

*We find it. We prove it.
We make it possible*

17 December 2010

ABOUT CARPENTARIA:

Carpentaria is an exploration company focused on discovering base, precious metals and bulk commodities in eastern Australia. The company currently has interests in iron ore, tin, gold, copper and coal exploration projects

CARPENTARIA'S AIM:

With a strong geo-scientific team discover and build a strong cash flow generating mining operation.

DISCOVERIES TO DATE:

Hawsons Iron Project - NSW
Euriowie Tin Project - NSW

Capital Structure:

Ordinary Shares 94,171,301

Major Shareholders:

Conglin In't Invest' Group	11.17%
Giralia Resources	9.13%
Mr. Conglin Yue	3.91%
Directors/Management including Unlisted Options	7.50%

Financial

Cash and deposits on hand
A\$14.9million

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Maiden 1.4 billion tonne Resource for the Hawsons Iron Project

HIGHLIGHTS

- **Maiden Inferred Resource** identified for Hawsons Iron Project, Broken Hill, NSW, comprising **1.4 billion tonnes** at a magnetite Davis Tube Recovered (DTR) grade of 15.5% (using a cut-off DTR grade of 12%)
 - Contained iron concentrate of **220 million tonnes** magnetite at a **premium grade** of **69.9% Fe and 2.5% SiO₂**, with no significant impurities,
- Project attributes that provide **significant cost/revenue benefits** include:
 - Soft siltstone host rock (Bond Work Index of **6.3 kilowatt-hour per tonne**, or kWh/t) leading to:
 - Low cost mining
 - Low power requirements for processing.
 - Very thick horizontal mining widths (in excess 600m)
 - Low waste to ore ratio.
 - Located in close proximity to rail, road and power infrastructure with excess capacity
- Easily liberated, premium quality concentrate product
- **Prefeasibility Study** outcomes are expected in early 2011 targeting an **initial open pit** with a mine life of +15 years, with production **commencing at 6 million tonnes per annum (Mtpa) ramping up to 20 Mtpa**.
- Additional **potential for further substantial resources** in established exploration targets¹
 - potential project mine life of **several decades**.
- Largest magnetite iron mineral resource in NSW and one of the largest resources of this type in Eastern Australia.

¹ The term "Target" should not be misunderstood or misconstrued as an estimate of Mineral Resources and Reserves as defined by the JORC Code (2004), and therefore the terms have not been used in this context. It is uncertain if further exploration or feasibility study will result in the determination of a Mineral Resource or Mining Reserve

The Board of Carpentaria Exploration Limited (ASX:CAP) is pleased to announce a Maiden Inferred Resource for its Hawsons Iron Project of 1.4 billion tonnes at a magnetite Davis Tube Recovery (DTR) of 15.5% (12% DTR magnetite cut-off), the largest new magnetite iron ore discovery in New South Wales.

Category	Billion Tonnes	Magnetite DTR %	Concentrate Grades				
			Fe%	Al ₂ O ₃ %	P ₂ O ₅ %	SiO ₂ %	LOI %
Inferred	1.4	15.5	69.9	0.22	0.002	2.5	-3.0

(average density 3.04 t/m³)

This resource was estimated by independent geologists Hellman and Schofield Pty Ltd and details of the resource estimation are included in Appendix 1.

Hawsons Iron Project – Mineral Resource

The Project is located close to Broken Hill mining centre and regional infrastructure and covers the entire extent of the Braemar Iron Formation in NSW. See Figure 1.

