Maiden Indicated Resource for Hawsons Iron Project; Total Inferred and Indicated Resource Estimate increases by 20%

ABN: 63 095 117 981 | ASX: CAP

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26 March 2014

Highlights

- **Maiden Indicated Resource of 215 million tonnes (Mt) at 16.2% mass recovery, containing 35Mt premium-grade magnetite concentrate**
- **Total Inferred plus Indicated resource tonnage increased by 26% from the 2010 estimate to 1.77 billion tonnes at a mass recovery of 14.9%**
- **New Indicated plus Inferred Resource contains 263Mt of premium-grade magnetite concentrate, a 20% increase on the 2010 resource estimate**
- **Premium concentrate grades maintained - 69.7% Fe (iron) and 2.9% SiO_2 (silica) with negligible impurities**
- **Significant enhancement for NSW's biggest magnetite project, which is close to available power, water and transport infrastructure to facilitate a start-up operation**

Carpentaria Exploration Limited (ASX:CAP) is pleased to announce a maiden Indicated Resource and a 20% increase in contained premium quality magnetite concentrate for its flagship Hawsons Iron Project located near Broken Hill, New South Wales..

The Hawsons project is held by a joint venture between Carpentaria Exploration (60% interest) and private resources investor Pure Metals Pty Ltd (40%).

The maiden Indicated Resource comprises 215 million tonnes (Mt), containing 35Mt of premium quality magnetite concentrate.

The total Inferred plus Indicated Resource estimate has been expanded to 1.77 billion tonnes at a magnetite mass recovery grade of 14.9%, a 26% tonnage increase on the Company's December 2010 estimate. Total contained iron concentrate has risen by 20% to 263 million tonnes compared to the previous estimate of 220Mt, while maintaining a premium grade of 69.7% Fe and just 2.9% SiO_2.

Carpentaria's Managing Director, Quentin Hill, said the resource upgrade was a milestone in the project's development, resulting from diligent geological work by the Company and independent resource estimators H&S Consultants Pty Ltd.

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"Carpentaria's maiden Inferred Resource was released very soon after drilling was completed at its first major discovery. This upgrade has relied upon a significant geological interpretation and additional data gathering effort that has provided higher confidence in the continuity of the resource than was known at the time of the earlier estimate in December 2010," Mr Hill said.

"This result is a very significant boost to our flagship joint venture project. Not only have we achieved a 20% increase in total contained magnetite concentrate, but the conversion from Inferred Resource to a maiden Indicated Resource in the area of greatest drilling was essentially 100%, providing great confidence in subsequent conversion of other Inferred Resources."

A full comparison of the new resource estimate and the resource estimate released to the ASX in December 2010, at the same 12% Davis Tube Recovered (DTR) grade cut-off, is shown in Table 1 below. Further details are included in the H&S Consultants report attached in the appendix to this report:

ASX Published Resource	Category[3]	Billion Tonnes	Magnetite DTR%	Concentrate Grades					*Contained Concentrate Million Tonnes*
				Fe%	Al_2O_3%	P%[1]	SiO_2%	LOI%	
March 2014	Inferred	1.55	14.7	69.6	0.20	0.004	2.9	-3.0	*228*
March 2014	Indicated	0.22	16.2	69.8	0.20	0.005	2.8	-3.0	*35*
	Total	1.77	14.9	69.7	0.20	0.004	2.9	-3.0	*263*
December 2010	Inferred	1.40	15.5	69.9	0.22	0.002	2.5	-3.0	*220*
Percentage (%) total Resource Increase[2]		26	-4	< -1	none	none[1]	7	none	*20*

Table 1. Hawsons Magnetite Iron Ore Project - Comparison of December 2010 and Upgraded March 2014 Resource Estimates.

