



Quarterly Activities Report – June 2008

HIGHLIGHTS

CORPORATE

- Strategic Alliance secured with Posco Australia, a subsidiary of Korean-based POSCO, the world's fourth largest steel producer.
- A\$7.23M share placement at 40 cents completed to Posco Australia, representing a strong endorsement of Sandfire's projects and strategy. POSCO acquires a 19.9% stake in Sandfire at completion of the share placement.
- Positions Sandfire to accelerate exploration of its high-quality portfolio and target additional strategic resource opportunities in the current market.

BORROLOOLA PROJECT (Northern Territory)

Manganese

- Drilling scheduled to commence in late August targeting up to 11 cretaceous-style manganese targets.
- Targets range in area from 2 to 15 square kilometres and include areas proximal to known manganese deposits and historical intersections.

Base Metals

- Diamond drilling of the Yalco and Warramana Prospects scheduled to commence in August following completion of the regional review phase.
- Substantial lead-zinc-silver targets outlined at both prospects from detailed gravity surveys.

Diamonds

- Independent review confirms the diamond potential of the 13,400km² project area, which is central to three known diamondiferous kimberlite fields.

DOOLGUNNA PROJECT (Western Australia)

Iron Ore

- Mapping of the hematite mineralisation in the Robinson Range was completed, with access for drilling subject to Heritage site clearances.
- Six zones of mineralization defined with the potential to host low-phosphorus Direct Shipping Ore (DSO).
- Drilling of a new target being a large, circular magnetic anomaly to commence mid-July 2008.

Gold

- High-gold values recorded for four holes received to date from recent drilling at the DeGrussa Prospect, with a best result of **24 m @ 6.8 g/t gold**.

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PO Box 1495
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Issued Capital:

Ordinary Shares	82.5M
Contributing	12.7M
Options	13.1M

Cash (June 2008) A\$8.4M

Major Shareholders:

POSCO	19.99%
Founders/Board	18.00%
High net worth	24.00%

Directors:

Miles A Kennedy
Chairman

W. John Evans
Technical Director

John R. Hutton
Director

Karl M Simich
Director

OVERVIEW

During the Quarter, Sandfire Resources finalised agreements with Posco Australia Pty Ltd, a subsidiary of the leading Korean-based global steel group POSCO, for Posco Australia to acquire a strategic 19.9% stake in Sandfire through a Share Placement comprising 16.5 million shares at 40 cents each and 2.5 million partly paid ordinary shares (Contributing Shares) at 25 cents each (with 15 cents unpaid) to raise A\$7.23 million.

The completion of the share placement was announced on 3 July 2008 after all conditions precedent were satisfied on 19 June 2008 for the placement of both the ordinary shares and the contributing shares.

The Share Subscription Agreement, together with a Commercial Agreement encompassing an off-take agreement with POSCO for up to 30% of future mineral production from Sandfire Projects excluding gold and diamond production. It establishes the foundations for a long-term alliance between Sandfire and POSCO. POSCO is a Korean-based global company and the world's fourth largest steel producer.

The establishment of a long-term Strategic Alliance with POSCO represents a significant endorsement of the quality of Sandfire's diversified portfolio of manganese, lead-zinc-silver, iron ore and gold projects in Australia. Securing the financial backing and strategic technical and corporate support of such a substantial industry group represents a substantial achievement, particularly in the current volatile and difficult market conditions for junior exploration companies.

This will enable Sandfire to accelerate exploration activities across its portfolio, as well as position the Company to take advantage of additional resource opportunities, both in Australia and overseas.

1. BORROLOOLA PROJECT, Northern Territory (Sandfire - 100%)

The Borroloola Project comprises a 13,000km² tenement area in the Northern Territory which encompasses a significant proportion of the Batten Fault Zone. This important geological structure hosts the world-class McArthur River Mine, the second largest SEDEX hosted base metal deposit in the world. Sandfire's tenements also cover a coastal strip which is considered highly prospective for cretaceous-style manganese deposits, similar to the world-class Groote Eylandt manganese deposits (BHP Billiton).

During the Quarter, Sandfire continued to work towards generating priority drilling targets for the 2008 field season for both manganese and base metals. The Company has now completed an extensive review of historical data from previous exploration in the McArthur Basin and surrounding areas.

