



KIMBERLEY METALS LIMITED

MANBARRUM PROJECT

COMBINED ANNUAL REPORT 2011

EL24395 (16/08/2010 - 15/08/2011) EL25470 (05/03/2010 - 04/03/2011) EL25646 (23/08/2010 - 22/08/2011) MA24518 (25/08/2010 - 24/08/2011) MA26581 (01/08/2010 - 31/07/2011)

Tenement/s	EL24395, EL25470, EL25646, MA24518, MA26581	1:250 000 Sheet Name	Auvergne (SD5215)
Holder	TNG Ltd	1:100 000 Sheet Name	Legune (4767)
Manager	Kimberley Metals Ltd	Datum GDA_E	GDA94-52 519650-553750
Operator	Kimberley Metals Ltd	GDA_N	8295900-8337950
Commodity	Zn, Pb, Ag, Fe		
Author	B. Morgan, Geologist.		
Authorised By:	A. Johnston, Chief Geologist		
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KIMBERLEY METALS LIMITED – ABN 38 129 954 365 Level 3, 2 Elizabeth Plaza, North Sydney, NSW 2060

Telephone: +61 2 9927 2006 Fax: +61 2 9927 2050 Website: www.kimberleymetals.com.au

EXECUTIVE SUMMARY

The Manbarrum Project comprises five exploration titles (EL24395, EL25470, EL 25646, A24518, A26581) covering a 50 kilometre strike length of the SE margin of the Bonaparte Basin, where widespread Mississippi Valley Type (MVT) Zinc-Lead-Silver mineralisation has been located.

The current reporting period saw a change in project management with the signing of a Joint Venture (JV) between TNG Ltd (TNG) and Kimberley Metals Ltd (Kimberley) in February 2011. Prior to this JV deal, TNG Ltd were in negotiations with Teng Fei for the sale on the Manbarrum Project, which collapsed late 2010. During the entire negotiation period, a waiver of expenditure for the group of tenements was approved by the NT Mines Dept (Sept 2010) to allow owners TNG Ltd to complete a sale/JV deal. The waiver of expenditure was upheld for the full reporting period to allow time for both parties to complete and swap all data sets.

The Kimberley Region experienced a record wet season during 2010/11 with rain fall double the average, resulting in large amounts of damage to road infrastructure in the region. The prolonged wet season affected ground activities, especially on the black soil plains, where access was not available until May/June this year.

During this period Kimberley Metals undertook the following exploration works;

- Database compilation
- 2D (GIS ArcView) & 3D (Micromine) data compilation
- Re-processing of historical gravity data
- Review previous metallurgical test work

Exploration work on the Manbarrum project for the second year of the joint venture will comprise the following proposed works;

- Ongoing database compilation
- Ongoing 2D & 3D data compilation
- Geophysical interpretation
- Geological mapping & structural review
- Project & Resource review
- Geophysical survey
- Drill target definition

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1. INTRODUCTION

The project comprises five exploration titles (A24518, A26581, EL24395, EL25470 and EL25646), covering a 50 kilometre strike length of the SE margin of the Bonaparte Basin, where widespread Mississippi Valley Type (MVT) Zinc-Lead-Silver mineralisation has been located.

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Kimberley Metals are highly active within the Bonaparte Basin with the Sorby Hills Pb-Ag-Zn project currently in pre-feasibility with plans to commence operations in 2013. Sorby Hills is approximately 40km to the west of the Sandy Creek deposit (Figure 1) which provides an opportunity to extract local deposits/resources through a centralised facility.

The Kimberley Region experienced a record wet season during 2010/11 with rain fall double the average, resulting in large amounts of damage to road infrastructure in the region. The prolonged wet season affected ground activities, especially on the black soil plains, where access was not available until May/June this year.

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- Review previous metallurgical test work

2. LOCATION AND ACCESS

The Manbarrum Project is located in the North Western part of the Northern Territory, on Legune station, approximately 70km north east of the regional centre of Kununurra (WA) and at approximate lat -15 Deg 24' 21", long 129 Deg 11' 48" on the Auvergne 1:250,000 map sheet. Access is via sealed, then good but unsealed station tracks. These are accessed during the dry season only. Travel time by road from Kununurra is approximately 1.25 hours. A location map is shown in Figure 1.



