



**ASX Announcement**

**25 May 2017**

**WINSTON GOLD DEPOSIT**

**MAIDEN INFERRED MINERAL RESOURCE ESTIMATE COMPLETED**

**EXPLORATION TARGETS DEFINED**

Tanga Resources Limited (ASX : TRL) is pleased to advise that a report prepared by Perth based resource consultants, Ravensgate Mining Industry Consultants (Ravensgate), has identified an initial Inferred Mineral Resource Estimate, based on a cutoff grade of 1.0g/t Au, of:

- 120,000 tonnes at grade 4.5g/t Au for 17,600 ounces\*

The Inferred Mineral Resource Estimate at Winston is constrained within a 40m by 40m wide block over a vertical distance of 150m (refer Figure 2).

The Inferred Mineral Resource Estimate is based on drilling of approximately one third of the Winston property with further drilling planned on the western and southern areas of the property.

Domain	Volume (BCM)	Tonnage (t)	Grade Au (g/t)	Metal (ozs)
1	15,000	48,000	3.1	4,800
2	22,000	72,000	5.5	12,800
<b>Total</b>	<b>37,000</b>	<b>120,000</b>	<b>4.5</b>	<b>17,600</b>

**Table 1 Winston Resource at 1.0g/t Au Cut-off**

**Exploration Target**

In addition to the Mineral Resource estimate, an Exploration Target range was estimated in areas where:

1. the up plunge and down plunge extents of the Mineral Resource interpreted lodes which were not closed by drilling; and
2. isolated drill holes which had intersected mineralisation in other BIF units away from the interpreted lodes.

The potential quantity and grade is conceptual in nature, that there has been insufficient exploration in to estimate a Mineral Resource in these areas and that it is uncertain if further exploration will result in an increase in the estimated Mineral Resource.

Case	Volume (BCM)	Tonnage (t)	Grade Au (g/t)	Metal Au (ozs)
Low	47,000	153,000	2.2	10,700
High	290,000	944,000	4.2	126,800

**Table 2 Exploration Target Range**

*Note: Exploration Target is additional to the Mineral Resource estimate. (Refer Figures 3 & 4).*

\*Parameters used in the above calculations were Specific Gravity 3.25 and topcut of 90g/t Au.

\*All tonnes quoted are dry, metric tonnes (Mt).

Ravensgate state that at Winston, “gold distribution is highly variable with localised very high grades and visible gold---duplicate samples often have a spread of values, and short ranges in the variogram modelling highlight the highly variable nature of the mineralisation. The geological model was used to constrain an Ordinary Kriging gold grade estimate. A top cut of 90g/t Au was used to limit the impact of the small number of very high grade assays in the estimate”.

Ravensgate has recommended that further drilling (infill & extensional) needs to be carried out:

- in the central part of the Winston gold deposit to firm up the inferred resource estimate: 1200m of Reverse Circulation (RC) drilling; and
- to test the exploration targets by extensional drilling to the west, south and east within a 500m radius of Winston: 2,000m of combined RC and diamond drilling.

The combined drill program of ~3,200m is planned to commence later in the year.

Locations of the drill holes are shown below in Figure 1.