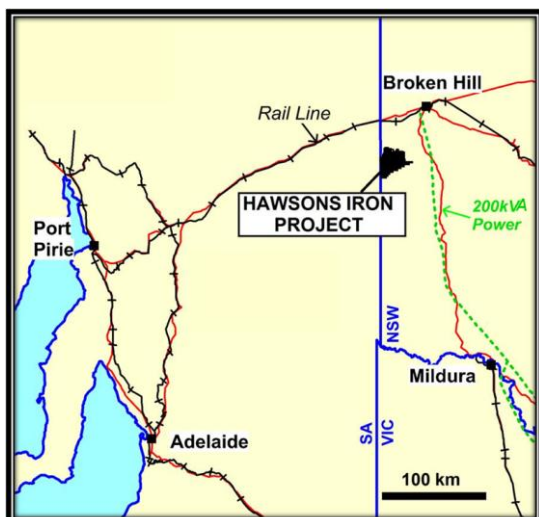


Figure 1. Location of Hawsons Project

The Maiden Inferred Resource covers just one area within the project. Ultimately, the project has the potential for a multi-decade mine life based on an increased **exploration target¹ of 6 to 11 billion tonnes** at 14 – 17 % magnetite DTR with a **concentrate grade of 69-71% Fe**, to a target depth of **450 m**. The previously announced exploration target¹ of 3.5 to 5.8 billion tonnes at 18 – 20 % magnetite DTR and a premium concentrate grade of 69 -71 % Fe (ASX Dec 2009 Quarterly) was only to 250 m depth.

It is important to note that Carpentaria's Phase 1 drilling tested the full extent of the large exploration target¹ represented by the anomalies shown in Figure 2 and confirmed the geophysical modeling and outlined the presence and consistency of siltstone hosted magnetite mineralization that is similar to the

new resource. The Phase 2 drilling confirmed the exceptional conversion from exploration target¹ to Inferred Resource at the Core and Fold Anomaly. This provides considerable confidence that the other remaining exploration targets¹ could be rapidly converted to mineral resources supporting a multi decade project.

The resource is based on 986 laboratory composited DTR analyses at 38 microns, the resource concentrate grade is premium quality at 69.9 % Fe (iron) and 2.52 % SiO₂ (silicon dioxide), with no other impurities. The estimated resource extends to a vertical depth of 400m below surface over a 3km strike length, resulting in an in situ high-grade iron concentrate of 220 million tonnes (Mt).

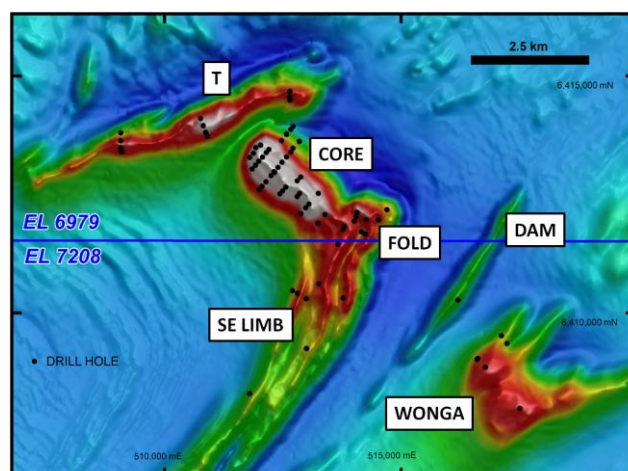


Figure 2. Reduced to the Pole Magnetics depicting the magnetite sources in the Project and the drill hole locations