A large proportion of the available airborne electromagnetic (AEM) data has been reprocessed through the latest version of EMFlow software, including data covering the world-class HYC deposit now being mined by Xstrata at the McArthur River Mine. Further work has also been conducted on behalf of Sandfire by the CSIRO Division of Exploration and Mining on the airborne electromagnetic data.

The Company's geological team has initiated discussions with academic researchers from the ARC Centre of Excellence in Ore Deposits (CODES) at the University of Tasmania. This group has conducted extensive geological research in the area over the past 15 years and a cooperative research project between Sandfire and CODES is currently being set up with a PhD student.

1.1 Manganese Exploration

The potential for manganese mineralisation at the Borroloola Project is primarily within the sediments of the Cretaceous Carpentaria Basin that overlie the basement McArthur Basin rocks. This geological setting is similar to the world-class Groote Eylandt manganese deposit, located 180km north of the project, which produces some 1.6Mtpa of high-grade manganese ore, representing over 10% of global supply.

Sandfire's tenements include four known manganese deposits discovered by BHP in the early 1990s, namely L4, Yiyinti and South Rosie Creek, as well as an historical manganese intersection recorded by Mt Isa Mines at the Eastern Creek Prospect.

Reconnaissance exploration for cretaceous-style manganese mineralization relies primarily on airborne electromagnetic (AEM) surveys that can identify the flat-lying shallow and aerially extensive conductive rock sequences that characterise this type of manganese mineralisation.

During the Quarter, Sandfire refined its modelling of the AEM data over the upper catchment of Rosie Creek. This work has outlined 11 discrete shallow conductive targets ranging up to 15 square kilometres in area (*see Figs 3 and 4*).

Reconnaissance drill testing of these targets is planned to commence in the middle of the September 2008 Quarter. In addition, an area south west of the Rosie Creek manganese deposit will be tested, together with some reconnaissance drilling around the boundaries of the known Cretaceous manganese mineralisation at Rosie Creek.

The drilling proposed for the Eastern Creek Prospect will target an extensive conductor in Proterozoic rocks along strike from a reported intersection of manganese mineralisation by Mt Isa Mines (12m @ 25% Mn).

1.2 Base Metal Exploration

In addition to manganese exploration, the other main exploration target at the Borroloola Project is zinc, lead and silver mineralisation in sediment-hosted base metal deposits within Palaeoproterozoic McArthur Group rocks. This mineralisation is typified by the world-class McArthur River Mine deposit, located 26 kilometres south of the Project boundary, which is one of the world's largest zinc-lead-silver deposits with an ore resource of approximately 120 million tonnes.

At McArthur River, the base metal mineralisation is closely related to the Emu Fault Zone that was active during the formation of sediments and the accompanying base-metal mineralisation. Sandfire's tenement block at Borroloola covers approximately 100 kilometres of the Emu Fault Zone and is considered to be highly prospective for large base metal accumulations.

During the Quarter, Sandfire completed an assessment of the historic exploration database, geology and geographic setting of the project area and has now prioritised the principal prospective areas. The areas defined are considered the most prospective for repetitions of the McArthur River-style zinc-lead mineralisation.

Other Proterozoic McArthur Basin sequences throughout the Project area are also considered prospective for base metal deposits; a review of historic data for these areas, together with ongoing reconnaissance, is continuing (*see Fig 5*).

Sandfire recently completed two large and, in places, detailed gravity surveys of the two most prospective areas along the Emu Fault Zone, the Yalco and Warramana Prospects. Detailed in-fill gravity surveys at the Warramana Prospect have located five discrete gravity highs in areas of little outcrop, but which are thought to be underlain by the most prospective stratigraphic units.

The interpretation of the gravity data from Yalco Prospect is more complicated than suggested by the available mapping. The Company will undertake detailed geological mapping during the September quarter to prioritise several gravity anomalies.

Sandfire has contracted a diamond drilling rig to commence drilling in Borrooloola in August 2008. Initial targets will be the gravity anomalies at Warramana and deepening of the hole BD016 at the Yalco prospect, which was drilled as part of the 2007 program. The later hole targeted a deep AEM anomaly and was suspended above the target depth for operational reasons.

