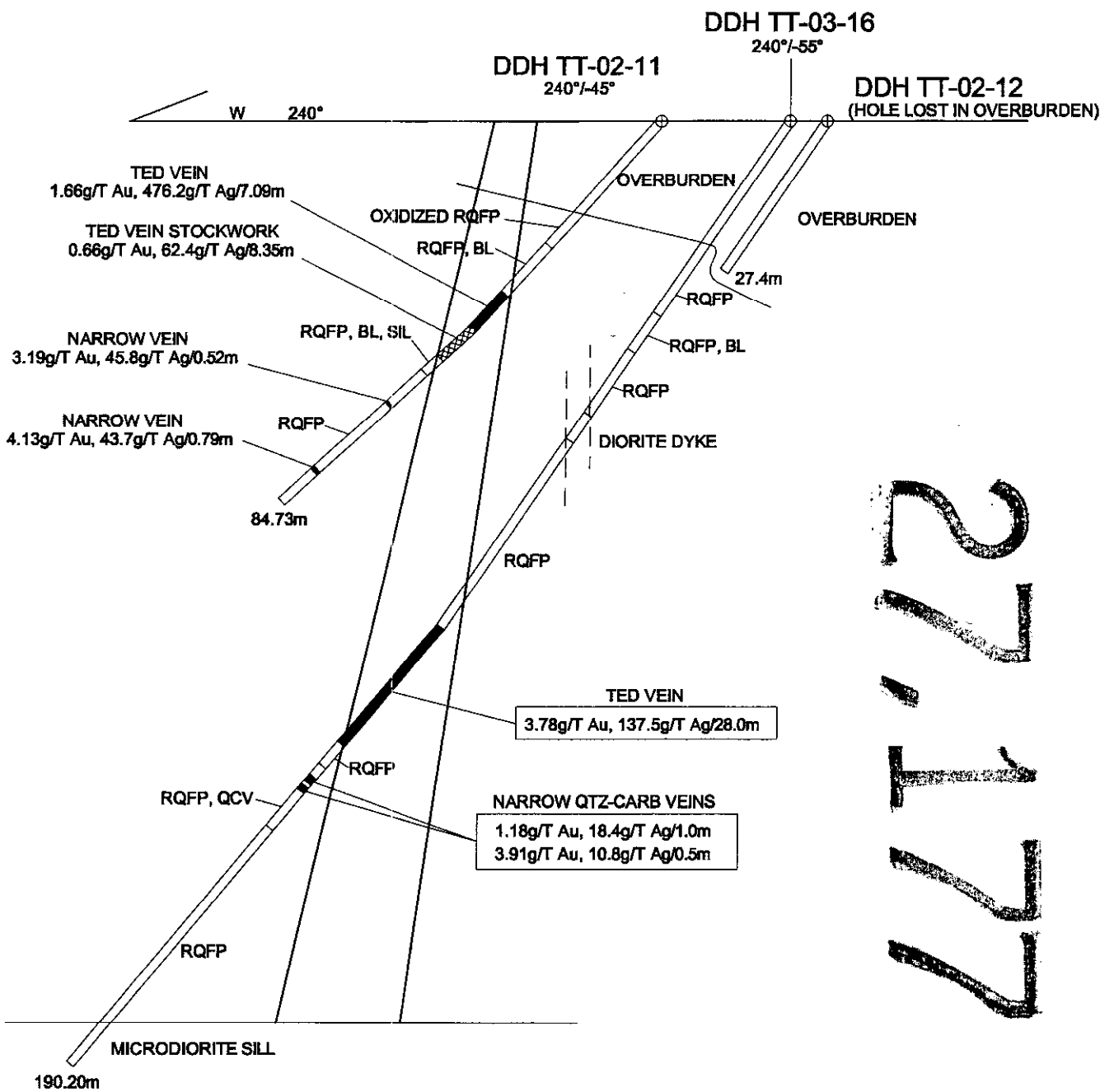
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- RQFP RHYOLITE QUARTZ FELDSPAR PORPHYRY
- SIL SILICIFICATION
- BL BLEACHING
- QCZ QUARTZ-CARBONATE VEIN

SOUTHERN RIO RESOURCES LTD.

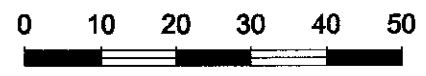
**3 T'S PROJECT
TAM PROPERTY
TED VEIN TARGET
DDH TT-03-14, 15**

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DRAWN BY: D. MCIVOR	DATE: May 2003	

27177



SCALE 1:1000

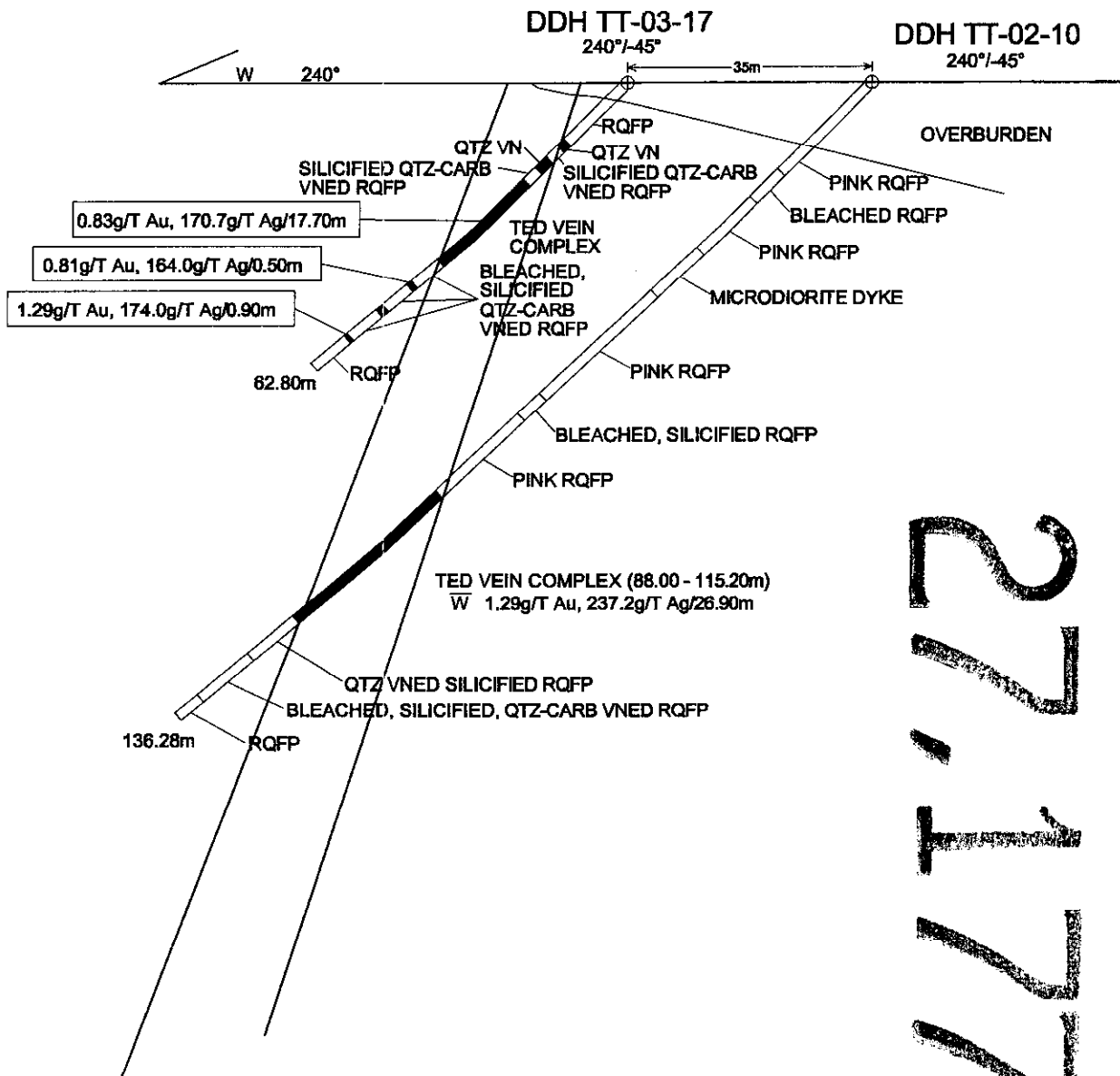


- LEGEND**
- TED VEIN INTERCEPT
 - RQFP RHYOLITE QUARTZ FELDSPAR PORPHYRY
 - SIL SILICIFICATION
 - BL BLEACHING
 - QCV QUARTZ-CARBONATE VEIN

SOUTHERN RIO RESOURCES LTD.

**3 T'S PROJECT
 TAM PROPERTY
 TED VEIN TARGET
 DDH TT-02-11,12 & TT-03-16**

SCALE: 1:1000	NTS: 93F/3E.2W	DWS. NAME:
DRAWN BY: D. MCIVOR	DATE: May 2003	



27,177

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

SCALE 1:1000



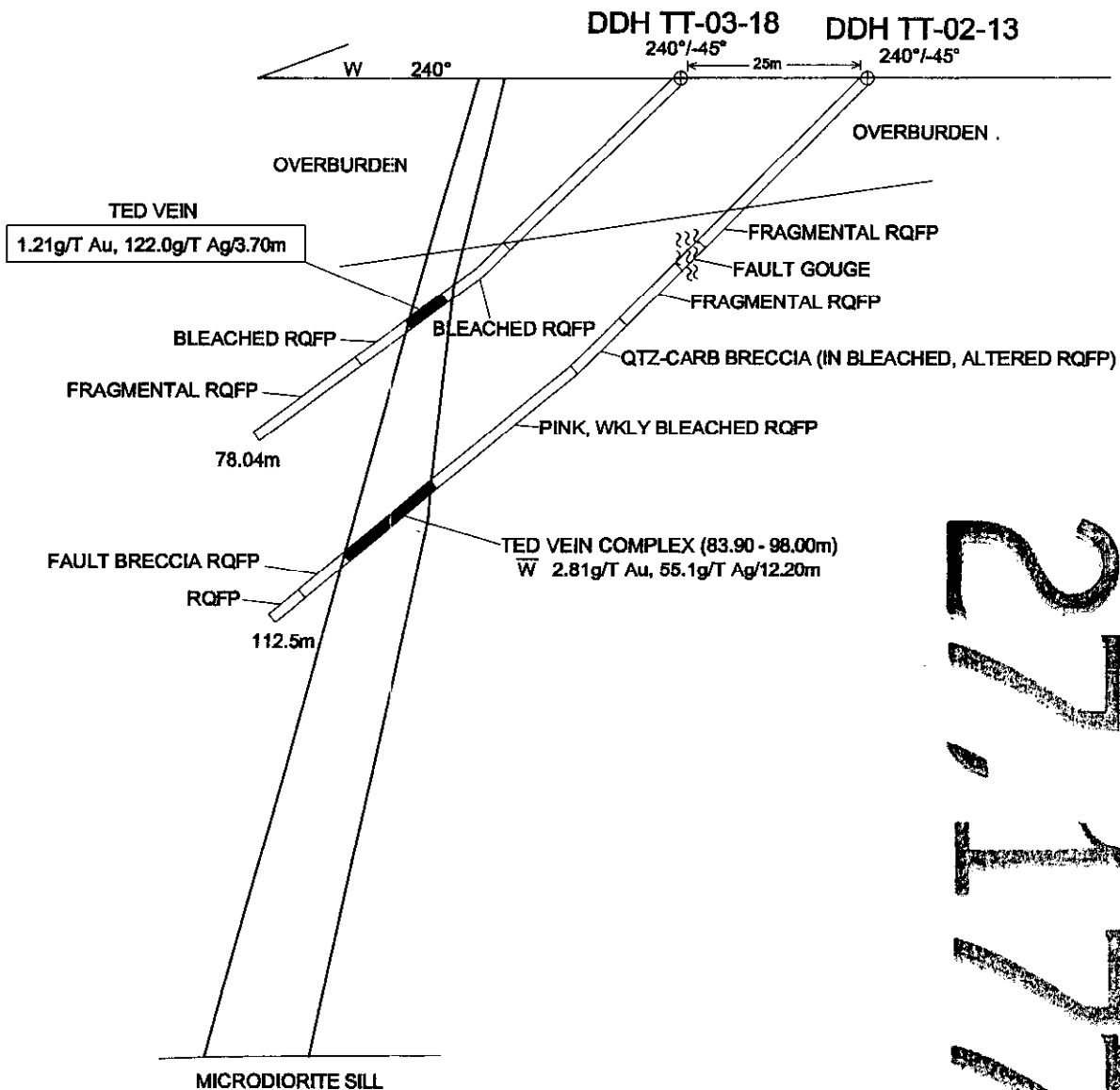
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- TED VEIN INTERCEPT
- RQFP RHYOLITE QUARTZ FELDSPAR PORPHYRY
- SIL SILICIFICATION
- BL BLEACHING
- QCV QUARTZ-CARBONATE VEIN

SOUTHERN RIO RESOURCES LTD.