Figure 1: Location of the Manbarrum Project tenements.

3. TENURE

The Manbarrum Project comprises five tenements: A24518, A26581, EL24395, EL25470 and EL25646 (Table 1; Figure 2). All tenements are held by TNG Ltd (owner) and managed under a JV with Kimberley Metals Limited (manager).

Title	Area (blocks)	Area (km)	Application Date	Grant Date	Term (Years)	Reporting Period
EL24395	45	126	08/09/04	16/08/05	8	12 months
A24518	6	16.8	15/12/04	23/08/05	8	12 months
EL25470	32	89.6	13/07/06	05/03/07	6	12 months
EL25646	39	109.2	16/10/06	23/08/07	6	12 months
A26581	6	16.8	14/01/08	01/08/08	6	12 months

Table 1: Manbarrum Tenure





Figure 2: Manbarrum Project Tenements



4. **REGIONAL GEOLOGY**

The onshore Bonaparte Gulf Basin (Figure 3) covers 18,000 square kilometres and contains a Cambrian to Permian sequence with a maximum thickness of 5,000 metres. The basin is controlled by faulting; particularly in the south and east where extensions of Halls Creek Mobile Zone fault systems are present (the eastern margin of the Bonaparte Basin sediments is marked by the Cockatoo Fault zone).



Figure 3: Onshore tectonic setting of the Bonaparte Basin (Jorgensen et al., 1990).

The Sandy Creek base-metal deposit is very similar to the Sorby Hills lead-zinc deposits which are located in the eastern portion of the Bonaparte Gulf sedimentary basin. The carbonate complex association and epigenetic characteristic of the mineralisation are typical of orebodies of the Mississippi Valley type. Numerous, commonly small orebodies with an average size of 500,000t occur in four areas along two major NE trends - Sorby Hills, Spirit Hill, Sandy Creek and the Gap. These trends are parallel to the eastern basinal margin and to basement-controlled fault structures related to the Halls Creek Mobile Zone. Significant mineralisation is restricted to the Upper Devonian-Lower Carboniferous dolomite horizons, with the Button Beds being the main host lithology. Mineralised sedimentary breccias, cross-cutting fracture zones and rare replaced narrow dolomite beds are the most important ore types.

The Sandy Creek deposit is situated on the eastern margin of the Bonaparte Gulf Basin where prospective Devonian and Carboniferous sediments unconformably overlie Middle or Upper Proterozoic basement rocks. The Lower Carboniferous-Burt Range Formation (Clb2), 'Sandy Dolomites' is important within the Sandy Creek area as it is host to most of the Pb-Zn mineralisation encountered. The unit consists of massive to poorly bedded, locally fossiliferous rocks ranging in composition from sandy dolomites to dolomitic sandstones. Syn-sedimentary brecciation is common throughout the unit. The upper portions of the unit are in some places very sandy. Mineralisation at Sandy Creek is seen to be principally associated with the basin margin.

5. **PREVIOUS EXPLORATION**

Exploration for base-metals by Aquitaine and its Bonaparte Gulf Joint Venture partners began in 1971. Exploration methods used included detailed IP surveys, seismic reflection surveys, stream/soil geochemistry and drilling. By 1984 a total of 19 diamond drill holes and 50 RC holes had been drilled in the region of the Sandy Creek deposit.

In 1985 BHP entered the Sorby Hills Joint Venture with Triako Resources (who had acquired the project from Aquitaine) and carried out exploration together with adjacent tenements in Western Australia (Sorby). This work was concentrated away from the Sandy Creek deposit but in 1989 BHP carried out an IP survey over the deposit. This IP survey showed that the Burt Range Formation to the north of the Sandy Creek deposit is still chargeable and BHP commenced a fence of diamond drill holes 800 metres north of the Sandy Creek deposit to test the Burt Range Formation.

Table 2 provides a summary of the exploration of the onshore Bonaparte Basin.

