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ASX ANNOUNCEMENT

MAIDEN IRON ORE MINERAL RESOURCE ESTIMATE FOR MCPHEE CREEK MAIN RANGE DEPOSIT

- Maiden Inferred Mineral Resource for Giralia's 100% owned McPhee Creek main range deposit, based on 71 RC holes completed to date, since discovery in September 2009;
 - Overall Resource 52.1 million tonnes @ 56.0%Fe (61.7% CaFe), at 50% Fe cut-off
 - Includes 33.8 million tonnes @ 57.3%Fe (62.9% CaFe), at 55% Fe cut-off
- The deposit remains open in most directions and shallow dips indicate large tonnage potential along the range which is ~8 kilometres long and up to 1 kilometre wide.
- Conservative Exploration Target# established of 100 to 140 Mt @ 57 to 60% Fe for the western side of the range only.
- The resource is near-surface, and potentially within road haulage distance of Port Hedland.
- Scoping Study to evaluate development options.

The Directors of Giralia Resources NL ("Giralia") report the maiden Inferred Mineral Resource for the McPhee Creek main range iron ore discovery, located 220 kilometres south-east of Port Hedland, and 50 kilometres north of of BC Iron Limited/ FMG's Nullagine-Bonnie Creek channel iron deposits ("CID") in the Pilbara region of Western Australia.

The iron ore mineralisation on the main range at McPhee Creek appears to be a shallow dipping hematite rich zone within an Archaean age banded iron formation sequence. The main range is approximately 8 kilometres long, and up to 1 kilometre wide. Hematite mineralisation is up to 90 metres thick, and starts from surface in many holes.

Surface mapping indicates that mineralisation extends further east than the area currently drilled, and extends south into a synclinal keel where recent rock sampling has returned high iron grades. As the eastern most hole on most sections drilled is mineralised, this suggests that relatively flat lying mineralisation could extend considerably further than currently modelled in the Company's conservative initial **Exploration Target#** of **100 to 140 million tonnes** of hematite iron ore (57-60%Fe) for the main range deposit.

Giralia Resources - Mineral Resource Estimate - McPhee Creek Main Range Deposit as at 15 December 2009								
Deposit Cut-off Grade	Category	Tonnes (Mt)	Fe %	Р%	SiO ₂ %	$AI_2O_3\%$	LOI %	CaFe %
Main Range Total > 50 % Fe	Inferred	52.1	56.0	0.08	6.7	3.2	9.2	61.7
Main Range Total > 55 % Fe	Inferred	33.8	57.3	0.09	5.7	2.7	9.0	62.9

Note: The Mineral Resource was estimated within constraining wireframe solids based on a nominal lower cut-off grade of 50% Fe. The resource is quoted from blocks above the specified cut-off grade % Fe. Calcined Iron grade (CaFe) is a measure of iron content upon removal of volatiles (i.e. LOI). Differences may occur due to rounding.

The term "Exploration Target" should not be misunderstood or misconstrued as an estimate of Mineral Resources or Ore Reserves as defined by the JORC Code (2004), and therefore the terms have not been used in this context. Exploration targets are conceptual in nature, and it is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Ore Reserve.



Giralia's Chairman Graham Riley commented;

"Giralia's exploration team has made another significant discovery, with this first resource estimate at McPhee Creek delivered within only 3 months of the first drill hole into the target. Our Exploration Target for the western edge of the main range is 100 to 140 million tonnes, and a major resource drill out is being planned and permitted for early 2010, designed to rapidly grow the resource and to test the outstanding additional potential to the east on the remainder of the range. Giralia's total hematite and CID iron ore resource base is now over 180 million tonnes with drilling continuing to add tonnes."