1. The P% content shown in the December 2010 Resource was incorrectly labelled due to a computation rounding error effecting the very low concentrations but the value shown here is as originally and incorrectly published to the ASX. Following correction the P% content in the December 2014 estimate is identical to the March 2014 estimate.
2. Between the original December 2010 and newly published March 2014 estimates.
3. Resources are at 12% mass recovery or Davis Tube Recovery cut off

The increase in size to the total Resource and establishment of an Indicated category was the result of a comprehensive review and interpretation of geological and high resolution down-hole geophysical logging data, aided by a newly recognised sequence stratigraphy correlation. The detailed re-interpretation was greatly facilitated by CAP's extensive, high quality technical drill-hole database.

The newly estimated Indicated Resource is wholly converted from a segment of the December 2010 Inferred Resource. It represents an area with the closest drill-hole spacing and a high degree of confidence in the correlation of geological and high resolution geophysical data.

Figure 1 shows the comparison between the 2010 Inferred and 2014 Inferred plus Indicated Resource outlines.

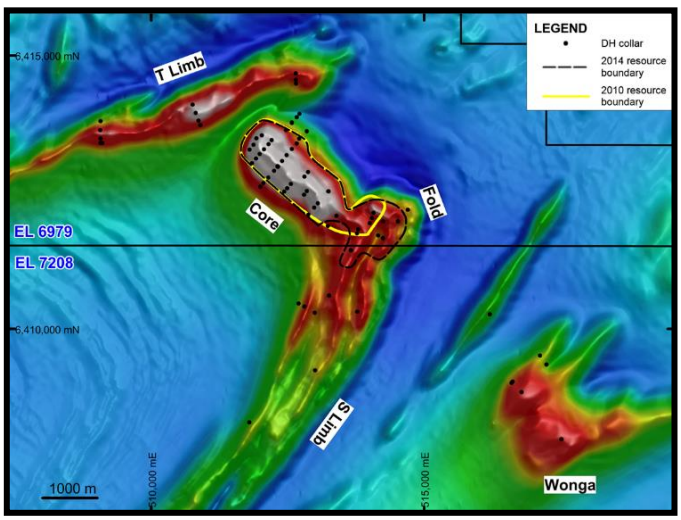

Figure 1. Comparison between 2010 inferred and 2014 inferred and indicated resource outlines.

"The outstanding conversion from inferred to indicated is very positive and demonstrates, as we have consistently stated, that the Hawsons mineralisation has exceptional homogeneity and spatial continuity with very simple geometry," Mr Hill said.

"The increase in the total resource and contained magnetite concentrate will greatly assist with current feasibility study design and optimisation. The newly recognised stratigraphic correlation has led to a higher degree of confidence in the technical understanding of the Inferred to Indicated Resource conversion process which should result in a significant reduction in future drilling requirements for the project."

This resource upgrade follows the Company's announcement on 19 February 2014 of a positive outcome from a detailed start-up study for Hawsons, which showed that matching the project's size to the existing 10Mtpa capacity of the existing rail, power and port infrastructure has the potential for robust returns on investment. The total resource upgrade and inclusion of an indicated category, when combined with the results of the recent study, provides the joint venture confidence to continue development.

The Hawsons joint venture aims to exploit the project's soft rock, cheap grid power and low strip ratio to achieve very competitive CIF prices (cost to land the product in China) in the second quartile of the 62% Fe cost curve. The joint venture (JV) is currently progressing an environmental impact statement (EIS) for the project, which is expected to be completed in early 2015. The JV is also pursuing infrastructure agreements and planning work programs for the next budget period. Production could begin within the next three years should additional funding be secured for the bankable feasibility study.

Speaking from the Mines and Money conference Mr Hill said "Attending Hong Kong's premier mining conference has revealed the strong interest from Asian investors in quality Australian mining projects. We are confident of attracting the right partner for the Hawsons project, and unlocking its potential as a source of long-lasting wealth for our shareholders, Broken Hill and the community of New South Wales".

For further information please contact:

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Managing Director

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The information in this report that relates to Exploration Results is based on information evaluated by Mr Q.S. Hill who is a member of the Australian Institute of Geoscientists (MAIG) 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 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Hill is a Director 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 information 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 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Tear is a Director of H&S Consultants Pty Ltd and he consents to the inclusion in the report of the Mineral Resource in the form and context in which they appear.