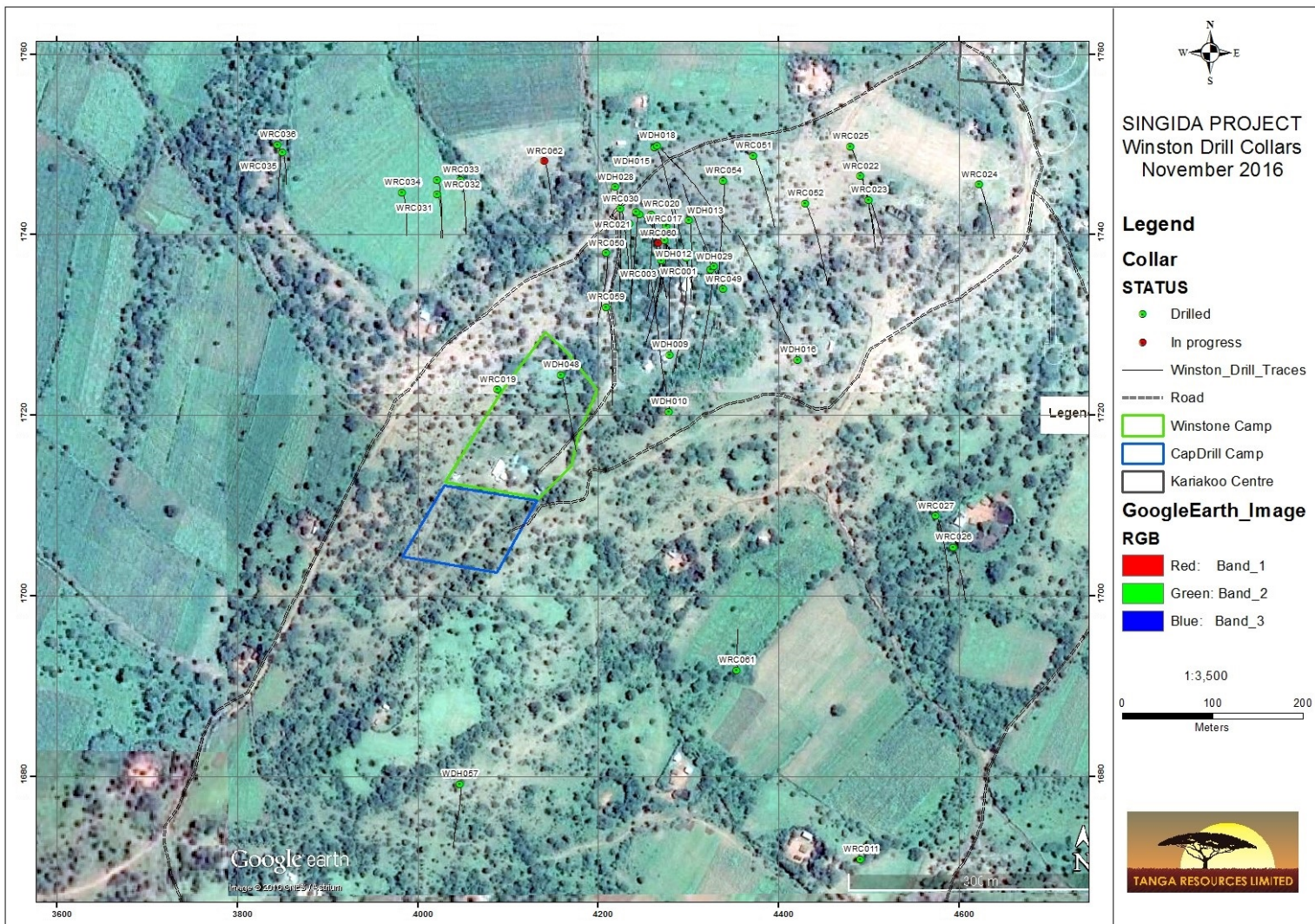


Figure 1. Plan of Drilling Completed at Winston.



## **Future Work:**

### **Metallurgical Test Work (currently in progress)**

Metallurgical test work has commenced on the very high grade gold mineralisation at Winston: recent test results from the mineralised interval in WRC004 (ASX - 19/1/16) have confirmed by Fire Assay the values reported in 2016:

- 16m @ 64.64g/t Au from 116m to 132m (Bureau Veritas, Perth WA) in WRC004.

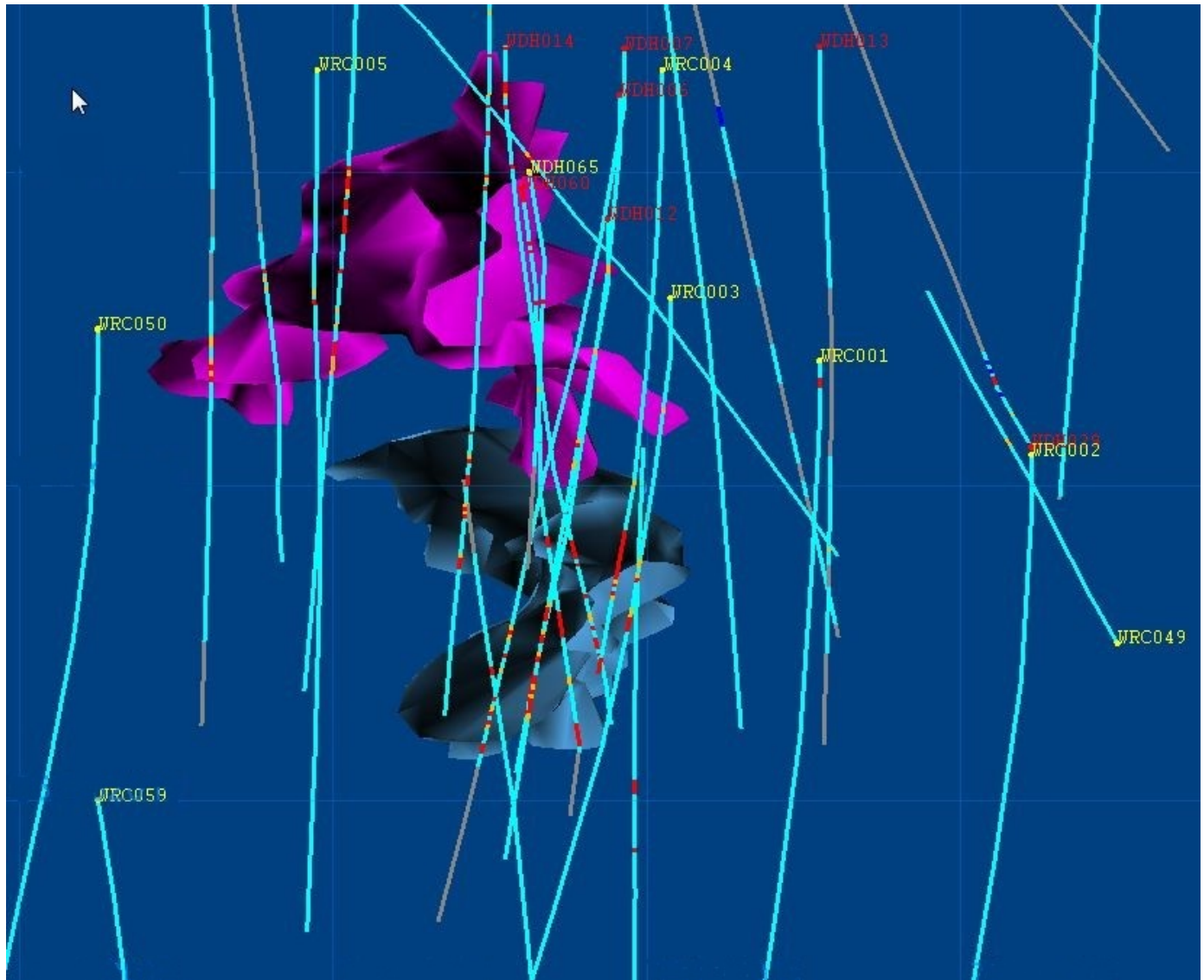
Preliminary work being carried out by Midas Engineering Group in Perth shows that 58.4% of the gold is recoverable by gravity methods, and that overall 93.0% is recoverable by cyanide leach.

