ASX ANNOUNCEMENT **ASX Code: MMX**

23 September 2010

JACK HILLS RESOURCE ESTIMATE UPDATE

Murchison Metals Limited (Murchison) is pleased to announce further exploration success and a mineral resource update at the Jack Hills Iron Ore Project in which it holds a 50% interest through Crosslands Resources Ltd (Crosslands).

Overall Mineral Resources at the project now total **3.22 billion tonnes @ 32.3% iron** (26.6% DTR) including an increase in the Direct Shipping Material (DSO) component to 139Mt at an average grade 56.6% Fe.

Full details of the updated JORC resource are included in the attached announcement by Crosslands.

Key highlights of the Crosslands announcement include:

- an increase in mineral resources of 220 Million tonnes from the previously reported figure;
- An initial mineral resource at the emerging high grade Brindal Deposit, located 3km to the south of the main Jack Hills deposit;
- Identification of further exploration targets along the underexplored corridor running between Jack Hills and Brindal;
- Newly identified detrital iron deposits uncovered through sterilisation drilling, on the plains to the north of Jack Hills; and
- Potential for further expansion of the resource in the future, with numerous untested exploration targets identified.

Significantly, the inclusion of the emerging Brindal and detrital iron deposit's demonstrates the ongoing exploration success at the Jack Hills Project. Crosslands is currently considering the manner in which these developments may be considered as part of the expansion project currently being studied.

Crosslands has also highlighted the competitive advantages of its project, which include:

- Achievement of saleable concentrate grade at a coarse grind size;
- A low strip ratio;
- Proven processing technologies;
- Separate hematite and magnetite products, at different grind sizes, to allow penetration into both the sinter and pellet feed markets;
- Lower grinding power requirements; and
- Highly attractive chemistry with very low phosphorous and alumina expected in both products.

The update is a result of ongoing work conducted for the Bankable Feasibility Study for the Jack Hills Expansion Project. Murchison Metals Executive Chairman, Paul Kopejtka, said the update was a continuing sign of the regional significance of the Jack Hills deposit.

"The Jack Hills Expansion Project clearly ranks as one of the leading projects in the development of the mid-west iron ore province. The announcement today demonstrates a significantly higher level of geological confidence in the project, as the Bankable Feasibility Study continues." said Mr Kopejtka.

"Murchison and our joint venture partner Mitsubishi Development continue to work together to advance development at Jack Hills, and this is another important step towards realising the full potential of the Jack Hills Expansion Project."

Resource and exploration drilling activity is ongoing as part of the continuing feasibility study, and additional exploration targets have been identified along strike between the main Jack Hills project and the Brindal deposit.

-ENDS-

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About Murchison

Murchison Metals Limited ("Murchison") is an Australian ASX listed company. Murchison is included in the S&P/ASX 200 Index.

Murchison is a 50% shareholder in Crosslands Resources Ltd ("Crosslands") which is the owner of the Jack Hills iron ore project located in the mid-west region of Western Australia. The remaining 50% of Crosslands is held by Mitsubishi Development Pty Ltd ("Mitsubishi"), a subsidiary of Mitsubishi Corporation, Japan's largest general trading company.

Murchison also has a 50% economic interest in an independent infrastructure business, Oakajee Port and Rail ("OPR"). OPR was established to construct new port and rail infrastructure to provide logistics services to miners (including Crosslands) and other potential customers in the mid-west region of WA. The remaining 50% economic interest in OPR is held by Mitsubishi.

In addition to its investments in Crosslands and OPR, Murchison owns the Rocklea iron ore project in the Pilbara region of WA.

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CROSSLANDS RESOURCES LTD
THE HEART OF MID-WEST IRON ORE

Thursday 23 September 2010

CROSSLANDS LIFTS CONFIDENCE IN JACK HILLS MINERAL RESOURCE ESTIMATE – 3.2 BILLION TONNES

Crosslands Resources Ltd ("Crosslands") is pleased to report the completion of a new resource estimate update for its Jack Hills Iron Ore Project in the mid-west region of Western Australia. Additional infill drilling integrated in the new resource estimates provides further confidence uplift to the 3.2 Billion tonne resource.