Internationally recognised geological consultants CSA Global Pty Ltd (CSA) were commissioned by Giralia to complete the maiden resource estimate for the McPhee Creek main range deposit. Methodology, procedure and parameters used for the Mineral Resource estimate are detailed in the CSA summary report (Annexure 1). Delineation of this updated Mineral Resource is based on 71 reverse circulation ("RC") drill holes completed to date at McPhee Creek main range by Giralia in September to November 2009, which returned intersections including; **90 metres @ 58.6% Fe** from surface to end of hole, **50 metres @ 60.3%Fe**, **46 metres @ 60.2% Fe**, **56 metres @ 59.0%Fe**, and **80 metres @ 56.1%Fe**.

The Company will commence a study into development options at McPhee Creek, focused on road haulage to Port Hedland.

R M Joyce DIRECTOR

15 December 2009

The information in the report that relates to in-situ Mineral Resources is based on information compiled by Mr Grant Louw of CSA Global. Mr Grant Louw takes overall responsibility for the Report. He is a Member of the Australian Institute of Geoscientists and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code 2004 Edition). Mr Grant Louw consents to the inclusion of such information in this Report in the form and context in which it appears.

The information in this report that relates to Exploration Results is based on information compiled by R M Joyce, who is a Member of the Australasian Institute of Mining and Metallurgy and a full time employee of the Company. Mr Joyce 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'. Mr Joyce consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.





Fig 1: Location plan McPhee Creek tenements



Fig 2: McPhee Creek iron ore deposits, drill hole plan.



Fig 3: McPhee Creek main range Cross Section



Fig 4; Photo looking south along the southern end of the McPhee Creek main range.



About Giralia Resources NL

Giralia Resources NL ("ASX: GIR") is a well funded (~**\$65 million cash**) mineral exploration company based in Perth, Western Australia. Giralia's iron ore projects in Western Australia are the Company's major exploration and development focus:

Beebyn (100%) – **Hematite** (MidWest) – Adjoins Sinosteel Weld Range deposits. Initial Inferred Mineral Resource **7.2 million tonnes** @ **57.2% Fe**. Major upside at nearby Beebynganna Hills project, where 7 new zones of hematite have been discovered.

Western Creek (100%) – Hematite (15 km W of Newman) – Marra Mamba iron ore as direct extensions to BHP Silver Knight deposit. Inferred Mineral Resource 52.4 million tonnes @ 56.7% Fe. Deposit is near surface, with several zones open ended.

Earaheedy (100%) – **Hematite** (200 km S of Newman) –23 known hills with rock sample grades over 57% Fe, within 130 kilometres of iron formations on Giralia tenements, with shallow dips indicating large tonnage potential. Drilling; 20 metres @ 55.7% Fe, 8 metres @ 58.7% Fe, and 12 metres @ 57.3%Fe from 8 hills tested to date.

Anthiby Well (100%*) -CID (Pilbara) – Channel iron deposit (CID) mesas, drill intersections include 32 metres @ 55.1%Fe including 24 metres @ 56.0%, 22 metres @ 56.3%Fe, and 18 metres @ 56.2%Fe. Initial Inferred Mineral Resource 63.5 million tonnes @ 50.5% Fe, including 37.6 million tonnes @ 53.6% Fe (59.1%CaFe). * subject to production royalty

McPhee Creek (100%) – Hematite (Pilbara) – New hematite discovery 220km south east of Port Hedland. Drill intersections include 90 metres @ 58.6 % Fe, 46 metres @ 60.2% Fe. Initial Inferred Mineral Resource 52.1 million tonnes @ 56.0% Fe (61.7%CaFe). Small CID mesa nearby 5.17 million tonnes @ 53.6% Fe (60.4%CaFe).

Daltons (75%) - Hematite (Pilbara) – newly discovered zone of massive hematite outcrop, only 150 km south of Port Hedland, and 40km from FMG, BHP rail lines. Drilling **70m** @ **58.4%** Fe from surface, including **54m** @ **60.9%** Fe, **1.5%**Al₂O₃. Initial Inferred Mineral Resource **40.0 million tonnes** @ **57.3%** Fe (**62.3%CaFe**).

Yerecoin – **Magnetite** (150 km from Perth) – 1 km to railway. Initial drilling March 2009; **72 metres** *(a)* **32.4%Fe, 52.4 metres** *(a)* **31.6 %Fe.** Coarse magnetite; excellent DTR testwork. Scoping Study in progress. Exploration Target 200-250million tonnes *(a)* 30 to 35%Fe.