The diamond core drilling program testing base metal targets is expected to continue until the onset of the northern wet season in late October.

1.3 Review of the Diamond Potential of the Borrooloola Project

The Borrooloola Project tenement holding of 13,400 square kilometres lies between the known kimberlite fields of Merlin (a past producer), Abner Range and Roper River. Historic records of diamond exploration within the Project report numerous macro-diamonds, micro-diamonds and other kimberlitic indicator minerals.

A review of the potential of the Borrooloola Project for diamonds was completed during the June 2008 Quarter by well-known diamond exploration geologist, David Jones. This review highlighted five priority targets and two areas of high interest for Sandfire.

The review concluded that:

- previous exploration in the area has largely been reconnaissance in nature and must be considered inadequate for an area of such high potential;
- previous work has identified a number of areas where noteworthy, but unexplained, concentrations of macro-and micro-diamonds as well as kimberlitic indicator minerals have been recovered;
- five priority targets and two areas of significant interest have been identified within the overall project area; and
- a combination of regional exploration to assess the true potential of the tenements and detailed follow-up on existing priority targets is recommended for the area.

In light of its focus on the priority manganese and base metal prospects at Borrooloola, Sandfire is currently reviewing the options available for evaluating the diamond potential of the area.

2.0 DOOLGUNNA PROJECT, Western Australia (Sandfire - 100%)

The Doolgunna Project covers an area of 465km² north of Meekatharra in Western Australia and includes two significant exploration opportunities for iron ore and gold. The potential for high-grade (+65% Fe), low-phosphorus hematite mineralization has been confirmed within a +26km strike length of the Robinson Ranges. In addition, Sandfire has delineated multiple virgin gold discoveries within this well-endowed gold district and is continuing exploration targeting a much larger accumulation of gold mineralization.

2.1 Iron Ore

Field reconnaissance and detailed geological mapping of the Robinson Range iron formations and previously identified low-phosphorus hematite mineralisation was completed during the Quarter. It is anticipated that Heritage clearances for the areas of interest should be possible during the next six months. This will enable a detailed evaluation of this mineralization to be undertaken (see *Native Title section 2.3 below*).

Six zones of mineralization have been defined with the potential to host low-phosphorus Direct Shipping Ore (DSO) grading +60% Fe. This mineralization is strategically located in close proximity to Midwest Corporation's tenements.

In addition, there is a large, very strong circular magnetic anomaly within the Marymia Dome granites where the Proterozoic sequence is over thrust from the south. This anomaly has previously been drilled in one locality to a maximum depth of approximately 110 metres. The hole intersected partially mineralized banded iron formation (BIF) to a depth of 80 metres below surface.

Sandfire has carried out a detailed ground magnetic survey over the anomaly and subsequent modelling has indicated that:

- the drill hole was centred on the peak of the anomaly; and
- there is a substantial volume of non-magnetic material within the modelled source rocks.

Aboriginal heritage clearance of the area was undertaken during the June Quarter, and drill testing of the anomaly is scheduled for early July.

2.2 Gold Exploration

During the Quarter, Sandfire completed a further program of RAB drilling for gold on the Doolgunna Project (see *Fig 2*). The drilling was targeted to test the eight known areas of gold geochemical anomalism, either comprising gold-in-soil anomalism or follow-up of previous reconnaissance gold-bearing drill intercepts.

The program comprised 239 holes for a total of 11,289 metres. Most of the assay results from this program have not yet been received. However, at the DeGrussa Prospect a previously reported gold intersection of 10m @ 5.95g/t gold was confirmed and extended with intersections on a traverse 40m to the southwest.

These were:

- Confirmation Holes (twinned)¹
 - Hole 2272: 2m to 10m (downhole), for **8m at 8.8g/t gold**
 - Hole 2268: 2m to 14m (downhole), for **12m at 2.83g/t gold**
- Southwestern traverse (holes also twinned)
 - Hole 2283: 5m to 14m (downhole) for **9m at 2.8g/t gold**. and 17m to 20m (downhole) for **3m at 8.53 g/t gold**
 - Hole 2282: 16m to 40m (downhole) for **24m at 6.8g/t gold**.

