

10 January 2011

## **TanzaniteOne Limited**

## ("TanzaniteOne" or "the Company") (AIM: TNZ)

# Tsavorite Maiden JORC Resource Statement, Tanzania

**TanzaniteOne Limited ("TanzaniteOne" or "the Company") (AIM: TNZ),** the coloured gemstone producer and developer, today announce its maiden JORC compliant Resources Statement for its Tsavorite project, NE Tanzania (the "Project"). Tsavorite is a brilliant green gemstone variety of grossular garnet and the Project is located 20 km from the Company's producing Tanzanite mine.

# Highlights

- Maiden JORC compliant Inferred Resource of 7.6 to 10.4 million bank cubic metres ("bcm") or approximately 18.2 to 24.9 million tonnes
- Maiden JORC compliant Indicated Resource of 0.89 to 2.17 million bcm or approximately 2.1 to 5.2 million tonnes located within Inferred Resource
- Average Tsavorite grade of 1.6 carats per loose cubic meter ("lcm") for the Indicated Resource
- Estimated 1.4 and 3.5 million carats of tsavorite located within Indicated Resource only
- Further Resource statement expected in Q2 2011, following second phase bulk sampling

The Tsavorite Project Resource Statement was prepared for TanzaniteOne, by Mr Ross McMaster as at 29 December 2010 in accordance with the guidelines of the Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (JORC Code - 2004 edition). This resource statement is based on the work conducted to date on the project and covers approximately 50% of the Project.

### **Work Summary**

The resource study activities conducted on the Project during late 2009 and 2010 included a total of 164 drill holes (with a combined depth of 3,180m) and comprised 6 inch rotary air blast



("RAB") and down hole hammer drilling to determine the volume of gravels, and bulk sampling to determine the grade. The average depth of the holes was 19m. The drill profiles were logged and supported by heavy mineral sampling at 1.5 metre intervals resulting in 2,100 heavy mineral samples.

A 32 tonne excavator with a 6 metre reach was used to conduct a bulk sampling exercise. The material was loaded into a 10 tonne tipper with 1 sample of 5 cubic metres per truckload for individual treatment. The treatment plant consists of a primary dry screening module with screened product between -12mm and +2mm being fed to a wet Bushman jig capable of treating two 5 cubic metre batch samples per day. A total of 26 samples were taken and processed resulting in a total sample size of approximately 312 tonnes.

#### JORC compliant Resource Summary:

Resource	Resource	Gravel Type	Waste	Resource	Average Grade	Carats
Category	Block			(million of bcm)	(carats per lcm)	(million)
Inferred	Lines C to J	Channel and Terrace		7.6 to 10.4		
Total Inferred Resource				7.6 to 10.4		
Indicated	Lines C to F	Terrace	50%	0.34	1.6	0.55
		Gravels	80%	0.14		0.22
Indicated	Lines C to F	Channel	50%	1.83	1.6	2.93
		Gravels	80%	0.75		1.2
Total Indicated Resource (included in Inferred				0.89 to 2.17	1.6	1.4 to 3.5
Resource)						



The inferred resource is based on drilling, pitting and sampling data from 8 drilling lines (C to J), while the indicated resource is based on 4 lines (C to F). The remaining lines G to J have been drilled but are yet to be bulk sampled. The bulk sampling of these remaining 4 lines will be conducted during the first quarter of 2011 and an updated resource update is expected in Q2. The data from the bulk sampling and resource valuations will then form the basis of a financial scoping study.

### **Qualified Person**

The resource statement has been prepared and all technical information has been reviewed and verified by Mr Ross McMaster, who has sufficient relevant experience to the style of mineralisation and type of deposit under consideration to qualify as a Competent Person as defined in the JORC Code (2004). Mr McMaster is a Member of the Australasian Institute of Mining and Metallurgy and meets the criteria of a qualified person under the AIM guidance note for mining, oil and gas companies. He has compiled and approved the technical disclosures in this announcement.

Commenting today Bernard Olivier, Chief Executive Officer said: "Having successfully delineated a maiden resource to JORC compliant standards we shall now work towards establishing an economic model for a potential Tsavorite mine. We expect to provide a further resource update during the second quarter of 2011 following the next phase of the bulk sampling programme scheduled in the coming months."

END

For more information, please visit www.tanzaniteone.com or contact:

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#### Notes to the Editor:

Tsavorite is the brilliant green gemstone variety of grossular garnet ((Ca3Al2(SiO4)3)), which was first discovered in 1968 in Lemshuku, NE Tanzania. In 1974, the new gemstone was introduced to the world market by Tiffany & Co in New York and named 'Tsavorite,' after the famous nearby 'Tsavo National Park' game reserve in Kenya. Tsavorite has a beautiful vivid green colour, is bright and lively with a high refractive index, durability and clarity. Tsavorite has a hardness approaching 7.5 on the Mohs Scale of Hardness and has no cleavage, which makes it suitable for almost any jewellery application and makes it durable enough for every day wear. Tsavorite is also not treated in any way. The price per carat of tsavorite is approximately two to four times higher than tanzanite and roughly a quarter of the price of emerald.

TanzaniteOne is the largest and most scientifically advanced miner and supplier of rough tanzanite, a unique position that affords it the opportunity to support and influence the entire channel, from mine to market, ensuring that maximum stakeholder value is achieved at each stage of the process.

Our leading position in the tanzanite market has ensured TanzaniteOne the recognition and respect of its peers and provides the opportunity for expansion into a broader range of PCGs located at various key sites around the world.

TanzaniteOne, which uses state-of-the-art optical sorters and technically advanced processing and sorting methods, has further enhanced its sorting techniques resulting in the unlocking of



further value in the B and BL categories. This initiative forms part of the Group's stated refocus on its main production source, lighter but equally brilliant stones. Additional evaluation continues in this area as TanzaniteOne strives to unlock value in this significant portion of its production.

### Glossary of technical terms:

- "Indicated 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.
- "Inferred 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
- "bcm" Bcm is bank cubic metres which is the *in situ* measurement of material volume and once excavated this material (sands, gravels and cobbles) usually bulks out by a "lcm" further 20-30% to give volume measurements in loose cubic metres ("lcm").
- "JORC" The Joint Ore Reserves Committee: The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves, as published by the Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia.