BURNSIDE OPERATIONS LTD RISING TIDE PROJECT

RESOURCE ESTIMATE

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EXECUTIVE SUMMARY

Geology

The Rising Tide deposit is hosted in interbedded metasedimentary units of the Koolpin Formation. Locally the Koolpin Formation is conformably intruded by the Zamu Dolerite, which exists as the basal unit in the mine sequence. Reverse faulting within the Koolpin sediments is thought to have occurred during a regional deformation event, and mineralization appears to be bound by these faults. Mineralization occurs within four parallel lodes which are subparallel to the Dolerite intrusion, striking ENE with a southerly dip ranging 20° - 35°. A high grade zone exists between 10,000N and 10,130N and is coincident with a fault zone thrusting the Koolpin Formation to the north.

Wireframing

- Interpretation of the mineralized lodes is broadly similar to the previous models conducted on Rising Tide. The main variation being the subdivision of grade envelopes into four subparallel lodes defined by the reverse faulting.
- Four grade envelopes were delineated; 100, 200, 300 & 400, using a lower grade cutoff of 0.40g/t Au. Previously 0.70g/t Au cutoff was used to define the ore lodes, however, mineralization continuity was enhanced at 0.40g/t Au.
- Sectional interpretations were constructed using vertical north-south cross sections.
- The main lodes, 200 & 300 are continuous along the strike of the deposit, for a length of 750m.
- Lode 100 exists mainly within the interpreted thrust zone, from a quartz breccia at 9980N to 10190N, with a 210m strike ENE.
- Lode 400 comprises of a number of solids with varying continuity

Statistics

- Statistical analysis of each lode revealed the 200 lode to have the highest composite grades, with an average of 1.85g/t Au. A lognormal distribution is suggested by composites within each lode, with a positive skewness. An elevated coefficient of variation is present for all lodes within the deposit, indicating the need for appropriate topcuts to be applied prior to grade estimation.
- Top-cuts were applied to composites within individual lodes in order to constrain extreme values and reduce their impact on estimated grades. A top-cut of 10g/t Au was used for all lodes, with upper inflexion points in probability distribution plots used as a guide to determining top-cuts for each lode.

Variography

- Variography analysis using lognormal variograms was completed on a combined lode dataset to supply variogram parameters for grade interpolation. A moderate nugget effect is inherent, with 40% of the total variability, indicating reasonable reproducibility of sampling methods.
- Maximum spatial continuity ranges indicate the largest continuity down-plunge, with a smaller range down-dip less than half that in the down-plunge direction, and a narrow width for across-lode variography. A maximum range down-plunge of 65m, 30m downdip and 5.5m across-lode was interpreted as representing the spatial continuity at Rising Tide.

Block model

- Grades were estimated using ordinary kriging for all lodes into blocks of 10m x 5m x 2.5m (east by north by RL) constrained within the wireframe models, subcelled to 5m x 2.5m x 1.25m along wireframe boundaries. A minimum of 4 composites and a maximum of 10 composites were used in interpolation of grades into blocks. A search ellipse of 75m x 60m x 10m was used for all lodes to collect composites for interpolation. A second subsequent interpolation pass was employed with expanded search ellipses in order to fill unfilled blocks within individual lodes.
- The classified Mineral Resource for the Rising Tide deposit is presented below as at 15th January 2005, above a cut-off of 0g/t Au. Classification of the resource involved several criteria, including drillhole spacing, sampling density, sampling locations, wireframe geometry and confidence in grade continuity. Densities used were 2.2t/m³ for oxide material, 2.37t/m³ for transitional material, and 2.81t/m³ for fresh material to estimate resource block tonnage for all lodes.

CATEGORY	TONNES	AU	OUNCES
Indicated	1,481,232	1.48	70,575
Inferred	1,505,876	1.24	60,038
TOTAL	2,987,109	1.36	130,611

Recommendations

- Minimal follow-up drilling is recommended to:
 - 1. Infill drill where high grade zones are not continuous between 25m sections between 10,000N & 10,130N.
 - 2. Identify the southern extent of gold mineralisation near surface. Current drillhole spacing is irregular on the southern limits.

- An extensive database audit is recommended to identify and correct any data entry errors present.
- Further testwork on density values is recommended. Confidence in the historical density values is low, and it is recommended to test selected drillcore to verify the use of 2.8t/m³ as an average density for all lodes.

BURNSIDE OPERATIONS PTY LTD RISING TIDE RESOURCE ESTIMATE

TABLE OF CONTENTS

1.0	INTRODUCTION	6
2.0	DATA	6
3.0	GEOLOGY	7
4.0	WIREFRAMING	9
5.0	STATISTICS5.1 Descriptive Statistics5.2 Top-cutting of exploration composite data	9 9 10
6.0	VARIOGRAPHY	13
7.0	BLOCK MODELLING AND GRADE INTERPOLATION 7.1 Block sizes 7.2 Modelling Parameters 7.3 Block model validation	15 15 16 17
8.0	RESOURCE CLASSIFICATION AND REPORTING	27
9.0	RECOMMENDATIONS. 9.1 Drilling recommendations	29 29 29

BURNSIDE OPERATIONS PTY LTD RISING TIDE RESOURCE ESTIMATE

TABLE OF CONTENTS

LIST OF TABLES

Table 5.1	Uncut composite statistics within solids (g/t Au)	9
Table 6.1	Model variogram parameters for Rising Tide deposit	.13
Table 7.1	Kriging Efficiency Statistics – Rising Tide deposit	.15
Table 7.2	Rising Tide Resource Model Extents	.15
Table 7.3	Search ellipse dimensions for each interpolation domain	.16
Table 7.4	Statistical validation of Au interpolated grades	.17
Table 8.1	Rising Tide Classified Global Mineral Resource as at 15 th January 2005	.27
Table 8.2	Rising Tide Classified Mineral Resource above 1.1g/t Au as at 15 th January 2005	.28