¹ The twinning of the holes on both lines was to determine the dip of the gold-bearing shear. The gold analyses were by acid digest of a pulverised 30 gm sample, read by ICP.MS. The averages are arithmetic averages with no cutting of elevated values. Further, RAB drilling is an open hole system with possibilities for sample loss and contamination. The results are to be considered indicative only

The analytical results from two further traverses of close spaced drilling testing of the DeGrussa gold-in-soil geochemical anomaly at 160m and 360m to the southwest are awaited.

To date, no quartz veining has been observed in the mineralised intersections, suggesting the prospects for a mineralised shear lode system.

Follow-up RAB reconnaissance drilling of the DeGrussa prospect was recommenced in early July extending the drilling grid up to 700m southwest of the discovery hole on 100m traverse lines of inclined, overlapping holes.

2.3 Native Title

There are three separate, non-conflicting Native Title areas over the Doolgunna Project area. Two of the areas are applications, and for these areas, heritage clearances are routinely carried out by arrangement with the Yamatji Land and Sea Council and the traditional owners.

The NWN peoples have been granted Native Title that extends over the western sector of the Doolgunna Project. To date no heritage surveys have been carried out in this area.

During the Quarter, Sandfire was advised that the Jidi Jidi Aboriginal Corporation (acting for the NWN peoples) were proposing to execute the Heritage Agreement attached to the Indigenous Land Use Agreement. Sandfire believes this will facilitate a more harmonious relationship and advance our exploration programs.

3. YANNARIE PROJECT: Western Australia (Sandfire 100%)

No field work was conducted in the past quarter. Planning is underway for an Induced Polarisation (IP) survey to start in the September quarter, over the lead and zinc anomalies. Consequent to that survey, a Reverse Circulation (RC) drilling program is planned to test any targets identified by the survey.

4. URANDY PROJECT: Western Australia (Sandfire 100%)

A program of soil geochemistry for the base metal (lead and zinc) and gold anomalous areas is planned for early in the September Quarter.

5. SANDFIRE PROJECT: Western Australia (Sandfire 100%)

No work was carried out during the Quarter.

**JOHN EVANS
TECHNICAL DIRECTOR**

21 July 2008

The information in this report that relates to Exploration Results is based on information compiled by John Evans who is a Fellow of the Australasian Institute of Mining and Metallurgy. John Evans has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking 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. John Evans consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

SCHEDULE OF MINING TENEMENTS – 30 JUNE 2008

Project And Tenement	Notes	Area (Gaticule Blocks)	Date Of Grant
BORROLOOLA			
MLN624		16.18ha	4/8/1971
EL10121		5	5/9/2002
EL24349		367	10/4/2005
EL24373		45	10/4/2005
EL24374		79	10/4/2005
EL24401		413	3/6/2005
EL24402		433	30/6/2005
EL24664		139	21/12/2005
EL24700		310	21/12/2005
EL24714		18	1/12/2005
EL24778		143	24/7/2006
EL24942		161	22/8/2006
EL24943		146	1/8/2006
EL24946		70	18/4/2006
EL24996		39	14/8/2006
EL24997		106	14/8/2006
EL25070		488	14/8/2006
EL25312		48	31/5/2007
EL25328		37	5/3/2007
EL25462		159	1/8/2007
EL25501		37	Application
EL25590		38	12/7/2007
EL25591		11	12/7/2007
EL25592		23	12/7/2007
EL25647		16	1/8/2007
EL26298		29	5/3/2008
EL26299		52	Application
EL26361		30	20/4/08
EL26480		3	Application
EL26481		4	Application
EL26481		11	Application
EL26486		10	Application
EL26555		314	Application
EL26587		24	Application
EL26599		319	Application
EL26637		47	Application
DOOLGUNNA			
E52/1697		23	22/6/2005
E52/1698		28	1/8/2005
E52/1699		54	1/8/2005
E52/1715		54	22/6/2005
P52/1123		200	Application
E52/2208		1	Application
E52/2209		1	Application
GLEN ROSS			
E52/1840		70	Application
E52/1841		70	Application
E52/1842		66	Application
E52/1843		68	Application
E52/1844		70	Application
E52/1845		68	Application