**3 T'S PROJECT
TAM PROPERTY
TED VEIN TARGET
DDH TT-02-10, TT-03-17**

SCALE: 1:1000	NTS: 93F/3E.2W	DWG. NAME:
DRAWN BY: D. MCIVOR	DATE: May 2003	



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GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

SCALE 1:1000



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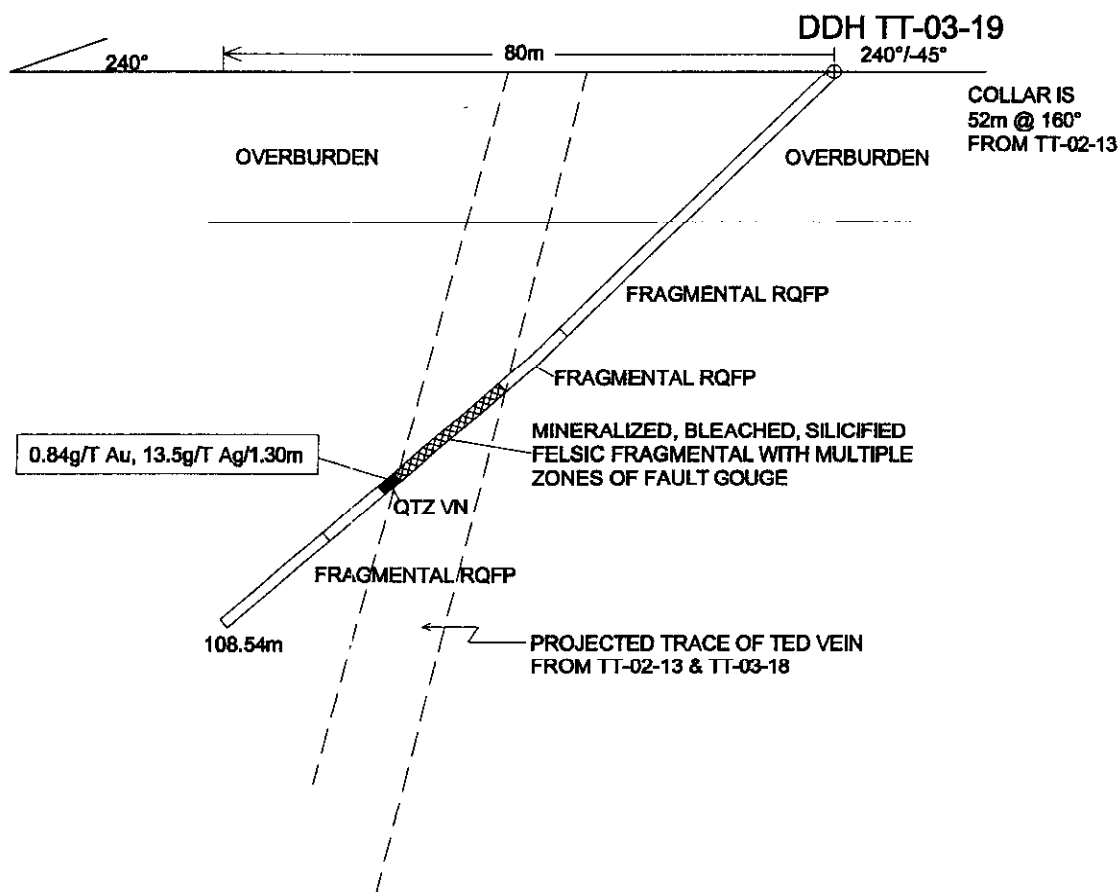
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- RQFP RHYOLITE QUARTZ FELDSPAR PORPHYRY
- SIL SILICIFICATION
- BL BLEACHING
- QCV QUARTZ-CARBONATE VEIN

SOUTHERN RIO RESOURCES LTD.

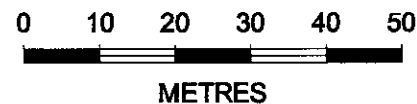
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TAM PROPERTY
TED VEIN TARGET
DDH TT-02-13, TT-03-18**

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DRAWN BY: D. MCVOR	DATE: May 2003	


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SCALE 1:1000



LEGEND

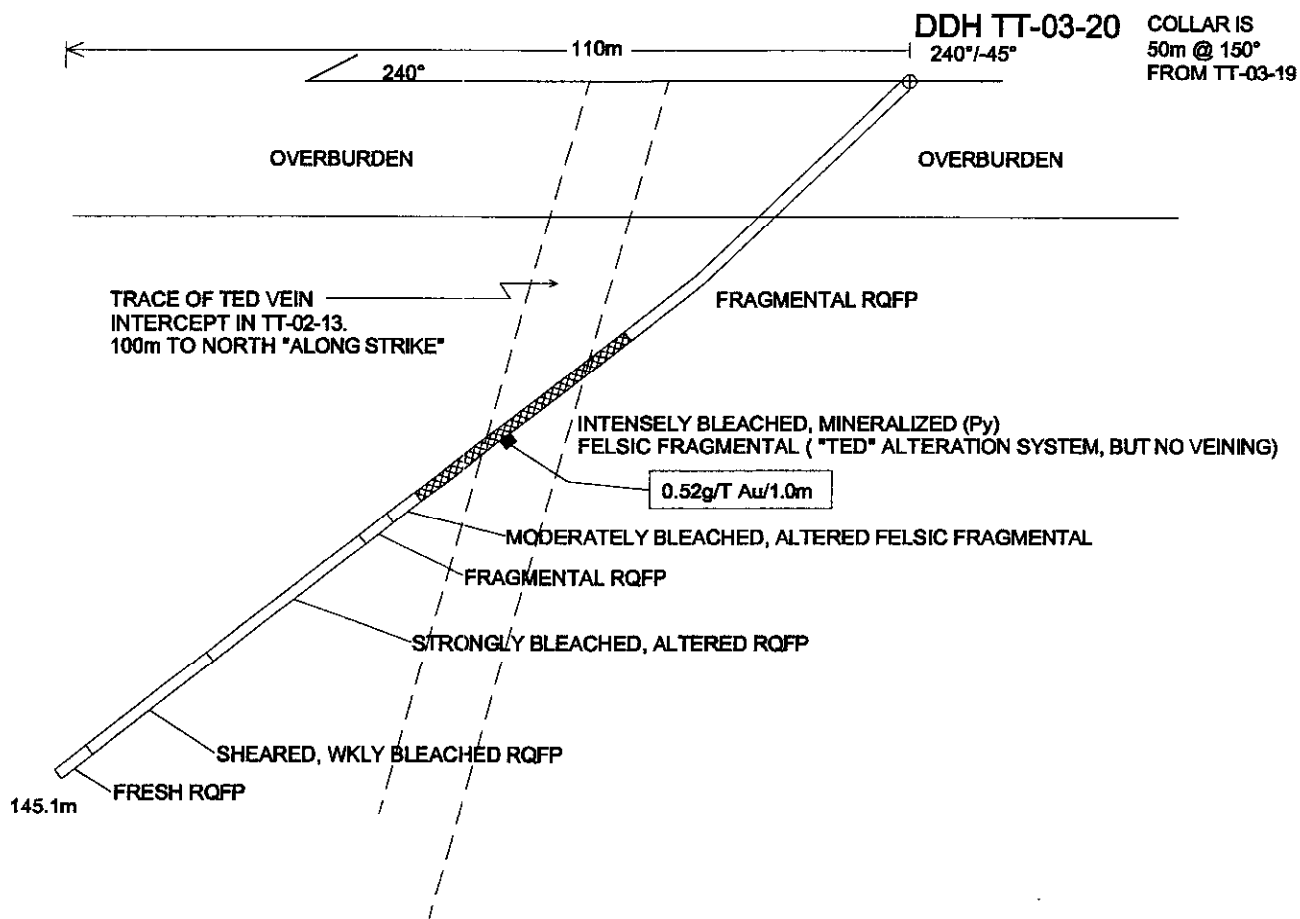
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- SIL SILICIFICATION
- BL BLEACHING
- QC QUARTZ-CARBONATE VEIN
-  TED VEIN

SOUTHERN RIO RESOURCES LTD.

**3 T'S PROJECT
TAM PROPERTY
TED VEIN TARGET
DDH TT-03-19**

SCALE: 1:1000	NTS: 93F/3E.2W	DRW. NAME:
DRAWN BY: D. MCNOR	DATE: May 2003	

27,177



SCALE 1:1000



LEGEND

- RQFP RHYOLITE QUARTZ FELDSPAR PORPHYRY
- SIL SILICIFICATION
- BL BLEACHING
- QCV QUARTZ-CARBONATE VEIN
- TED VEIN

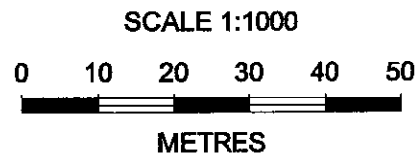
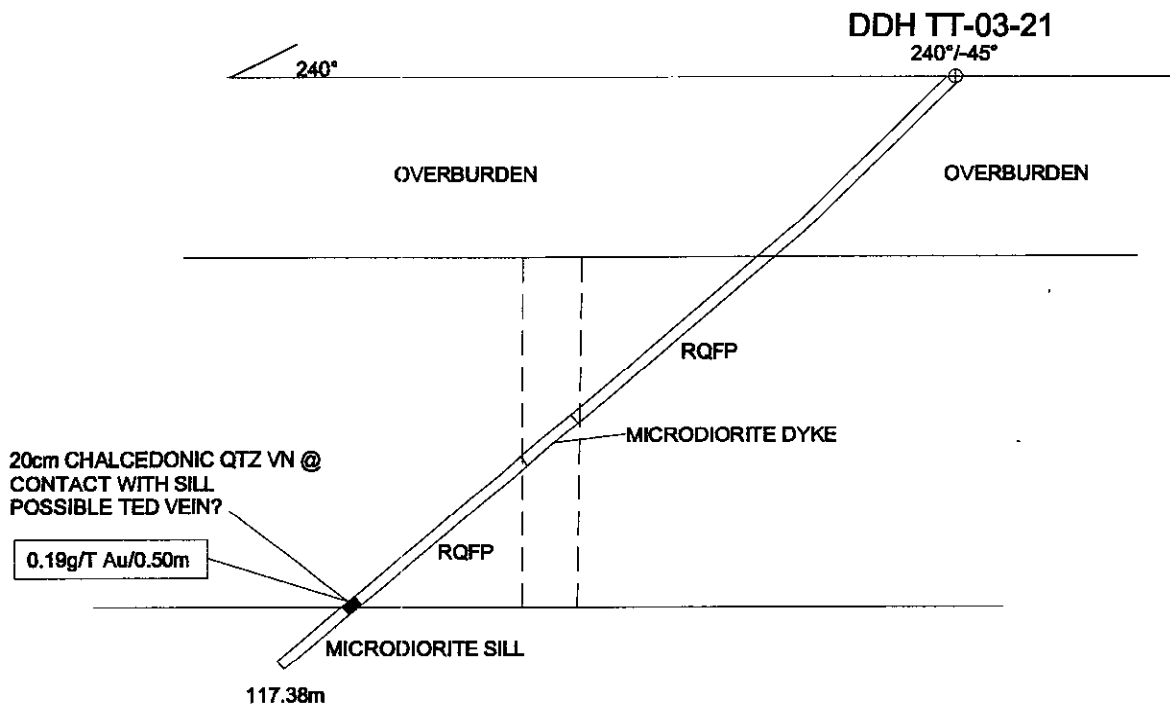
SOUTHERN RIO RESOURCES LTD.