The new resource estimate is significant in that it includes:

- A global resource increase of 220 Million tonnes;
- An initial resource estimate at the emerging high grade satellite Brindal deposit, located 3km south of the main Jack Hills deposit;
- Newly identified detrital deposits uncovered through drilling on the plains to the north of the Jack Hills deposit; and
- Potential for expansion of the resource in the future, with numerous untested exploration targets identified.

The Jack Hills Mineral Resource is made up of:

- Banded Iron Formation (BIF), previously referred to as Beneficiation Feed Ore (BFO);
- Detrital Iron Deposits (DID), which includes potential BFO or Jig feed canga and colluvium deposits; and,
- Massive Iron Mineralisation (MIM), which includes Direct Shipping Ore (MIM-DSO) and potential Jig feed or BFO (MIM-JIG).

Total in situ resources for the Measured, Indicated and Inferred resources are estimated as follows:

Total Global Mineral Resource – 3.22 Billion tonnes @ 32.3% Fe (26.6% DTR).

The Jack Hills resource comprises:

	New 2010 Estimate	**Dec 2009 Estimate**	**Cut-off Grade**
BIF-BFO	2.87 Billion tonnes @ 30.7% Fe	2.86 Billion tonnes @ 30.6% Fe	>22% Fe
MIM-JIG	96 Million tonnes @ 45.5% Fe	39 Million tonnes @ 45% Fe	0-50% Fe
MIM-DSO	133 Million tonnes @ 56.2% Fe	110 Million Tonnes @ 56.9% Fe	>50% Fe
DD-BFO/JIG	118 Million tonnes @ 32.6% Fe	None	> 22% Fe

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The Brindal resource comprises:

	New 2010 Estimate	Dec 2009 Estimate	Cut-off Grade
BIF-BFO	5 Million tonnes @ 27.8% Fe	None	>22% Fe
MIM-JIG	0.1 Million tonnes @ 44.1% Fe	None	0-50% Fe
MIM-DSO	5.9 Million tonnes @ 62.8% Fe	None	>50% Fe

This new resource model and estimate adds further confidence in the Jack Hills project, the highlights being:

- **A significant uplift in confidence, with over 70% of resources classified as Measured and Indicated JORC categories for the BIF and MIM materials;**
- **An increase in the Measured Resources with 28% of the deposit now being classified in this highest category;**
- **Increased resource size, in particular a 58% increase in the global MIM domains, including a 26% increase in the high grade MIM-DSO domains at a 50% Fe cut-off;**
- **Detailed infill drilling data is consistent with previous geological models which demonstrated amenability to bulk mining, with broad widths and strong geological continuity of iron mineralisation defined;**
- **Demonstration of the potential of the new discovery of Detrital Iron Deposits, which form flat sheets at surface; and,**
- **Prospective extensions to mineralisation established for further drill testing.**

The estimated Mineral Resources are summarised in Table 1. The Mineral Resources are classified and reported in accordance with the JORC Code. Full details of the resource estimate, including JORC classification, are provided in Tables 1-3.

The updated Mineral Resource covers the area shown in Figure 1, comprising:

- The main Jack Hills deposit area of Mt Matthew to North East Ridge, a strike length of some 7km;
- The detrital deposits located to the north on the flanks of the Jack Hills range; and,
- The Brindal Deposit located 3km south of the main Jack Hills.

The improved Mineral Resource incorporates data from the second phase of a major $30M exploration program (Figure 2), which commenced in April 2009 across the company's Jack Hills iron ore tenements.

Brindal Deposit

The Brindal deposit comprises predominantly high-grade massive hematite Direct Shipping Ore (DSO); 5.9 Million tonnes @ 62.8% Fe at a >50% cut-off grade. Recent drilling and resource modelling has also demonstrated the existence of additional beneficiable BIF mineralisation (BFO) at Brindal.