LIST OF FIGURES

Figure 3.1	Aerial view of structural interpretation of Rising Tide	8
Figure 3.2	Section 10004E showing controlling structures & geological contacts	8
Figure 5.1	Lognormal histograms and lognormal probability plots – 100 Lode	11
Figure 5.2	Lognormal histograms and lognormal probability plots – 200 Lode	11
Figure 5.3	Lognormal histograms and lognormal probability plots – 300 Lode	12
Figure 5.4	Lognormal histograms and lognormal probability plots – 400 Lode	12
Figure 6.1	Variogram model for Rising Tide deposit	14
Figure 7.1	Au Grade vs Depth validation plot – 100 Lode, Rising Tide deposit	19
Figure 7.2	Au Grade vs Depth validation plot – 200 Lode, Rising Tide deposit	20
Figure 7.3	Au Grade vs Depth validation plot – 300 Lode, Rising Tide deposit	21
Figure 7.4	Au Grade vs Depth validation plot – 400 Lode, Rising Tide deposit	22
Figure 7.5	Au Grade vs Easting validation plot - 100 Lode, Rising Tide deposit	23
Figure 7.6	Au Grade vs Easting validation plot - 200 Lode, Rising Tide deposit	24
Figure 7.7	Au Grade vs Easting validation plot - 300 Lode, Rising Tide deposit	25
Figure 7.8	Au Grade vs Easting validation plot - 400 Lode, Rising Tide deposit	26
Figure 8.1	Grade Tonnage Curve for all lodes, Rising Tide deposit	28

LIST OF APPENDICES

1.0 INTRODUCTION

A geological resource estimate was completed on the Rising Tide deposit in December 2004. This deposit comprises part of the Burnside Project Joint Venture, and is located approximately 160km south of Darwin in the Northern Territory, Australia. The aim of this work was to update the geostatistical kriged resource of the Rising Tide deposit, using the greater understanding of the deposit geology and incorporating this geology into the resource model.

2.0 DATA

A total of 269 exploration drillholes were used for the resource estimate, representing 15,035m. Validation of the drillhole database was performed, and minor errors fixed. Drillholes are based on a regular grid of 25m along-strike and 20m across-strike. Larger drillhole spacings along-strike up to 50m are located on the margins of the deposit, with across-strike spacings up to 40m. All holes defining the Rising Tide resource are oriented grid north, with holes dipping at an average of -60°.

A topography surface constructed from drillhole collars, and two surfaces representing the base of weathering, and top of fresh material were used in the resource model. Densities applied were: 2.20t/m³ from the topography surface to the base of weathering; 2.37t/m³ to the transitional zone between the base of weathering & top of fresh material, & 2.81t/m³ to blocks within fresh material below this transitional zone. The density values are based on arithmetic averages of all density samples within each zone from a total dataset of 302 samples involving 11 holes. Density values were derived using the water-invasion method. The reader is referred to MRT's 1998 resource report on Rising Tide for detailed analysis on the representativeness of SG values calculated by various methods, and the verification of density values calculated using the water-invasion method.

3.0 GEOLOGY

The Rising Tide prospect is situated in close proximity to the sheared contact between the Koolpin Formation and the Zamu Dolerite. Locally the Koolpin Formation is conformably intruded by the Zamu Dolerite, which exists as the basal unit in the mine sequence. The Koolpin Formation is comprised of varying proportions of argillite, carbonaceous, graphitic and pyritic/pyrrohotitic shale, chert bands and calc silicates (Sewell 1997).

Gold mineralization has been interpreted to occur in four parallel lodes cross cutting the stratigraphy of the interbedded metasedimentary units of the Koolpin Formation. Reverse thrust faulting within the Koolpin sediments is thought to have occurred during a regional deformation event and mineralization appears to be bound by these faults. The thrust faults are repetitious across the deposit on 20 to 30m spacing, with an average displacement of 4m, creating enechelon zones within each lode. The lodes, (100, 200, 300, & 400, from surface to depth), are subparallel to the Zamu Dolerite intrusion and strike ENE with a southerly dip ranging 20⁰ to 35⁰. Vertical lode thickness ranges from 2m to 6m. Minor mineralization extends into the Zamu Dolerite, mainly represented by lode 400. A high grade zone exists between 10,000N and 10,130N and is coincident with a quartz-pyrite rich, sheared fault zone interpreted to thrust the Koolpin to the north, over the Zamu Dolerite.

Key components controlling mineralization are:

- *Reverse Faults*: create minor offsets (~1m) within the ore lodes, dominant controlling factor in the western portion.
- *Thrust Fault*: occurs in the northern portion of the deposit and is related to the intrusion of the Zamu dolerite. Mineralized zones are thicker and of higher in grade within this zone.
- *Breccia Fault*s: Two (possibly three) NE-SW parallel dextral faults. Dilated, higher grade pods occurs around the breccia

Rocks in the area have undergone regional upper greenschist facies metamorphism. Contact metamorphic assemblages have locally reached Hornblende – Hornfels Facies with the occurrence of garnets and amphiboles in mafic and calcareous rocks.



Figure 3.1 Aerial view of structural interpretation of Rising Tide.



Figure 3.2 Section 10004E showing controlling structures & geological contacts.

4.0 WIREFRAMING

A geological model was created, the primary geological features being the Zamu Dolerite intrusion & reverse thrust faulting. Four grade envelopes were delineated for the Rising Tide deposit, based on a lower cut of 0.40g/t Au. The four grade envelopes delineated were 100, 200, 300 and 400. Previous models utilised a 0.70g/t Au cutoff value for ore delineation, however, continuity of the mineralization was found to be enhanced at 0.40g/t Au.

The main lodes, 200 and 300 are continuous along the strike of the deposit, for a length of 750m. Lode 100 exists north of the 10,000N section coincident of a quartz breccia fault that strikes across the deposit at 015 grid north, and extends through the interpreted thrust zone, for a strike of 210m. The 400 lode comprises of a number of solids with varying continuity. This is a thin lode occurring in close proximity to the Zamu Dolerite.

