

## **OLYMPIA RESOURCES LTD**

# HARTS RANGE GARNET PROJECT TECHNICAL GROUP REPORT YEAR ENDING 22<sup>nd</sup> JANUARY, 2009 EL10150 AND EL10372



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#### **EXECUTIVE SUMMARY**

The Harts Range Tenements are located along the valley of the Plenty River and cover 994.3km<sup>2</sup>. Olympia has been exploring in the Plenty Valley since 1997 and has identified a large resource of premium garnet in the floodplain deposits along Aturga Creek.

In 2008-2009 Olympia has undertaken exploration on:

- Obtaining bulks samples from the Aturga deposit
- Completing a detailed mineralogy study of the deposits
- Completing a detailed metallurgical flow sheet review
- Undertaking a review of the resources in the deposit with reference to the mineralogy
- Extending the inferred resources to the east of the Aturga deposit.
- Undertaking clearance approvals from the Central Land Council for reconnaissance exploration on E10372

Olympia intends to continue exploration on the tenements in 2009. Application to reduce the covenant on the tenements has been submitted to the NT Mines Department. It is expected a drilling programme will be undertaken in the second half of 2009.

## **INTRODUCTION**

Olympia has seven (7) tenements in the Northern Territory shown in The two tenements covered by this reporting period consist of the main Riddoch Dunes and Aturga Project areas and the Jinka tenement on the Plenty River.

**Table 1 Current Tenements of Olympia Resources Ltd** 

Project	Prospects	Tenements	Rent 2008	Covenant '08	Actual	Proposed '09	Anniversary
Harts Range	Riddoch	EL 10150	\$ 5,104	\$ 31,000	\$ 40,900	\$ 22,000	23 <sup>rd</sup> January
	Plenty River	EL 25098	\$ 66	\$ 32,000	\$ 9,167	\$ 20,000	2 <sup>nd</sup> October
	Spinifex Bore	EL 24360	\$ 671	\$ 50,000	\$ 57,846	\$ 15,000	15 <sup>th</sup> September
Huckitta	Jinka	EL 10372	\$ 2,112	\$ 24,000	\$ 5,224	\$ 22,000	23 <sup>rd</sup> January
	Irrerlirre	EL 24378	\$ 1,661	\$ 26,500	\$ 14,463	\$ 20,000	15 <sup>th</sup> September
	Huckitta	EL 24641	\$ 704	\$ 19,000	\$ 12,845	\$ 10,000	15 <sup>th</sup> September
	Total for	2008		\$ 182,500	\$140,445	\$109,000	

Exploration programmes on EL24360, el24378, 24641 and el25098 have been reported separately by Stewart (2008a) TO December 2008.

#### **PITTING**

During 2008 it was realised that bulk sampling was required to obtain large market samples and to test the flow sheet. In order to obtain the material a pitting programme was undertaken (Baxter & Stewart, 2008) (Appendix 1).

Digging of pits covering the length and breadth of the deposit was undertaken to provide bulk material for metallurgical testwork.

In the first programme (May, 2008) the samples were contaminated by calcrete necessitating a second programme (July, 2008).

The pitting confirmed the stratigraphy identified by earlier exploration. An example of the stratigraphy is seen in



Figure 1 Pit APBSP4 showing floodplain over paleochannel

#### **MINERALOGY**

In order to provide a better understanding of the mineralogy of the Aturga Deposit a detailed mineralogy was undertaken. This study included the newly assessed inferred resource near Spinifex Bore.

The measured resource is in the mining lease ML23868. The indicated resource mainly falls in the mining lease but is also in EL10150. The inferred resource is in EL24360 and EL25098.

Olympia Resources Limited created 12 minibulk composites for each resource type and geology environment Aturga Project. These were sent off to Roger Hamilton for Grain point counting. The results are reported in Stewart (2008b) and Appendix 2.

Table 2: Drill Samples in Minibulks

Bulk ID	% Garnet	No Samples	Bulk ID	% Garnet	No Samples
FPIBS	21.8	14	PCIBS	35.3	13
FPITS	25.8	13	PCITS	27.8	14
FPM	21.5	22*	PCM	29.5	19#
FPMN	22.0	22	PCMN	25.6	21
FPMS	19.8	15	PCMS	24.6	14

<sup>\*11</sup> samples out of middle area (7 to S,4 to N) #9 samples out of the middle area (6 to S,3 to N)

### **METALLURGY**

This metallurgical testwork program has been carried out to:

- **⊃** Provide independent verification of the previous metallurgical testwork, and
- **⊃** Prepare a range of garnet samples for testing by consumers.

The testwork has been carried out by Allied Mineral Laboratories (AML) whose manager John Bunter has extensive experience at an operating and testwork level in a wide range of heavy mineral operations.

#### **RESOURCES**

During 2008 after the mineralogy review a new resource model was developed (Baxter and Stewart, 2008) Appendix 4.

During the latter half of 2006 Olympia Resources Limited (Olympia) undertook a drilling program in the Aturga Project. It was designed to increase confidence and extend the current measured resource in the Harts Range district. Two blocks of indicated resource are identified to the north of the measured resource and an inferred resource was identified towards the east on and around the Plenty River.

Olympia has a mining lease (ML23868) over a part of their Riddoch Dunes exploration licence (EL10150). The measured resources and the majority of the indicated resources are all within the mining lease, with some of the indicated resource in EL10150. The inferred resources are within surrounding exploration tenements, Plenty River, EL25098 and Spinifex Bore EL24360. This report updates the measured, indicated and inferred resources estimates of the floodplain and palaeochannel deposits within the tenements.

A summary of the revised resources is presented in Table 1. The assumed cut-off grade for the resource statement is 25% heavy mineral in the resource.

**Table 3: Resource Summary** 

Category	Material (t)	НМ%	OS%	SL%	HM (t) in ore	Garnet (t) in ore	AMH (t) in ore
Measured	10,030,000	33.6	7.5	15.6	3,366,000	799,000	2,449,000
Indicated	17,542,000	33.1	9.9	12.6	5,800,000	1,580,000	4,040,000
Total M +Ind	27,572,000	33.3	9.0	13.7	9,170,000	2,380,000	6,490,000
Inferred	52,000,000	32.7	11.7	13.1	17,000,000	4,000,000	12,000,000
Total	79,500,000	32.9	10.8	13.3	26,000,000	6,400,000	18,500,000

# SACRED SITE CLEARANCE (CLC)

During 2008 clearance has been obtained from the Central Lands Council for:

- Water drilling on EL24360 with certificate C2008-032
- Reconnaissance drilling on tenement to the east

The applications for clearances are presented in Appendix 5.

#### **BIBLIOGRAPHY**

Baxter, J.L. & Stewart, S. 2008, Revision of Resources at Aturga Abrasives Project including detailed mineralogy: January, 2009, Olympia Resources Ltd Report No. OLY09/001

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