The deposit is located some 3km south of the main Jack Hills iron deposit. Brindal is the first drilled of several identified exploration targets located outside the established main resource position in the Jack Hills tenements (Figure 1).

The Brindal DSO mineralisation drilled to date is near-surface and amenable to open pit mining methods. The new resource estimate summarised in Table 2 incorporates recent drilling which recorded 6m -100m thick DSO intersections. The Brindal DSO mineralised lenses are now defined over a 900m strike length. The mineralisation remains open in several areas. The most recent drilling has extended the drilled DSO mineralised zones by approximately 500m.

Recent drilling and data from recent geophysical survey indicate potential for further extensions, and has led Crosslands to upgrade the prospectivity of the remaining 3.5km of the unexplored Brindal gap for both additional DSO and BFO targets. Infill and step-out drilling is ongoing at Brindal.

Detrital Iron Deposits
The newly identified detrital resource, discovered through exploration drilling, is located in an area currently being investigated for tailings and mine waste disposal. Work is currently underway to test the potential economics of mining this material and the subsequent impact on the current planned site configuration, and as such, there is some potential that this material may not be available for economic extraction in the future.

Resource Drilling and Modelling

Minimum drill spacing throughout the resource area was ~200m, while the southern portion of the deposit is extensively drilled to a 30 – 50m spacing (Figure 2). 3D geological models were constructed integrating surface mapping and drilling. The BIF rock units are demonstrated to be amenable to bulk mining having widths of 20 – 200m, and strong strike and vertical continuity (Figure 3).

Resource estimation was conducted using methodologies consistent with planned bulk mining parameters; block modelling used 25m x 25m x 12m parent blocks with grades interpolated through ordinary kriging.

Beneficiation Operations

Beneficiation operations are being designed to recover both magnetite and hematite fractions to produce two saleable concentrate products. Based on pilot scale laboratory testwork at the reported Banded Iron Formation BFO resource iron grade (30.7% Fe) and DTR (26.5 wt%) the predicted combined magnetite and hematite Fe yield is 70 - 74%.

The advantages of the Crosslands resource include:

- Achievement of saleable concentrate grade at a coarse grind size; and,
- A low strip ratio.

Competitive advantages of the deposit and proposed processing operations include:

- Proven processing technologies;
- Separate hematite and magnetite products, at different grind sizes, to allow penetration into both the sinter and pellet feed markets;
- Lower grinding power requirements; and,
- Highly attractive chemistry with very low phosphorous and alumina expected in both products.

Ongoing Resource Definition

Resource and exploration drilling activity is ongoing with an additional $15M budgeted for exploration programs for FY2010/11. These programs continue to return positive results. The objective of the current phase of drilling is focused on detailed infill drilling of the established resources for mine planning purposes. In addition, exploration

drilling is focused on new high grade MIM targets across the Jack Hills tenements and Detrital Iron Deposit targets located within the mine infrastructure footprint. A further update is expected in early in 2011.

The Jack Hills deposit remains open at depth and new MIM and BIF targets have been identified along strike between the Brindal deposit and Mt Hale. Drilling is currently underway at Brindal to explore new extensions and to lift the JORC classification of the established resource from Inferred to Indicated and Measured categories.

Table 1: Jack Hills Deposit Mineral Resource Summary Table *(July 2010, SRK Consulting).*

	JORC Category	Cut-off % Fe	Dry Tonnes (x 10^6)	Fe %	DTR %
In Situ Banded Iron Formation (BIF-BFO)					
	Measured	22	834	30.7	22.2
	Indicated	22	1,160	30.5	27.5
	Inferred	22	877	30.9	29.2
Sub Total	**All**	**22**	**2,871**	**30.7**	**26.5**
In Situ Detrital Deposits (DID-BFO)[1]					
	Measured	22	0	0	0
	Indicated	22	0	0	0
	Inferred	22	118	32.6	3.6
Sub Total	**All**	**22**	**118**	**32.6**	**3.6**
In Situ Massive Iron Mineralisation 0 - 50% Fe, Potential Jig feed or BFO (MIM-JIG)					
	Measured	0 to 50	31	45.6	38.6
	Indicated	0 to 50	35	45.4	36.5
	Inferred	0 to 50	31	45.6	38.6
Sub Total	**All**	**0 to 50**	**96**	**45.5**	**37.9**
>50% Fe, DSO (MIM-DSO)					
	Measured	50	38	57.4	47.6
	Indicated	50	61	56.3	34.6
	Inferred	50	34	54.5	42.0
Sub Total	**All**	**50**	**133**	**56.1**	**40.2**
Total	Measured		902	32.3	23.9
Total	Indicated		1,256	32.2	28.1
Total	Inferred		1,060	32.3	27.0
Total	**All**		**3,218**	**32.2**	**26.6**