**3 T'S PROJECT
TAM PROPERTY
TED VEIN TARGET
DDH TT-03-20**

SCALE: 1:1000	NTS: 93F/3E.ZW	DRG. NAME:
DRAWN BY: D. MCIVOR	DATE: May 2003	

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

27,177



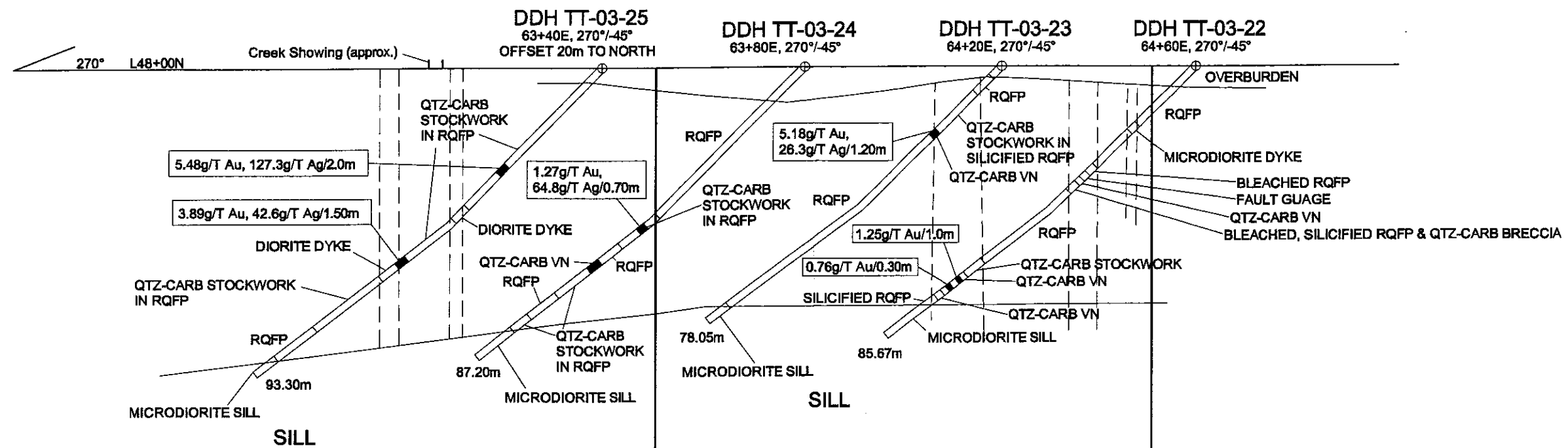
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- SIL SILICIFICATION
- BL BLEACHING
- QCV QUARTZ-CARBONATE VEIN
- TED VEIN

SOUTHERN RIO RESOURCES LTD.

**3 T'S PROJECT
TAM PROPERTY
TED VEIN TARGET
DDH TT-03-21**

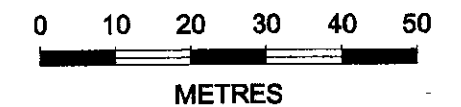
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DRAWN BY: D. MCVOR	DATE: May 2003	



GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

27,177

SCALE 1:1000



LEGEND

- RQFP RHYOLITE QUARTZ FELDSPAR PORPHYRY
- SIL SILICIFICATION
- BL BLEACHING
- QCV QUARTZ-CARBONATE VEIN
- █ MINT VEIN

SOUTHERN RIO RESOURCES LTD.

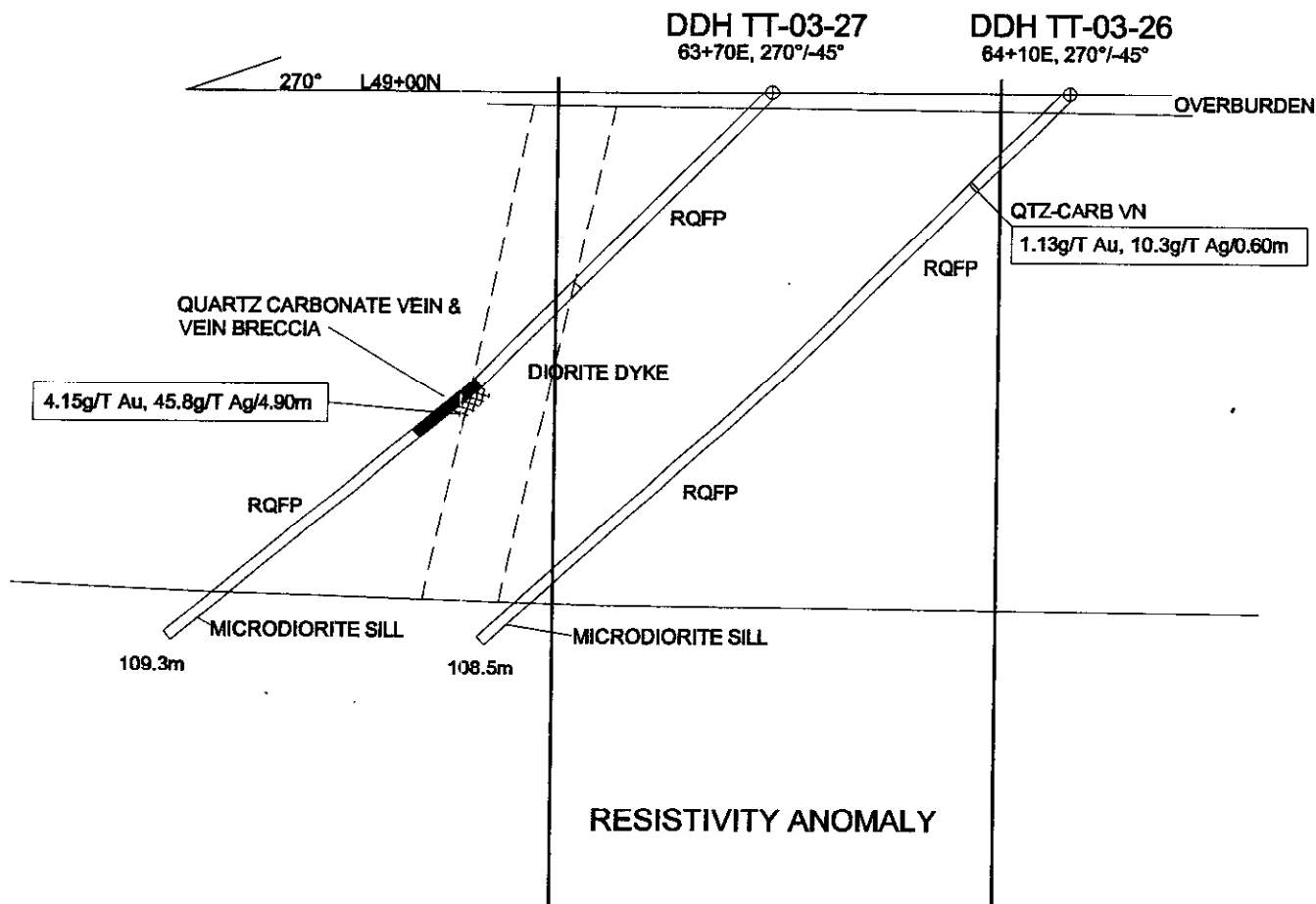
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TAM PROPERTY
MINT VEIN TARGET
DRILL SECTION L48+00N
DDH TT-03-22,23,24,25

SCALE: 1:1000 NTS: 93F/3E.ZW DMC NAME:
DRAWN BY: D. MCIVOR DATE: May 2003

GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT

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(See plan map for collar locations)



SCALE 1:1000

0 10 20 30 40 50

METRES

LEGEND

- RQFP RHYOLITE QUARTZ FELDSPAR PORPHYRY
- SIL SILICIFICATION
- BL BLEACHING
- QCV QUARTZ-CARBONATE VEIN
- MINT VEIN

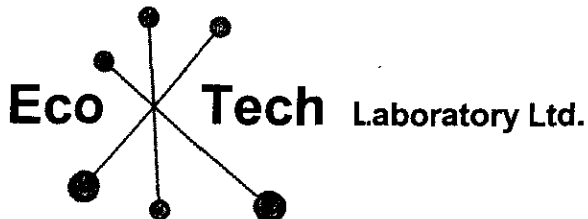
SOUTHERN RIO RESOURCES LTD.