Sectional interpretations were constructed using vertical north-south cross sections. All wireframing was conducted in Datamine; sectionally interpreted strings were created for all lodes. The lode strings were snapped to the drillholes and wireframes were generated using the Proportional Length Method option in Datamine. The wireframes were validated for intersections and crossovers, and then exported to a format valid for Surpac. Drillhole intercepts were generated and the wireframes then modified to correct any snapping errors.

5.0 STATISTICS

5.1 Descriptive Statistics

Sample intervals within the exploration database were examined to determine the dominant sample length. Nearly all sample intervals were 1m in length, thus the data was composited to 1m intervals, honouring drillhole-wireframe intersections. Statistics were run within the resource drillhole database for all constrained composite data by envelope, and are presented in Table 5.1. No other mineralisation indicators were used, as data was extracted from within wireframes.

Parameter	100	200	300	400
Number	264	681	546	165
Minimum	0.02	0.005	0.005	0.005
Maximum	18.6	29.4	11.9	4.51
Mean	1.61	1.85	1.36	0.71
Median	0.84	1.01	0.79	0.5
Std Dev	2.19	2.50	1.54	0.73
Variance	4.79	6.26	2.37	0.53
Coeff Var	1.36	1.35	1.14	1.02
97.5%ile	8.26	8.00	5.72	2.77
Topcut	10	10	10	3
No Cut	3	6	3	3
Cut Mean	1.55	1.77	1.35	0.69
Cut CV	1.21	1.14	1.12	0.96

Table 5.1Uncut composite statistics within solids (g/t Au)

Location statistics of exploration composites reveal the 200 lode to have the highest gold grades within the Rising Tide deposit, with an uncut average of 1.85g/t Au. The distribution of composites suggests a lognormal distribution for all lodes, as shown by statistical plots in Figures 5.1 to 5.4. A lower-grade population below 0.5g/t Au for all lodes likely represents small areas of internal dilution within the solids, and is not considered part of the mainstream population.

5.2 Top-cutting of exploration composite data

Composite data within the exploration database was assessed for the need of a top-cut to be applied to data prior to grade estimation. The determination of a high-grade cut is made on the basis of histograms, probability plots and ranked data values, with the general criteria for the top-cuts being a marked change, a kink, or pronounced disintegration at the higher end of the probability distribution, or a clear break within ranked composite data.

Since Au composites exhibit several high-grade extreme values, with the mean grade low relative to the spread of data, and with an elevated coefficient of variation, top-cutting of Au composites is necessary to reduce the impact of extreme values on estimation of Au grades.

Using the above criteria, a top-cut of 10 g/t Au was applied to the 100, 200 and 300 lodes, with a separate top-cut of 3g/t Au applied to the 400 lode of the Rising Tide deposit. This lode is lower in average grade, with a maximum composite value of 4.51g/t Au, and also contains a low number of samples, and thus 3g/t Au was considered appropriate. Table 5.1 summarises the topcuts employed for cutting composites at Rising Tide, and resultant cut mean grades for each lode.







Figure 5.2 Lognormal histograms and lognormal probability plots – 200 Lode



Figure 5.3 Lognormal histograms and lognormal probability plots – 300 Lode



Figure 5.4 Lognormal histograms and lognormal probability plots – 400 Lode

6.0 VARIOGRAPHY

Variography analysis using lognormal variograms was performed on composite data for the resource model. In order to provide sufficient data for reliable variography analysis, composites from all lodes were combined together to form one dataset.

Fan interpretation of variograms in the horizontal plane show a 060° strike, with across-strike plane interpretations showing a shallow dip of -25° towards 150°. In the plane defined by the strike and dip orientations, a plunge was not interpreted with sufficient confidence for use in the current resource model, and the plunge was set parallel to the strike orientation, which represents the next known maximum spatial continuity at Rising Tide. However, other minor directions of mineralisation continuity were identified, these being -19°/107° and -16°/203°. These directions likely relate to cross-cutting structures along which minor dilational mineralised veins are located.

Variograms with two spherical structures were modelled, with results in Table 6.1. The quality of variograms was fair, although low data levels, the thin lode nature and lack of data continuity have prevented more robust variograms. The narrow lode width of the Rising Tide lodes have resulted in poor downhole variography, with the sill reached within two lags, and a weakly defined nugget effect.

Lode	Nugget Effect	Sill 1	Range 1	Sill 2	Range 2
Lower	0.40	0.32	65m x 30m x 5.5m	0.28	95m x 45m x 6m

Table 6.1 Model variogram parameters for Rising Tide deposit

The along-strike direction demonstrates the largest range of spatial continuity, with a maximum spatial range of 95m, twice that of the down-dip direction at 45m. Downhole widths of lodes were interpreted as 6m from downhole variography. More data is needed to produce robust variograms, particularly infill drilling in the down-dip and downhole directions.

The variogram model plot for Rising Tide is included as Figure 6.1.

Figure 6.1 Variogram model for Rising Tide deposit

7.0 BLOCK MODELLING AND GRADE INTERPOLATION

7.1 Block sizes

Block size dimensions were considered for the Rising Tide deposit, taking into account drilling density and distribution of composite data within wireframes. An analysis using kriging efficiency was undertaken to determine the optimum block size for Rising Tide, using several block sizes of 10m x 5m x 2.5m, 15m x 5m x 2.5m and 25m x 5m x 2.5m (east x north x RL). Ordinary kriging was run on a model block centred at 10005E, 4092.5N and 1131.25mRL using the above block sizes with all other interpolation parameters identical, and the kriging variance, block variance and LaGrange multiplier noted for each run. Table 7.1 lists the kriging efficiency results below:

Block Size	Block Variance	Kriging Variance	La Grange Multiplier	Kriging Efficiency
10m x 5m x 2.5m	0.730	0.052	-0.028	0.929
15m x 5m x 2.5m	0.766	0.055	-0.042	0.929
25m x 5m x 2.5m	0.827	0.095	-0.098	0.886

Table 7.1 Kriging Efficiency Statistics – Rising Tide deposit

The ideal block size is considered the one with the highest kriging efficiency, with minimal kriging variance relative to block variance. The above table indicates that a block size of either $10m \times 5m \times 2.5m$ or $15m \times 5m \times 2.5m$ is optimal for Rising Tide. Given that the lodes are of a narrow, thin nature, with variable geometry from section to section caused by cross-cutting breccias and thrust structures, a $10m \times 5m \times 2.5m$ block size was considered to best fit the wireframes at Rising Tide, and was thus used as the block size for Rising Tide.