1. Mineral Resources are based on drilling & assaying completed on 30 April, 2010 and actual pit limit surveyed on 30 May, 2010
2. Banded Iron Formation (BIF), previously reported as BFO
3. Massive Iron Mineralisation, previously reported as DSO.
4. Tonnages are dry metric tonnes. Tonnages have been rounded, hence small difference may be present in the totals
5. DTR = Davis Tube Recovery (grind size, P100 45µ).
6. Detrital resources are shallow deposits located on the north western side of the Jack Hills ridge. Detrital material is currently accessible, however, this area is being investigated for tailings and mine waste disposal and as such there is some potential that this material will not be available economic extraction in the future.

Table 2: Brindal Deposit Mineral Resource Summary Table *(July 2010, SRK Consulting).*

	JORC Category	Cut-off % Fe	Dry Tonnes ($x 10^6$)	Fe %	DTR %
In Situ Banded Iron Formation (BIF-BFO)					
	Measured	22	0	0	0
	Indicated	22	0	0	0
	Inferred	22	5	27.8	1.7
Sub Total	**All**	**22**	**5.1**	**27.8**	**1.7**
In Situ Massive Iron Mineralisation 0 - 50% Fe, Potential Jig feed or BFO (MIM-JIG)					
	Measured	0 to 50	0	0	0
	Indicated	0 to 50	0	0	0
	Inferred	0 to 50	0.1	44.1	4.6
Sub Total	**All**	**0 to 50**	**0.1**	**44.1**	**4.6**
>50% Fe, DSO (MIM-DSO)					
	Measured	50	0	0	0
	Indicated	50	0	0	0
	Inferred	50	5.9	62.8	3.6
Sub Total	**All**	**50**	**5.9**	**62.8**	**3.6**
Total	Measured		0	0	0
Total	Indicated		0	0	0
Total	Inferred		11.1	46.5	2.8
Total	**All**		**11.1**	**46.5**	**2.8**

1. Mineral Resources are based on drilling & assaying completed on 30 April, 2010 and actual pit limit surveyed on 30 May, 2010
2. Banded Iron Formation (BIF), previously reported as BFO
3. Massive Iron Mineralisation, previously reported as DSO.
4. Tonnages are dry metric tonnes. Tonnages have been rounded, hence small difference may be present in the totals
5. DTR = Davis Tube Recovery (grind size, P100 45µ).
6. Detrital resources are shallow deposits located on the north western side of the Jack Hills ridge. Detrital material is currently accessible, however, this area is being investigated for tailings and mine waste disposal and as such there is some potential that this material will not be available economic extraction in the future.

Figure 1: Map of Jack Hills Project Highlighting Jack Hills Deposit (Mt Mathew to NE Ridge), Brindal Deposit, Detrital Deposits and potential exploration areas.