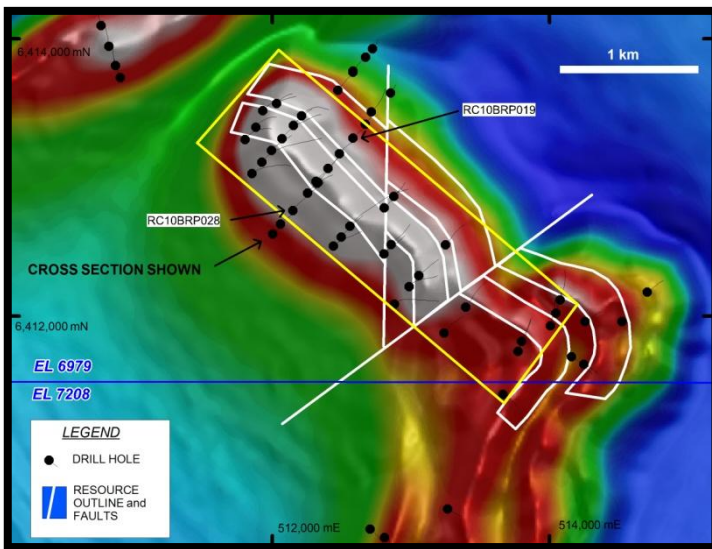


Figure 3. Aerial extent of resource over reduced to the pole magnetics.
Area of current Inferred Resource in yellow

Graphs of the grade-tonnage curves for the Inferred Resource estimate are shown in Appendix 1. The curves show that at a cut-off of 8% DTR that there is a resource of 1.84 Bt @ 14.3 % DTR which contains 263 Mt of concentrate. The relatively flat average DTR grade curve highlights the great consistency of the resource grade at bulk tonnages.

The Resource is open along strike to the south east and down dip. The aerial extent of the resource is shown in Figure 3. The Resource estimate follows the completion of the Phase 2 drilling totalling, 52 drill holes (over 15,065 metres)

The recently completed Scoping Study has highlighted the project's low cost of mining and processing due to the softness of the magnetite siltstone with a Bond Work Index of **6.3 kWh/t** compared with the Australian range of about 16.0 - 29.0 kWh/t for the more typical banded iron formation magnetite deposits.

The thick horizontal mining widths as shown in Figure 4 will result in a relatively low strip ratio for open pit mining where two 300 m thick magnetite units are separated by about 50m of lower grade magnetite siltstone. It is considered highly feasible that this 650 m horizontal width would be mined as one unit in an open pit operation.

Carpentaria's Executive Chairman Nick Sheard said "Carpentaria is very pleased to deliver the Company's Maiden Inferred Resource only one year after discovery. The Hawsons Iron Project is the largest magnetite iron ore resource identified in Eastern Australia, and importantly it is located near rail, road and power infrastructure, being only 60 kilometres south of Broken Hill,"

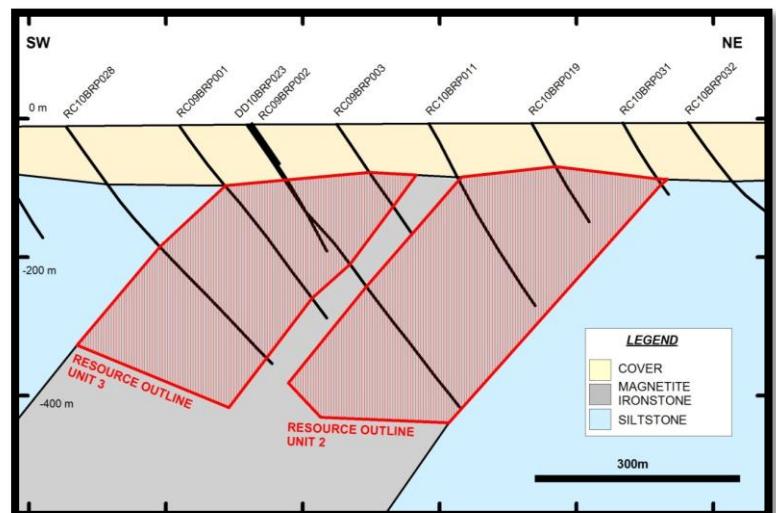


Figure 4. Cross section through Resource - refer to Figure 3 for location

Prefeasibility Study

The Company is now focused on a successful outcome from the Prefeasibility Study, with Carpentaria set to ultimately retain a 20 % free carried interest through to annual production of 20 million tonnes of iron ore concentrate.

