

Developing a global iron ore business

21<sup>st</sup> July 2008

#### **ASX/MEDIA RELEASE**

# SUNDANCE ANNOUNCES 1.2 BILLION TONNE ITABIRITE INFERRED RESOURCE, UPGRADED ITABIRITE EXPLORATION TARGET AND INCREASED DSO HEMATITE INFERRED RESOURCE AT MBARGA

### Initial Itabirite Inferred Resource at Mbarga

Sundance Resources Limited (ASX: **SDL** – "Sundance") is pleased to announce an initial JORC-Code compliant Inferred Mineral Resource of **1.2 billion tonnes of Itabirite hematite** (average grade of 38% Fe) at the Mbarga Deposit within its 90%-owned Mbalam Iron Ore Project in Cameroon, West Africa.

This Inferred Resource is at the upper end of the previously announced target for the Mbarga Deposit. Ongoing evaluation has enabled the Company to upgrade its Itabirite **Exploration Target to between 1.6 and 1.8 billion tonnes** for the Mbarga Deposit at an average grade of 38 - 39% Fe. The Itabirite Exploration Target for the broader Exploration Permit No. 92 area remains at between 2.0 and 2.5 billion tonnes.

The Inferred Resource is based on drilling completed over an area of 3km by 3km on the Mbarga Deposit to an average depth of 350 metres. This includes 106 reverse circulation drill holes and 19 diamond drill holes for a total of ~24,000 metres. The upgraded Exploration Target is based on modelling of assay data and site based hand-held XRF data from deeper and more broadly spaced drilling to the west of the main deposit.

The Itabirite mineralisation is open at depth with enrichment extending to drill depths of over 500 metres. Infill drilling is ongoing with the expectation that the Inferred Resource will be progressively increased towards the Exploration Target. The Itabirite Inferred Mineral Resource inventory at Mbarga is set out below:

| Deposit | Million Tonnes | Fe (%) | SiO₂(%) | A1 <sub>2</sub> O <sub>3</sub> (%) | P (%) | LOI (%) |
|---------|----------------|--------|---------|------------------------------------|-------|---------|
| Mbarga  | 1,190          | 38     | 44      | 0.6                                | 0.04  | 0.3     |
|         |                |        |         |                                    |       |         |

Note: Classification of resources is based on, and meets, the JORC Code (2004) standards of resource classification. Resources have been classified as Inferred based on drilling density of predominantly 400m along strike and 200m across strike of mineralisation. Resource estimation has been carried out using IDS methodology using an assigned density value of 3.35t/m3 and a cut-off value of 33% Fe

### Increased DSO Hematite Inferred Resource

The Company is also pleased to announce an increased JORC-Code compliant Inferred Mineral Resource of DSO quality hematite of **200 million tonnes at an average grade of 60.3% Fe**. The updated DSO Inferred Mineral Resource inventory for the Mbarga and Mbarga South Deposits is summarised below:

| Deposit         | Million Tonnes | Fe (%) | SiO <sub>2</sub> (%) | A1 <sub>2</sub> O <sub>3</sub> (%) | P (%) | LOI (%) |
|-----------------|----------------|--------|----------------------|------------------------------------|-------|---------|
| Mbarga          | 173.7          | 60.4   | 7.5                  | 2.5                                | 0.06  | 1.8     |
| Mbarga<br>South | 27.2           | 59.4   | 7.7                  | 3.5                                | 0.06  | 3.2     |
| TOTAL           | 200.9          | 60.3   | 7.6                  | 2.7                                | 0.06  | 2.0     |

Note: Classification of resources is based on, and meets, the JORC Code (2004) standards of resource classification. Resources have been classified as Inferred based on a drilling density of 200m along strike and 100m across strike of mineralisation. Resource estimation has been carried out using Ordinary Kriging methodology using an assigned density value of 4.0t/m3 and a cut-off value of 50% Fe

Recent drilling has also confirmed the presence of additional high Fe grade hematite mineralisation at depth along the western flank of the Mbarga Deposit. Visual inspection, site based hand-held XRF sample analysis and limited assays of drill core from this area indicates the presence of significant intersections of massive hematite. This is either supergene material similar to the existing DSO resource or hypogene material similar to that identified in previous drilling funded by the United Nations Development Program ("UNDP") at the Metzimevin Prospect.

Modelling supports an **additional new Exploration Target of between 40 and 60 million tonnes of hematite grading 55-60% Fe along the western flank of Mbarga**. Significant intersections reported from drilling in this area include 16m at 64% Fe from 153m; 20m at 58% Fe from 204m; 53m at 58% Fe from 279m; and 24m at 60% Fe from 177m. This area represents a priority exploration focus for the Company given its potential to increase its JORC-Code compliant resource inventory at Mbarga.

Drilling is also scheduled to commence this Quarter at the Metzimevin Prospect where the UNDP previously reported a non JORC-Code compliant tonnage estimate of up to 35 million tonnes of +60% Fe hematite within outcrop extending over a 600 metre strike length.