JORC Code, 2012 Edition – Table 1 Hawsons Magnetite Project

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• A total of 52 drillholes were drilled by CAP. Drillholes were a mixture of reverse circulation (RC) from surface, diamond tails to RC precollars (PD) and diamond from surface (DD). • All sampling was to industry standard • RC drillholes were drilled to obtain 1m samples with sample compositing applied to obtain a 2m to 10m 3kg sample which was pulverized to produce 150g aliquot for X-Ray Fluorescence (XRF) and Davis Tube Recovery (DTR) analysis. Hand held magnetic susceptibility measurements and geological logging was completed for every metre of every drillhole. • Diamond drillhole core sampling process involved; orientation, metre marking, magnetic susceptibility measurements (every 0.5m), core recoveries, rock quality designation (RQD) and geological logging (every metre). The core was then photographed and cut into halves to produce an 8m composite sample (predominantly NQ core) which was pulverized to produce a 150g aliquot for XRF and DTR analysis. • Geoscience Associates carried out gyroscope surveying on all drillholes. Surveys were conducted on open hole. The geophysical logging was completed for a majority of holes and consisted of natural gamma, magnetic susceptibility, density and calliper readings • CAP has a suite of documented procedures for drilling related activities • Consistency of sampling method maintained. • Sampling technique is considered appropriate for deposit type
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	• Drilling is a combination of RC, PD and DD • Industry standard drilling rigs suitable for the required task were used. • RC drilling was carried out using a truck mounted Schramm and truck mounted KWL 1600H. Both used 4.5 inch rods and 5.5inch face bits. • PD and DD drilling was carried out using a truck mounted UDR650 using NQ2 and standard HQ diameters. When

Criteria	JORC Code explanation	Commentary
		orientated the Ace Core orientation tool was used.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• RC sampling done on 1m intervals into green plastic bags. Sample recoveries for RC were visually estimated by the geologist at the time of drilling and recorded, • Because no numerical RC chip recovery data exists it is not possible to conclude if there is a relationship between sample recovery and mineral grade • Core recoveries were recorded by measuring the length of core recovered in each run divided by the drilled length of the individual core runs; average recovery >97%. • A hand held XRF orientation study concluded that there was no sample bias with loss or gain of fine/coarse material. • Negligible wet samples in the RC drilling
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Every RC, PD and DD drillhole was logged by a geologist & entered into Excel spread sheets recording; Recovery, Moisture content, Magnetic susceptibility, Oxidation state, Colour, % of Magnetite, Gangue Min, Sulphide Min, Veins and Structure. Data was uploaded to a customised Access database. • Logging used a mixture of qualitative and quantitative codes • All RC sample metres were sub-sampled, sieved, washed and stored in a labelled plastic chip tray. All remaining drill core after sampling was stored in labelled plastic core trays on site. • All drill core was photographed wet and dry after logging and before cutting. • All relevant intersections were logged • Geological logging was of sufficient detail to allow the creation of a geological model.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	• All RC samples were composited using the spear sampling method. The spear method was concluded to be adequate based on the results of a hand held XRF orientation exercise. The green plastic bags were speared from each angle to the bottom of the bag to ensure a representative sample. • DD core was cut into half core using a brick saw and diamond blade. The core was cut using the orientation line or perpendicular to bedding. Half core was sent to ALS for analysis, whilst remaining half core was retained for reference. • Field duplicates, blanks (river sand) and certified standards were used for quality control measures • All sampling methods and samples sizes are deemed

Criteria	JORC Code explanation	Commentary
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	appropriate

Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*
	• *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*
		• <u>Sample Prep</u>
		  • Crush the sample to 100% below 3.35 mm.
		  • A 150 g sub-sample for pulverizing in a C125 ring pulveriser (record weight) – DTR SAMPLE.
		  • Initially pulverize the 150 g sample for nominal 30 seconds – the sample is unusually soft for a ferro-silicate rock!
		  • Wet screen the DTR sample at 38 micron pressure filter and dry, screen at 1 mm to de-clump and re-homogenize.
		  • Record the oversize weights – if less than approximately 20 g is oversize, stop the procedure – failure.
		  • If failure - select another 150 g DTR Sample and reduce the initial pulverization time by 5 secs, repeat until initial grind pass returns greater than approximately 20 g oversize. Once achieved retain the – 38 micron undersize.
		  • Regrind only the oversize for 4 seconds of every 5 g weight of oversize.
		  • Repeat the wet screening, drying, de-clumping & weighing stages until less than 5g above 38micron remains.
		  • Ensure the remaining < 5 g oversize is returned back into the previously retained -38 micron product.
		  • Report the times and weights for each grind pass phase.
		  • Combine and homogenize all retained -38 micron aliquots and <5 g oversize –final pulverized product. Sub-sample the final pulverized product to give a 20 g feed sample for DTR work and a ~10 g sample for HEAD analysis via XRF fusion.
		  • The objective of the pulverizing procedure is to achieve a nominal P80 of approximately 25 micron for the sample.
		• <u>Davis Tube Recovery (DTR) Analysis</u>
		  • Pulveriser bowl 150 ml
		  • Stroke Frequency - 60/minute
		  • Stroke length – 38mm
		  • Magnetic field strength – 3000 gauss
		  • Tube Angle – 45 degrees
		  • Tube Diameter – 40mm
		  • Water flow rate – 540-590 ml/min
		  • Washing time 20 minutes

Criteria	JORC Code explanation	Commentary
		• Collect the concentrate in small collector (magnetic fraction) and discard tails. • X-Ray Fluorescence (XRF) Assaying • Using the Head Sample, analyse by XRF fusion method for the following elements: Al2O3 %, As % , Ba % , CaO % , Cl % , Co % , Cr % , Cu % , Fe % , K2O % , MgO % , Mn % , Na2O % , Ni % , P % , Pb % , S % , SiO2 % , Sn % , Sr % , TiO2 % , V % , Zn % , Zr % & LOI. • Dry the DTR concentrate and report the weight of the concentrate as a percentage of measured feed and report – DTR Mass Recovery. • Using the DTR concentrate sample analyse by XRF fusion method for the following elements: Al2O3 %, As % , Ba % , CaO % , Cl % , Co % , Cr % , Cu % , Fe % , K2O % , MgO % , Mn % , Na2O % , Ni % , P % , Pb % , S % , SiO2 % , Sn % , Sr % , TiO2 % , V % , Zn % , Zr % & LOI. • JH8 and KT5 magnetic susceptibility meters were used to record magnetic susceptibility. • A laboratory standard was used each day to calibrate each metre. A Niton XL3T Gold hand held XRF machine was used. A laboratory analysed sample was used to calibrate for Fe. • QAQC procedures consisted of using field duplicates, triplicates, blanks and certified standards at a frequency of 5 per 100 samples. • Internal QAQC measures were also undertaken by ALS. • Satisfaction of precision, accuracy and any lack of bias was made by Keith Hannan of Geochem Pacific Pty Ltd, an independent Geochemist/consultant. • All sampling and assay methods and samples sizes are deemed appropriate.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Data was stored in a customised Access database • Twin DD holes were used to verify the results for RC holes and the DTR performance. • No Adjustments were made to raw assay data. • Density data from the downhole geophysics was adjusted upwards by 5.2% based on check density measurements using core with the immersion in water (Archimedes) method
Location of	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations*	• Drill holes collars were located by a local surveyor using a Differential GPS with accuracy to less than one metre.