Results from the Prefeasibility Study are expected in early 2011, when Carpentaria's joint venture partner, Bonython Metals Group (BMG), currently at 40 % equity, will have the right to pay Carpentaria \$25 million to vest 51 % in the Joint Venture. BMG would then fund a \$20 million Bankable Feasibility Study (BFS) due

for completion within two years. On completion of the successful BFS, BMG can earn an 80% interest in the project on payment of an additional \$23 m in cash to Carpentaria. Carpentaria will then retain a 20 % free carried interest to a 20Mtpa of concentrate production operation which represents a 4 Mtpa output for Carpentaria at this full projected production rate.

Mr Sheard noted that “Our independent test work shows the favourable characteristics of the resource comprising large tonnages, soft mineralization, excellent magnetite liberation and high concentrate grades. I believe that these unique characteristics will more than offset the relatively low DTR grades compared to the usual hard banded iron formations and therefore ultimately deliver a robustly economic project.”

“Hawsons has the potential to transform Carpentaria from an exploration company to a mid-tier mining house with long-term revenue streams and also become a major mining project for Western NSW. High-quality magnetite, such as that identified at Hawsons, with potential for production of direct reduction pellets can currently command prices of up to US\$190 per tonne and Carpentaria has already received interest from a number of potential Asian buyers for off take of our share of future output.”

“Within only three years after floating on the ASX, Carpentaria is proud to announce such a major scale Maiden Resource for our shareholders, which adds to our other interests in promising coal, copper/gold, tin, tungsten, and nickel projects across Eastern Australia,” Mr Sheard said.



Nick Sheard
Executive Chairman

The data in this report that relates to Exploration Results is based on information evaluated by Mr S.N Sheard who is a Fellow of the Australian Institute of Geoscientists and who has sufficient experience 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 (the “JORC Code”). Mr Sheard is a full-time employee of Carpentaria Exploration Ltd and he consents to the inclusion in the report of the Exploration Results in the form and context in which they appear.

The data in this report that relates to Mineral Resource Estimates is based on information evaluated by Mr Simon Tear who is a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM) and who has sufficient experience 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 (the “JORC Code”). Mr Tear is a full-time employee of Hellman & Schofield Pty Ltd and he consents to the inclusion in the report of the Mineral Resource in the form and context in which they appear.

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Appendix 1

Hellman & Schofield has completed new Mineral Resource estimates for the Hawsons Iron Project in Western, New South Wales. The target commodity is iron ore as magnetite. The maiden resource estimates incorporate all the available drillhole data from the recent 2010 drilling programme and a new geological & geophysical interpretation. The estimates have been reported using the JORC Code and Guidelines and the author has the requisite experience to act as a Competent Person under the code.

The headline resource estimate is reported unconstrained at a 12% Davis Tube Recovery (DTR) magnetite grade cut-off for fresh rock material below the oxidation base, to a depth of -240mRL.

Category	Billion Tonnes	Magnetite DTR %	Concentrate Grades				LOI %
			Fe %	Al ₂ O ₃ %	P ₂ O ₅ %	SiO ₂ %	
Inferred	1.4	15.5	69.9	0.22	0.002	2.5	-3.0

(average density 3.04 t/m³)

The Hawsons Iron Prospect is situated within folded, upper greenschist facies Neoproterozoic rocks of the Adelaide Fold Belt. The Braemar Facies magnetite ironstone is the host stratigraphy and comprises a series of strike extensive magnetite-bearing siltstones with a moderate dip (circa 45°). Large areas of the Hawsons prospective stratigraphy are concealed by transported ferricrete and other younger cover. The base of oxidation due to weathering over the prospective horizons is estimated to average 80m in depth. The airborne magnetic data clearly indicates the magnetite siltstones as a series of parallel, narrow, high amplitude magnetic anomalies.

CAP has supplied the drill hole database for the deposit, which H&S has accepted in good faith as an accurate, reliable and complete representation of the available data. H&S performed only very limited validation of the data and did not detect any obvious problems likely to impact significantly on the resource estimates. The drillhole database for Hawsons is satisfactory for resource estimation purposes. The quality control procedures for assay and sampling used by CAP were reviewed by H&S and are to industry standard. However, responsibility for quality control resides solely with CAP.