### Positive Results from Metallurgical Testwork on Mbarga Itabirite

Sundance is also pleased to report that latest results received from ongoing metallurgical testwork have confirmed the beneficiation potential of the Mbarga Itabirite hematite. The most recent tests have been completed on a composite of drill core samples sourced from 9 drill holes at Mbarga with sample depths ranging from 37m to 315m. Ore grades from these samples averaged ~39% Fe.

Latest testwork has produced **+66% Fe concentrate with around 44% weight recovery and very low phosphorus and alumina content**. Testwork is continuing to optimise the balance between concentrate grade and recovery.

## CEO Comments

Commenting on today's announcement, Sundance's CEO, Don Lewis, said: "The definition of a JORC-Code compliant Inferred Resource of 1.2 billion tonnes of Itabirite and 200 million tonnes of DSO quality hematite, in just over 12 months of drilling, represents an outstanding achievement by our exploration team. The Itabirite resource, which is at the upper end of our previously announced target range, confirms our view that the Mbarga Deposit is a world-scale asset which can underpin a long-term, international iron ore business."

"The Mbarga deposit is clearly a very large, enriched ore body. Our upgraded Exploration Target of between 1.6 and 1.8 billion tonnes of enriched Itabirite solely from the Mbarga Deposit underpins a large part of our overall Itabirite Exploration Target of between 2.0 and 2.5 billion tonnes within the Mbalam Project area," Mr Lewis continued.

"Our metallurgical test work to date also indicates that the Itabirite mineralisation at Mbarga may be upgraded to produce a high grade hematite concentrate using conventional beneficiation technology. This testwork underpins the Company's business model for staged development of DSO/Itabirite mining operations producing 35Mtpa of high-grade product over a 20 year plus mine life."

"Exploration is continuing to build confidence in the start-up DSO resource base of the Mbalam Project, with the DSO Inferred Mineral Resource now increased to 200 million tonnes. The additional exploration targets identified at Mbarga and other exploration prospects, including Metzimevin, Njweng and Meridional, support significant potential to increase the tonnage of DSO and Itabirite mineralisation on EP92 to support a worldscale iron ore operation," he added.

Further details of recent progress at the Mbalam Project will be provided in the Company's June Quarterly Report, which is scheduled to be released shortly.

#### ENDS

Released by:

**Nicholas Read** 

Telephone: (+61-8) 9388-1474 / +61-419 929 046

**Read Corporate** 

On behalf of:

Don Lewis, Managing Director

(+61-8) 9220-2300 /+61-417 996 005

Web: <u>www.sundanceresources.com.au</u>

### About Sundance Resources Limited

Sundance Resources Ltd is an Australian exploration company focused on mining interests in the Republic of Cameroon, on the central west coast of Africa. Sundance has commenced feasibility study on its 90%-owned **Mbalam Iron Ore Project** in Cameroon as the basis for developing a global iron ore business.

Central West Africa is considered to have the potential to develop into a significant new iron province, underpinned by the Mbalam Iron Ore Project and the nearby Belinga Project in Gabon, under development by the China National Machinery and Equipment Import and Export Corporation.

WA-based Sundance has been listed on the Australian Stock Exchange since 1993 and is also traded on overthe-counter markets in Frankfurt, Berlin, Hamburg, Stuttgart and Munich.

#### **Competent Persons Statement**

The information in this release that relates to Exploration Results is based on information compiled by Mr Robin Longley, a Member of the Australian Institute of Geoscientists, and Mr Lynn Widenbar, a member of the Australasian Institute of Mining and Metallurgy.

Mr Longley is a consultant to the Company and has sufficient experience which is relevant to the style of mineralisation and type of Deposit 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". Mr Longley consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Mr Widenbar is a consultant to the Company and has sufficient experience which is relevant to the style of mineralisation and type of Deposit 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". Mr Widenbar consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The estimated quantity and grade of near-surface DSO quality supergene mineralisation and underlying Itabirite-style mineralisation has been restricted to the area currently covered by drilling on a 400m x 200m pattern at Mbarga, with partial infill to 200m x 100m. This is represented by an area approximately 3km (east-west) x 3km (north-south) on the Mbarga Deposit and by an area approximately 1.5km (east-west) x 1.0km (north-south) on the Mbarga Deposit and by an area approximately 1.5km (east-west) x 1.0km (north-south) on the Mbarga South Deposit. Grade interpolation has been extrapolated using Ordinary Kriging on composited sample results and a nominal 50% Fe cutoff value for DSO and Inverse Distance Squared methodology and 33% cutoff value for Itabirite. A digital terrain surface (based on highly accurate topographic data), has been used to limit extrapolation of the mineralisation to the topographic hill at Mbarga. An internal waste zone (schist) cross-cutting the supergene and Itabirite zones and surficial cover has been modeled and removed from the quantity estimated as DSO quality and Itabirite mineralisation. Densities of 4.0t/m3 and 3.35t/m3 have been applied for evaluation of the DSO and Itabirite mineralisation respectively.