SCHEDULE OF MINING TENEMENTS – 30 JUNE 2008

Project And Tenement	Notes	Area (Graticule Blocks)	Date Of Grant
MT ANDERSON			
E04/1828		140	Application
E04/1829		190	Application
MT BOGGOLA			
E08/1433	1	68	11/10/2005
E08/1460	1	35	14/10/2004
E52/1736	1	66	11/10/2005
SANDFIRE			
E04/1344		35	20/10/2003
E04/1425		24	10/1/2005
E04/1449		35	13/4/2005
E04/1451		34	13/4/2005
TANGADEE			
E52/1794		70	Application
E52/1795		70	Application
E52/1796		70	Application
E52/1797		70	Application
E52/1798		49	Application
E52/1799		40	Application
E52/1800		70	Application
E52/1801		70	Application
URANDY			
E08/1462		70	26/7/2005
E08/1463		70	26/7/2005
YANNARIE			
E08/1374		70	1/8/2005
E08/1409	1	26	24/5/2004
E09/1111		70	22/6/2005
E09/1510		12	Application

Note 1: Tenements in process of being transferred to Sandfire

FIG. 1

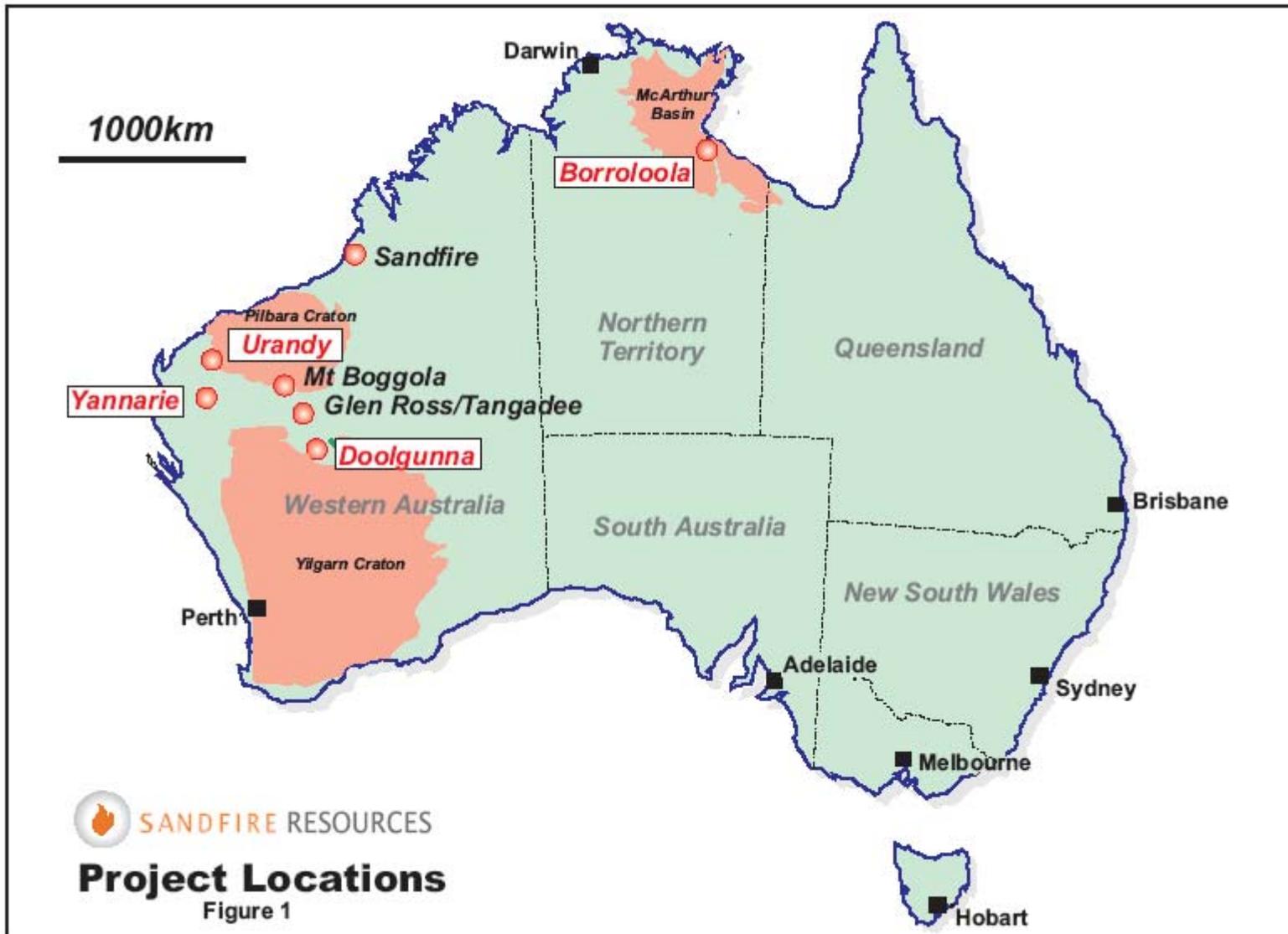


FIG 2

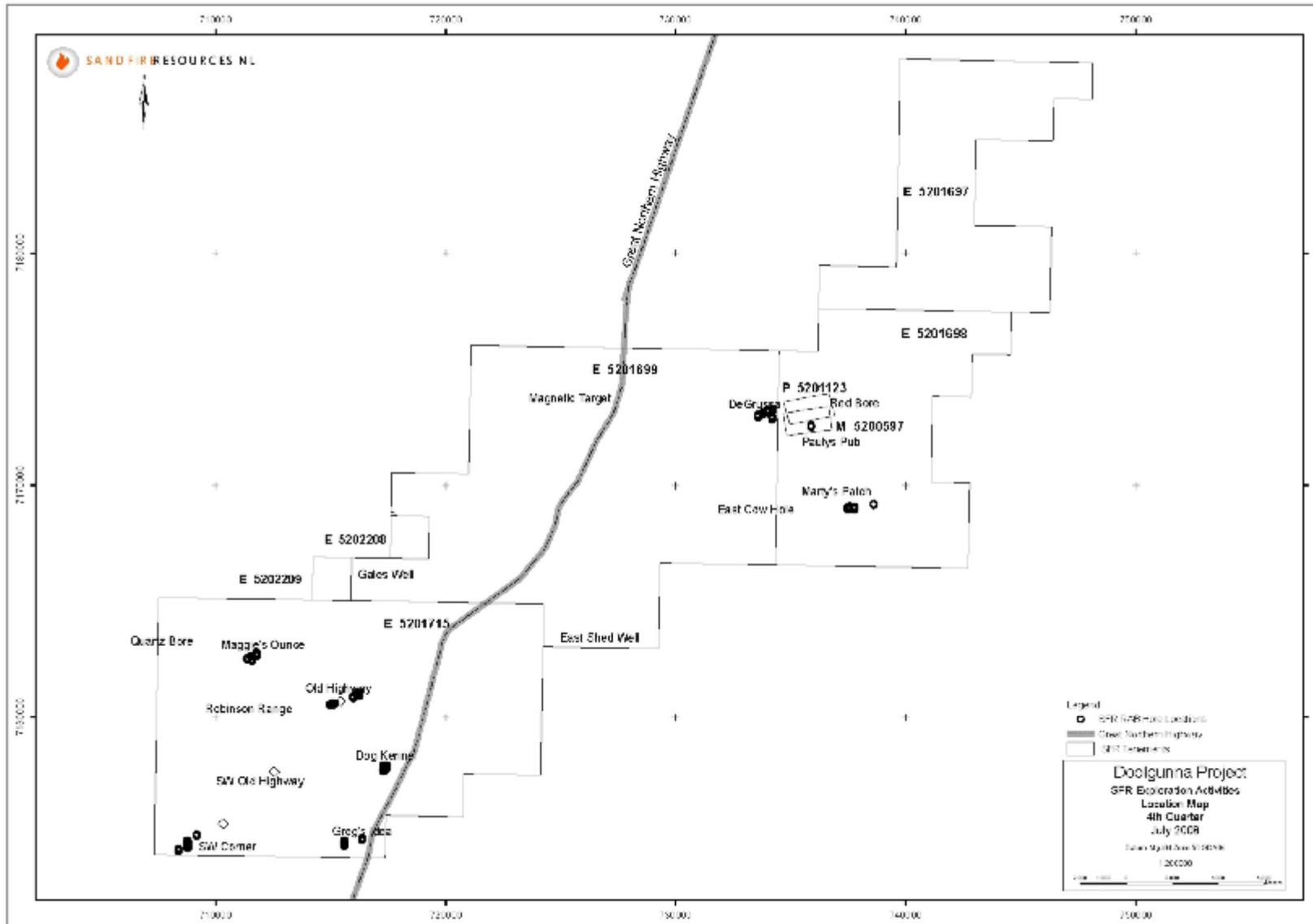




FIG 3

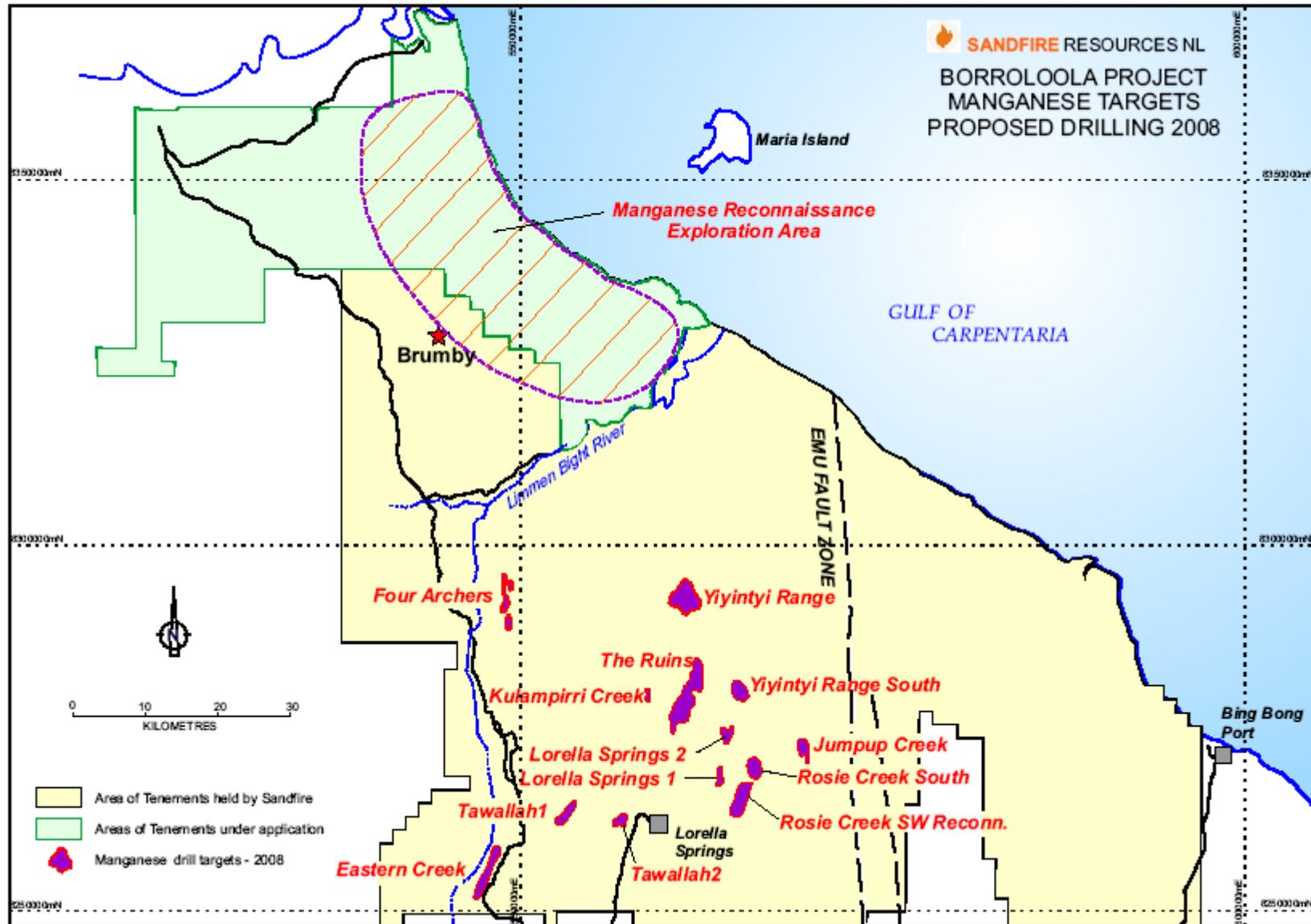




FIG 4

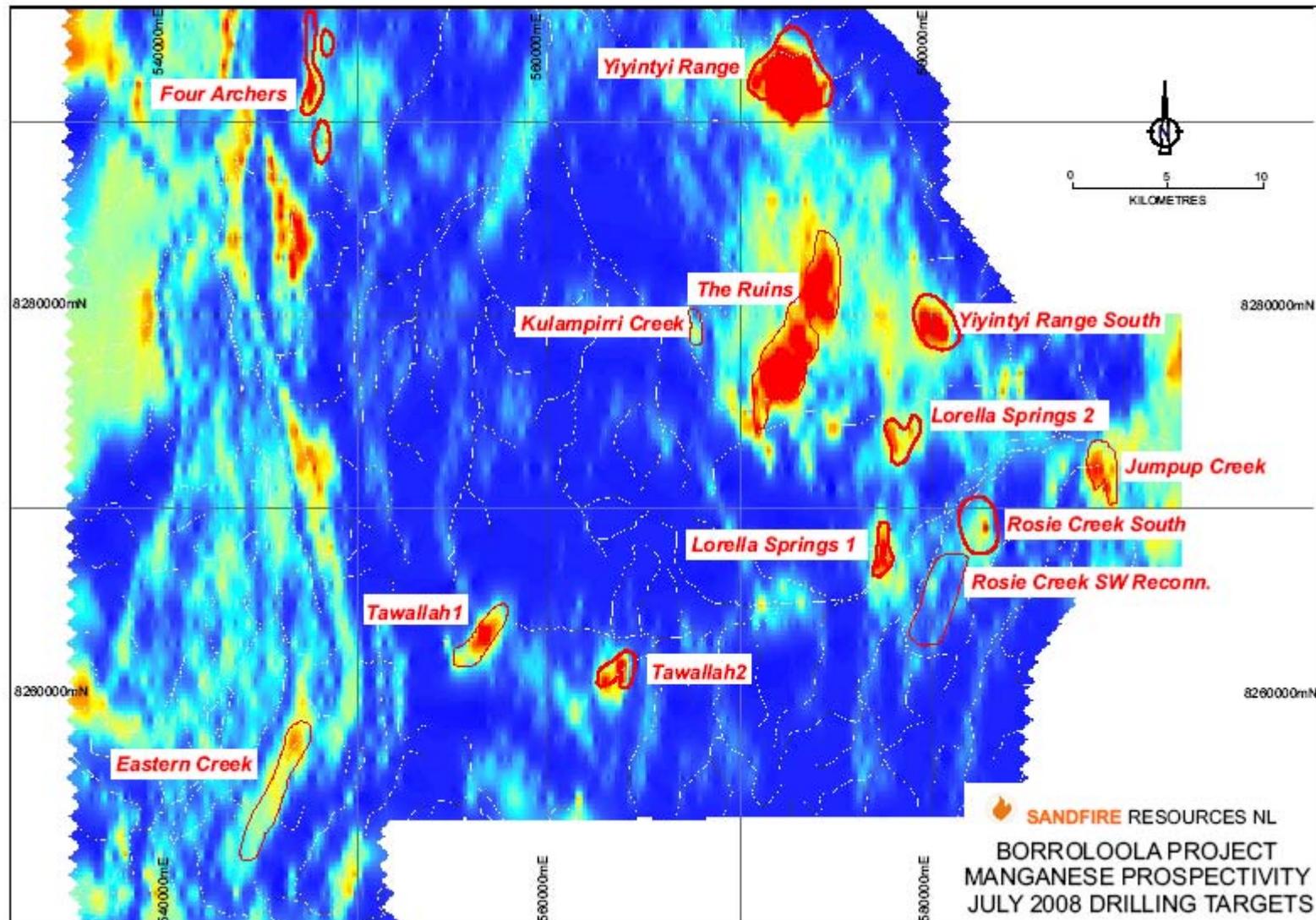


FIG. 5