**3 T'S PROJECT
TAM PROPERTY
MINT VEIN TARGET
DRILL SECTION L49+00N
DDH TT-03-26,27**

SCALE: 1:1000	NTS: 93F/3E.2W	DWG. NAME:
DRAWN BY: O. MCIVOR	DATE: May 2003	

APPENDIX 2

ORIGINAL ASSAY DATA



ASSAYING
GEOCHEMISTRY
ANALYTICAL CHEMISTRY
ENVIRONMENTAL TESTING

10041 Dallas Drive, Kamloops, BC V2C 6T4
Phone (250) 573-5700 Fax (250) 573-4557
E-mail: ecotech@direct.ca
www.ecotechlab.com

CERTIFICATE OF ASSAY AK 2002-059

SOUTHERN RIO RESOURCES

Suite 1410, 650 W Georgia
Box 11584
Vancouver, BC, V6B 4N8

28-Mar-03

**GEOLOGICAL SURVEY BRANCH
ASSESSMENT REPORT**

ATTENTION: LINDSAY BOTTOMER

No. of samples received: 111

Sample type: Core

Project #: 3T's

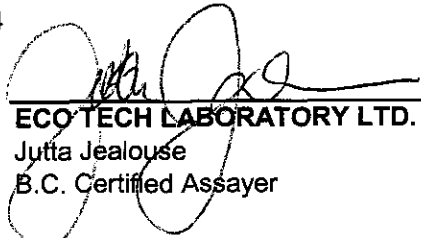
Shipment #: 1

Samples Submitted by: Southern Rio

27,177

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
1	16901	0.12	0.003	1.3	0.04
2	16902	0.06	0.002	0.8	0.02
3	16903	<0.03	<0.001	0.5	0.02
4	16904	0.03	0.001	0.5	0.02
5	16905	0.03	0.001	0.7	0.02
6	16906	0.05	0.001	0.4	0.01
7	16907	0.46	0.013	64.5	1.88
8	16908	0.04	0.001	2.5	0.07
9	16909	0.04	0.001	2.3	0.07
10	16910	0.15	0.004	3.9	0.11
11	16911	0.11	0.003	2.0	0.06
12	16912	0.06	0.002	0.9	0.03
13	16913	0.04	0.001	1.5	0.04
14	16914	0.04	0.001	2.9	0.09
15	16915	0.05	0.001	3.5	0.10
16	16916	0.04	0.001	7.1	0.21
17	16917	0.14	0.004	14.9	0.44
18	16918	0.11	0.003	35.8	1.04
19	16919	0.66	0.019	16.8	0.49
20	16920	0.07	0.002	4.2	0.12
21	16921	0.13	0.004	5.9	0.17
22	16922	0.09	0.003	2.1	0.06
23	16923	0.03	0.001	1.3	0.04
24	16924	<0.03	<0.001	<0.1	<0.01
25	16925	0.27	0.008	11.8	0.34

TT-e3-15


ECO TECH LABORATORY LTD.
Jutta Jealouse
B.C. Certified Assayer

SOUTHERN RIO RESOURCES AK3-059

28-Mar-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
26	16926	1.21	0.035	272.0	7.93
27	16927	0.12	0.003	6.4	0.19
28	16928	0.27	0.008	5.0	0.15
29	16929	0.22	0.006	23.1	0.67
30	16930	<0.03	<0.001	1.1	0.03
31	16931	0.05	0.001	2.2	0.06
32	16932	0.07	0.002	2.1	0.06
33	16933	0.07	0.002	1.9	0.06
34	16934	0.05	0.001	2.2	0.06
35	16935	0.08	0.002	4.7	0.14
36	16936	0.10	0.003	10.3	0.30
37	16937	0.19	0.006	62.4	1.82
38	16938	0.36	0.010	56.8	1.66
39	16939	0.32	0.009	37.2	1.09
40	16940	0.26	0.008	22.2	0.65
41	16941	0.25	0.007	22.1	0.65
42	16942	0.29	0.008	10.9	0.32
43	16943	0.92	0.027	20.9	0.61
44	16944	1.82	0.053	452.0	13.18
45	16945	2.25	0.066	784.0	22.86
46	16946	4.09	0.119	384.0	11.20
47	16947	0.16	0.005	16.0	0.47
48	16949	0.14	0.004	10.7	0.31
49	16950	<0.03	<0.001	0.2	0.01
50	16951	0.05	0.001	1.2	0.04
51	16952	<0.03	<0.001	1.0	0.03
52	16953	0.09	0.003	1.5	0.04
53	16954	<0.03	<0.001	0.4	0.01
54	16955	0.26	0.008	6.3	0.18
55	16956	0.13	0.004	2.9	0.09
56	16957	0.20	0.006	7.2	0.21
57	16958	0.07	0.002	6.9	0.20
58	16959	0.74	0.022	216.0	6.30
59	16960	0.81	0.024	177.0	5.16
60	16961	2.93	0.085	518.0	15.11
61	16962	0.91	0.027	201.0	5.86
62	16963	0.54	0.016	68.3	1.99
63	16964	0.41	0.012	66.1	1.93
64	16965	0.31	0.009	42.7	1.25
65	16966	0.95	0.028	145.0	4.23
66	16967	1.08	0.031	170.0	4.96
67	16968	0.32	0.009	14.4	0.42
68	16969	0.84	0.024	36.4	1.06
69	16970	0.66	0.019	25.8	0.75
70	16971	3.89	0.113	56.3	1.64

T1-03-15

T1-03-16


 ECO TECH LABORATORY LTD.

 Jutta Jealous
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SOUTHERN RIO RESOURCES AK3-059

28-Mar-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
71	16972	3.64	0.106	50.1	1.46
72	16973	1.18	0.034	38.3	1.12
73	16974	1.12	0.033	46.3	1.35
74	16975	2.78	0.081	214.0	6.24
75	16976	2.76	0.080	320.0	9.33
76	16983	<0.03	<0.001	1.3	0.04
77	16984	10.30	0.300	43.2	1.26
78	16985	22.1	0.645	54.6	1.59
79	16987	10.4	0.303	55.6	1.62
80	16988	0.99	0.029	17.0	0.50
81	16989	0.30	0.009	23.5	0.69
82	16990	0.34	0.010	5.6	0.16
83	16991	1.18	0.034	18.4	0.54
84	16992	0.12	0.003	2.5	0.07
85	16993	<0.03	<0.001	<0.1	<0.01
86	16994	3.91	0.114	10.8	0.32
87	16995	0.27	0.008	5.0	0.15
88	16996	0.07	0.002	1.4	0.04
89	16997	0.12	0.003	2.7	0.08
90	21001	<0.03	<0.001	<0.1	<0.01
91	21002	0.03	0.001	0.9	0.03
92	21003	<0.03	<0.001	0.4	0.01
93	21004	<0.03	<0.001	<0.1	<0.01
94	21005	<0.03	<0.001	0.6	0.02
95	21006	0.03	0.001	0.7	0.02
96	21007	<0.03	<0.001	0.7	0.02
97	21008	<0.03	<0.001	1.4	0.04
98	21009	0.04	0.001	2.8	0.08
99	21010	0.06	0.002	2.7	0.08
100	21011	<0.03	<0.001	<0.1	<0.01
101	21012	<0.03	<0.001	2.6	0.08
102	21013	0.07	0.002	7.3	0.21
103	21014	0.08	0.002	12.3	0.36
104	21015	0.07	0.002	5.6	0.16
105	21016	0.10	0.003	10.1	0.30
106	21017	0.10	0.003	35.2	1.03
107	21252	0.32	0.009	20.6	0.60
108	21253	0.30	0.009	36.7	1.07
109	21254	0.25	0.007	90.0	2.63
110	21255	0.39	0.011	101.0	2.95
111	21257	0.53	0.015	21.8	0.64

TT-03-16

DDH TT-03-14

TT-03-15



ECO TECH LABORATORY LTD.

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 B.C. Certified Assayer

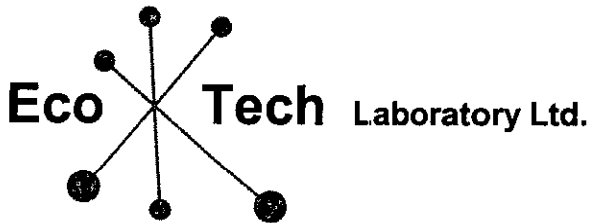
SOUTHERN RIO RESOURCES AK3-059

28-Mar-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
QC DATA:					
Repeat:					
1	16901	0.12	0.003	1.3	0.04
10	16910	0.13	0.004	4.2	0.12
19	16919	0.68	0.020	17.0	0.50
23	16923	0.03	0.001	-	-
26	16926	1.38	0.040	-	-
32	16932	0.10	0.003	-	-
36	16936	0.12	0.003	10.4	0.30
43	16943	1.03	0.030	-	-
44	16944	1.85	0.054	-	-
45	16945	2.16	0.063	-	-
46	16946	4.06	0.118	-	-
54	16955	0.30	0.009	6.4	0.19
60	16961	2.98	0.087	-	-
61	16962	0.90	0.026	-	-
70	16971	3.88	0.113	-	-
71	16972	3.25	0.095	49.6	1.45
72	16973	1.15	0.034	-	-
74	16975	2.67	0.078	-	-
75	16976	2.74	0.080	-	-
76	16983	<0.03	<0.001	-	-
77	16984	10.60	0.309	-	-
78	16985	21.70	0.633	-	-
79	16987	10.00	0.292	-	-
80	16988	1.06	0.031	16.9	0.49
89	16997	0.12	0.003	2.5	0.07
Resplit:					
1	16901 ✓	0.14	0.004	1.3	0.04
36	16936 ✓	0.08	0.002	10.6	0.31
71	16972 ✓	3.60	0.105	49.6	1.45
106	21017 ✓	0.12	0.003	36.2	1.06
Standard:					
PM906		5.59	0.163	-	-
PM906		5.68	0.166	-	-
PM906		5.52	0.161	-	-
Mpla		-	-	69.6	2.03

JJ/ejd
XLS/02


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E-mail: ecotech@direct.ca
www.ecotechlab.com

CERTIFICATE OF ASSAY AK 2003-066

SOUTHERN RIO RESOURCES

Suite 1410, 650 W Georgia
Box 11584
Vancouver, BC, V6B 4N8

28-Mar-03

ATTENTION: LINDSAY BOTTOMER

No. of samples received: 9

Sample type: Core

Project #: None Given

Shipment #: None Given

Samples Submitted by: R. Weicker

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)	
1	16948	1.08	0.031	122.0	3.56	TT-03-15
2	16977	2.81	0.082	163.0	4.75	TT-03-16
3	16978	4.40	0.128	468.0	13.65	"
4	16979	0.89	0.026	256.0	7.47	"
5	16980	1.53	0.045	116.0	3.38	"
6	16981	6.10	0.178	122.0	3.56	"
7	16982	9.25	0.270	136.0	3.97	"
8	16986	17.10	0.499	172.0	5.02	TT-03-16
9	21256 95.8-96.8 TT15	0.24	0.007	7.2	0.21	TT-03-15

QC DATA:

Repeat:

1	16948	1.12	0.033	124	3.62
3	16978	4.45	0.130		
6	16981	6.30	0.184		
7	16982	9.20	0.268		
8	16986	17.40	0.507		

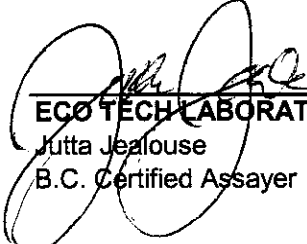
Resplit:

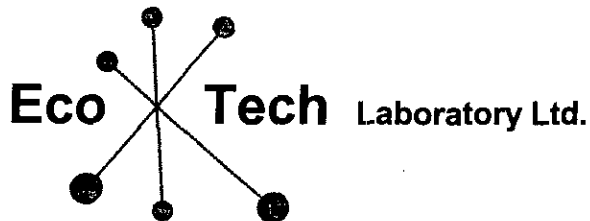
1	16948	1.02	0.030	128	3.73
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Standard:

PM168	2.15	0.063			
CU106			138	4.02	

JJ/kk
XLS/03


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www.ecotechlab.com

CERTIFICATE OF ASSAY AK 2003-061

SOUTHERN RIO RESOURCES

Suite 1410, 650 W Georgia
Box 11584
Vancouver, BC, V6B 4N8

3-Apr-03

ATTENTION: LINDSAY BOTTOMER

No. of samples received: 83

Sample type: Core

Project #: 3T'S

Shipment #: 2

Samples Submitted by: Duncan McIver

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
1	21258	0.08	0.002	3.1	0.09
2	21259	0.08	0.002	1.4	0.04
3	21260	0.13	0.004	3.7	0.11
4	21261	0.07	0.002	2.6	0.08
5	21262	0.09	0.003	6.7	0.20
6	21263	0.06	0.002	10.4	0.30
7	21264	0.14	0.004	10.3	0.30
8	21265	0.10	0.003	2.5	0.07
9	21266	0.10	0.003	2.5	0.07
10	21267	0.31	0.009	7.0	0.20
11	21268	0.34	0.010	74.2	2.16
12	21269	1.34	0.039	172.0	5.02
13	21270	2.18	0.064	402.0	11.72
14	21271	0.98	0.029	182.0	5.31
15	21272	0.25	0.007	9.9	0.29
16	21273	0.20	0.006	18.8	0.55
17	21274	0.21	0.006	16.9	0.49
18	21275	0.28	0.008	40.6	1.18
19	21276	0.58	0.017	92.0	2.68
20	21277	0.56	0.016	122.0	3.56
21	21278	0.90	0.026	316.0	9.22
22	21279	1.72	0.050	536.0	15.63
23	21280	1.06	0.031	242.0	7.06
24	21281	1.01	0.029	208.0	6.07