Block model origin and extents are defined below in Table 7.2.

Model Limits	Extent of Model	No of Blocks	Block Size
3650N – 4350N	700m	140	5m
9500E – 10350E	850m	85	10m
1010mRL – 1180mRL	170m	68	2.5m

Table 7.2 Rising Tide Resource Model Extents

Blocks were subdivided into sub-blocks of $5m \times 2.5m \times 1.25m$ (east x north x RL) in order to fill areas adjacent to wireframe boundaries. The solid wireframes were used to limit the blocks available for grade interpolation, with block centroid locations used to define the blocks and sub-blocks for interpolation.

7.2 Modelling Parameters

Ordinary kriging, using parameters derived from the lognormal variograms was chosen to interpolate grades into blocks for all lodes. The skewed nature of the data distribution makes this technique ideal, whereas other techniques such as inverse distance interpolation assume a normal distribution, which can lead to errors if the data is not cut appropriately. Inverse distance techniques also do not utilise the information obtained from the variogram in interpolation of blocks, and thus the spatial correlation between samples is not taken into account.

A total of two kriging passes were performed, with the second interpolation pass utilising an expanded search ellipse in an attempt to fill any remaining unfilled blocks. Only those blocks unfilled were interpolated by this second pass, and grades estimated from the first interpolation pass were left unchanged.

Each lode was treated as a separate hard boundary, restricting the Au grade interpolation to drillhole data located within each lode. A minimum of 4 composites and a maximum of 10 composites were used to interpolate each block grade for all lodes. A tight restriction on the maximum number of composites was necessary to limit the effects of the large across-lode and along-strike variability present in the Rising Tide deposit.

A search ellipse is used to select the samples to estimate a particular block, with ellipse dimensions guided by maximum range parameters modelled in the variography. A search ellipse dimension of $75m \times 60m \times 10m$ was used for all lodes. Search ellipse orientations for interpolation were the same as those interpreted by variography analysis, with all lodes set to a strike of 060° , and dipping -25° towards 150° .

Table 7.3 lists the search ellipses used for each lode in both interpolation passes. A larger second pass search ellipse was required for the 300 lode, as composites were separated by larger distances than for other lodes. All blocks were filled after the second subsequent interpolation pass for all lodes.

	1st PASS SEARCH ELLIPSE			2ND PASS SEARCH ELLIPSE		
LODE	Major	Semi-major	Minor	Major	Semi-major	Minor
100	75m	60m	10m	100m	80m	15m
200	75m	60m	10m	100m	80m	20m
300	75m	60m	10m	150m	120m	30m
400	75m	60m	10m	100m	80m	20m

Table 7.3 Search ellipse dimensions for each interpolation domain

7.3 Block model validation

The Rising Tide block model was validated by several methods, including visual validations on-screen, global statistical comparisons of input and block grades, and local grade/depth relationships. The model was validated visually by viewing vertical sections and plans of the block model, with spatial comparison of kriged block grades against input composite grades to ensure grade trends were represented correctly.

7.3.1 Global statistical validations

Input average composite grades were statistically compared with mean block grades for all lodes, with summary results tabulated in Table 7.4 below.

LODE	NO OF COMPOSITES	TONNES	MODEL AVERAGE AU	COMPOSITE AVERAGE AU	% DIFFERENCE
100	264	398,669	1.48	1.55	-4.6%
200	681	1,329,745	1.63	1.77	-8.2%
300	546	1,131,288	1.27	1.35	-5.7%
400	165	394,849	0.72	0.69	4.6%
TOTAL	1,656	3,254,551	1.38	1.49	-8.0%

Table 7.4 Statistical validation of Au interpolated grades – Rising Tide deposit

Reconciliations between average input composite grades and mean block grades are reasonable. Differences between average composite and model grades are attributed to the variability of composite grades along-strike and down-dip, making it difficult for the model to reproduce localised grade trends evenly. This is evidenced in the validation plots, as discussed in the next section.

7.3.2 Grade/Depth validations

Figures 7.1 to 7.4 illustrate the grade/depth relationship for each lode respectively within the Rising Tide deposit. Both input composite data and model grade data were averaged within 5m RL increments for each lode group, and plotted together with the number of composites to assess the reliability of the block model. Figures 7.5 to 7.8 illustrate the grade/easting relationship for each lode, with both input composite data and model grade data averaged within 25m easting increments and plotted together with the number of composites.

Comparison of model grades with composite grades for the 100 lode (Figures 7.1 and 7.5) illustrate a close reconciliation, with model grades reproducing the fluctuations in composite grades. A slight underestimation of composite grades is present around 1135mRL and 1075mRL, where the model has smoothed the erratic high-grade spikes displayed by

composite grades. However, a low number of composites exist at low depths, with only one composite present in the 1075mRL bench, hence this composite has had a disproportionate influence on model grades.

The 200 lode illustrates a smoothing of composite grades by the model with respect to depth (Figure 7.2). A sharp spike in average composite grade is present between 1060-1050mRL; three composites are located within this interval and thus the model has had to draw on composites from adjacent benches to ensure reliable interpolation, and hence a smoothing of this composite spike is present. The easting validation plot (Figure 7.6) displays a composite trend of high-grades on one section, then low-grades on the next section, and so forth throughout the deposit. This 'yo-yo' pattern has made it extremely difficult for the model to reproduce the composite grade trends and reflects the difficulty in domaining of this lode. It is thought that this erratic composite trend is influenced by the presence of cross-cutting faults and breccias, creating a dilational path for the concentration of gold-enriched fluids. More drilling is required to better understand the geological controls within this lode, and to further define the high-grade domain present. Infill drilling to 12.5m drill centres should be adequate for delineation of this high-grade zone within the 200 lode.

