

**January 22, 2013**

## *Wilcherry Hill Iron Ore Project Update*

- Government approval received for new shorter distance trans-shipment point
- Identification of the new Black Hills West Prospect – surface grab sampling assays of up to 57.9% Fe
- Follow up drilling completed at the Black Hills West Prospect – significant shallow intercept of 10.0m @ 50.34% Fe
- 2,500m drill programme commences at the Hercules Prospect.

The Directors of IronClad Mining Limited (ASX:IFE) are pleased to report that the Company has made significant progress in its campaign to identify additional low cost, high value Direct Shipping Ore (DSO) for the Wilcherry Hill Iron Ore Project. The Company is also progressing well with implementing plans to achieve significant savings in both the capital and operating start-up costs of the first stage of the project.

The Wilcherry Hill Project is an 80%:20% Joint Venture with Trafford Resources Ltd (ASX:TRF) formed to develop iron ore mining at Wilcherry Hill and immediately adjoining deposits in South Australia, with production aimed to extend to the massive Hercules Project.

Mining is planned to proceed in three stages with progressive increases in production.

As previously reported, IronClad began a new drilling programme to identify more near surface DSO in October last year following a sharp fall in iron ore prices. The Company also undertook an intensive planning review to reduce iron ore transport, handling and ship loading costs.

IronClad Managing Director, Robert Mencil, said that he was pleased to note that, at the time of reporting, the spot price for iron ore in China had recovered by more than 60% since last September. However he believed that, while much healthier, the price could remain volatile as the Chinese economy settled into planned new directions which were forecast to see Gross Domestic Product (GDP) growth averaging more than 8% a year.

## **Exploration**

### *Black Hills West*

Exploration at the Black Hills West Prospect was completed in early December 2012 outlining a zone of near surface hematitic mineralisation transitioning, at depth, to more magnetite dominant mineralisation. Continuous zones of greater than 55% Fe were initially intersected as part of an ongoing regional program to investigate the potential for economic deposits of iron rich lateritic lag or outcrop areas suitable for DSO (direct shipping ore) mining.

A round of follow up exploratory drilling has now been completed with six (6) reverse circulation holes drilled for a total of 481m.

Significant intercepts (over 5m down hole width) from this latest drilling are listed in Table 1.

A complete listing of intercepts greater than 30% Fe is shown in appendix Table A2.

### **ASX CODE: IFE**

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Executive Chairman

**Neil McKay**  
Company Secretary and  
Non-Executive Director

**Peter Rowe**  
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HOLE_ID	DEPTH (m)		INTERVAL	FE%	SiO2%	Al2O3%	P%	S%	LOI%
	FROM	TO	(m)						
12BWRC019	62.0	72.0	10.0	50.34	14.76	5.43	0.017	0.032	-0.41
<i>including</i>	<i>67.0</i>	<i>68.0</i>	<i>1.0</i>	<i>55.14</i>	<i>11.43</i>	<i>2.31</i>	<i>0.014</i>	<i>0.052</i>	<i>-1.46</i>

Table 1 Black Hills West Prospect. Significant Intercepts at 50% Fe cut off and 5m or greater down hole width

The follow up drilling investigated the depth and strike extent of the previously identified iron mineralisation. Results indicate that the mineralisation remains open to the east. Geological modelling and resource estimation will now be undertaken.

Geophysical modelling of the two magnetic anomalies at the Black Hills West Prospect (Figure 1) is planned for early this quarter to assess the further potential for near surface DSO.

The more intense anomaly, 200m to the east of the current drill testing, remains undrilled.

### **Black Hills South West**

The Company's recently completed regional assessment identified a number of additional DSO targets in the vicinity of the Black Hills West Prospect (BHW).

In particular, the Black Hills South West Prospect, located 3 km south of BHW (Figure 2), was identified as a potential site for near surface iron mineralisation. Surface grab sampling of material from a low lateritic rise returned iron assays up to 57.9% Fe (Table 2). The lateritic rise is proximal to an east-west trending aeromagnetic anomaly making the Black Hills South West Prospect an attractive target for follow up evaluation. Additional field investigations will be undertaken during the quarter to assess the prospectivity.