The resource estimates were produced from a mixture of surface Reverse Circulation (RC) and diamond drillholes (mixed HQ and NQ core sizes). A total of 52 holes for 15,065 m were drilled. Drillhole spacing ranges between 150m and 300 m in both section and plan. DTR sampling was based on a range of composite intervals from 4-15 m of RC chip sampling and cut half core under geological control for the magnetite mineralisation. A total of 986 laboratory DTR assays for Hawsons have been collected. The samples have been analysed by using industry standard 38 micron grind DTR analyses procedures at ALS laboratories, a commercial laboratory based in Perth, WA.

Drillhole collars have been located by the Differential Ground Positioning System (DGPS) survey method and all survey, geological and analytical data have been compiled into an appropriately structured Microsoft Access database. Downhole survey methods have been a mixture of north seeking gyro, single shot downhole camera and single downhole digital measurements. Downhole geophysical logging has been collected for a majority of the drillholes and has provided downhole magnetic susceptibility and

density readings on 0.01m intervals. Core recovery is generally >95% and RC recovery in the fresh rock zone was very good. There has been some limited diamond/RC hole twinning.

5m downhole composites were generated from the database for DTR magnetite grade and iron head grade. Missing DTR data was estimated using conditional expectation to generate an equation from the downhole magnetic susceptibility data and if that was unavailable then from hand held magnetic susceptibility readings. Also composited were concentrate grades for iron, alumina, phosphorous, silica and loss on ignition. Missing Fe concentrate grades were estimated from an equation using the DTR grades and the remaining concentrate elements were estimated from the iron concentrate grade. A total of 2,899 composites were used for the modelling. Coefficient of variation for the magnetite grade was relatively low to allow for Ordinary Kriging as a valid modelling method. No top cut was applied to the data. Variography on the composite data indicates relatively short ranges for the grade continuity. This is mainly due to a lack of data.

A 3 pass search strategy was employed with the Ordinary Kriging of the composites:

Search 1 with 50% Expansion	Pass No 1	Pass No 2	Pass No 3	Rotations
X	300m	450m	450m	-47°
Y	150m	225m	225m	
Z	50m	75m	75m	
Composite Data Requirements				
Min Data	16	16	8	
Max Data	32	32	32	
Octants	4	4	2	