Further leach tests are in progress on composite samples from the above interval.

### **Drilling:**

It is aimed to increase the confidence level of the Ravensgate inferred resource estimate, and more importantly to identify significant new gold targets within a 500m radius of Winston with pre-collared Diamond drilling in two phases:

- a. Drilling at Winston with targetted RC and Diamond drilling into strike & plunge extensions of the high grade gold mineralisation: 1,200m (as per the Ravensgate recommendations); and;
- b. Drilling to increase the confidence level of the exploration targets to inferred resource status (as per the Ravensgate report) within 500m of Winston: 2,000m of drilling including diamond tails.



**Figure 2. Plan of Winston drilling showing the Mineralised Domains used to calculate the Inferred Mineral Resource estimate. The shapes are defined by a 1g/t Au lower cut-off.**

## Exploration Targets:

In addition to the above Inferred Mineral Resource, Ravensgate arrived at a range of Exploration Targets (the “low case” and the “high case”), see Figures 3 and 4 below.

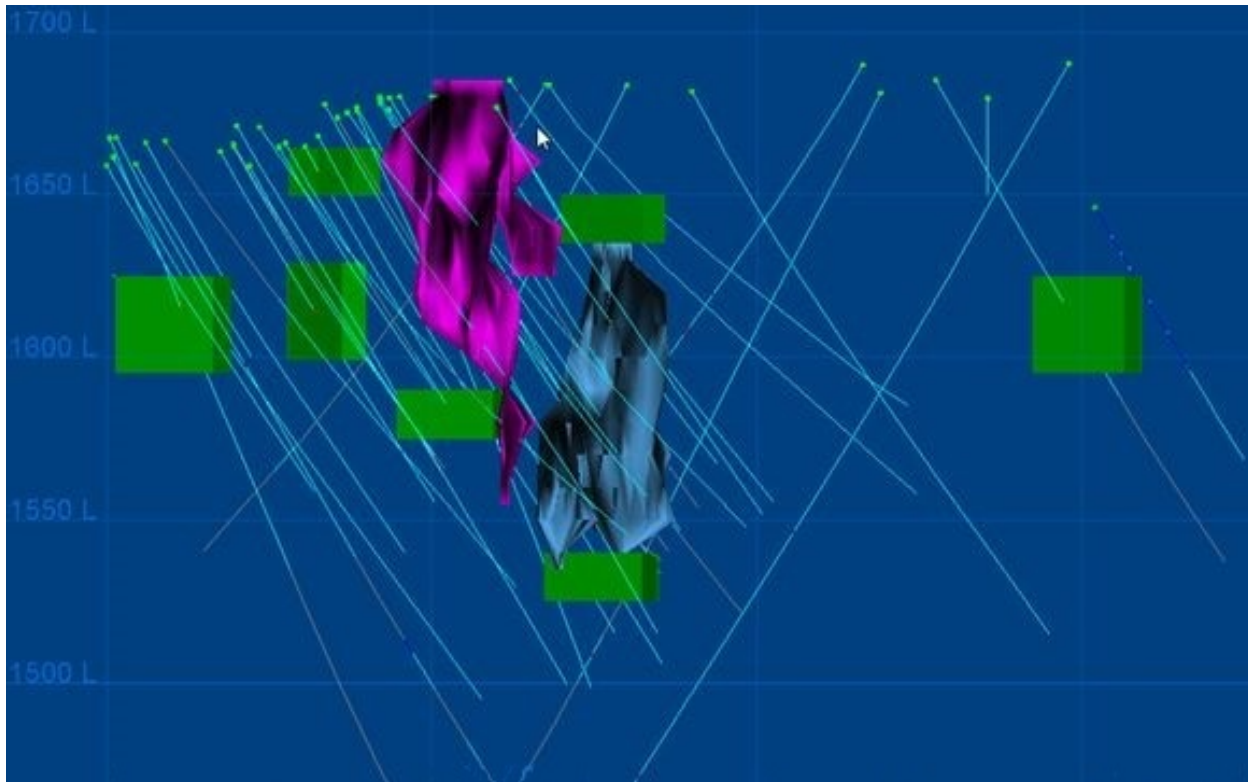


Figure 3. Exploration Target low case shown in green. Mineral Resource in pink & light blue.