Sample No.	Easting_MGA	Northing_MGA	Fe%	SiO2%	Al2O3%	P%	S%	LOI
WH22805	602662	6375718	36.3	26.61	13.73	0.013	0.043	6.21
WH22806	602539	6375749	45.9	17.49	10.13	0.015	0.073	5.20
WH22807	602491	6375757	57.9	5.46	4.33	0.024	0.089	5.17

Table 2 Black Hills South West Prospect. Surface grab sample results

### **Hercules**

Exploratory drilling has commenced at the Hercules prospect (Figure 3). The target is near surface, low strip ratio mineralization with grades suitable as DSO or upgrade via simple beneficiation.

A program of up to 2,500m of reverse circulation drilling is planned in this first phase. The program will test the northerly extension of the known, near surface hematite and goethite mineralization that forms part of the existing inferred mineral resource.

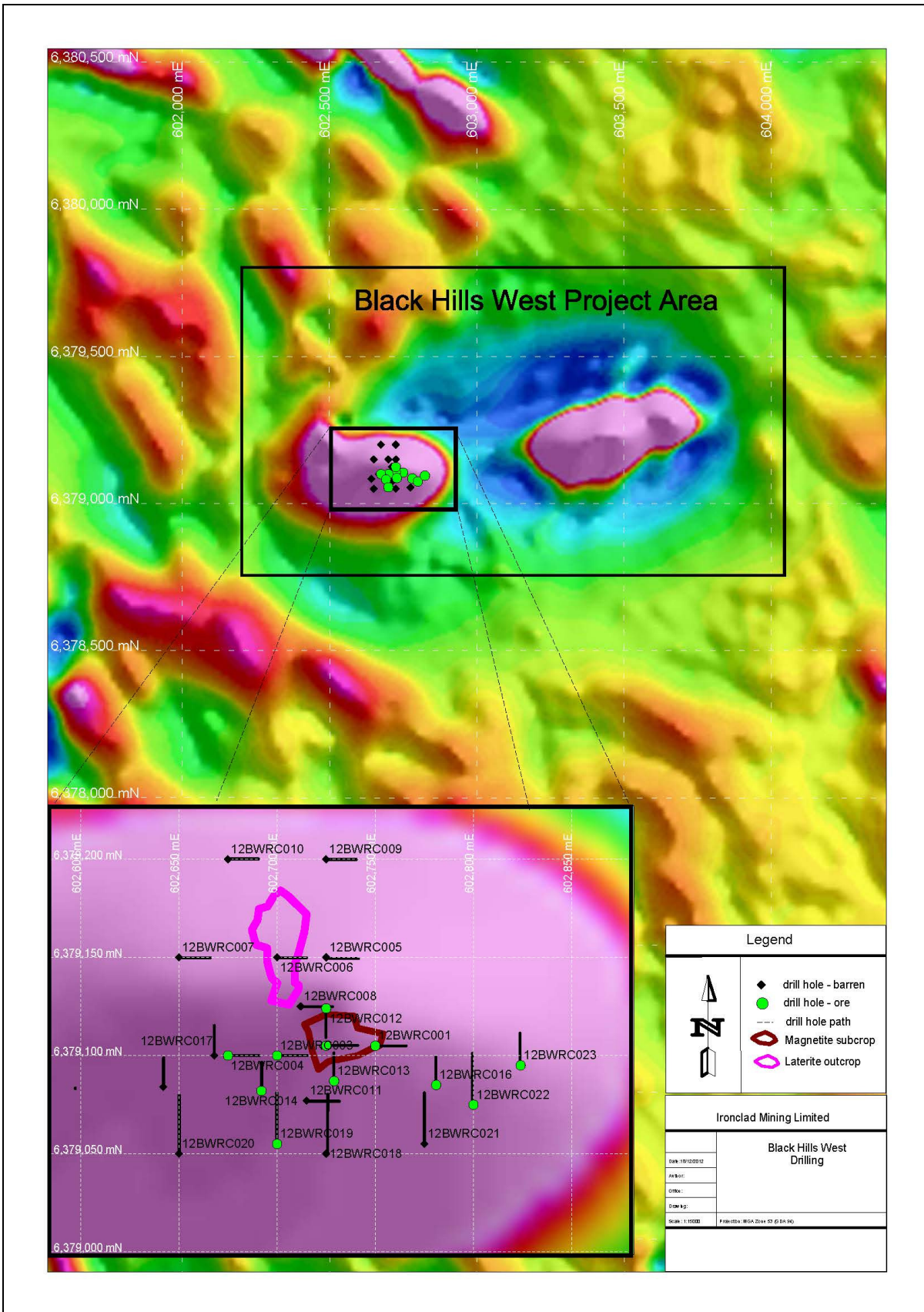


Figure 1 Black Hills West Project Area Location and drill hole Layout