IT-03-17

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SOUTHERN RIO RESOURCES AK3-061

3-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
25	21282	0.55	0.016	92.4	2.70
26	21283	0.97	0.028	242.0	7.06
27	21284	1.87	0.055	354.0	10.32
28	21285	0.20	0.006	42.6	1.24
29	21286	0.11	0.003	15.4	0.45
30	21287	0.04	0.001	2.6	0.08
31	21288	0.03	0.001	3.0	0.09
32	21289	<0.03	<0.001	3.2	0.09
33	21290	0.23	0.007	58.1	1.69
34	21291	0.81	0.024	164.0	4.78
35	21292	0.04	0.001	3.8	0.11
36	21293	0.08	0.002	3.5	0.10
37	21294	0.04	0.001	3.2	0.09
38	21295	0.09	0.003	6.9	0.20
39	21296	0.06	0.002	3.5	0.10
40	21297	1.28	0.037	174.0	5.07
41	21298	0.07	0.002	5.9	0.17
42	21299	0.09	0.003	11.5	0.34
43	21300	0.28	0.008	56.3	1.64
44	21051	0.40	0.012	54.5	1.59
45	21052	0.17	0.005	4.9	0.14
46	21053	0.32	0.009	27.8	0.81
47	21054	0.32	0.009	22.5	0.66
48	21055	0.14	0.004	21.1	0.62
49	21056	0.10	0.003	6.5	0.19
50	21057	<0.03	<0.001	1.2	0.04
51	21058	0.05	0.001	2.3	0.07
52	21059	0.08	0.002	1.4	0.04
53	21060	0.17	0.005	3.1	0.09
54	21061	0.28	0.008	4.9	0.14
55	21062	0.11	0.003	4.1	0.12
56	21063	0.11	0.003	4.3	0.13
57	21064	0.42	0.012	11.2	0.33
58	21065	0.25	0.007	10.3	0.30
59	21066	0.75	0.022	44.2	1.29
60	21067	<0.03	<0.001	1.5	0.04
61	21068	0.13	0.004	6.5	0.19
62	21069	0.76	0.022	38.5	1.12
63	21070	3.12	0.091	416.0	12.13
64	21071	2.14	0.062	212.0	6.18
65	21072	0.49	0.014	34.2	1.00
66	21073	0.10	0.003	3.9	0.11
67	21074	0.05	0.001	5.2	0.15
68	21075	0.22	0.006	4.8	0.14
69	21076	0.12	0.003	2.1	0.06

TT-03-17

TT-03-18



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SOUTHERN RIO RESOURCES AK3-061

3-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
70	21077	0.24	0.007	2.9	0.09
71	21078	0.05	0.001	2.1	0.06
72	21079	<0.03	<0.001	1.8	0.05
73	21080	0.10	0.003	1.7	0.05
74	21081	0.03	0.001	1.7	0.05
75	21082	<0.03	<0.001	1.7	0.05
76	21083	0.05	0.001	2.9	0.09
77	21084	0.04	0.001	2.7	0.08
78	21085	<0.03	<0.001	0.4	0.01
79	21086	0.05	0.001	7.5	0.22
80	21087	<0.03	<0.001	0.5	0.02
81	21088	<0.03	<0.001	1.1	0.03
82	21089	<0.03	<0.001	0.7	0.02
83	21090	<0.03	<0.001	0.9	0.03

QC DATA:**Resplit:**

1	21258 ✓	0.09	0.003	3.3	0.10
36	21293 ✓	0.06	0.002	3.1	0.09
71	21078	0.06	0.002	2.1	0.06

Repeat:

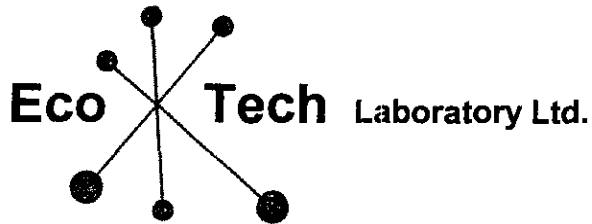
1	21258	0.08	0.002	3.1	0.09
10	21267	0.30	0.009	6.8	0.20
13	21270	2.00	0.058		
19	21276	0.58	0.017		
22	21279	1.74	0.051		
27	21284	1.85	0.054		
36	21293	0.08	0.002	3.6	0.11
40	21297	1.29	0.038		
45	21052	0.17	0.005	5.0	0.15
54	21061	0.30	0.009	4.6	0.13
63	21070	3.24	0.094		
64	21071	2.03	0.059		
71	21078	0.05	0.001	2.0	0.06

Standard:

PM168	2.10	0.061		
PM168	2.06	0.060		
PM168	2.02	0.059		
PM168	2.07	0.060		
Mpla			70.0	2.04
Mpla			69.7	2.03

JJ/kk
XLS/03


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CERTIFICATE OF ASSAY AK 2003-070

SOUTHERN RIO RESOURCES

Suite 1410, 650 W Georgia
Box 11584
Vancouver, BC, V6B 4N8

7-Apr-03

ATTENTION: LINDSAY BOTTOMER

No. of samples received: 98

Sample type: Core

Project #: 3T'S

Shipment #: 3

Samples Submitted by: Southern Rio Resources

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
1	21091	<0.03	<0.001	1.0	0.03
2	21092	<0.03	<0.001	1.0	0.03
3	21093	<0.03	<0.001	1.0	0.03
4	21094	0.19	0.006	0.9	0.03
5	21095	<0.03	<0.001	0.8	0.02
6	21096	0.03	0.001	1.4	0.04
7	21097	<0.03	<0.001	0.9	0.03
8	21098	<0.03	<0.001	0.9	0.03
9	21099	0.03	0.001	1.3	0.04
10	21100	<0.03	<0.001	1.0	0.03
11	21101	<0.03	<0.001	1.2	0.04
12	21102	0.03	0.001	1.5	0.04
13	21103	<0.03	<0.001	1.4	0.04
14	21104	<0.03	<0.001	1.4	0.04
15	21105	<0.03	<0.001	1.5	0.04
16	21106	<0.03	<0.001	1.8	0.05
17	21107	<0.03	<0.001	2.0	0.06
18	21108	<0.03	<0.001	1.9	0.06
19	21109	<0.03	<0.001	1.5	0.04
20	21110	<0.03	<0.001	0.9	0.03
21	21111	<0.03	<0.001	1.0	0.03
22	21112	<0.03	<0.001	0.9	0.03
23	21113	<0.03	<0.001	1.7	0.05

TT-03-19

JJ/ejd
XLS/03

per Jutta Jealouse
ECO TECH LABORATORY LTD.
Jutta Jealouse
B.C. Certified Assayer

SOUTHERN RIO RESOURCES AK3-070

7-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
24	21114	<0.03	<0.001	2.0	0.06
25	21115	<0.03	<0.001	1.0	0.03
26	21116	<0.03	<0.001	1.3	0.04
27	21117	<0.03	<0.001	0.8	0.02
28	21118	<0.03	<0.001	0.8	0.02
29	21119	<0.03	<0.001	1.0	0.03
30	21120	<0.03	<0.001	1.8	0.05
31	21121	<0.03	<0.001	1.8	0.05
32	21122	0.03	0.001	1.9	0.06
33	21123	0.03	0.001	1.8	0.05
34	21124	0.11	0.003	5.2	0.15
35	21125	0.25	0.007	10.7	0.31
36	21126	0.05	0.001	3.7	0.11
37	21127	0.08	0.002	5.4	0.16
38	21128	0.16	0.005	6.4	0.19
39	21129	0.84	0.024	13.5	0.39
40	21130	<0.03	<0.001	2.1	0.06
41	21131	<0.03	<0.001	0.5	0.02
42	21132	<0.03	<0.001	0.3	0.01
43	21133	<0.03	<0.001	0.8	0.02
44	21134	<0.03	<0.001	0.3	0.01
45	21135	<0.03	<0.001	0.2	0.01
46	21136	<0.03	<0.001	0.5	0.02
47	21137	<0.03	<0.001	0.3	0.01
48	21138	<0.03	<0.001	<0.1	<0.01
49	21139	<0.03	<0.001	<0.1	<0.01
50	21140	<0.03	<0.001	<0.1	<0.01
51	21141	<0.03	<0.001	<0.1	<0.01
52	21142	<0.03	<0.001	<0.1	<0.01
53	21143	<0.03	<0.001	<0.1	<0.01
54	21144	0.03	0.001	0.2	0.01
55	21145	<0.03	<0.001	0.1	0.00
56	21146	<0.03	<0.001	0.1	0.00
57	21147	<0.03	<0.001	0.3	0.01
58	21148	<0.03	<0.001	0.2	0.01
59	21149	0.07	0.002	0.3	0.01

TT-03-19

TT-03-20

JJ/ejd
XLS/03

Jutta Jealouse
ECO TECH LABORATORY LTD.
 Jutta Jealouse
 B.C. Certified Assayer

SOUTHERN RIO RESOURCES AK3-070

7-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
60	21150	<0.03	<0.001	0.2	0.01
61	21151	<0.03	<0.001	0.3	0.01
62	21152	<0.03	<0.001	0.3	0.01
63	21153	0.52	0.015	<0.1	<0.01
64	21154	<0.03	<0.001	0.2	0.01
65	21155	<0.03	<0.001	0.5	0.02
66	21156	<0.03	<0.001	0.2	0.01
67	21157	<0.03	<0.001	0.1	0.00
68	21158	<0.03	<0.001	<0.1	<0.01
69	21159	<0.03	<0.001	<0.1	<0.01
70	21160	<0.03	<0.001	<0.1	<0.01
71	21161	<0.03	<0.001	<0.1	<0.01
72	21162	<0.03	<0.001	0.1	0.00
73	21163	<0.03	<0.001	0.2	0.01
74	21164	<0.03	<0.001	0.4	0.01
75	21165	<0.03	<0.001	0.7	0.02
76	21166	<0.03	<0.001	0.8	0.02
77	21167	<0.03	<0.001	0.8	0.02
78	21168	<0.03	<0.001	0.8	0.02
79	21169	<0.03	<0.001	0.8	0.02
80	21170	<0.03	<0.001	0.5	0.02
81	21171	<0.03	<0.001	0.2	0.01
82	21172	<0.03	<0.001	0.4	0.01
83	21173	<0.03	<0.001	0.8	0.02
84	21174	<0.03	<0.001	0.7	0.02
85	21175	<0.03	<0.001	0.8	0.02
86	21176	<0.03	<0.001	0.1	0.00
87	21177	<0.03	<0.001	0.5	0.02
88	21178	<0.03	<0.001	0.8	0.02
89	21179	<0.03	<0.001	1.1	0.03
90	21180	<0.03	<0.001	0.6	0.02
91	21181	<0.03	<0.001	0.1	0.00
92	21182	<0.03	<0.001	0.5	0.02
93	21183	<0.03	<0.001	0.6	0.02
94	21184	<0.03	<0.001	0.6	0.02