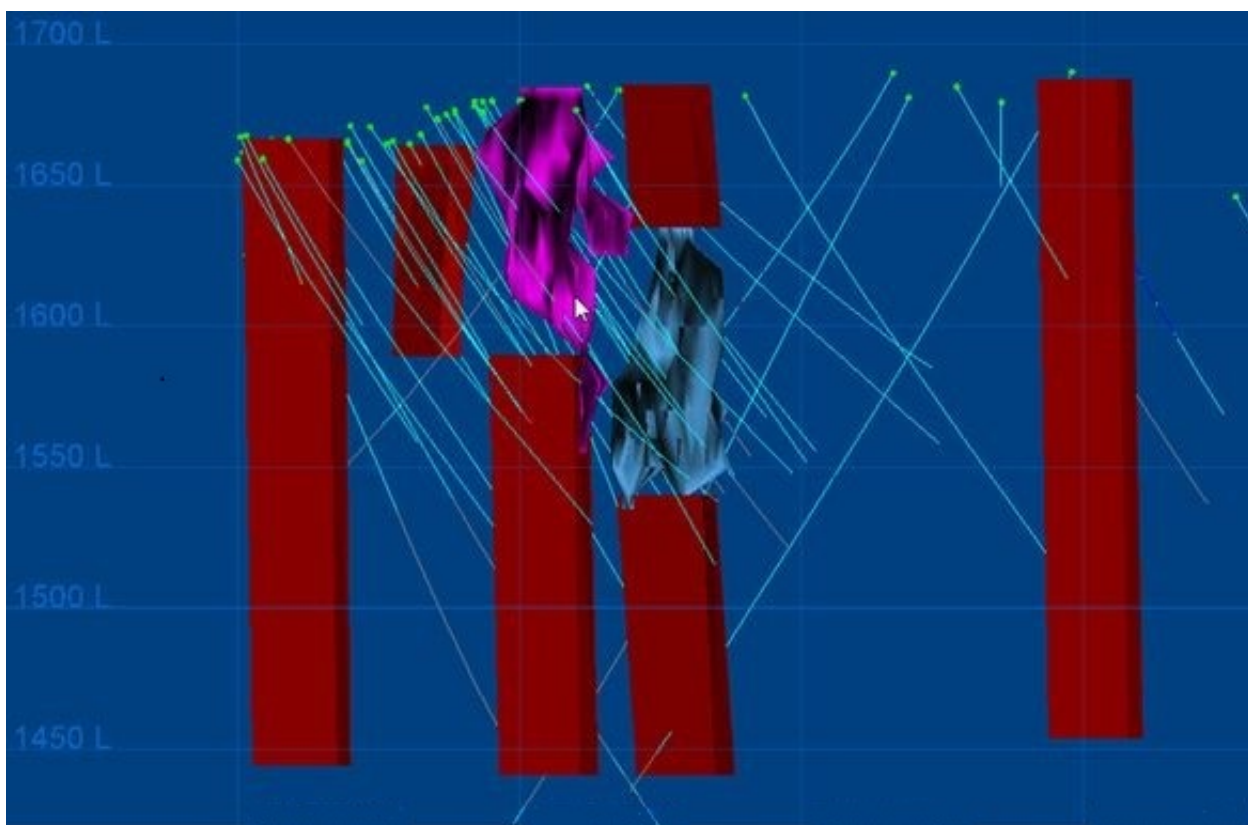
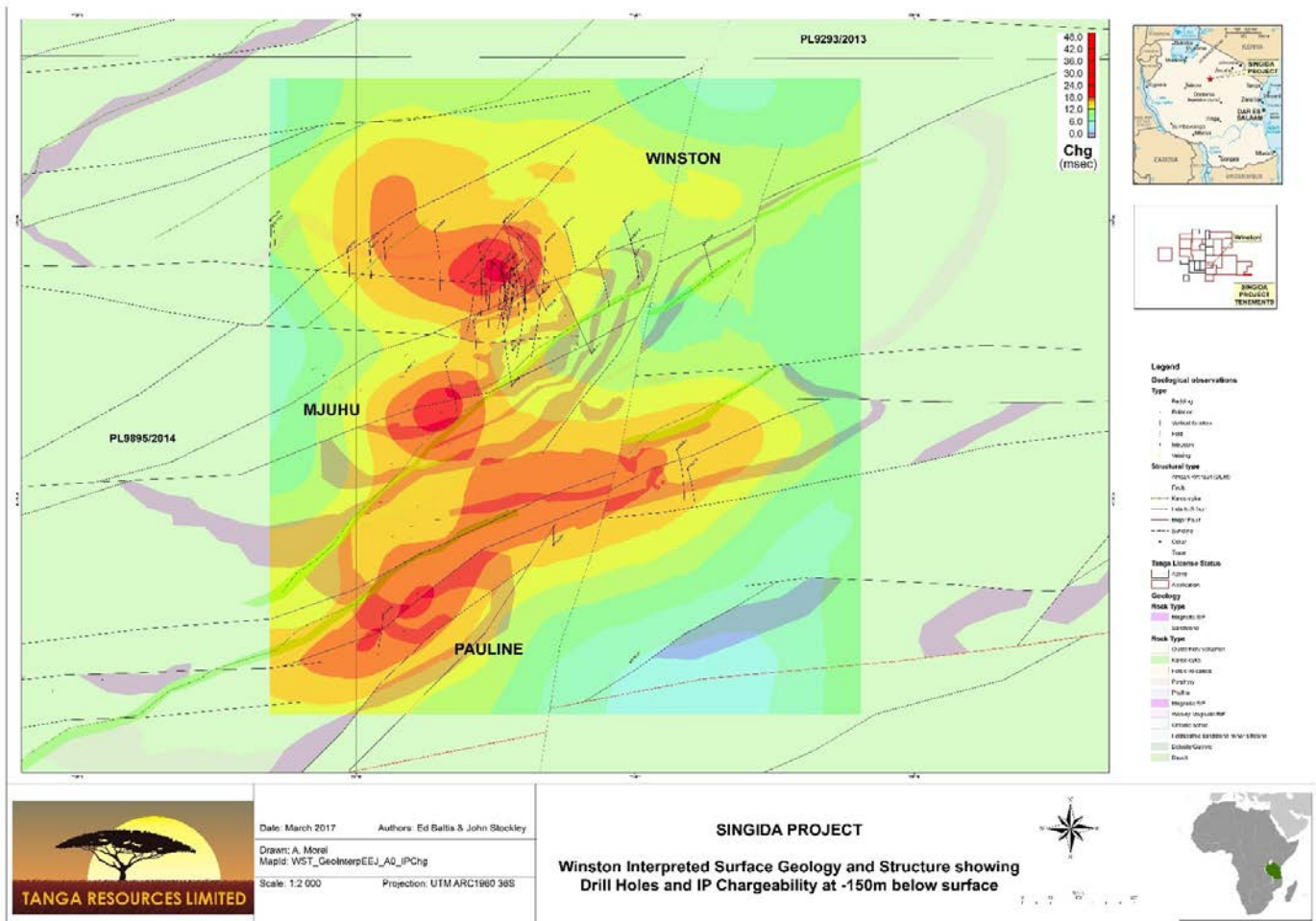