The grade/depth relationship for the 300 lode shows a reasonable reconciliation of model grades with composite grades, with a slight smoothing of composite grades by the model (Figure 7.3). This smoothing is partially a function of the low numbers of composites from 1090mRL and below, with a slightly erratic composite grade trend present and resultant smoothing of this trend by the model. A close reconciliation exists between composites and model grades with respect to easting (Figure 7.7). This trend is more consistent that that for the 200 lode, with less of a yo-yo pattern present, and thus a closer reconciliation of model grades with composite grades.

The 400 lode shows a similar trend to that for the 100 lode, with model grades reproducing composite grades (Figures 7.4 and Figure 7.7). As for the 100 lode, a high-grade spike in composites at the 1075mRL has been smoothed by block grades, this bench is coincident with two composites present, and thus the model has obtained composites from adjacent benches to achieve a reliable block grade.



Figure 7.1 Au Grade vs Depth validation plot – 100 Lode, Rising Tide deposit



Figure 7.2 Au Grade vs Depth validation plot – 200 Lode, Rising Tide deposit



Figure 7.3 Au Grade vs Depth validation plot – 300 Lode, Rising Tide deposit



Figure 7.4 Au Grade vs Depth validation plot – 400 Lode, Rising Tide deposit



Figure 7.5 Au Grade vs Easting validation plot – 100 Lode, Rising Tide deposit



Figure 7.6 Au Grade vs Easting validation plot – 200 Lode, Rising Tide deposit



Figure 7.7 Au Grade vs Easting validation plot – 300 Lode, Rising Tide deposit



Figure 7.8 Au Grade vs Easting validation plot – 400 Lode, Rising Tide deposit

8.0 RESOURCE CLASSIFICATION AND REPORTING

The Rising Tide model resource has been classified into Indicated and Inferred categories according to the JORC code, using a combination of drilling density and confidence in grade continuity between drill sections. All lodes were classified on the basis of kriging variance.

The kriging variance is used as an objective measure of the geostatistical confidence in a given block, and represents the value of the squared error between the actual grade and the estimated grade generated by the kriging process. It is dependent on a number of criteria, including block size, internal block discretisation, sample numbers and the variogram parameters but is independent of the actual grade. Thus, using the Rising Tide variography as a guide, blocks for the Rising Tide deposit were suitable to be classified as Indicated if they were spaced approximately within 25m along-strike from drillholes, and 30m down-dip between drillholes. An Inferred classification is appropriate for those blocks located more than 25m along-strike from drillholes, and greater than 30m down-dip between drillholes. The ranges above represent a guideline only for the classifications, and actual ranges used to determine the threshold between Indicated and Inferred blocks were applied to modified distances from those above, using the spatial distribution of composite data as an additional guideline.

The classified global mineral resource is reported in Table 8.1 as at 15th January 2005. The topography and weathering surfaces were used to construct a density model, which was used in reporting of model tonnage and grades.

LODE	CATEGORY	TONNES	AU	OUNCES
100	Indicated	208,567	1.51	10,146
100	Inferred	140,745	1.42	6,407
TOT	AL 100 LODE	349,312	1.47	16,554
200	Indicated	638,962	1.73	35,622
200	Inferred	581,481	1.46	27,332
TOT	AL 200 LODE	1,220,443	1.60	62,938
300	Indicated	512,134	1.35	22,146
500	Inferred	529,332	1.18	20,133
TOT	AL 300 LODE	1,041,466	1.26	42,290
400	Indicated	121,569	0.68	2,662
400	Inferred	254,318	0.75	6,165
TOT	AL 400 LODE	375,887	0.73	8,822
То	tal Indicated	1,481,232	1.48	70,575
Тс	otal Inferred	1,505,876	1.24	60,038
GR	AND TOTAL	2,987,109	1.36	130,611

Table 8.1 Rising Tide Classified Global Mineral Resource as at 15th January 2005

Table 8.2 lists the classified mineral resource above a cut-off of 1.1g/t Au as at 15th January 2005; this cut-off is the present economical cut-off grade at current gold prices.

LODE	CATEGORY	TONNES	AU	OUNCES
100	Indicated	136,124	1.92	8,381
100	Inferred	99,869	1.67	5,362
TOT	AL 100 LODE	235,993	1.81	13,748
200	Indicated	490,205	2.01	31,631
200	Inferred	394,159	1.73	21,949
TOT	AL 200 LODE	884,364	1.89	53,596
200	Indicated	311,776	1.70	17,081
300	Inferred	281,978	1.49	13,535
TOT	AL 300 LODE	593,755	1.60	30,620
400	Indicated	19,473	1.47	922
400	Inferred	41,364	1.33	1,762
TOTAL 400 LODE		60,838	1.37	2,684
Total Indicated		957,578	1.88	58,014
Тс	tal Inferred	817,370	1.62	42,608
GR	AND TOTAL	1,774,949	1.76	100,607

Table 8.2 Rising Tide Classified Mineral Resource above 1.1g/t Au as at 15th January 2005

Figure 8.1 illustrates the grade-tonnage relationship for all lodes for Rising Tide at a range of cut-off grades, to test the sensitivity of the model to the cut-off grade applied. Tonnes and grades were reported from the block model at various cut-offs within the lode wireframes and cumulated to form the grade-tonnage curve as illustrated in Figure 8.1. Cut-off grades are located next to points representing the tonnage and average grade applicable at these cut-off grades.



Figure 8.1 Grade Tonnage Curve for all lodes, Rising Tide deposit

9.0 **RECOMMENDATIONS**

A number of recommendations are made, in light of the completed resource model for Rising Tide, including infill drilling, additional drilling to extend and link wireframes, database quality assurance and density calculations.

9.1 Drilling recommendations

The current drilling density at Rising Tide is 25m along-strike and 20m across-strike.