11-03-2c

JJ/ejd
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Rev. Kuan Akhena
ECO TECH LABORATORY LTD.
 Jutta Jealous
 B.C. Certified Assayer

SOUTHERN RIO RESOURCES AK3-070

7-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
95	21185	<0.03	<0.001	0.8	0.02
96	21186	<0.03	<0.001	3.8	0.11
97	21187	<0.03	<0.001	3.7	0.11
98	21188	0.08	0.002	2.8	0.08

TT-03-20

QC DATA:

Resplit:

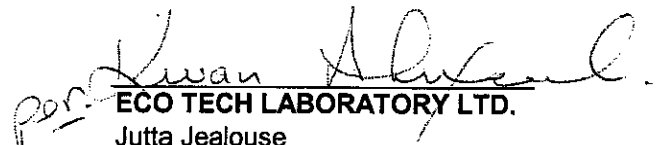
1	21091 ✓	<0.03	<0.001	1.1	0.03
36	21126 ✓	0.05	0.001	3.5	0.10
71	21161 ✓	<0.03	<0.001	<0.1	<0.01

Repeat:

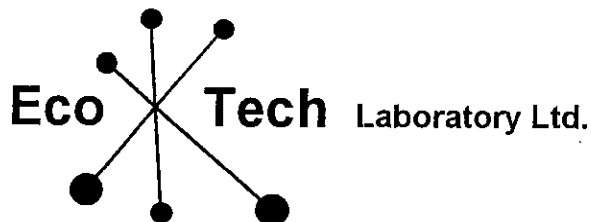
1	21091 ✓	<0.03	<0.001	1.0	0.03
10	21100	<0.03	<0.001	1.2	0.04
19	21109	<0.03	<0.001	1.5	0.04
36	21126 ✓	0.04	0.001	3.6	0.11
45	21135	<0.03	<0.001	0.1	0.00
54	21144	0.04	0.001	0.2	0.01
71	21161 ✓	<0.03	<0.001	<0.1	<0.01
80	21170	<0.03	<0.001	0.5	0.02
89	21179	<0.03	<0.001	1.2	0.04

Standard:

PM168	2.10	0.061	1.4	0.04
PM168	2.08	0.061	1.5	0.04
PM168	2.06	0.060	1.6	0.05

per: 
ECO TECH LABORATORY LTD.
 Jutta Jealouse
 B.C. Certified Assayer

JJ/ejd
 XLS/03



ASSAYING
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ENVIRONMENTAL TESTING

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Phone (250) 573-5700 Fax (250) 573-4557
E-mail: info@ecotechlab.com
www.ecotechlab.com

CERTIFICATE OF ASSAY AK 2003-083

SOUTHERN RIO RESOURCES

Suite 1410, 650 W Georgia
Box 11584
Vancouver, BC, V6B 4N8

15-Apr-03

ATTENTION: LINDSAY BOTTOMER

No. of samples received: 113

Sample type: Core

Project #: 3T'S

Shipment #: 4

Samples Submitted by: Southern Rio Resources

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
1	21189	0.03	0.001	0.8	0.02
2	21190	<0.03	<0.001	0.6	0.02
3	21191	0.25	0.007	1.0	0.03
4	21192	0.32	0.009	1.3	0.04
5	21193	<0.03	<0.001	<0.1	<0.01
6	21194	<0.03	<0.001	0.3	0.01
7	21195	<0.03	<0.001	0.7	0.02
8	21196	0.19	0.006	0.9	0.03
9	21197	<0.03	<0.001	0.4	0.01
10	21198	<0.03	<0.001	0.3	0.01
11	21199	<0.03	<0.001	0.1	0.00
12	21200	<0.03	<0.001	1.0	0.03
13	21201	<0.03	<0.001	0.9	0.03
14	21202	<0.03	<0.001	1.3	0.04
15	21203	<0.03	<0.001	0.8	0.02
16	21204	0.03	0.001	0.6	0.02
17	21205	<0.03	<0.001	0.5	0.02
18	21206	<0.03	<0.001	0.2	0.01
19	21207	<0.03	<0.001	0.4	0.01
20	21208	<0.03	<0.001	0.4	0.01
21	21209	<0.03	<0.001	<0.1	<0.01
22	21210	<0.03	<0.001	0.6	0.02
23	21211	<0.03	<0.001	0.8	0.02

TT-03-21

TT-03-22

per Jutta Jealouse
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SOUTHERN RIO RESOURCES

15-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
24	21212	<0.03	<0.001	<0.1	<0.01
25	21213	<0.03	<0.001	5.1	0.15
26	21214	<0.03	<0.001	0.9	0.03
27	21215	1.25	0.036	0.1	0.00
28	21216	<0.03	<0.001	0.4	0.01
29	21217	<0.03	<0.001	0.3	0.01
30	21218	<0.03	<0.001	0.2	0.01
31	21219	0.76	0.022	8.0	0.23
32	21220	<0.03	<0.001	0.2	0.01
33	21221	<0.03	<0.001	0.2	0.01
34	21222	<0.03	<0.001	1.1	0.03
35	21223	0.06	0.002	1.2	0.04
36	21224	0.12	0.003	1.5	0.04
37	21225	0.29	0.008	3.2	0.09
38	21226	0.07	0.002	2.9	0.09
39	21227	<0.03	<0.001	0.6	0.02
40	21228	<0.03	<0.001	0.3	0.01
41	21229	<0.03	<0.001	0.6	0.02
42	21230	<0.03	<0.001	0.4	0.01
43	21231	<0.03	<0.001	0.1	0.00
44	21232	<0.03	<0.001	0.6	0.02
45	21233	<0.03	<0.001	0.6	0.02
46	21234	0.03	0.001	1.2	0.04
47	21235	0.10	0.003	4.2	0.12
48	21236	0.08	0.002	4.2	0.12
49	21237	0.08	0.002	4.3	0.13
50	21238	0.05	0.001	4.6	0.13
51	21239	0.03	0.001	1.7	0.05
52	21240	0.08	0.002	4.2	0.12
53	21241	<0.03	<0.001	1.2	0.04
54	21242	0.34	0.010	2.5	0.07
55	21243	3.46	0.101	24.1	0.70
56	21244	6.89	0.201	28.2	0.82
57	21245	<0.03	<0.001	0.1	0.00
58	21246	0.03	0.001	0.3	0.01
59	21247	0.04	0.001	0.2	0.01
60	21248	<0.03	<0.001	0.2	0.01
61	21249	0.04	0.001	0.4	0.01
62	21250	0.04	0.001	0.7	0.02
63	21301	<0.03	<0.001	<0.1	<0.01
64	21302	<0.03	<0.001	<0.1	<0.01
65	21303	0.04	0.001	0.4	0.01

TT-03-22

TT-03-23

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SOUTHERN RIO RESOURCES

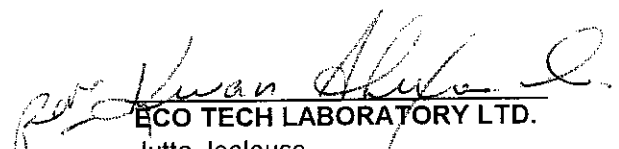
15-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
66	21304	0.04	0.001	0.6	0.02
67	21305	<0.03	<0.001	1.0	0.03
68	21306	<0.03	<0.001	0.5	0.02
69	21307	<0.03	<0.001	0.4	0.01
70	21308	<0.03	<0.001	0.3	0.01
71	21309	<0.03	<0.001	0.3	0.01
72	21310	<0.03	<0.001	0.2	0.01
73	21311	<0.03	<0.001	0.6	0.02
74	23112	<0.03	<0.001	0.7	0.02
75	21313	<0.03	<0.001	1.1	0.03
76	21314	0.34	0.010	4.2	0.12
77	21315	0.03	0.001	2.0	0.06
78	21316	<0.03	<0.001	0.2	0.01
79	21317	0.18	0.005	21.8	0.64
80	21318	0.07	0.002	0.5	0.02
81	21319	0.03	0.001	0.4	0.01
82	21320	<0.03	<0.001	2.6	0.08
83	21321	0.21	0.006	6.9	0.20
84	21322	0.03	0.001	1.2	0.04
85	21323	0.14	0.004	8.4	0.25
86	21324	0.08	0.002	2.0	0.06
87	21325	0.04	0.001	4.1	0.12
88	21326	1.27	0.037	64.8	1.89
89	21327	0.03	0.001	1.4	0.04
90	21328	0.03	0.001	2.4	0.07
91	21329	<0.03	<0.001	0.4	0.01
92	21330	<0.03	<0.001	0.8	0.02
93	21331	0.03	0.001	1.1	0.03
94	21332	0.10	0.003	1.0	0.03
95	21333	<0.03	<0.001	0.5	0.02
96	21334	0.40	0.012	14.2	0.41
97	21335	0.03	0.001	1.2	0.04
98	21336	0.04	0.001	1.0	0.03
99	21337	0.03	0.001	0.6	0.02
100	21338	<0.03	<0.001	0.6	0.02
101	21339	<0.03	<0.001	0.4	0.01
102	21340	<0.03	<0.001	0.3	0.01
103	21341	<0.03	<0.001	0.4	0.01
104	21342	<0.03	<0.001	0.6	0.02
105	21343	<0.03	<0.001	0.4	0.01

TT-03-23

TT-03-24

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SOUTHERN RIO RESOURCES

15-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
106	21344	0.03	0.001	0.6	0.02
107	21345	<0.03	<0.001	0.3	0.01
108	21346	<0.03	<0.001	0.3	0.01
109	21347	0.03	0.001	0.7	0.02
110	21348	0.04	0.001	0.5	0.02
111	21349	0.04	0.001	0.9	0.03
112	21350	0.04	0.001	2.4	0.07
113	21351	<0.03	<0.001	1.3	0.04

TT-03-24

QC DATA:**Resplit:**

1	21189	0.04	0.001	0.8	0.02
36	21224	0.15	0.004	1.8	0.05
71	21309	<0.03	<0.001	0.3	0.01
106	21344	0.03	0.001	0.6	0.02

Repeat:

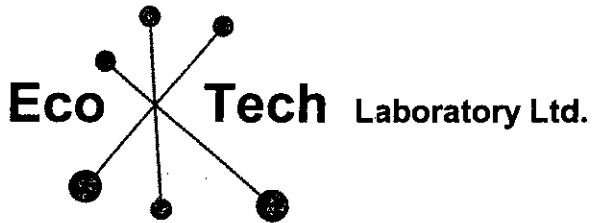
1	21189	0.03	0.001	0.80	0.02
10	21198	<0.03	<0.001	0.30	0.01
19	21207	<0.03	<0.001	0.40	0.01
36	21224	0.12	0.003	1.60	0.05
45	21233	<0.03	<0.001	0.60	0.02
54	21242	0.32	0.009	2.30	0.07
71	21309	<0.03	<0.001	0.30	0.01
80	21318	0.05	0.001	0.40	0.01
89	21327	<0.03	<0.001	1.30	0.04
106	21344	0.03	0.001	-	-

Standard:

PM168	2.08	0.061	-	-
PM168	2.10	0.061	-	-
PM168	2.10	0.061	-	-
PM168	2.10	0.061	-	-
MP1a	-	-	69.8	2.04
MP1a	-	-	69.9	2.04
MP1a	-	-	69.7	2.03