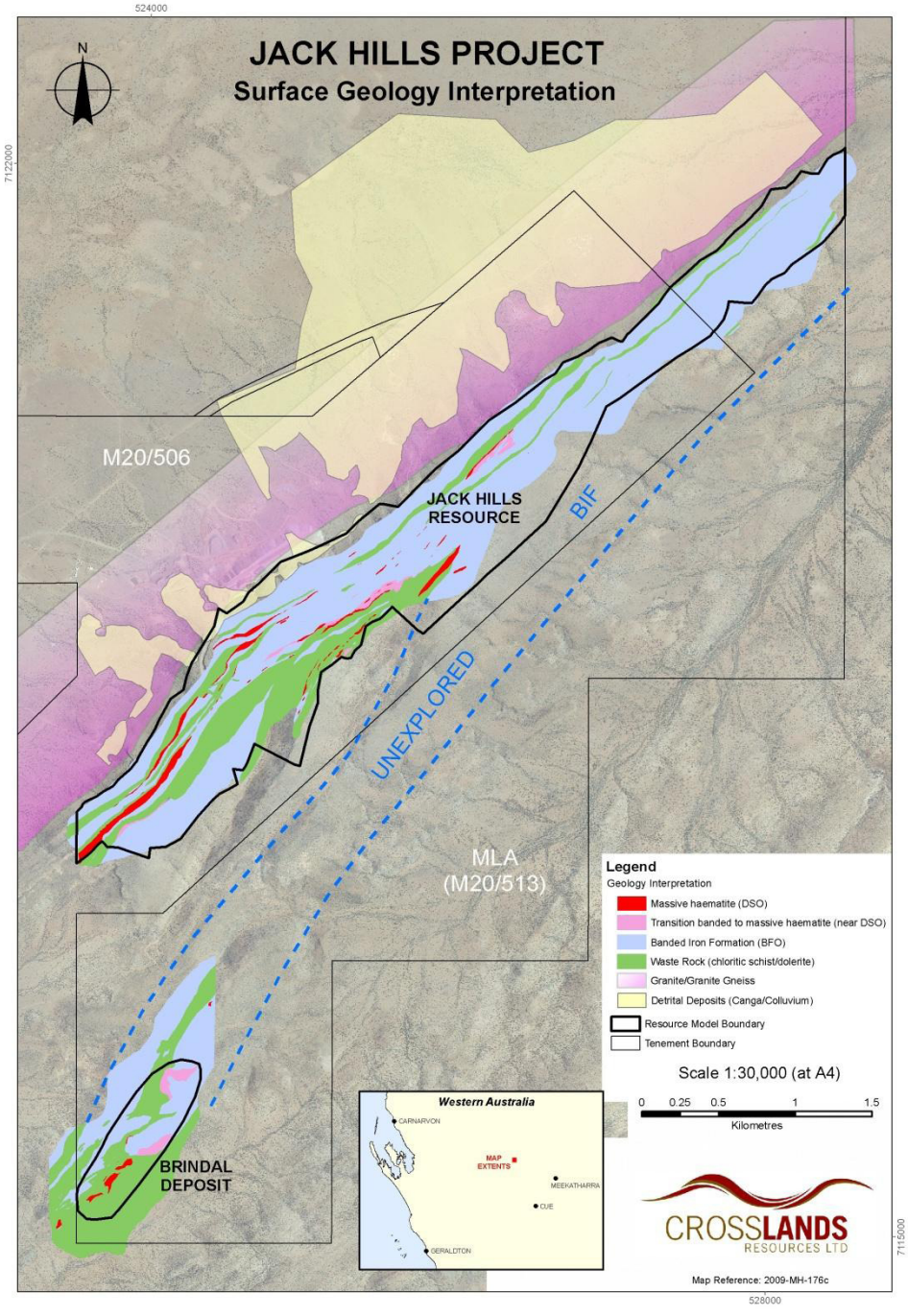

Figure 2: Drill coverage included in the new resource estimate. *Hole collars illustrated as black dots indicate drilling available in the previous (December 2009) resource update; holes in red illustrate new holes incorporated into this update (data input for modeling closed 30th April, 2010). Drilling is ongoing.*