Minor follow-up drilling is recommended to identify the southern extent of the current delineation of gold mineralization near surface. Current drillhole spacing on the southern side is irregular and drilling will be required for sterilization / delineation of pit limits.

A zone of higher grade pods exist in relation to the thrust zone, however, the continuity from section to section in this area is not good. To isolate and properly domain this high grade area, further drilling would be required to delineate the geological/structural controls.

One area of concern in the block model is the large extrapolation of the lode wireframes below and to the north of the drillhole intercepts. Model block grades within these areas are influenced unduly by the small number of drillhole intercepts from above, since search ellipses have captured small numbers of composites and used these composites to interpolate a large number of blocks. Again, infill drilling will reduce potential edge effects created by the lack of composite data at depth.

9.2 Other recommendations

The current resource database contains a considerable number of historical drillholes, with associated assay data. The database has been validated, with Au1 assay values utilised in the modelling process. However, storage of historical data utilised the use of AuAve and misallocation of data may potentially have occurred. It is recommended that a database person be employed to sort through the historical archives and tabulate all the assay values of historical data for each batch, and to compare this with the current resource database. This process forms an essential part of quality control/quality assurance and will reinforce the integrity of the database for any future due diligence.

A density of 2.8t/m³ was used in reporting of model tonnage and grades, and is based on the average of all existing data. However, the source of this data is uncertain, and it is thus recommended to complete further testwork using drillhole core from proposed drillholes to verify the use of this value as an average density for all lodes.

APPENDIX 1

RISING TIDE DEPOSIT DRILLHOLE COLLAR LISTING

HOLE	EASTING	NORTHING	RL	DEPTH
BKDT0525	10055.784	3996.650	1137.130	40
BKRC222	9999.714	4023.998	1141.600	125
BKRC223	10099.815	4060.828	1145.000	125
BKRC224	10199.135	4138.376	1137.200	99
BKRC238	10002.014	3939.692	1129.300	90
BKRC239	10100.978	3969.906	1133.600	92
BKRC240	10199.779	4048.784	1131.000	93
BKRC328	10302.444	4199.115	1124.700	69
BKRC329	10302.204	4114.003	1126.800	99
BKRC330	10302.363	4029.079	1122.700	98
BKRC331	10402.311	4248.882	1119.500	63
BKRC332	10402.251	4163.969	1119.700	98
BKRC333	10201.979	3964.069	1125.700	117
BKRC334	10102.042	3889.040	1126.000	95
BKRC492	9851.796	3799.374	1123.000	129
BKRC493	10001.791	3699.919	1119.500	130
BKRC494	10099.901	3599.695	1115.800	150
BKRC495	10201 746	3699.093	1119 800	130
BKRC496	10302 039	3949 205	1120,300	111
BKRC497	10401 967	3949 157	1117 200	111
BKRC498	10400.973	3699 138	1115 400	150
BKPC523	10001 030	3850 /08	1123 500	144
BKRC523	10052 204	2010 720	1123.300	144
DKRC524	10052.294	3919.729	1127.000	75
DKRC525	10052.206	3999.004	1138.200	75
DKRC520	10152.142	3919.272	1127.000	100
DKRC52/	10152.100	3999.200	1132.300	90
	10202.165	3004.444	1122.700	110
RGID10594	10106.154	4097.558	1146.511	40
RGID10607	10156.756	4156.789	1138.668	40
RGIDI0616	9905.254	4040.804	1148.030	31.4
RGIDI0644	9802.615	3900.173	1137.644	40
RGIDI0647	10204.223	3997.162	1127.389	79.9
RGTDT0656	9852.617	4012.565	1150.060	37.5
RGTDT0676	9677.661	3858.761	1131.340	25.3
RGTDT0700	10182.006	4075.137	1136.790	53.1
RGTDT0704	10228.331	4134.493	1134.540	46.3
RGTDT0713	10031.133	4074.015	1152.080	40.5
RGTR0587	9752.056	3840.009	1130.000	57
RGTR0588	9852.181	3879.918	1130.300	40
RGTR0589	10004.499	3779.864	1120.586	131
RGTR0590	10054.460	3839.191	1122.925	117
RGTR0591	10052.171	3959.747	1131.900	60
RGTR0592	10052.365	4039.421	1145.800	20
RGTR0593	10102.191	4015.370	1138.300	65
RGTR0594	10102.333	4101.622	1146.600	50
RGTR0595	10152.193	4039.253	1135.200	60
RGTR0596	10152.261	4079.630	1135.200	50
RGTR0597	10252.806	4280.298	1124.010	13
RGTR0598	10254.567	4239.459	1126.020	42
RGTR0599	10254.878	4198.432	1128.730	60
RGTR0600	10255.180	4166.121	1130.780	48
RGTR0601	10253.498	4121.248	1133.950	66
RGTR0602	10254.646	4077.500	1129.060	60
RGTR0603	10254.038	4036.624	1126.170	60
RGTR0604	10203.798	4218.685	1130.720	24
RGTR0605	10205.150	4177.967	1135.870	36
RGTR0606	10157.294	4117.762	1141.360	48
RGTR0607	10156.873	4158.810	1138.860	48
RGTR0608	10156.409	4197.638	1133.440	23
RGTR0609	10104.688	4217.383	1131.270	24
RGTR0610	10105.196	4181.813	1135.950	30
RGTR0611	10055.704	4200.056	1133.940	18
RGTR0612	10055.836	4159.319	1139.350	18
RGTR0613	10005.358	4138.975	1142.620	66
RGTR0614	9605.640	3999.311	1131.770	66
RGTR0615	9605.185	3960.734	1130.400	60
RGTR0616	9905.294	4040.974	1147.930	42
RGTR0617	9904.954	3998.628	1141.980	42
RGTR0618	9904.940	3960.960	1137.130	78
RGTR0619	10005.357	4061.929	1150.830	60