While the Company is optimistic that it will report additional resources in the future, any discussion in relation to Exploration Targets, over and above the stated Inferred Resources of is only conceptual in nature. There has been insufficient exploration to define a Mineral Resource over and above the Inferred Resource and it is uncertain if further exploration will result in determination of a Mineral Resource.

#### Forward-Looking Statement

Certain statements made during or in connection with this communication, including, without limitation, those concerning the economic outlook for the iron ore mining industry, expectations regarding iron ore prices, production, cash costs and other operating results, growth prospects and the outlook of SDL's operations including the likely commencement of commercial operations of the Mbalam Project and its liquidity and capital resources and expenditure, contain or comprise certain forward-looking statements regarding SDL's exploration operations, economic performance and financial condition. Although SDL believes that the expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in iron ore prices and exchange rates and business and operational risk management. For a discussion of such factors, refer to SDL's most recent events or circumstances after today's date or to reflect the occurrence of unanticipated events.



#### FIGURE 1: MAP OF EP92 SHOWING LOCATION OF PRINCIPAL DEPOSITS

#### Sundance Resources Limited Mbalam Project - Mbarga & Mbarga South Deposits

## **IDENTIFIED MINERAL RESOURCE – PARAMETERS**

| Item   | Details                                   | Comments  |  |
|--|---|---|--|
| Surveying  | Differential GPS                          | Established survey control by licensed surveyor.  |  |
| Drilling Techniques                                    | RC and Diamond                            | 51/4" face sampling RC; NQ/HQ diamond.  |  |
| Downhole Surveying                                     | North Seeking Gyroscope                   | Surtron being mobilised to site.  |  |
| Geological Logging                                     | QC Logging Procedures                     | Field Marshall/acQuire logging system.  |  |
| Geotechnical/Structural                                | Diamond Core Orientated                   | Geotechnical/structure logging - Field<br>Marshall/acQuire logging system.  |  |
| Sampling   | RC Sub-Sample and Half Core               | Multi-tiered splitter; diamond sawing.  |  |
| Assaying   | Niton XRF and XRF                         | Niton on site; commercial lab in Australia.   |  |
| Assay QA/QC  | Duplicates, Lab Standards                 | Site specific standards being developed; routine duplicates and lab standards monitored in acQuire QA/QC reports.   |  |
| Data Spacing   | 200m x 400m; 2m Sampling                  | Nominal initial drill hole spacing; infilling proposed.   |  |
| Density  | Site Measurements and Lab<br>Confirmation | Conventional weighed suspended in air and water; pycnometer; metallurgical test work confirmation of densities; Supergene 3.35g/cm <sup>3</sup> and Itabirite 4.00g/cm <sup>3</sup> . |  |
| Database Integrity                                     | acQuire Drill Hole Database               | Fully validated drill hole database; independently audited.   |  |
| Verification of Sampling and<br>Assaying               | One (1) twinned RC/DD hole.               | Further twinned holes planned.  |  |
| Auditing   | Drilling, Assaying and Database           | Independent technical auditors; monitored by internal auditor.  |  |
| Geological Interpretation                              | Surface Mapping and Drill Holes           | Surface mapping used for initial geological framework, modified by drill hole data.   |  |
| Geological Modelling                                   | 3D Surfaces (DTM) and Wireframes          | Geological domains based on initial geological mapping and interpretation.  |  |
| Block Size 25m (X) by 25m (Y) by 5m (Z)                |   | Sub-celled to honour DTM and wireframe shapes.  |  |
| Interpolation Method Ordinary Kriging/IDS <sup>2</sup> |   | Supergene Domain - OK and validated by IDS <sup>2</sup> estimate. Itabirite Domain - IDS <sup>2</sup>   |  |
| Search Parameters                                      | Variable by Domain                        | Search radii and orientation variable, domain and spatially dependent.  |  |

| ltem                       | Details  | Comments  |
|----------------------------|--|---|
| Variables Interpolated     | Fe, SiO <sub>2</sub> , Al <sub>2</sub> O <sub>3</sub> , P and LOI  | Minor and trace elements in future modelling runs.  |
| Nominal Drill Hole Spacing | 400m (N) by 100m (E)   | Partial infill to 200m (N) x 100m (E).  |
| Classification             | Supergene/DSO – Fully constrained as<br>material type using wireframe<br>Itabirite – Number of Samples > 10 or<br>Number of Holes >1; Within 'Main<br>Itabirite Domain'; Above 500m RL and<br>Excludes Hypergene Mineralisation. | Assessment criteria in addition to sampling, data and estimation criteria as above.   |
| Metallurgical Data         | Initial test work on core from geographically dispersed holes.   | Results of average feed grade support resource<br>grades. Flotation tests provide viable<br>concentration grade.  |
| Mining Factors             | Scoping pit optimisation and scheduling scenarios.   | Revenue and cost factors from Scoping Study;<br>mining parameters for large pit.  |
| Cut-Off Parameters         | DSO – 50% iron (Fe).<br>Itabirite – 33% iron (Fe).   | DSO – maintains 60% Fe head grade.<br>Itabirite – above break-even cut-off grade.<br>Supports average feed grade for metallurgical<br>test work and average resource grade. |