Period	Company/JV	Exploration	Results
1971 - 1986	Aquitaine in various JV's	Mapping, sampling, IP, grid drilling, EM, aeromagnetic, RC drilling, DD drilling; gamma- logging; seismic; basin modelling	1971 discovery of Sorby Hills, Sandy Creek outcrop; 1973 D-E mineralisation; 1976 Alpha and Beta trends
I972 – 1979	Aquitaine/SEREM JV	Mapping, sampling, IP, grid drilling, EM, aeromagnetic, RD drilling, DD drilling	
1977 - 1985	Aquitaine/MIM	Mapping, sampling, EM, aeromagnetic, RC drilling, DD drilling	
1981 - 1985	St Joe Bonaparte	Mapping, sampling, IP, grid drilling, EM, aeromagnetic, RD drilling, DD drilling	
1985 -1996	Elf Aquit. Triako/BHP JV	Sampling, IP, grid drilling, EM, aeromagnetic, RD drilling, DD drilling; gravity	
1992 - 1995	North farm in	EM, aeromagnetic,	
1992 - 1997	Wilga Mines (Delta) farm in	Sampling, IP, EM, aeromagnetic, RC drilling, DD drilling; MMI	

Table 2: History of base metal exploration in the onshore Bonaparte Basin



The current reporting period was restricted to desk top activities mainly due to extensive wet season limiting ground access, and time required to formalise and swap data after the JV deal was signed in February 2011.

During this period Kimberley Metals undertook the following exploration works;

- Database compilation
- 2D (GIS ArcView) & 3D (Micromine) data compilation
- Re-processing of historical gravity data
- Review previous metallurgical test work

Kimberley Metals undertook a high resolution gravity survey over the Sorby Hills Project in July/August 2011. As part of the survey, all historical data (including the 1996 Geoterrex Ltd) over the Manbarrum Project was re-processed by Stewart Geophysical consultants Pty Ltd (Figure 4) in preparation for structural interpretation.



Figure 4. Re-processed historical data (1996) over the Manbarrum Project, Bouguer gravity image.

7. EXPENDITURE 2010-2011

The current reporting period saw a change in project management with the signing of a Joint Venture (JV) between TNG Ltd (TNG) and Kimberley Metals Ltd (Kimberley) in February 2011. Prior to this JV deal, TNG Ltd were in negotiations with Teng Fei for the sale on the Manbarrum Project, which collapsed late 2010. During the entire negotiation period, a waiver of expenditure for the group of tenements was approved by the NT Mines Dept (Sept 2010) to allow owners TNG Ltd to complete a sale/JV deal. The waiver of expenditure was upheld for the full reporting period to allow time for both parties to complete and swap all data sets.

Although a waiver of expenditure was approved for the Manbarrum Project area, both TNG Ltd and Kimberley Metals Ltd continued exploration activities and committed expenditure. Total expenditure on the combined tenements (A24518, A26581, EL24395, EL25470 and EL25646) is \$178,705.83 as shown in Table 3.

Cost Category	A24518 (\$)	EL24395 (\$)	EL25470 (\$)	EL25646 (\$)	A26581 (\$)
Office Studies	8,375.00	21,500.00	18,395.33	31,952.00	21,500.00
Ground Exploration	17,575.00	10,100.00		5,552.00	10,100.00
Access and Rehabilitation	3,893.00	4,740.00	5,140.00	4,501.00	4,740.00
Contractors/Consultants - Geological			888.00		
Contractors/Consultants - General			1,215.82		
Travel & Accommodation			6,750.50		
Motor vehicle costs			270.50		
Storage			1,204.26		
Freight/Couriers			39.60		
Consumables			273.82		
TOTAL	29,843.00	36,340.00	34,177.83	42,005.00	36,340.00

Table 3. Expenditure for combined tenements.

8. PROPOSED PROGRAM & EXPENDITURE COMMITMENT 2012

Exploration work on the Manbarrum project for the second year of the joint venture will comprise the following proposed works;

- Ongoing database compilation
- Ongoing 2D & 3D data compilation
- Geophysical interpretation
- Geological mapping & structural review
- Project & Resource review
- Geophysical survey
- Drill target definition

The proposed expenditure for Manbarrum Project for 2011/12:

\$63,000	(Year 7)
\$20,000	(Year 4)
\$90,000	(Year 7)
\$40,000	(Year 5)
\$50,000	(Year 5)
	\$63,000 \$20,000 \$90,000 \$40,000 \$50,000

Total Exp: \$263,000