HOLE	EASTING	NORTHING	RL	DEPTH
RGTR0620	10054.881	4079.315	1151.120	60
RGTR0621	10104.760	4142.197	1142.870	60
RGTR0622	10055.650	4120.881	1147.790	72
RGTR0623	10005.733	4101.316	1147.920	120
RGTR0624	9956.179	4118.669	1144.800	60
RGTR0625	9956.847	4079.056	1150.305	60
RGTR0626	9957.627	4159.135	1141.470	96
RGTR0627	10005.115	4179.382	1136.980	168
RGTR0628	9805.410	4100.196	1139.749	60
RGTR0629	9804.658	4059.867	1142.370	60
RGTR0630	9704.373	3858.849	1135.520	60
RGTR0631	9704.421	3899.336	1135.520	60
RGTR0632	9803.711	3950.580	1147.218	90
RGTR0633	9854.843	4161,925	1136,480	60
RGTR0634	9905.026	4170.053	1139.820	60
RGTR0635	9905.619	4129.775	1143.090	60
RGTR0636	9905.683	4091.488	1148.170	60
RGTR0637	9704.377	3820,102	1126.840	60
RGTR0638	9704 319	3779 485	1122.990	60
RGTR0639	9604 344	3803 769	1123.243	60
RGTR0640	9604.013	3763 758	1121 280	60
RGTR0641	9603.834	3841 083	1125 260	60
PGTP0642	0953 670	4000 700	11/2 700	60
RCTR0642	0000.079 0853 716	4030.133	11/1 210	20
PGTP0644	9055.710	2001.059	1127 670	114
	9004.211	3901.000	1157.070	114
	9004.272	3970.003	1102.170	102
	10104.233	3924.327	1120.700	102
RGTR0647	10204.297	3999.809	1127.085	62
RGTR0648	10004.373	3898.566	1125.154	102
RGTR0649	9957.014	3920.163	1127.490	84
RGTR0650	9952.565	3959.601	1133.828	60
RGIRU651	9956.665	3990.247	1136.426	120
RGTR0652	9803.525	3859.159	1131.250	84
RGTR0653	10004.000	3979.347	1135.277	72
RGTR0654	9957.336	4049.177	1151.960	60
RGTR0655	9904.825	3920.125	1130.902	60
RGTR0656	9853.245	4007.331	1149.448	60
RGTR0657	9853.092	3971.300	1147.235	78
RGTR0658	9852.639	4047.174	1151.978	60
RGTR0659	9853.618	3930.708	1139.677	78
RGTR0660	9662.839	3821.179	1125.444	66
RGTR0661	9662.485	3779.991	1122.956	72
RGTR0662	9662.773	3740.563	1121.317	66
RGTR0663	9603.729	3719.792	1120.046	78
RGTR0664	9503.929	3596.458	1118.178	60
RGTR0665	9503.826	3637.444	1118.464	60
RGTR0666	9504.166	3677.300	1119.052	60
RGTR0667	10204.028	4087.817	1134.616	72
RGTR0668	9504.709	3716.860	1119.902	60
RGTR0669	10159.679	3960.563	1128.681	75
RGTR0670	9627.139	3859.680	1125.000	36
RGTR0671	9628.038	3816.873	1124.250	36
RGTR0672	9654.738	3858.498	1128.580	40
RGTR0673	9651.977	3899.138	1130.680	47
RGTR0674	9649.866	3940.148	1132.300	70
RGTR0675	9678.449	3899.417	1133.300	30
RGTR0676	9677.591	3858.561	1131.710	30
RGTR0677	9727.425	3858.502	1135.240	30
RGTR0678	9753.528	3978.373	1140.890	60
RGTR0679	9729.579	3938.534	1141.250	40
RGTR0680	9730.003	3899.936	1145.040	30
RGTR0681	9755.046	3900.186	1146.050	40
RGTR0682	9779.183	3938.456	1148.330	42
RGTR0683	9804.169	3924.810	1143.800	36
RGTR0684	9754.513	3939.974	1147.250	42
RGTR0685	9629.010	3776.434	1122.210	41
RGTR0686	9578.020	3796.918	1121.450	24
RGTR0687	9578.589	3753.511	1119.820	42
RGTR0688	9780.297	3899.857	1139.940	42
RGTR0689	9827.120	3982.745	1150.480	30
RGTR0690	9877.906	3984.304	1143.650	42
RGTR0691	9932.860	4002.994	1140.640	42