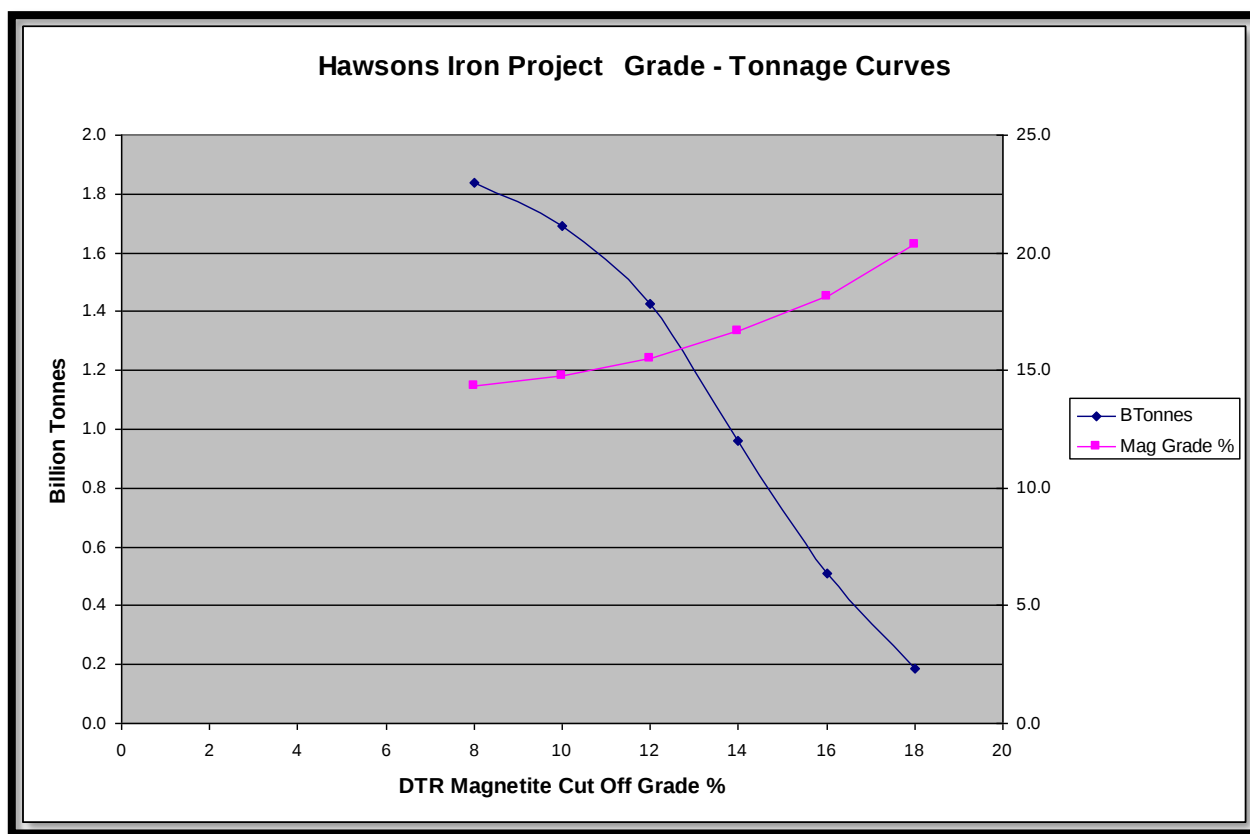
Reporting of the resources used a 12% magnetite DTR cut-off grade to a depth of -240mRL unconstrained by any wireframes, but limited to below the top of fresh rock surface and to the resource modelling local grid easting of 23200mE.

The main factors affecting the resource classification are the drillhole (data) spacing, the weak to moderate variography, the relative small amount of data and estimated data, the mining method, the geological understanding and the style of mineralisation.

CAP have informed H&S that the most likely mining method will be conventional truck and shovel bulk mining method via an open pit operation and the resources have been classified according to this assumption.

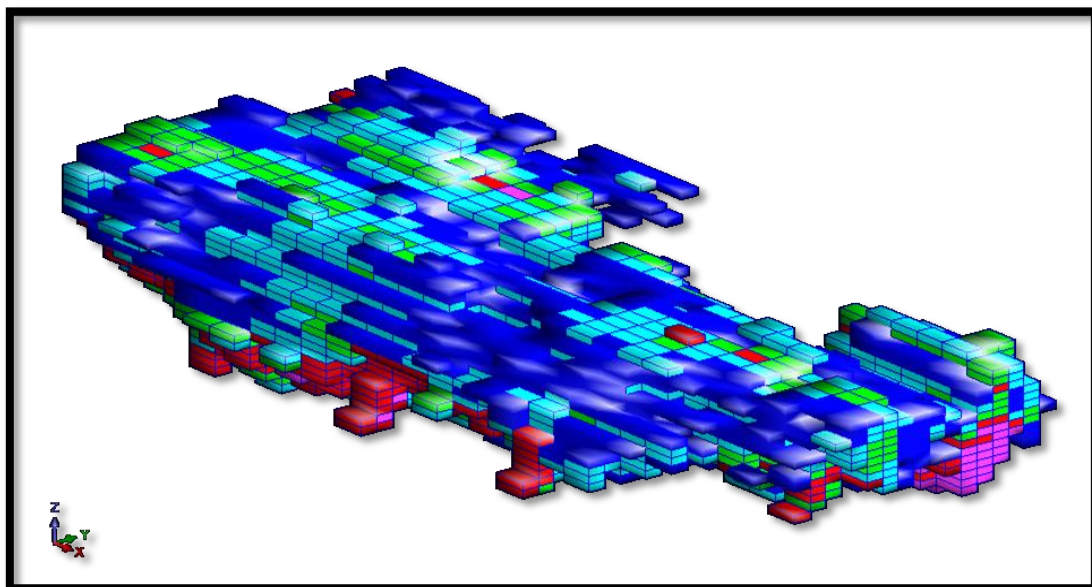
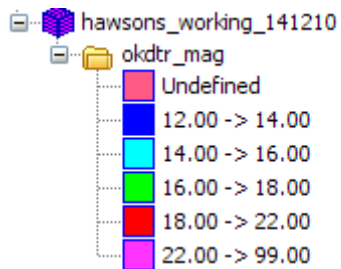
The resource has been reported for a range of cut off grades as per the table below and represented visually as a set of grade-tonnage curves.