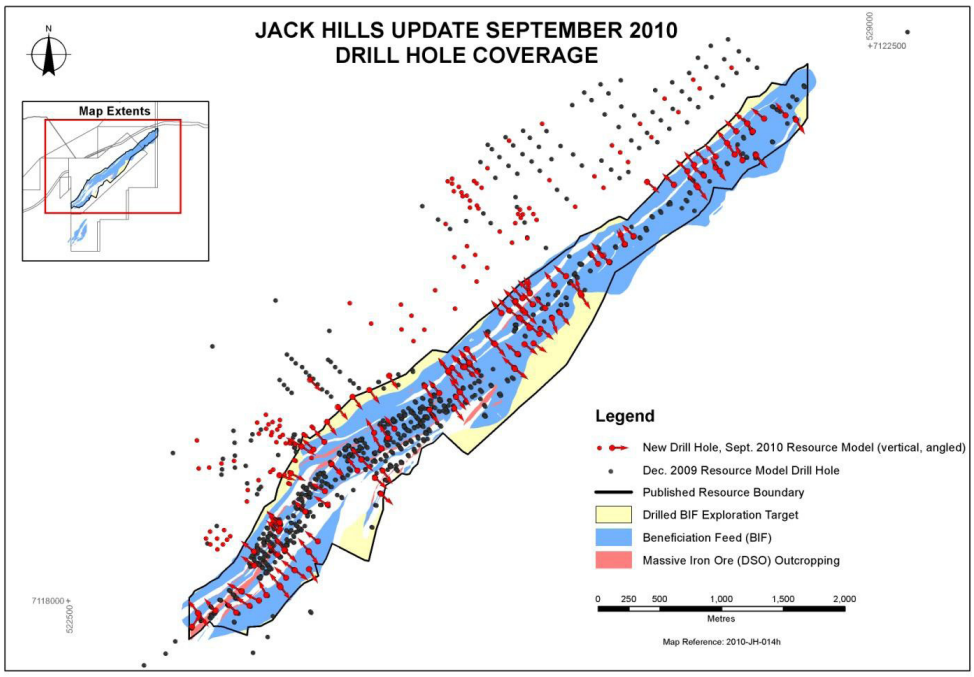

Figure 3: Plan View of Resource Model Geological Wireframes at 500m RL.