Figure 4. Exploration Target high case shown in red. Mineral Resource in pink & blue.



**Figure 5. IP chargeability inversion modelling showing targets at -150m level below surface.**

## Background

Tanga discovered the Winston gold deposit in December 2015, and has completed the initial detailed exploration and resource definition drilling program: 46 RC drill holes of which 15 had Diamond Drilling tails, have been completed. Surface mapping, ground magnetic surveys, ground electrical geophysical surveys (IP) and drilling have been used to compile a geological model of the local area. High grade gold mineralisation is hosted in strongly deformed and faulted Archaean Banded Iron Formation (BIF) rocks within a sequence of un-mineralised deep rift fill greywacke, siltstone, arkosic sandstone intruded by late orogenic felsic porphyries and younger Karoo-aged dolerite dyke swarms. Gold mineralisation is associated with strong, iron-rich amphibole-garnet-chlorite-pyrrhotite alteration, together with quartz veining and silica replacement.



Drilling at Winston commenced in November 2015 and was completed in November 2016. A total of 46 holes for 7,558m of drilling has been completed in the vicinity of the Winston deposit. Gold mineralisation was intersected in 15 of the 46 holes drilled and these holes have been used in the Mineral Resource estimation. A total of 239m of RC drilling and 203.2m of diamond drilling were used in the Mineral Resource estimation.

RC drilling was completed using a GEMROK P1100H track mounted machine using an 18cm Sandvik face sampling hammer. Diamond coring was by HQ3 triple tube methods using the same rig as for the RC drilling.

### **Competent Person Statement**

The information in this report that relates to the exploration results, geology interpretation, resource database and bulk density was based on material compiled by John Stockley. Mr Stockley is a Member of the Australian Institute of Geoscientists and is an employee of Tanga Resources Limited. Mr Stockley has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which was being undertaken to qualify as Competent Person as defined in the 2012 Edition of the JORC “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (the JORC Code). Mr Stockley consents to the inclusion in this report of the matters based on his information in the form and content in which it appears.

The information in this report that related to the Mineral Resource estimate is based on material generated and compiled by David Reid who is a Member of the Australasian Institute of Mining and Metallurgy and the Australian Institute of Geoscientists. Mr Reid has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which is being undertaken to qualify as Competent Person as defined in the 2012 Edition of the JORC “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (the JORC Code). Mr Reid consents to the inclusion in this report of the matters based on his information in the form and content in which it appears.

**- ENDS -**

For further information please contact:

Mr John Stockley  
Technical Director  
Tanga Resources Limited  
Mobile: +61 447 826 166

Further information relating to Tanga Resources Limited and its exploration projects can be found at its website: [www.tangaresources.com.au](http://www.tangaresources.com.au)