JJ/ejd
XLS/03

Per Kuan Akmal
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www.ecotechlab.com

CERTIFICATE OF ASSAY AK 2003-087

SOUTHERN RIO RESOURCES

Suite 1410, 650 W Georgia
Box 11584
Vancouver, BC, V6B 4N8

22-Apr-03

ATTENTION: LINDSAY BOTTOMER

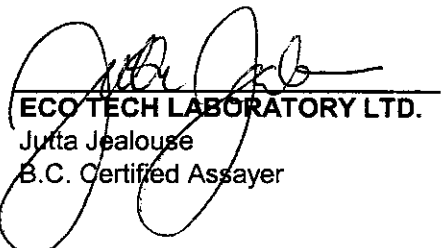
No. of samples received: 107

Sample type: Core

Samples Submitted by: R. Weicker

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
1	21401	0.05	0.001	2.1	0.06
2	21402	0.12	0.003	7.7	0.23
3	21403	0.03	0.001	1.3	0.04
4	21404	0.06	0.002	2.3	0.07
5	21405	0.05	0.001	3.3	0.10
6	21406	0.03	0.001	1.0	0.03
7	21407	0.05	0.001	2.2	0.06
8	21408	<0.03	<0.001	0.6	0.02
9	21409	0.05	0.001	1.9	0.06
10	21410	0.30	0.009	11.9	0.35
11	21411	0.08	0.002	5.3	0.16
12	21412	0.05	0.001	2.2	0.06
13	21413	0.04	0.001	0.8	0.02
14	21414	0.04	0.001	0.9	0.03
15	21415	0.03	0.001	0.5	0.02
16	21416	0.03	0.001	0.5	0.02
17	21417	0.04	0.001	0.8	0.02
18	21418	0.03	0.001	0.4	0.01
19	21419	0.04	0.001	1.3	0.04
20	21420	0.03	0.001	0.7	0.02
21	21421	0.07	0.002	0.7	0.02
22	21422	0.09	0.003	0.9	0.03
23	21423	0.40	0.012	8.8	0.26
24	21424	0.08	0.002	4.3	0.13

TT-03-25


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B.C. Certified Assayer

SOUTHERN RIO RESOURCES AK-87

22-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
25	21425	2.50	0.073	53.6	1.56
26	21426	8.40	0.245	201.0	5.86
27	21427	0.05	0.001	3.4	0.10
28	21428	0.05	0.001	5.4	0.16
29	21429	0.04	0.001	1.6	0.05
30	21430	0.06	0.002	2.4	0.07
31	21431	0.47	0.014	10.6	0.31
32	21432	0.09	0.003	6.5	0.19
33	21433	0.11	0.003	7.9	0.23
34	21434	0.05	0.001	3.8	0.11
35	21435	0.06	0.002	0.8	0.02
36	21436	0.05	0.001	1.1	0.03
37	21437	0.06	0.002	1.9	0.06
38	21438	0.18	0.005	5.8	0.17
39	21439	0.17	0.005	3.1	0.09
40	21440	0.26	0.008	8.7	0.25
41	21441	0.11	0.003	3.5	0.10
42	21442	0.09	0.003	10.3	0.30
43	21443	0.07	0.002	6.3	0.18
44	21444	0.04	0.001	0.6	0.02
45	21445	0.31	0.009	21.8	0.64
46	21446	3.98	0.116	42.6	1.24
47	21447	0.41	0.012	9.3	0.27
48	21448	0.08	0.002	3.0	0.09
49	21449	0.11	0.003	1.1	0.03
50	21450	0.15	0.004	4.6	0.13
51	21451	0.07	0.002	0.7	0.02
52	21452	0.12	0.003	2.3	0.07
53	21453	0.35	0.010	4.5	0.13
54	21454	0.44	0.013	8.7	0.25
55	21455	0.23	0.007	3.5	0.10
56	21456	0.14	0.004	3.2	0.09
57	21458	0.20	0.006	2.8	0.08
58	21459	0.31	0.009	2.6	0.08
59	21461	<0.03	<0.001	<0.1	<0.001
60	21462	0.22	0.006	3.2	0.09
61	21463	0.53	0.015	2.2	0.06
62	21464	0.31	0.009	5.6	0.16
63	21465	0.12	0.003	2.1	0.06
64	21467	0.08	0.002	0.7	0.02
65	21468	0.07	0.002	0.5	0.02
66	21469	0.22	0.006	2.1	0.06
67	21470	1.31	0.038	10.3	0.30

TT-03-25

TT-03-26



ECO TECH LABORATORY LTD.

Jutta Jealous
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SOUTHERN RIO RESOURCES AK-87

22-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)	
68	21471	0.09	0.003	1.4	0.04	
69	21472	<0.03	<0.001	<0.01	<0.001	TT-03-26
70	21473	1.26	0.037	17.7	0.52	
71	21474	1.08	0.031	20.9	0.61	
72	21475	1.24	0.036	15.5	0.45	
73	21476	5.16	0.150	91.8	2.68	
74	21477	10.70	0.312	68.9	2.01	
75	21479	0.19	0.006	25.4	0.74	
76	21480	0.09	0.003	13.3	0.39	
77	21481	0.08	0.002	20.3	0.59	
78	21482	1.52	0.044	16.1	0.47	
79	21483	0.05	0.001	0.9	0.03	
80	21484	<0.03	<0.001	0.4	0.01	
81	21486	0.04	0.001	0.4	0.01	
82	21487	0.04	0.001	0.9	0.03	
83	21488	<0.03	<0.001	0.5	0.02	
84	21489	<0.03	<0.001	0.4	0.01	
85	21490	0.06	0.002	3.2	0.09	TT-03-27
86	21491	0.05	0.001	1.7	0.05	
87	21492	0.03	0.001	2.9	0.09	
88	21493	0.06	0.002	3.1	0.09	
89	21494	<0.03	<0.001	1.3	0.04	
90	21495	0.04	0.001	1.1	0.03	
91	21496	0.06	0.002	1.3	0.04	
92	21497	0.03	0.001	1.0	0.03	
93	21498	0.04	0.001	1.5	0.04	
94	21499	<0.03	<0.001	1.4	0.04	
95	21500	0.03	0.001	1.1	0.03	
96	21501	0.05	0.001	2.4	0.07	
97	21502	<0.03	<0.001	0.6	0.02	
98	21503	<0.03	<0.001	1.4	0.04	
99	21504	0.09	0.003	12.9	0.38	
100	21505	<0.03	<0.001	1.7	0.05	
101	21506	<0.03	<0.001	0.8	0.02	
102	21507	0.03	0.001	1.8	0.05	
103	21508	0.05	0.001	10.0	0.29	
104	21509	0.03	0.001	1.9	0.06	
105	21510	0.03	0.001	2.1	0.06	
106	21511	0.03	0.001	1.4	0.04	
107	21512	0.05	0.001	0.2	0.01	



ECO TECH LABORATORY LTD.

 Jutta Jealousé
 B.C. Certified Assayer

SOUTHERN RIO RESOURCES AK-87

22-Apr-03

ET #.	Tag #	Au (g/t)	Au (oz/t)	Ag (g/t)	Ag (oz/t)
QC DATA:					
Resplit:					
1	21401	0.06	0.002	2.0	0.06
36	21436	0.06	0.002	1.1	0.03
71	21474	1.07	0.031	21.4	0.62
106	21511	0.03	0.001	1.2	0.04
Repeat:					
1	21401	0.05	0.001	2.1	0.06
10	21410	0.33	0.010	11.8	0.34
19	21419	0.04	0.001	1.3	0.04
25	21425	2.24	0.065	-	-
26	21426	8.78	0.256	-	-
36	21436	0.05	0.001	1.0	0.03
45	21445	0.30	0.009	21.6	0.63
46	21446	3.79	0.111	-	-
54	21454	0.44	0.013	6.1	0.18
71	21474	1.16	0.034	20.9	0.610
72	21475	1.30	0.038	-	-
73	21476	5.76	0.168	-	-
74	21477	10.70	0.312	-	-
78	21482	1.62	0.047	-	-
80	21484	<0.03	<0.001	0.4	0.012
89	21494	<0.03	<0.001	1.3	0.038
106	21511	0.03	0.001	1.2	0.035
Standard:					
PM168		2.14	0.062	-	-
PM168		2.10	0.061	-	-
PM168		2.04	0.059	-	-
PM168		2.08	0.061	-	-
PM168		2.10	0.061	-	-
Mpla		-	-	69.7	2.033
Mpla		-	-	69.4	2.024
CU106		-	-	138.0	4.024

JJ/kk
XLS/03


Eco Tech LABORATORY LTD.
Jutta Jealous
B.C. Certified Assayer

APPENDIX 3

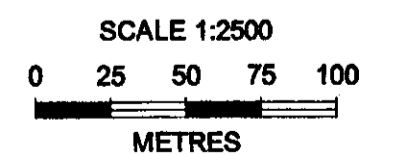
DRILL HOLE LOCATION PLAN MAPS

27,177

(M)