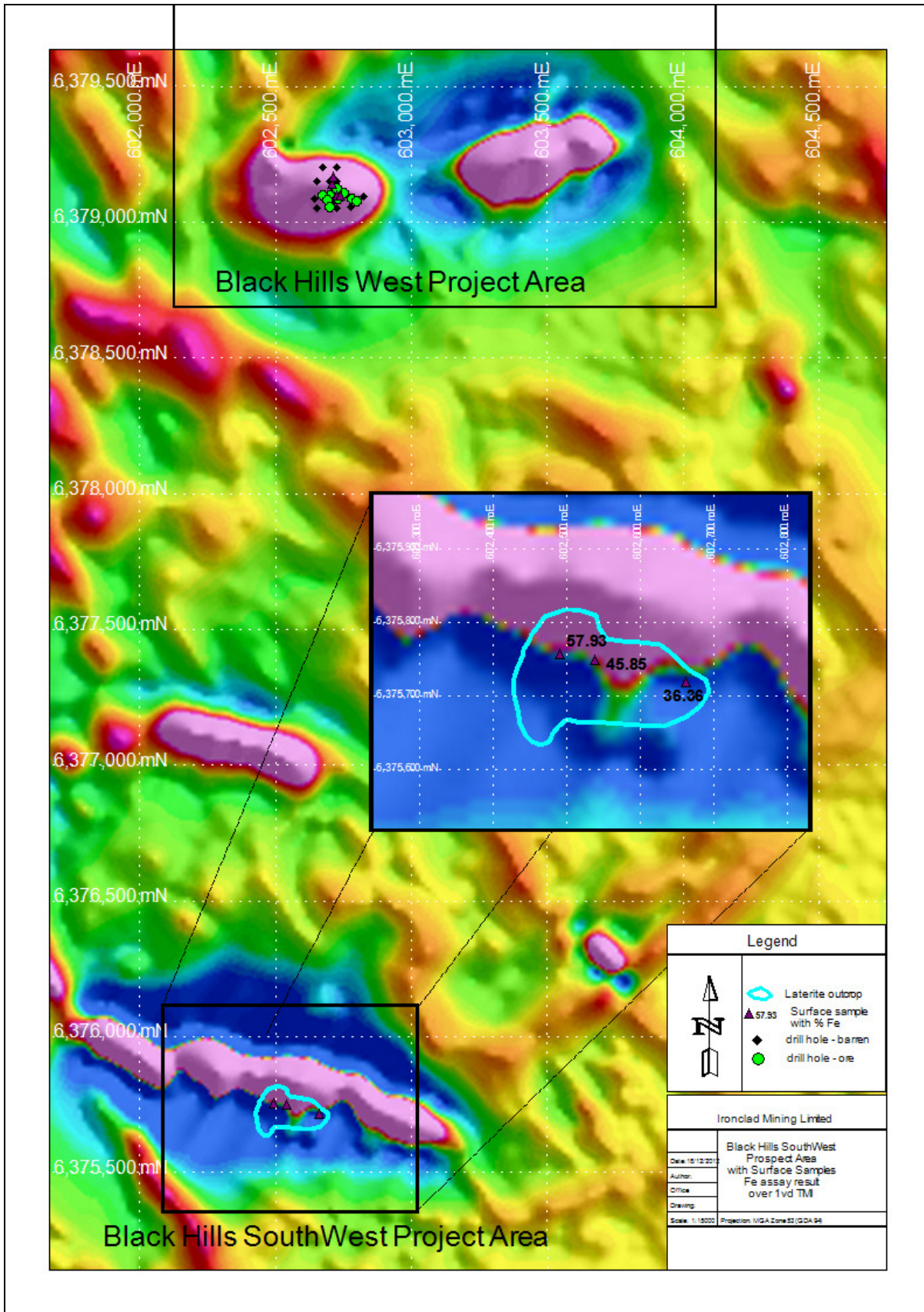


Figure 2 Black Hills South West Project Area Location



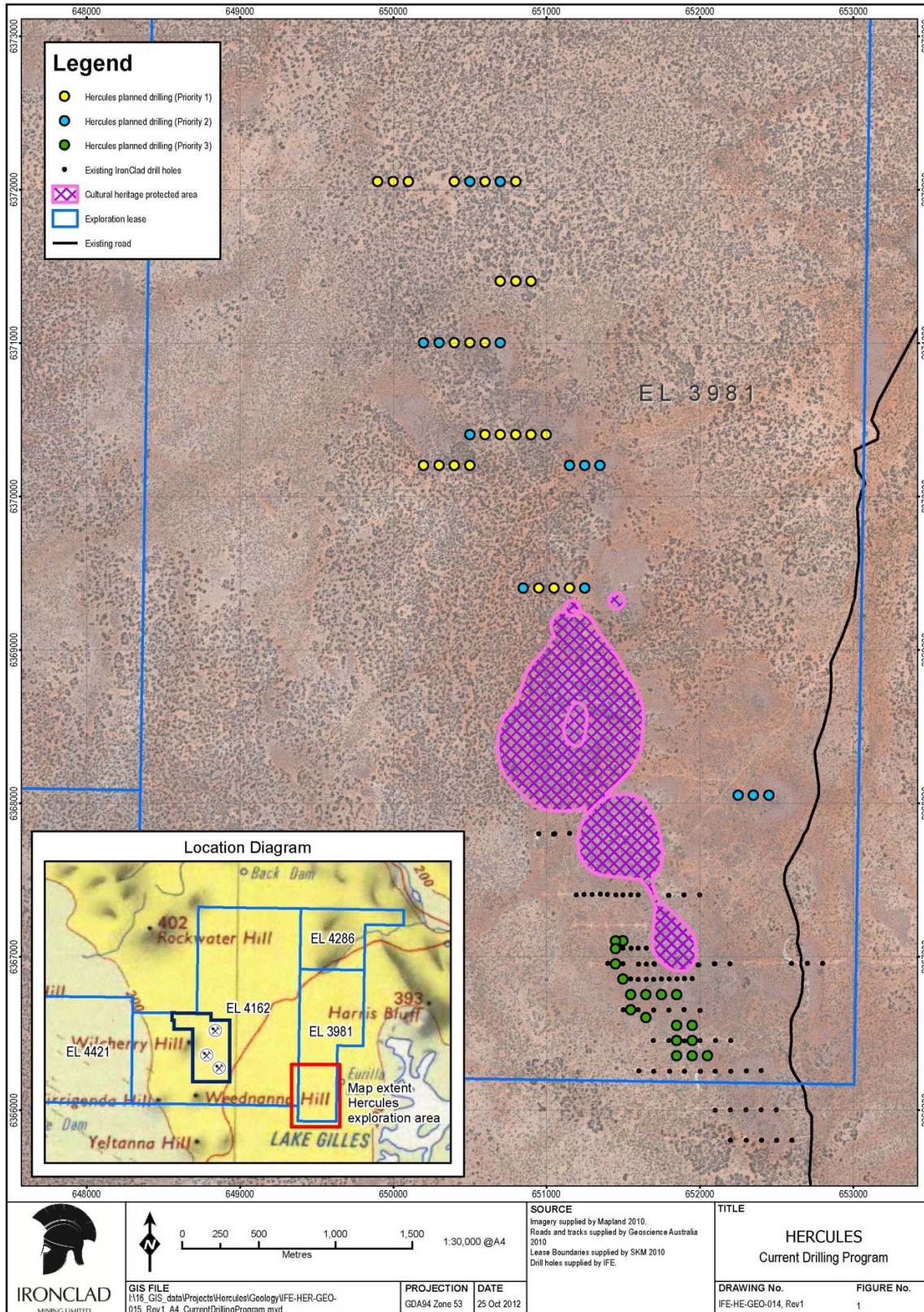


Figure 3 Hercules Prospect Location and drill hole Layout – P1 & P2 holes to be drilled





## **Government Approval Amendments**

### ***Trans-shipment Point***

The Government of South Australia recently approved IronClad and Sea Transport's proposed amendments to the existing trans-shipment approval.