DTR Mag Cut Off %	Billion Tonnes	Magnetite Grade %
8	1.8	14.3
10	1.7	14.8
12	1.4	15.5
14	1.0	16.7
16	0.5	18.2
18	0.2	20.3

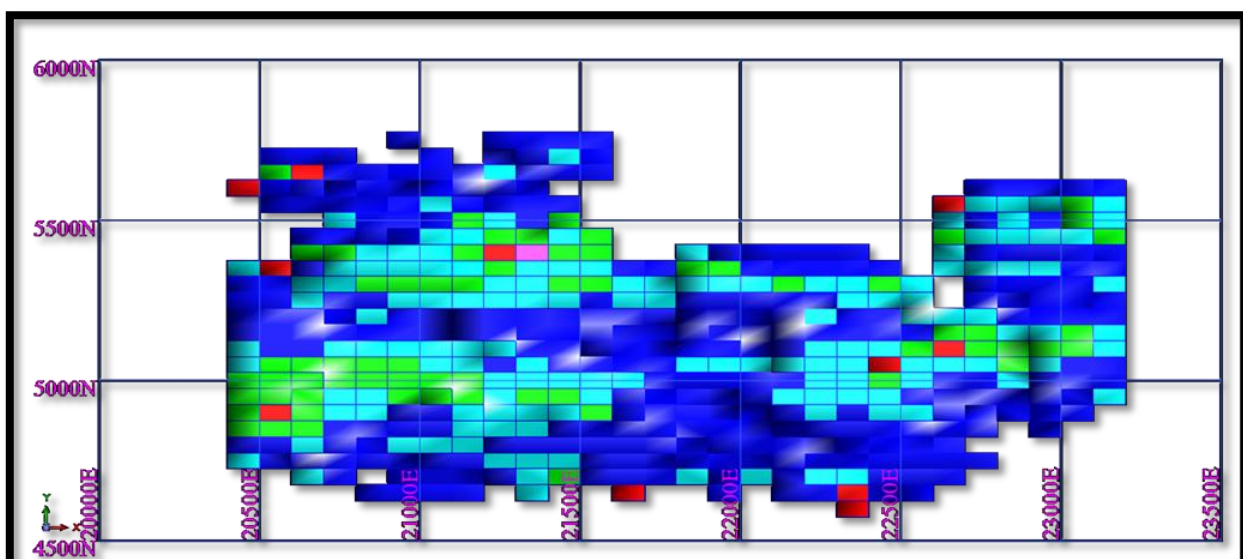


The unconstrained resource block model at a 12% DTR magnetite cut off is shown in the figures below.

Colour Code for magnetite block grades (%)



View: looking down to north



Plan view in the local grid used for resource block modeling. This grid is different from those shown in the text figures which use Map Grid of Australia (GDA 94 – Z54)