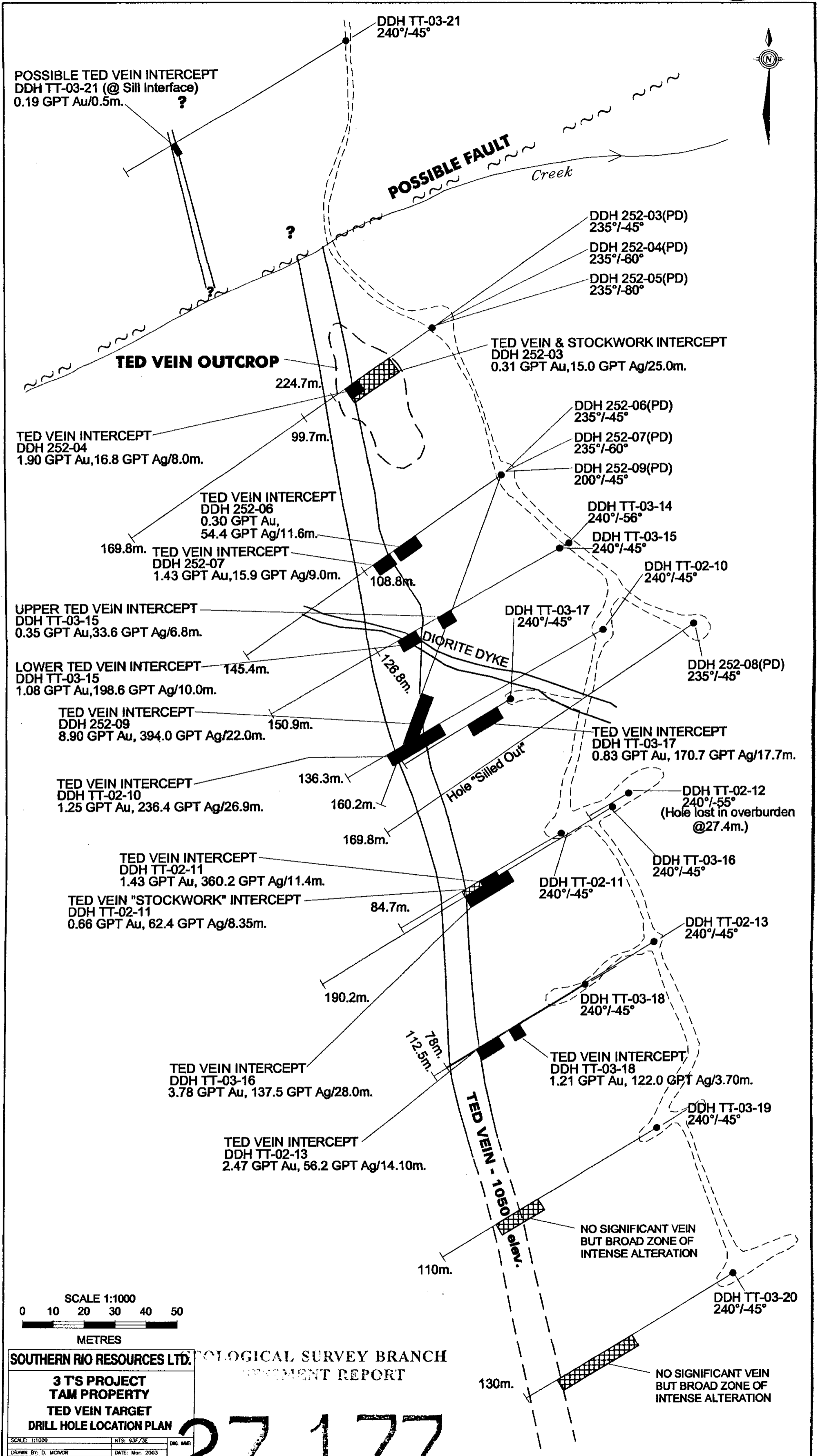


- 2002 DIAMOND DRILL HOLES
- 2003 DIAMOND DRILL HOLES



SOUTHERN RIO RESOURCES LTD.
3 T'S PROJECT
TAM PROPERTY
DDH LOCATION MAP

DATE DRAWN: MAY 2003 SCALE: 1:2500 DRG. NAME:
 AUTHOR: D. MCIVOR NTS No: 93F/SE.ZW



SOUTHERN RIO RESOURCES LTD. GEOLOGICAL SURVEY BRANCH
MINING REPORT

3 T'S PROJECT
TAM PROPERTY
TED VEIN TARGET
DRILL HOLE LOCATION PLAN

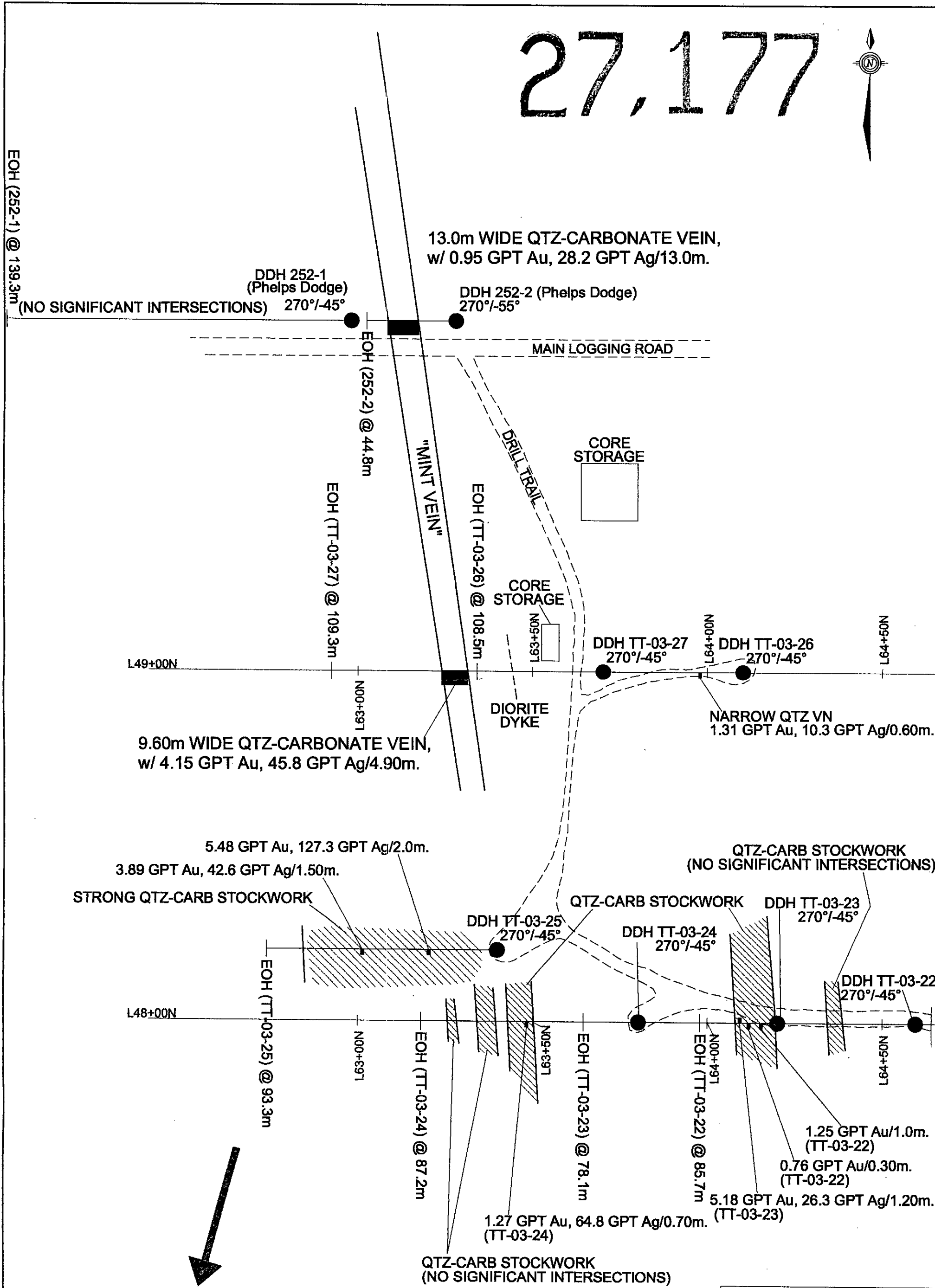
SCALE: 1:1000 NTS: 93F/3E DRG. NAME: DATE: Mar. 2003

27,177

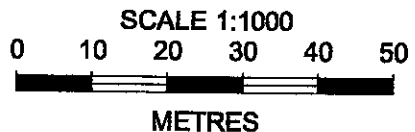
27,177



EOH (252-1) @ 139.3m



**To Ted Vein
 (~500 Metres)**



SOUTHERN RIO RESOURCES LTD.

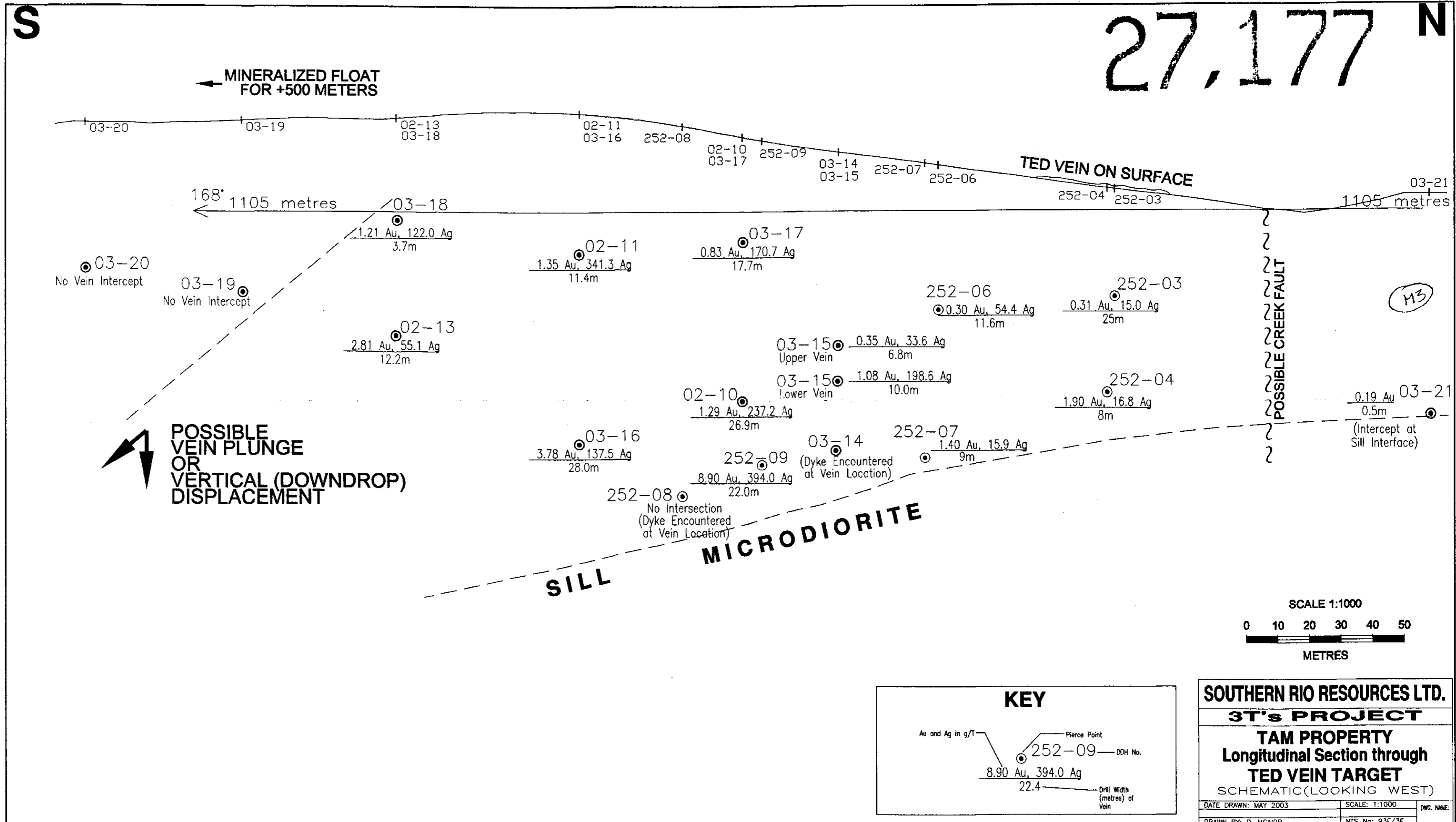
**3 T'S PROJECT
 TAM PROPERTY
 MINT VEIN TARGET
 DRILL HOLE LOCATION PLAN**

SCALE: 1:1000	NTS: 63P/3E	DWG. NAME:
DRAWN BY: D. MCVOR	DATE: Mar. 2003	

APPENDIX 4

TED VEIN SCHEMATIC
LONGITUDINAL SECTION

27,177 N



Drill Hole ID	Gold (Au) g/T	Silver (Ag) g/T	Drill Width (m)	Notes
03-20	No Vein Intercept			No Vein Intercept
03-19	No Vein Intercept			No Vein Intercept
02-13 / 03-18	1.21	122.0	3.7	
02-11	1.35	341.3	11.4	
03-17	0.83	170.7	17.7	
02-10 / 03-17	1.29	237.2	26.9	
03-15 (Upper Vein)	0.35	33.6	6.8	
03-15 (Lower Vein)	1.08	198.6	10.0	
252-06	0.30	54.4	11.6	
252-03	0.31	15.0	25	
252-04	1.90	16.8	8	
03-14	1.40	15.9	9	
252-07	1.40	15.9	9	
03-14	3.78	137.5	28.0	
252-09	8.90	394.0	22.0	(Dyke Encountered at Vein Location)
252-08	No Intersection			(Dyke Encountered at Vein Location)
03-21	0.19	0.5	0.5	(Intercept at Sill Interface)