The Company also has significant other commodity interests, including the Lake Frome Joint Venture around the operating Beverley uranium mine in South Australia, and the 100% owned 170,000 ounce Snake Well gold project in Western Australia.

In addition to its strong cash balance, Giralia also holds significant stakes in several ASX listed companies (shown below), which are held largely as a result of the spin-off of independently managed and funded companies over the last 3 years. Giralia shareholders have benefited through priority IPO entitlements and in specie distributions, and ongoing exposure to upside from exploration success.

Company	ASX Code	Key Commodity	Giralia Stake
PacMag Metals Limited	PMH	copper	~10.4%
U3O8 Limited	UTO	uranium	~15%
Zinc Co Australia Limited	ZNC	zinc	~12%
Carpentaria Exploration Limited	CAP	NSW, Qld copper-gold	~10.4%
Hazelwood Resources Ltd	HAZ	nickel, tungsten	~3.3%

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MEMORANDUM

To:Julian GoldsworthyDate:December 14, 2009From:Grant LouwRe:McPhee Creek Mineral Resource estimate, Technical Summary.

Giralia Resources NL, McPhee Creek Project Mineral Resource Estimate.

CSA Global Pty Ltd (CSA) was engaged by Giralia Resources NL (Giralia) to complete a Mineral Resource estimate for iron mineralisation in the main range deposit within the 100% Giralia owned McPhee Creek iron ore project. The modelled deposit appears to be a shallow dipping hematite rich zone within an Archaean age banded iron formation sequence. The Mineral Resource estimate is based on a 71 hole Reverse Circulation (RC) drilling program completed in December 2009.

The Mineral Resource estimate for the modelled mineralised zone in the main range deposit is classified as Inferred. This is based on confidence in the geological interpretation and continuity from the results of the drilling campaign. The results of the Mineral Resource estimate for the McPhee Creek main range deposit are tabulated in Table 1.

Giralia Resources - Mineral Resource Estimate - McPhee Creek Main Range Deposit as at 15 December									
2005									
Deposit Cut-off Grade	Category	Tonnes (Mt)	Fe %	Р%	SiO ₂ %	Al ₂ O ₃ %	LOI %	CaFe %	
Main Range Total > 50 % Fe	Inferred	52.1	56.0	0.08	6.7	3.2	9.2	61.7	
Main Range Total > 55 % Fe	Inferred	33.8	57.3	0.09	5.7	2.7	9.0	62.9	

Table 1 Mineral Resource estimate results for the CID and SCID zones.

Note: The CSA Mineral Resource was estimated within constraining wireframe solids based on a nominal lower cut-off grade of 50% Fe. The resource is quoted from blocks above the specified Fe % cut-off grade. Calcined Iron grade (CaFe) is a measure of iron content upon removal of volatiles (i.e. LOI) and is calculated after estimation of Fe and LOI grades. Differences may occur due to rounding.

The Mineral Resource estimate for the main range deposit completed by CSA is based on:

- Giralia supplied all geological and sampling data and provided technical and geological support to CSA during the resource modelling process.
- CSA imported the supplied drill hole data to Datamine Studio 2 software with no truncation of coordinates and proceeded with the modelling in the Datamine extended precision environment.
- Wireframe solids were generated based on the sectional interpretations provided by Giralia to delineate the zones of Fe mineralisation. A lower Fe cut-off of 50 % was used to define the mineralised envelopes.
- The interpreted mineralised zones consist of three primary mineralisation envelopes that are likely to be connected once infill drilling is completed. There are a number of secondary mineralisation envelopes at or near surface lenses, generally overlying the primary zones separated based on the 50 % Fe cut-off. A further zone to the south west of the primary zone in the northern part of the deposit has also been modelled. Figure 1 demonstrates the outlines of the modelled mineralised zones.





Figure 1 Plan showing extents of the modelled mineralised zones.

