

ABN 23 008 677 852 ASX: PDZ Level 19 St Martins Tower - 44 St Georges Terrace Perth WA 6000 GPO Box 2519 Perth WA 6001 t +618 9225 5755 • f +618 9225 4599 • w prairiedownsmetals.com.au

# ASX RELEASE

16<sup>th</sup> April 2009

# **Quarterly Report for the Period Ended 31 March 2009**

#### HIGHLIGHTS

- The Company continues to systematically progress the Prairie Downs Project ("the Project") by conducting campaign style exploration aimed at consolidating and developing the Company's database to support the future progression of a bankable feasibility study in relation to the identified resource.
- The Company commissioned a regional review of the entire Prairie Downs tenement package which has identified nine high priority targets for further exploration. These targets comprise potential channel iron ore, gold, uranium, and further main lode style base metal mineralisation.
- A number of joint venture opportunities, including commodity specific exploration initiatives, are currently being explored by the Company.
- The Company is in a strong financial position with significant cash reserves and no debt. New investment opportunities designed to deliver long-term growth to shareholders continue to be evaluated.

# PRAIRIE DOWNS BASE METAL PROJECT - TARGET GENERATION

The geological, geophysical, geochemical and other remotely sensed data collected to date across the entire Prairie Downs metallogenic province, confirm the Company's tenements are highly prospective for a range of commodities. In addition to the currently defined resource the Company has previously identified zinc, lead, silver, copper and vanadium targets further along strike including the "Costean Seven" and "Kerr's Find" prospects. To better understand the complex geology and generate further exploration targets the Company commissioned Southern Geoscience Consultants Pty Ltd, to conduct an extensive evaluation of the high quality and comprehensive data available. This review has significantly advanced the Company's exploration model. Fifty-one exploration targets have been generated of which nine are considered to be very high priority.

Mineralisation styles identified as exploration targets are summarised below:

- "Main Lode" style zinc mineralisation, i.e. Prairie Downs Fault hosted, or at least spatially related, zinc mineralisation. Mineralisation appears to be related to a large intrusive body to the east of the Main Lode;
- A series of "Intrusion related" porphyry style targets;
- Channel Iron deposits;
- Archaean gold hosted targets, possibly similar to Independence Groups nearby Karalwinda Project;
- Uranium deposits, either as sediment hosted deposits in modern drainage, sediment hosted deposits in the basal Fortescue, or structurally controlled deposits in the granites; and

• Other less advanced targets include Komatiite hosted nickel deposits and VHMS style Cu-Zn mineralisation in the Fortescue Group, with plausibly associated Au mineralisation.

High priority targets are identified in Figure 1 below. Summary descriptions of these targets follow.

Figure 1 – Summary Target Locations and Geology



# Main-Lode Style Zinc Mineralisation Targets

Eleven empirical targets for zinc/lead/silver vein mineralisation have been proposed. The targets are based on spatial association with the Prairie Downs Fault, the distribution of mapped alteration (primarily potassic and chloritic), conductivity and, fresh outcropping Zn and Pb sulphide mineralisation. The most advanced of these are depth and strike extensions to the known mineralisation.

# Intrusion Related Porphyry Style Targets

Eight targets are defined, broadly on the concept of a "porphyry copper" model centred around the intrusives identified in airborne geophysics. The targets are necessarily very large at this stage, reflecting a lack of information on the intrusive and the alteration systems, if any, developed around them. The various deposit types formed could include:

- Porphyry Cu-Au deposits formed in the core of the intrusive body, or as an apothysis of material coming off the main body;
- Skarn style deposits, formed either as endoskarns within the main intrusive or as exoskarns in contact with reactive country rock or a combination thereof; and
- Pb-Zn or Ag-Au vein hosted deposits in the zoned alteration halo around the intrusive. The Main Lode Zinc mineralisation probably represents sphalerite veins developed in the alteration halo around the inferred proximal intrusive, focussed by the pre-existing Prairie Downs Fault.