HOLE	EASTING	NORTHING	RL	DEPTH
RGTR0692	9956.717	4015.452	1141.470	42
RGTR0693	9980.770	4015.963	1140.760	48
RGTR0694	10034.683	3999.065	1137.850	36
RGTR0695	10081.030	4000.060	1137.450	72
RGTR0696	10130.525	4001.191	1134.830	72
RGTR0697	10130.004	4042.139	1139.880	66
RGTR0698	10130.180	4081.726	1142.830	54
RGTR0699	10128.899	4122.404	1143.270	40
RGTR0700	10182.070	4078.736	1136.860	48
RGTR0701	10182.139	4119.652	1138.030	48
RGTR0702	10181.293	4157.052	1138.350	36
RGTR0703	10228.541	4100.044	1133.300	54
RGTR0704	10228.718	4140.221	1134.370	42
RGTR0705	10228.414	4179.399	1133.230	24
RGTR0706	10127.354	4160.624	1139.020	24
RGTR0707	10075.130	4159.456	1139.640	24
RGTR0708	10078.548	4040.530	1145.570	66
RGTR0709	10034.159	4037.973	1145.320	42
RGTR0710	10054.328	4059.592	1148.120	48
RGTR0711	10079.145	4080.227	1149.670	54
RGTR0712	10077.039	4116.727	1150.750	42
RGTR0713	10032.324	4075.803	1152.150	42
RGTR0714	10031.530	4114.082	1146.950	30
RGTR0715	9984.210	4092.725	1148.320	36
RGTR0716	9929.814	4081.402	1150.190	24
RGTR0717	9982.225	4054.509	1150.110	48
RGTR0718	9931.781	4045.411	1148.970	36
RGTR0719	9878.833	4024.211	1148.200	30
RGTR0720	9878.057	4061.650	1153.910	24
RGTR0721	9837.123	4021.611	1152.390	24
RGTR0722	9805.137	4016.470	1150.530	24
RGTR0723	9826.562	3941.949	1147.880	36
RGTR0724	9932.292	3961.867	1134.620	54
RGTR0725	9829.623	3901.378	1136.150	54
RGTR0726	9577.746	3776.025	1120.640	30
RGTR0727	9627.803	3796.050	1123.240	30
RGTR0728	9627.842	3837.056	1125.480	18
RGTR0729	9780.307	3976.222	1147.080	30
RGTR0730	9606.003	3790.027	1121.490	30
RGTR0731	9556.854	3794.434	1121.310	48
RGTR0732	9678.146	3879.813	1132.870	24
RGTR0733	9703.298	3879.924	1136.980	24
RGTR0734	9728.891	3881.063	1143.470	24
RGTR0735	9753.989	3996.087	1140.070	24
RGTR0736	9753.352	3955.910	1143.440	30
RGTR0737	9803.967	3881.045	1133.970	54
RGTR0738	9852.931	3990.162	1148.330	24
RGTR0739	9905.544	4024.389	1145.640	36
RGTR0740	10005.028	4080.004	1151.500	42
RGTR0741	10004.266	4043.696	1146.410	48
RGTR0742	10104.979	4039.829	1142.800	66
RGTR0743	10203.362	4111.670	1135.840	54
RGTR0744	10156.731	4097.969	1140.860	48
RGTR0745	10157.344	4058.271	1137.870	54
RGTR0746	10106.544	4078.235	1146.370	54
RGTR0747	10053.061	4019.027	1141.870	30
RGTR0748	10055.545	4099.088	1153.450	36
RGTR0749	9551.379	3754.983	1120.940	60
RGTR0750	9642.708	3796.002	1123.670	42
RGTR0751	9643.787	3837.447	1126.190	30
RGTR0752	9931.422	3986.891	1139.080	48
RGTR0753	9878.229	4003.908	1145.300	36
RGTR0754	9778.303	3963.379	1146.200	36
RGTR0755	9828.376	3920.453	1142.130	42
RGTR0756	9826.597	3962.842	1149.930	36
RGTR0757	9930.869	4026.649	1145.470	36
RGTR0758	9931.214	4064.646	1152.360	30
RGTR0759	10078.085	4096.902	1150.940	54
RGIR0760	10078.972	4060.483	1147.180	54
RGTR0/61	10037.954	4017.505	1141.360	36
	10104 000	4021.743	1140.370	00
RG1R0/03	10104.002	3331.200	1130.230	00

HOLE	EASTING	NORTHING	RL	DEPTH
RGTR0764	10130.267	4019.336	1136.910	66
RGTR0765	10129.716	4061.103	1141.680	54
RGTR0766	10129.436	4103.470	1143.260	54
RGTR0767	10182.346	4100.348	1137.630	48
RGTR0768	10228.215	4120.238	1134.690	48
RGTR0769	9779.411	3920.071	1145,240	30
RGTR0770	9878 165	4043 215	1151 830	30
RGTR0771	9981 391	4034 047	1144 940	48
RGTR0772	10032 102	4056 769	1149.050	36
RGTR0773	10032.102	4095 467	1150 740	35
PGTP0774	10032.130	4030.407	11/7 0/0	20
PGTP0775	10228 870	4152.015	1122 510	25
PCTP0776	10220.070	4133.103	1129 710	12
	10101.579	4137.190	1130.710	42
	10129.049	4139.799	1143.420	30
	9901.799	4074.473	1150.970	41
RGIR0779	9826.683	4001.959	1153.720	24
RGIRU/80	9806.576	3990.517	1153.150	24
RGTR0781	9757.490	3912.819	1146.590	30
RGTR0782	9853.533	3949.674	1144.980	30
RGTR0783	9852.159	4031.380	1151.810	24
RGTR0784	9906.285	4067.994	1152.820	24
RGTR0785	9903.686	3983.144	1140.860	36
RGTR0786	10004.852	3998.260	1138.440	36
RGTR0787	10035.541	3980.070	1135.020	48
RGTR0788	10054.774	3979.597	1134.880	48
RGTR0789	10105.950	4117.433	1146.630	41
RGTR0790	10157.198	4137.926	1140.990	36
RGTR0791	10182.080	4078.726	1136.890	60
RGTR0792	10204.406	4157.614	1136.590	36
RGTR0793	9754.932	3880.173	1141.810	48
RGTR0794	9677.099	3839.627	1135.000	36
RGTR0795	9605.841	3746.001	1120.900	54
RGTR0796	9504.549	3878.119	1125.210	60
RGTR0797	9505.236	3918.115	1125.920	60
RGTR0798	9505.034	3958.483	1124.470	60
RGTR0799	9204.646	3540.400	1114.440	60
RGTR0800	9204.714	3580.797	1116.310	60
RGTR0801	9205.201	3620.524	1116.760	60
RGTR0802	9303.230	3680.259	1121.330	60
RGTR0803	9303.012	3639.333	1120.610	60
RGTR0804	9304.665	3599.713	1119.520	60
RGTR0805	9403.912	3582.162	1117.850	60
RGTR0806	9404.074	3541.644	1117.830	60
RGTR0807	9405.287	3501.916	1120.060	50
RGTR0808	9504.877	3757,787	1120.960	60
RGTR0809	9504.625	3798.224	1122.370	55
RGTR0810	9505 302	3838 101	1123 750	60
RGTR0811	9705 708	3939 982	1137 450	60
RGTR0812	9705 705	3979 789	1136 480	60
RGTR0813	9707 811	4018 934	1136 440	60
RGTR0814	9709 408	4059 069	1136 350	60
RGTR0815	9711 204	4098 905	1135 100	60
RGTP0816	9802 /12	4130 381	1145 000	60
RGTRT0502	10052.413	4030 034	1145 801	50
RGTRT0610	10000.077	4062 412	1150 020	42
NOTITIOU S	10002.900	4002.412	1100.920	74