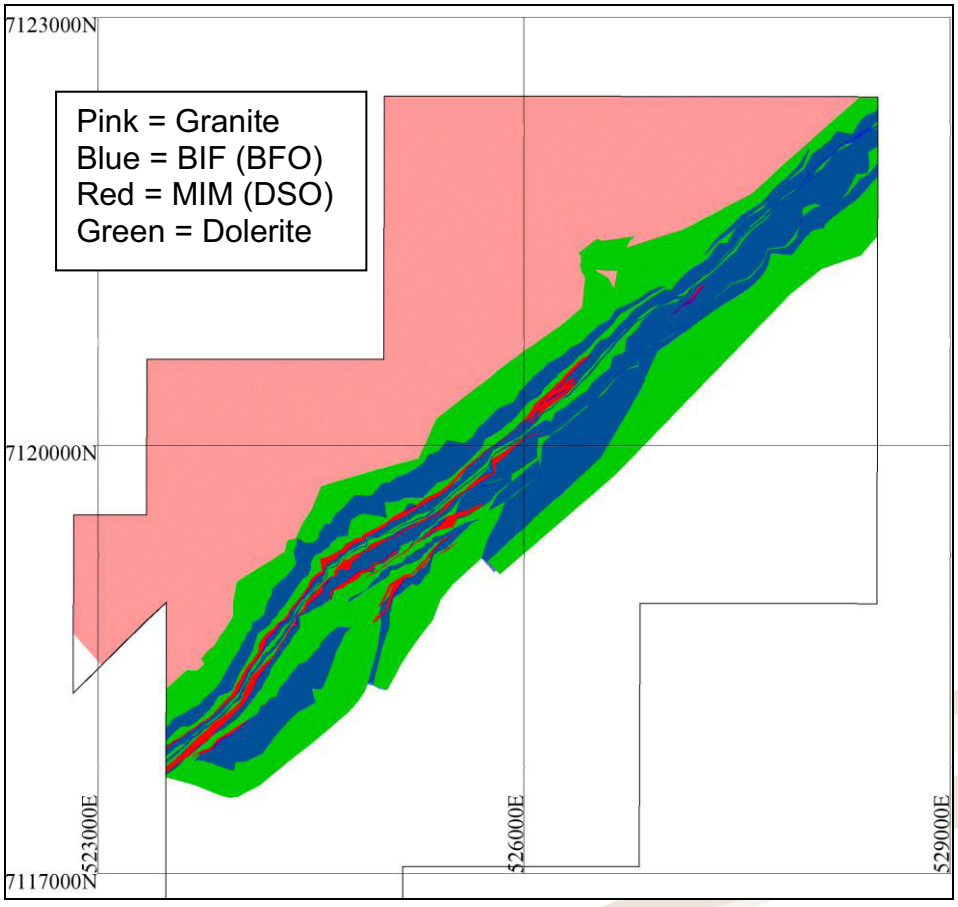

Table 3: Detailed Breakdown of Total Mineral Resources; Banded Iron Formation and Detrital Iron Deposits at >22% Cut-off Grade and Massive Iron Mineralisation (DSO) at >50% and 0-50%Fe *(May 2010, SRK Consulting).*

Jack Hills Magnetite & Hematite Iron Ore Deposit May 2010 Mineral Resource Estimate[1]										
Weathering Domain	JORC Category	Cut-off % Fe	Dry Tonnes[4] (x 10^6)	Fe %	SiO2 %	Al2O3 %	P %	LOI %	MgO %	DTR[5] %
In Situ Banded Iron Formation[2] (BFO)										
Oxidised	Measured	22	32	28.9	52.2	1.6	0.01	1.9	2.0	2.8
Oxidised	Indicated	22	21	31.0	50.1	1.6	0.03	1.7	1.3	3.6
Oxidised	Inferred	22	31	32.4	48.0	1.4	0.03	2.0	0.7	8.0
Transitional	Measured	22	304	30.1	49.3	0.9	0.02	1.8	3.7	14.9
Transitional	Indicated	22	204	30.8	49.9	1.0	0.02	1.4	2.4	19.6
Transitional	Inferred	22	35	29.9	52.2	1.1	0.02	1.3	1.5	11.1
Fresh	Measured	22	498	31.1	41.9	0.6	0.03	3.2	7.6	28.0
Fresh	Indicated	22	936	30.4	45.1	0.6	0.02	2.1	6.1	29.7
Fresh	Inferred	22	811	30.9	44.5	0.6	0.03	2.1	5.9	30.8
Total	Measured	22	**834**	**30.7**	**45.0**	**0.8**	**0.03**	**2.6**	**6.0**	**22.2**
Total	Indicated	22	**1,160**	**30.5**	**46.1**	**0.7**	**0.02**	**2.0**	**5.3**	**27.5**
Total	Inferred	22	**877**	**30.9**	**44.9**	**0.7**	**0.03**	**2.0**	**5.5**	**29.2**
Total	**All**	**22**	**2,871**	**30.7**	**45.4**	**0.7**	**0.03**	**2.2**	**5.6**	**26.5**
In Situ Detrital Deposits (BFO)[6]										
Total	Measured	22	0	0	0	0	0	0	0	0
Total	Indicated	22	0	0	0	0	0	0	0	0
Total	Inferred	22	118	32.6	35.3	10.4	0.02	5.8	0.3	3.6
Total	**All**	**22**	118	32.6	35.3	10.4	0.02	5.8	0.3	3.6
In Situ Massive Iron Mineralisation[3] MIM DSO >50% Fe										
Total	Measured	50	38	57.4	6.1	0.6	0.07	3.7	6.2	47.6
Total	Indicated	50	61	56.3	8.6	0.9	0.05	3.8	4.7	34.6
Total	Inferred	50	34	54.5	9.0	1.1	0.05	4.4	6.0	42.0
Total	**All**	**50**	133	56.2	8.0	0.9	0.06	3.9	5.5	40.2
MIM JIG 0 - 50% Fe										
Total	Measured	0 to 50	31	45.6	14.6	1.3	0.04	6.9	9.7	38.7
Total	Indicated	0 to 50	35	45.4	16.2	1.4	0.04	6.4	8.9	36.5
Total	Inferred	0 to 50	31	45.6	14.9	1.4	0.04	6.8	9.5	38.6
Total	**All**	**0 to 50**	96	45.5	15.3	1.4	0.04	6.7	9.3	37.9