# **Channel Iron Deposits**

The Company has delineated a channel iron deposit prospect defined by ground-truthing of radiometrically and magnetically defined paleochannels covering approximately 223 hectares. Channel iron deposits are an important source of iron ore and although typically low-grade, their relative lack of consolidation in most cases renders them amenable to bulk mining with little or no need for drilling and blasting. The key economic criteria for channel iron deposits are, firstly tonnage and location relative to infrastructure, as available in Newman. Notable type deposits in the Pilbara area include Robe River and Pannawonnica.

A large buried, weakly magnetic palaeochannel has been identified, marginal to a thin lateritic duricrust on granite (with an intense Th anomaly), interpreted to be a buried channel iron deposit. The palaeochannel is covered by a modern sheetwash surface, and modern drainage is developed almost at right angles to the palaeodrainage. The interpretation suggests the magnetic material, interpreted to be the channel iron deposit, is developed at or below the buried laterite surface.

#### **Gold Targets**

One gold target is outlined, based on anomalous Au results in PDD01, drilled into the Prairie Downs Fault ("PDF"). Whilst the gold assays are hosted in rocks in the PDF, they are significantly higher than all other results reported for the PDF to date. The occurrence is geologically similar to the nearby Francopan Prospect reported by the Independence Group.

#### **Uranium Targets**

Fourteen uranium mineralisation targets are defined, based on uranium anomalism in airborne radiometric data, and high U/Th ratios in the same dataset. The targets are grouped into three broad styles:

- Anomalies hosted in basal sediments in the Fortescue (possible "Witwatersrand' style);
- Anomalies hosted in old alluvial terraces marginal to the modern drainage; and
- Anomalies apparently hosted in fractures in granites in the Sylvania Dome.

# **EXPLORATION INTITIATIVES AND STRATEGY**

Responding to current economic conditions the Company has scaled back expenditure, re-evaluated previous exploration and feasibility work and is now well placed to position the Project for further development and explore additional opportunities to add shareholder value. The Company envisages systematically progressing its namesake project by conducting campaign style on-ground exploration and pursuing commodity specific joint ventures.

Nine targets have been selected as priority opportunities, flagged for more detailed on ground work. Exploration evaluation programmes are being designed and budgeted to maximise added value in a cost effective manner. Programmes will likely comprise:

- Detailed cross sectional and long sectional modelling of the identified mineralising systems
- Detailed on ground mapping
- Soil sampling
- Rock chip sampling
- Geophysics
- Spectral alteration mapping (airborne and surface)
- AC/RAB drilling

#### **OTHER PROJECTS**

Active negotiations continue with respect to joint venture agreements for the Company's Coppermine Bore, Longreach Well and Perenjori Projects.

#### CORPORATE

The Company's cash balance as at 31 March 20099 was \$4.308 million. During the quarter a focus on cost efficiencies and a complete review of expenditure resulted in a reduction of staff and contractors at site and in head office. This, combined with modifications to the exploration program will result in an ongoing reduction in operating expenses which will be recognized in future quarterly reports. Estimated expenditure in relation to exploration and evaluation activities for the June quarter has been reduced to \$200,000. The Company is committed to retaining a strong financial position in the current economic climate.

On 4 February 2009 Prairie announced the appointment of Mr John Welborn as Managing Director of the Company. Mr Welborn is a chartered accountant with extensive experience in corporate finance, company administration and investment banking.

As at 31 March 2009 the Company has 2,473 shareholders and 72,890,598 ordinary fully paid shares on issue with the top 20 shareholders holding 36.19% of the total issued capital.

The Company continues to explore potential joint ventures and new investment opportunities designed to deliver long-term growth to shareholders.