## JORC Table One

### Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Part	Criteria	Comments
1-1	Sampling Techniques	<p>Between drill holes 001 and 005: RC drilling - 1m green plastic bulk bag off the cyclone; also 1m calico ex cyclone. 1m calico combined with the next 1m calico to make a 2m composite sample which was then split through 3 stage riffle splitter into a 1kg sample. Through mineralised zones the 1m calico sent without splitting. Duplicates were taken every 30th sample.</p> <p>Re-splits from the 1m green bag sample ex the rig cyclone were numbered in sequence. All drill samples were dry and the rig cyclone was flushed clean at every rod change.</p> <p>From drill hole 006 to 065: RC drilling - 1m green plastic bulk bag was collected off the RC cyclone and each sampled by way of a three stage riffle splitter at 1m runs.</p> <p>Diamond drilling - sawn drill core with half the core cut by diamond saw and bagged into calicos at 1m intervals.</p> <p>Between drill hole 006-017, blanks (Mwanza granite or sand) were inserted at regular intervals (every 20th sample) and duplicates taken every 30th sample. Between drill holes 018-065, blanks and duplicates were inserted (as above) and standards were inserted every 10th sample, alternate with blanks and duplicates.</p> <p>All samples transported to ALS Mwanza for crush &amp; pulverize into 3-4kg bags then split to make a 50gm charge for Fire Assay.</p>
	Drilling Techniques	<p>Drill holes WRC001-005: Reverse circulation drilling using a top-drive all hydraulic Schramm 450 rig. Standard 15cm diam face sampling Sandvik hammer.</p> <p>Drill holes 006-065: Reverse Circulation - GEMROK P1100H multi-purpose tracked machine with Sandvik 18cm face sampling hammer (Cap Drill rig # 0258). RC drill holes 053, 055, 056, 058, 059, 062, 063, 064 completed with the Schramm RC rig 15cm bit diam face sampling Sandvik hammer.</p> <p>Diamond drilling using GEMROK P1100H multi-purpose tracked machine - between drill hole 006-017 HQ triple tube and between drill hole 018-065 NQ triple tube drill string, from surface in drill holes WDH029 and WDH065, and the end of the RC precollars for all other drill holes.</p> <p>All diamond drill core orientated using Reflex ACT III Orientation Tool.</p>
1-2	Drill Sample Recovery	<p>All 1m green RC bulk bags from the drill rig cyclone weighed on site and recorded. All samples dry. Cap Drill took every measure on the rig to maximise sample recovery and ensure a representative drill sample.</p> <p>All diamond core trays weighed on site; all care taken to obtain 100% core recovery (HQ &amp; NQ triple tube); core trays photographed wet and dry.</p> <p>Magnetic susceptibility measurements for all RC samples.</p> <p>Not known at this stage: more drilling is required to establish if there is any sample bias.</p>
1-3	Logging	<p>Logging is qualitative and quantitative. All RC chips and diamond core is logged, weighed and the magnetic susceptibility (MSI) measured. The percentage of visible sulphide (pyrrhotite, pyrite, chalcopyrite and gold) is estimated for each meter interval for both RC and core. Specific gravity (S.G.) measurements of representative samples of each rock type were undertaken.</p> <p>RC drilling - All 1m RC intervals are logged by Tanzanian geologists on the rig. All RC chip samples were geologically logged and a representative sample for each meter stored in plastic chip trays.</p> <p>Diamond drilling - All HQ/NQ drill core is photographed, core recovery calculated; core marked up along the orientation line, and logged by experienced (+10 years) Tanzanian geologists. Magnetic susceptibility is measured as an average of each meter sample of core.</p> <p>All core and RC holes logged for entire length.</p>
1-4		<p>Between drill holes 001 and 005: RC drilling - a 1m green plastic bulk bag and a 1m calico is sampled off the cyclone. Composite samples were</p>



Part	Criteria	Comments
	<b>Sub-Sampling Techniques and Sample Preparation</b>	<p>made by combining a 1m calico with the next 1m calico to make a 2m composite which was then split through 3 stage riffle splitter into a 1kg sample. Through mineralised zones the 1m calico sent without splitting. Duplicates were taken every 30th sample.</p> <p>Between drill hole 006-017, blanks (Mwanza granite or sand) were inserted at regular intervals (every 20th sample) and duplicates taken every 30th sample. Between drill holes 018-065, blanks and duplicates were inserted (as above) and standards were inserted every 10th sample, alternate with blanks and duplicates.</p> <p>Re-splits from the 1m green bag sample ex the rig cyclone were numbered in sequence. All drill samples were dry and the rig cyclone was flushed clean at every rod change.</p> <p>From drill hole 006 to 065: RC drilling - 1m green plastic bulk bag was collected off the RC cyclone and each sampled by way of a three stage riffle splitter at 1m runs.</p> <p>Diamond drill core half sawn by Sandvik blade, then sampled at 1m intervals by breaking with rock hammer into standard calico bags (2-3kg sample) and submitted to ALS Mwanza.</p> <p>Standard Western Australian sampling techniques applied. There has been no statistical work carried out at this stage.</p> <p>It is unknown whether the sample sizes are appropriated to the grain size of the material being sampled.</p>
1-5	<b>Quality of Assay Data and Laboratory Tests</b>	<p>All RC drill samples were prepared using standard crushing and pulverising (to -75#) at ALS, Mwanza. From the ~3 to 4kg pulp, samples are assayed by ALS Minerals in Vancouver and/or Johannesburg by method Au-AA24 (Au- 50gm Fire Assay with ICP-AES finish) and repeats on high grade samples (&gt;10ppm Au) were done using method Au-GRA22 (gravimetric assay). Full ICP multi-element analyses carried out on samples through the mineralised zones Method ICP41.</p> <p>Standard ALS Minerals protocols re blanks, standards &amp; duplicates applied.</p> <p>Referee sampling has not yet been carried out</p>
1-6	<b>Verification of Sampling and Assaying</b>	<p>An Independent Geological Consultant was on site from 13/10/16 to 23/10/16 at Winston.</p> <p>Drill holes WRC060 and WDH065 were twinned drill holes.</p> <p>Geological logging is completed on paper logs, before digitising. Scanned copies of primary geology log sheets and sampling sheets are retained. For consistency within the Winston deposit, M Hawke and S. Nzalalila completed relogging of Winston RC and diamond drill holes between November 2016 and March 2017. This was used for development of the resource model.</p> <p>All data entry is carried out by qualified personnel, with data compilation and storage by M. Hawke in Perth, W.A. Standard data entry is used on site, and backed up in Subiaco Western Australia.</p> <p>No adjustments have been carried out to the assay data.</p>
1-7	<b>Location of Data Points</b>	<p>Drill hole locations were measured by hand held Garmin GPS (<math>\pm 3m</math> horizontal, up to 12m vertical error). Down hole surveys have been carried out by Capital Drilling using Reflex Multi Shot Survey Camera, and core orientation using Reflex ACT III Orientation Tool by electronic Reflex positioning tool.</p> <p>Grid: ARC 1960 Datum UTM Zone 36S</p> <p>A DEM topographic model of the Winston Project area was completed using a differential global position system (DGPS) by Dunia Consultants Ltd. in May, 2016, with accuracy of less than <math>\pm 2m</math> for easting and northings and less than <math>\pm 1m</math> vertically. This forms the top constraint on the resource model. Elevation of drill holes was collected using the DGPS above for drill holes WRC001-006 and by hand held GPS for all other drill holes. Those drill holes which did not conform with the DEM model, were adjusted so the collar position fitted the DEM model.</p>
1-8	<b>Data Spacing and Distribution</b>	<p>Drill hole spacing is between 3 to 15m and 20-30m sectional spacing.</p> <p>The close spaced drilling in the centre of the Winston occurrence indicates continuity of the mineralisation over small spatial distances,</p>

