

## Titanium Resources Group Announces Initial JORC-Compliant Measured and Indicated Resources at its World-Class Sierra Rutile Mine

### Rare Earths Mineralisation Identified in Sierra Rutile Tailings

22 February 2011: Titanium Resources Group Ltd (“TRG”) is pleased to announce, as a result of its ongoing strategic review process, a JORC-compliant Mineral Resource for its subsidiary Sierra Rutile Ltd (“Sierra Rutile”) and the identification of potentially value-enhancing rare earths mineralisation in the Sierra Rutile tailings. The Mineral Resource estimate of approximately 600 million tonnes confirms Sierra Rutile’s standing as one of the largest natural rutile deposits in the world. Natural rutile is a premium form of titanium dioxide which trades at an approximate 20% premium to synthetic rutile and at a price 5-7 times that of ilmenite<sup>1</sup>.

A summary of the Mineral Resource estimate is presented in the table below:

#### January 2011 Sierra Rutile Mineral Resource\* (0.8% rutile cut-off grade)

Classification	Tonnes	Grade (%)				Contained Tonnes (kt)			
	Millions	Heavy Minerals	Rutile	Ilmenite	Zircon	Heavy Minerals	Rutile	Ilmenite	Zircon
Measured	4.4	2.30	1.13	0.42	0.18	102	50	19	8
Indicated	436.6	6.18	1.42	0.74	0.32	26,992	6,204	3,242	1,377
<b>Measured &amp; Indicated</b>	<b>441.0</b>	<b>6.14</b>	<b>1.42</b>	<b>0.74</b>	<b>0.31</b>	<b>27,095</b>	<b>6,254</b>	<b>3,260</b>	<b>1,385</b>
Inferred <sup>^</sup>	163.9	-	0.96	-	-	-	1,575	-	-
<b>Total Measured, Indicated and Inferred</b>	<b>604.9</b>					<b>27,095</b>	<b>7,829</b>	<b>3,260</b>	<b>1,385</b>

\*Mineral Resources include those resources which have been modified to produce the Ore Reserves. The figures reported represent 100% of the Mineral Resources and Ore Reserves attributable to Sierra Rutile Limited. <sup>^</sup> Insufficient historical data was available to provide a JORC compliant Heavy Mineral, ilmenite and zircon grade estimate

The quoted Mineral Resource includes all resources intended for conversion to Ore Reserves. Given the size and quality of the Sierra Rutile asset, the company is presently reviewing several options to substantially increase production at the mine and intends to release an updated Ore Reserve statement and associated expansion plans on completion of these studies. These expansion plans will be designed to take advantage of this world-class asset and the significant positive market fundamentals for premium heavy minerals products such as natural rutile.

<sup>1</sup> TZMI Dec 2010

## Rare Earths

As part of management's strategic review, and an added benefit of preparing the Mineral Resource, TRG identified the presence of significant rare earth mineralisation in the tailings of the mineral separation plant. These tailings, which have stockpiled over more than 30 years of operations, have the potential to add significant value to TRG. Studies are ongoing to quantify the type, extent and commercial potential of the mineralisation.

John Sisay, Chief Executive Officer of TRG, commented:

“As part of the ongoing strategic review, TRG is pleased to confirm a substantial 600 million tonnes Mineral Resource at Sierra Rutile, making it one of the largest natural rutile deposits in the world with an in-situ value, at current market prices, of almost US\$8 billion. We will be working methodically over the coming months to evaluate a number of options available to expand production and derive maximum value from this substantial resource. Additionally, whilst early stage, the identification of rare earths in the tailings stockpiles that have been produced in the more than 30 years Sierra Rutile has been operating is potentially very positive for TRG's shareholders. ”

## Additional Information

At a 0.8 per cent Rutile cut-off grade, the Mineral Resources are contained within 2 primary mining licence areas covering approximately 490km<sup>2</sup>, with a further 5 satellite deposits over an area of 69 km<sup>2</sup>. The orebody is up to 25 metres thick and comprises of sediments mineralised from surface to the underlying bedrock.

The mineral resource estimation was derived from an extensive geological drillhole database that has been verified by two separate and independent geological consultants Mine Development Associates and ACA Howe International. Geological sampling has been conducted using a combination of recognised heavy mineral drilling techniques, namely augering and aircore methods. Drill spacing varies between 30m x 30m for Measured Resources to grid spacing of above 300m x 300m for Inferred Resources.

Further details of the resource modelling is available from the company's website [www.titaniumresources.com](http://www.titaniumresources.com).

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The information in this report has been reviewed and approved for release by Mr Mark Button, NHDip, MMRM, Pr.Sci.Nat., SACNASP who has 25 years' experience in mineral commodities, of which 15 years is specific to mineral resource estimation, and who is the full-time Chief Operating Officer of SRL. Mr Button has sufficient experience in relation to the style of mineralisation and type of deposit under

consideration to qualify as a Competent Person as defined in the 2004 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves”. Mr Button has consented to inclusion of this information in the form and context in which it appears.

An ‘*Ore Reserve*’ is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out, and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.

A ‘*Mineral Resource*’ is a concentration or occurrence of material of intrinsic economic interest in or on the Earth’s crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

A ‘*Measured Mineral Resource*’ is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are spaced closely enough to confirm geological and grade continuity.

An ‘*Indicated Mineral Resource*’ is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

An ‘*Inferred Mineral Resource*’ is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.

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## **Titanium Resources Group**

Titanium Resources Group is a mining company with operations in the Republic of Sierra Leone. The Group is the country's largest private sector employer and produces rutile, zircon and ilmenite for use in industrial applications. The Group's operations have historically accounted for over 65 per cent of the exports of Sierra Leone. The Company will change its name to Sierra Rutile Limited on or around 28 February 2011.

## **Background**

The Sierra Rutile properties are located near the Imperi Hills on the coastal plain of southern Sierra Leone, approximately 135 km southeast of the capital Freetown. The bulk of the deposits occur in two clusters in the Gbangbama hills area; ML011/72, the Area One deposits, and the Sembehun area, (ML15/72). The deposits are proximal alluvial placers in origin, infilling north-easterly (and north-westerly) trending channels incised during the imposition of the secondary drainage system. The primary source of the rutile is derived from the gneisses of the Kasila Group, which underwent mechanical and chemical degradation to kaolinite and other clay minerals, liberating the rutile and other heavy minerals.