For further information contact: John Welborn Managing Director Prairie Downs Metals Limited Tel: (+6 18) 9225 5755 www.prairiedownsmetals.com.au

Information in this report that relates to Exploration Results or Mineral Resources is based on information compiled by Mr Luke Kerr who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Kerr has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Kerr consents to the inclusion in this report of the statements based on their information in the form and context in which it appears.

# PRAIRIE DOWNS PROJECT OVERVIEW

Currently the Project hosts a total global inferred and indicated resource of 4.7 million tonnes at a grade of 6.3% zinc, 18g/t silver and 1.8% lead at a nominal lower cut off grade of 1% zinc (refer to Table 1.0 attached). This resource contains 295,000 tonnes of zinc, 2.6 million ounces of silver and 83,000 tonnes of lead. Included is a high grade indicated and inferred resource of 1.6 million tonnes at a grade of 12.3% zinc, 36g/t silver and 3.7% lead.

The Project is located approximately 60 kilometres southwest of Newman in the Eastern Pilbara region of Western Australia and is therefore proximal to significant infrastructure including rail, road and gas pipeline. Furthermore, Newman is a hub for mining activity providing expertise and supplies to many significant operations.

The Prairie Downs Project is surrounded by actively explored prospects held by, amongst others, Rio Tinto Ltd, BHP Billiton Ltd, Fortesque Metals Group Ltd, Ausquest Ltd,  $U_3O_8$  Ltd, Warwick Resources Ltd, Independence Group NL and Dynasty Metals Australia Ltd. Exploration activity of these companies is focused upon iron ore, gold, uranium and base metals.

#### Prairie Downs Project Location Plan



# Table 1.0

# **RESOURCE STATEMENT**

The resource statement provides the classification of the Global Resources including the Indicated Resource and Inferred Resource for the respective lodes.

Lode	Category	Tonnes	Zinc (%)	Lead (%)	Silver (g/t)	Zinc Metal (tonnes)	Lead Metal (tonnes)	Silver Metal (Ounces)
Main	Local Indicated	1,692,844	7.8	1.9	23.8	132,086	32,164	1,295,725
Main	Local Inferred	853,838	6.9	1.9	21.4	58,915	16,223	587,463
Main	Local Total	2,546,682	7.5	1.9	23.0	191,001	48,387	1,883,188
Main	High Grade Indicated	884,082	13.3	3.3	34.8	117,193	29,526	989,823
Main	High Grade Inferred	351,024	11.3	3.2	46.0	39,666	11,233	519,141
Main	High Grade Total	1,235,106	12.7	3.3	38.0	156,858	40,758	1,508,964
Zed	Local Indicated	477,352	6.2	2.6	18.1	29,644	12,626	277,809
Zed	Local Inferred	262,922	5.9	2.8	15.0	15,512	7,362	126,797
Zed	Local Total	740,274	6.1	2.7	17.0	45,157	19,987	404,606
Zed	High Grade Indicated	144,562	10.1	6.0	35.0	14,601	8,674	162,672
Zed	High Grade Inferred	178,781	10.0	4.7	35.0	17,878	8,787	201,178
Zed	High Grade Total	323,343	10.1	5.4	35.0	32,479	17,461	363,850
Gabbro	Local Indicated	87,639	14.4	2.9	14.0	12,620	2,542	39,447
Gabbro	Local Inferred	1,280,463	3.6	1.0	7.4	46,208	12,508	303,640
Gabbro	Local Total	1,368,102	4.3	1.1	7.8	58,828	15,049	343,087
Gabbro	High Grade Indicated	87,639	14.4	2.9	14.0	12,620	2,542	39,447
Gabbro	High Grade Inferred	-	-	-	-	-	-	-
Gabbro	High Grade Total	87,639	14.4	2.9	14.0	12,620	2,542	39,447
Total Global Total Global High Grade		4,655,058	6.3	1.8	18.0	294,986	83,423	2,630,881
		1,646,088	12.3	3.7	36.0	201,957	60,761	1,912,262