Part	Criteria	Comments
		<p>however more drilling required to establish the continuity along strike and at depth.</p> <p>2m or 4m composites were taken through barren/unmineralised RC drilling intervals (sedimentary rock sequence). 1m sampling was undertaken through all potential mineralisation zones (banded iron formation, skarn altered rock and structural zones) from RC intervals and diamond core.</p>
1-9	<b>Orientation of Data in Relation to Geological Structure</b>	<p>Detailed structural logging of diamond core at Winston was completed by an independent geological consultant, and generally shows that the holes are normal to the main west-east strike direction. Geological interpretation and cross sections indicate that mineralisation is steeply dipping.</p> <p>The drilling orientation of key mineralised structures may have introduced a sampling bias. More structural data is required to constrain the multiple styles of mineralisation and it's continuity horizontally and at depth.</p>
1-10	<b>Sample Security</b>	<p>All samples remain in the custody of Kudu Resources (TZ) Ltd staff until arrival by vehicle at ALS Mwanza.</p>
1-11	<b>Audits or Reviews</b>	<p>No audits have been carried out at this stage.</p>

## Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Part	Criteria	Comment
2-1	Mineral Tenement and Land Tenure Status	Prospecting licence PL9895/2014. Owned 100% by Kudu Resources (TZ) Ltd which is a 99.95% owned subsidiary of Tanga Resources Ltd. The license is in good standing.  Infrastructure in the Winston prospect area includes 3 churches and 39 shambas (farms), as per the September 2014 census. All ethnographic and topographic features on the ridge have been photographed.
		No known impediments.  The Kudu Resources main field camp is located in the prospect area with a full time Kudu presence.
2-2	Exploration Done by Other Parties	No record of any previous exploration
2-3	Geology	Archean orogenic gold mineralisation: metasomatic exo-skarn replacement style amphibolite and BIF hosted orogenic gold at Winston.
2-4	Drill Hole Information	Previously reported on 19 Jan 2016
2-5	Data Aggregation Methods	No data aggregation methods have been used.
		A 0.5g/t Au and 1.0g/t Au cut offs, with a top cut of 90.0g/t Au, with a maximum of 2m of internal dilution has been used to calculate grades.
2-6	Relationship Between Mineralisation Widths and Intercept Lengths	Not applicable to the modelling work.
		It is likely that the drill intercepts previously reported represent downhole assays and not the true width. The mineralisation is steeply north plunging.
		Applied.
2-7	Diagrams	Balanced reporting has been applied.
2-8	Balanced Reporting	Specific gravity (S.G.) measurements were completed on representative rock types, with ore horizons (banded iron formation and skarn) resulting in an average S.G. of 3.25.  Ground magnetic surveys identified chargeability anomalies coincident with the Winston mineralisation. Several additional untested chargeability anomalies are identified proximal to the current drilling.  No significant deleterious or contaminating substances are known.
2-9	Other Substantive Exploration Data	Follow up RC and Diamond drilling is planned to infill and to test lateral and depth extensions to mineralisation, as well as to target untested chargeability anomalies.
2-10	Further Work	No further work reported.

Criteria listed in Section 1, and where relevant in Section 2, also apply to this section.)