Total In Situ Banded Iron Formation + Massive Iron Mineralisation + Detrital Deposits										
Total	Measured		902	32.3	42.3	0.8	0.03	2.8	6.1	23.9
Total	Indicated		1,256	32.2	43.4	0.7	0.03	2.2	5.4	28.1
Total	Inferred		1,060	32.3	41.8	1.8	0.03	2.7	5.1	27.0
Total	**All**		3,218	32.2	42.6	1.1	**0.03**	**2.5**	**5.5**	**26.6**
Mine Stockpiles										
High Grade	Measured	>58	0.52	62.43	4.29	0.77	0.07	2.18	2.48	NR
Med Grade	Inferred	50 - 58	0.49	55.92	8.33	0.75	0.07	3.99	5.01	NR
Low Grade	Inferred	22 - 50	4.44	36.9	38.64	0.75	0.04	2.01	3.67	NR

1 Mineral Resources are based on drilling & assaying completed on 30 April, 2010 and actual pit limit surveyed on 30 May, 2010

2 Banded Iron Formation (BIF), previously reported as BFO

3 Massive Iron Mineralisation, previously reported as DSO.

4 Tonnages are dry metric tonnes. Tonnages have been rounded, hence small difference may be present in the totals

5 DTR = Davis Tube Recovery (grind size, P100 45µ). No DTR data is available for the stockpiles

6 Detrital resources are shallow deposits located on the north western side of the Jack Hills ridge. Detrital material is currently accessible, however, this area is being investigated for tailings and mine waste disposal and as such there is some potential that this material will not be available economic extraction in the future.

In Situ Mineral Resources were compiled by Mr Roland Bartsch, a full time employee of Crosslands Resources Ltd., and Mr Bruce Sommerville, a full time employee of SRK Consulting. Mr Bartsch was responsible for the data collection and geological interpretations; Mr Sommerville was responsible for the grade estimation and classification. Stockpile resources were compiled by Mr Bartsch. Both Mr Bartsch and Mr Sommerville are Competent Persons as Defined by the Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code).

Competent Persons' Statement

The information in this announcement that relates to Exploration Results and geological and mineralogical interpretations of the Mineral Resource estimate of the Jack Hills Project is based on information compiled by Mr Roland Bartsch. Mr Bartsch is a full time employee of Crosslands Resources Ltd and is a Member of the Australasian Institute of Mining & Metallurgy.

The information in this announcement that relates to Mineral Resources of the Jack Hills Project is based on information compiled by Mr Bruce Sommerville in his capacity as an employee of SRK Consulting. Mr Sommerville is a Member of the Australasian Institute of Mining & Metallurgy.

Mr Bartsch and Mr Sommerville have 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 competent persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Bartsch and Mr Sommerville consent to the inclusion in the report of the matters based on their information in the form and context in which it appears.

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Reference List

Sommerville, B, L., 2010. Jack Hills and Brindal Magnetite and Hematite Iron Ore Deposits. Mineral Resource Estimate November, 2009. SRK Consulting Report prepared for Crosslands Resources Ltd.

Sommerville, B, L., 2009. Jack Hills Magnetite and Hematite Iron Ore Deposit. Mineral Resource Estimate November, 2009. SRK Consulting Report prepared for Crosslands Resources Ltd.

About Crosslands

Crosslands Resources Ltd ("Crosslands") is the owner of the Jack Hills iron ore project located in the mid-west region of Western Australia. Crosslands is jointly owned by ASX listed Murchison Metals Ltd ("Murchison") and Mitsubishi Development Pty Ltd ("Mitsubishi"), a subsidiary of Mitsubishi Corporation, Japan's largest general trading company.

In addition, Crosslands, Murchison and Mitsubishi have established a new independent infrastructure business, Oakajee Port and Rail (OP+R).

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