Subject to final sign off, this will mean that transfer of ore from barges to cargo ships can now take place at a point 7 (seven) nautical miles offshore, rather than the 10 (ten) nautical miles envisaged in the original approval. As a result, significant operating cost savings are likely to be achieved.

### ***Bulk Storage***

The proposed amendment to existing government port approvals in order to incorporate a buffer, bulk ore facility, approximately 1.5km from the dockside is still awaited. An approved amendment would eliminate the need to purchase 2,600 customised containers, reducing the total capital cost of the project by more than \$5 million.

### ***Other***

Land based trials of IronClad's two custom built rotainers was completed successfully.

Offshore based trials for floating crane trans-shipment of containers are planned towards the end of this month.

Optimisation studies incorporating recent increased near surface DSO and DMS results have been completed. Mine scheduling for stage one mining is currently being undertaken.

**Robert Mencil**  
Managing Director  
08 8224 0411

### **Competent Person Statement**

*The information in this announcement that relates to geological results and Mineral Resource estimates is based on information compiled by Chris Mroczek, who is a Member of The Australasian Institute of Mining and Metallurgy and who has more than five years' experience in the field of activity being reported on and is the Chief Geologist of the Company.*

*Mr. Mroczek has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity undertaken 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. Mroczek consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.*

## **Appendices: Supporting Information**

The drill hole information contained in this appendix relates to the drilling completed by IronClad at its Black Hills West prospect between 16th and 19th of December 2012.

Six (6) additional reverse circulation drill holes were drilled for a total of 481m. Drill hole collar information is listed in Table A1 and shown on Figure 1. Collar information pertaining to earlier drilling can be found in the Company's 19/12/12 release to the ASX.

The co-ordinate system is MGA94\_53.

The drilling method was reverse circulation using a 5.5" hammer. Holes were drilled at an angle of 60° to the North.

The sampling interval in ore was 1m with sub-samples for assays split using a 2 tier riffle splitter. Analysis of the sub-samples was carried out at Bureau Veritas Laboratory. Analysis was carried out using XRF for a routine suite of 11 elements and a gravimetric method was used to analyse



LOI (loss on ignition). The components analysed by XRF Al<sub>2</sub>O<sub>3</sub>, CaO, Fe, K<sub>2</sub>O, MgO, MnO, Na<sub>2</sub>O, P, S, SiO<sub>2</sub>, TiO<sub>2</sub>.

Assay information based on a 30% Fe cut off is listed in Table A2. Assays of 30% Fe and above are regarded as significant from an exploration perspective in delineating potential zones of direct shipping ore and mineralisation with the potential to be upgraded via beneficiation processes.

**Appendix A: Drill hole Collar and Assay Information**

HOLE_ID	DEPTH (m)	EASTING	NORTHING	HEIGHT	DIP	AZIMUTH
12BWRC018	97	602725	6379050	205.3	-60	0
12BWRC019	78	602700	6379055	205.5	-60	0
12BWRC020	96	602650	6379050	204.5	-60	0
12BWRC021	78	602775	6379055	204.9	-60	0
12BWRC022	72	602800	6379075	205.1	-60	0
12BWRC023	60	602825	6379090	204.0	-60	0

Table A1 Black Hills West Prospect Drill Hole Collar Information

HOLE_ID	DEPTH (m)		INTERVAL	FE%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P%	S%	LOI%
	FROM	TO	(m)						
12BWRC018	No significant intersections above 30% Fe								
12BWRC019	62.0	72.0	10.0	50.43	14.76	5.43	0.017	0.032	-0.41
12BWRC020	No significant intersections above 30% Fe								
12BWRC021	No significant intersections above 30% Fe								
12BWRC022	54.0	59.0	5.0	31.10	29.00	6.23	0.067	0.012	3.92
12BWRC022	66.0	69.0	3.0	37.74	24.09	3.90	0.065	0.018	2.05
12BWRC023	53.0	54.0	1.0	38.75	20.90	11.87	0.090	0.084	9.65

Table A2 Black Hills West Prospect. Significant Intercepts above 30% Fe cut off