- Drill holes samples were flagged according to the mineralised zone they fall into based on the constructed wireframes.
- The majority of samples are 2m long with only a small number of end of hole samples being 1m long due to drilling issues. Compositing to 2m had no effect due to the location of the 1m samples.
- Statistical analysis of the mineralised zones samples showed the primary mineralised zones have more consistent higher Fe grades than the smaller zones. The primary zones were then analysed and estimated separately.
- Top cuts were applied to deleterious elements, for the primary zones and secondary zones separately, to avoid potential estimation bias associated with outlier values, based on a detailed statistical analysis of the zones.
- Variograms were modelled for Fe and P for the primary zones, with the parameters obtained also applied to the other zones, which did not have sufficient samples to successfully model variograms. The resulting parameters from the Fe modelling were used in the estimation process for Fe and the associated contaminant elements, except P.
- A volume block model was constructed, with blocks coded based on the wireframes in a similar fashion to the drill hole samples.
- The block models contained parent block sizes of 20m x 20m x 5m (X x Y x Z) with subcells down to 5m x 5m x 2.5m.
- Ordinary Kriging (OK) was used to estimate the grades into the parent blocks for Fe and associated deleterious elements, with an Inverse Distance to the power of 2 (IDS) estimate also used as part of the cross check validations of the Kriged grades.
- Search ellipses were orientated based on the overall geometry of mineralisation for the zones.
- A minimum of 10 samples and a maximum of 36 samples were used to estimate the sample grades into each block for the first search pass. The minimum number of samples was reduced to 8 for the smaller zones in the second and third search pass to ensure all blocks found sufficient samples to be estimated.
- A maximum of 4 samples from any one drill hole were used per block estimate, with cell discretisation of 3 x 3 x 1 (X x Y x Z), and no octant based searching utilised.
- The results of the grade estimation were validated by means of visual comparison along sections, statistical analysis and trend plots comparing the estimated block grades and the drill hole sampling grades.
- A conservative SG of 3.3 was applied to the mineralised zones based on research into results obtained for similar mineralisation types.
- The Mineral Resource was classified as Inferred, based on current drill coverage and confidence in geological and grade continuity.

Fe grade-tonnage curve data of the mineralised zones are presented in Table 2 and Figure 2.



Giralia Resources - McPhee Creek Main Range - Interpreted Mineralised Zones December 2009									
Fe% Cut	Volume	Tonnes	FE%	P%	SIO ₂ %	AL ₂ O ₃ %	LOI%	CaFe %	DENSITY
63	10,000	20,000	63.1	0.11	3.1	1.1	4.5	66.1	3.3
62	100,000	200,000	62.5	0.10	3.3	1.2	4.9	65.8	3.3
61	100,000	400,000	62.0	0.10	3.3	1.3	5.5	65.7	3.3
60	400,000	1,200,000	60.9	0.10	3.6	1.6	6.9	65.4	3.3
59	1,300,000	4,200,000	59.8	0.11	3.8	1.7	8.2	65.1	3.3
58	3,200,000	10,500,000	59.0	0.11	4.3	1.9	8.6	64.6	3.3
57	5,300,000	17,600,000	58.4	0.10	4.8	2.2	8.7	64.0	3.3
56	7,900,000	26,100,000	57.8	0.10	5.3	2.5	8.9	63.4	3.3
55	10,200,000	33,800,000	57.3	0.09	5.7	2.7	9.0	62.9	3.3
54	12,700,000	41,800,000	56.7	0.09	6.1	2.9	9.1	62.4	3.3
53	14,500,000	47,700,000	56.3	0.08	6.4	3.0	9.2	62.1	3.3
52	15,300,000	50,500,000	56.1	0.08	6.6	3.1	9.2	61.8	3.3
51	15,700,000	51,700,000	56.0	0.08	6.7	3.2	9.2	61.7	3.3
50	15,800,000	52,100,000	56.0	0.08	6.7	3.2	9.2	61.7	3.3





Figure 2 Fe Grade Tonnage curve for main range mineralised zones

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