Part	Criteria	Comment
3-1	Database Integrity	Drilling database is maintained in MS Excel files. This system is not controlled and represents a risk to data integrity and confidence for use in Mineral Resource estimation.
		Some data validation was conducted when importing into Vulcan and Leapfrog software. Checks include: <ul style="list-style-type: none"> <li>• missing and overlapping</li> <li>• duplicate sample locations</li> <li>• data intervals beyond end of hole</li> </ul> Drill hole traces were viewed in 3D to check for unusual drill hole deviation and errors in the downhole survey.
3-2	Site Visits	John Stockley the competent person for data and geological interpretation and was present on site during the drilling program March-November 2016.
		Site visit was conducted by John Stockley. David Reid, the CP for the Mineral Resource estimation, has not visited site.
3-3	Geological Interpretation	The geological interpretation is based on close spaced drilling, detailed ground magnetic survey and mapping of limited surface outcrop and float. Reasonable consistency is observed between drill logging and the interpreted geology map. There is a strong lithological control on gold mineralisation which is largely confined to BIF lithologies. There are areas where logging does not match the interpretation and there is evidence of complex structural controls on the BIF unit and on deformation (folding and faulting) which will influence the confidence in the interpretation. The confidence of continuity of mineralisation between drill holes only sufficient to support an Inferred or Indicated Mineral resource estimate in the very closely drilled locations.
		Magnetic highs in the ground magnetic survey are assumed to define the subsurface expression of the BIF host unit and dolerite dykes.
		Mineralisation intersected in drilling is associated with alteration, veining and sulphide of the BIF. Structural control has been assumed to control the continuity of the mineralisation. Alternative fold and fault interpretation could affect the local interpretations especially at depth away from the control of the ground magnetic survey.
		The modelled extents of the BIF unit were used to guide the interpretation of the mineralised domain.
		Mineralisation continuity is demonstrated by alteration, veining and sulphide content. Grade continuity is highly variable. Variogram modelling showed very short range structures indicating that the grade continuity defined by the drill samples is poor.
3-4	Dimensions	There are two sub-vertical mineralised lodes with strike length of 40-50m and width of 5-12m. The mineralisation extends from near the surface and has been tested to a depth of 150m.
3-5	Estimation and Modelling Techniques	The estimation was constrained to the two interpreted mineralised domains and used ordinary kriging (OK) to estimate the grade into a block model generated using Vulcan software. Composites were cut to a maximum grade of 90g/t Au (99 <sup>th</sup> percentile of mineralised samples). The greatest distance from an estimated block to a composite was 25m. The average distance of composites used in block estimates was 10m. A downhole variogram demonstrate that the nugget was very low 10-15% but omni-directional variograms showed a very short range structure and overall range which would result in a highly smoothed estimate.

Part	Criteria	Comment
		No previous estimates or mine production was available as this deposit is a new discovery.
		No by-products are expected to be recovered.
		Only gold grades were estimated. Limited analysis of other elements suggests that the only deleterious element is sulphur.
		A block size of 5m x 5m x 5m was used for grade estimation. This is approximately half the drill spacing in the area of mineralisation. A sub-block size of 1m x1m x 1m was used in the block model construction to give better volume resolution of the mineralised domain. Composites were selected from within the mineralised domains using a vertical search ellipse of radii 100m x 40m x 40m and using a maximum of 15 samples.
		Selective mining units (SMU) are expected to be similar in size to the block size used in grade estimation.
		No correlation between variables was assumed as only the gold grade was estimated.
		Resource estimation was restricted to the two interpreted mineralised domains, which are located within the interpreted BIF unit.
		Sample grades distribution has a very high positive skew with a small number of very high grade values. The influence of these samples were restricted by apply a top cut of 90g/t Au.
		Block grades were visually compared to drilling sample grades. Global block grades were compared to average composite grades for each domain. No production reconciliation is available.
3-6	Moisture	Tonnages are reported on a dry basis. Selected pieces of diamond core from hole WDH007 were submitted for petrophysical analysis. This included moisture determination. The moisture in the ten samples ranged from 0.002% to 0.058% with an average of 0.026% moisture on a dry weight basis. There were no near surface samples collected with the shallowest sample taken at 87.1m down hole. Weathering is very shallow and it was assumed that the moisture content of the rocks near surface is negligible.
3-7	Cut-off Parameters	Mineralised domains were guided using a 0.3 - 0.5g/t Au cut-off. All the mineralised domain has been included in the resource as it is expected this represents the likely mining stope.
3-8	Mining Factors or Assumptions	Underground mining methods (sub level open stoping) with decline access were assumed. Mining studies are currently being commissioned.
3-9	Metallurgical Factors or Assumptions	Gold recovery is expected to be high based on preliminary metallurgical test work.
3-10	Environmental Factors or Assumptions	An ethnographic survey has been conducted and 15 shamba's (dwellings) have been identified in the vicinity of the deposit.
3-11	Bulk Density	Dry insitu bulk density was determined using measurements on drill core. A total of 37 samples of 5-20cm in length were taken from within mineralised domain 2. The bulk density was determined using water immersion. The drill core obtained for the deposits is composed of fresh competent rock with no apparent voids or porosity.

Part	Criteria	Comment
		Petrophysical tests on 10 core samples demonstrated that the porosity and moisture content of the core samples is negligible.
		Bulk density measurements were only made from core in domain two. It was assumed that the domain closer to surface would have the same density with very shallow to no weathering.
3-12	Classification	Classification is entirely Inferred Mineral Resource.
		The Mineral Resource classification has taken into account, data density and quality criteria as well as confidence in geological interpretation and continuity which has been guided by estimation parameters.
		The Mineral Resource estimate appropriately reflects the view of the Competent Person.
3-13	Audits or Reviews.	Ravensgate conducted internal peer review on the resource report.
3-14	Discussion of Relative Accuracy / Confidence	Uncertainty in the local geological model and highly variable gold grade has resulted in a low confidence in the resource estimate. This is reflected by the Inferred classification.
		Grade variability of samples is high (high CV) and the short variogram ranges will result in highly smoothed estimate. Local estimation of grade will not be accurate and should be considered as a global estimate.
		No production data is available.