Criteria	JORC Code explanation	Commentary
data points	*used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• Coordinates were supplied in GDA 94 – MGA Zone 54. • Down hole surveys were recorded using a gyroscope due to the highly magnetic nature of the deposit. • Topographic control was collected using a high resolution Differential GPS by a local surveyor • Location methods used to determine accuracy of drillhole collars are considered appropriate
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.* • *Whether sample compositing has been applied.*	• The deposit is drilled at a nominal spacing of 150m to 400m in section and plan. • The drill spacing was deemed adequate for the interpretation of geological and grade continuity noting the homogeneity of the style of mineralisation. • Drill samples were composited under geological control with an interval range of 2 to 10m with an average length of 8m,
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* • *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• Drilling was completed at -60^{o}, generally sub-perpendicular to the bedding, which is the primary control to the magnetite mineralisation. • Different azimuths were used to reflect the changing strike of the beds associated with folding of the sediments and were designed to maintain the steep angle to the bedding • Locally holes suffered significant deviation to the right (east) with depth. This affected the lower Unit 2 more than the upper Unit 3 • Drilling orientations are considered appropriate with no bias.
Sample security	• *The measures taken to ensure sample security.*	• All samples were stored on site under CAP personnel supervision until transporting to the CAP Broken Hill office • Intensity of magnetite mineralisation is difficult to see visually but detectable using a magnet.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Sample procedures and results were systematically reviewed by CAP personnel. • The QAQC data was reviewed by CAP staff • The QAQC data was also reviewed by Keith Hannan of Geochem Pacific Pty Ltd, an independent Geochemist/consultant who concluded: ○ 1. The duplication procedure for composite RC samples, by careful spearing, is demonstrably effective; ○ 2. An absence of mismatches between duplicates and the consistency of analytical results for CAP blanks and the CAP certified standards indicate that sample handling procedures

Criteria	JORC Code explanation	Commentary
		in the field for this complex program are well executed. ○ 3. Based on the laboratory chemical analyses and derived parameters such as magnetite content, the CAP monitor standard is chemically and mineralogically uniform and therefore 'fit-for-purpose'. ○ 4. The high degree of correlation between the averaged field portable (FP) XRF readings for Fe on primary bags of RC spoil and the laboratory analyses of Fe on the much smaller composite samples derived thereof, indicates that downhole Fe distributions are successfully mapped by FP XRF and that the compositing procedure is effective.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Hawsons Magnetite project is located in Western NSW, 60 km southwest of Broken Hill. The deposit is 30km from the Adelaide-Sydney railway line, a main highway and a power supply. • The project is under a Joint Venture between Carpentaria Exploration Ltd (CAP) and Pure Metals Pty Ltd where CAP holds 60% and Pure Metals 40% equity in the project. Pure Metals currently manage the project. • The project area is wholly within Exploration Licences (ELs) 6979, 7208 & 7504 which are 100% owned by CAP. • Licence conditions for all ELs have been met and are in good standing. • An application for a Mining Lease (ML) was lodged with the NSW Trade & Investment Department in October 2013 and Carpentaria is not aware of any impediments to obtaining a mining lease.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• In 1960 Enterprise Exploration Company (the exploration arm of Consolidated Zinc) outlined a number of track-like exposures of Neoproterozoic magnetite ironstone (+/- hematite) which returned a maximum result of 6m at 49.1% Fe from a cross-strike channel sample. No drilling was undertaken by Enterprise. • CRAE completed five holes within EL 6979 seeking gold

Criteria	JORC Code explanation	Commentary
		mineralisation in a second-order linear magnetic low interpreted to be a concealed faulted iron formation within the hinge of the curvilinear Hawsons' aeromagnetic anomaly. CRAE's program failed to locate significant gold or base metal mineralisation but the drilling intersected concealed broad magnetite ironstone units interbedded with diamictite adjacent to the then untested peak of the highest amplitude segment of the Hawsons aeromagnetic anomaly.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Hawsons Magnetite Project 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 generally with a moderate dip (circa -55^{o}). The airborne magnetic data clearly indicates the magnetite siltstones as a series of parallel, high amplitude magnetic anomalies. 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 from surface. • The Hawsons project comprises a number of prospects including the Core, Fold, T-Limb, South Limb and Wonga deposits. Resource Estimates have been generated for the Core and Fold areas which are contiguous. • The depositional environment for the Braemar Iron Formation is believed to be a subsiding basin, with initial rapid subsidence related to rifting possibly in a graben setting as indicated by the occurrence of diamictites in the lower part of the sequence (Unit 2). A possible sag phase of cyclical subsidence followed with deposition of finer grained sediments with more consistent, as compared to the diamictite units, bed thicknesses, style and clast composition (Unit 3). The top of the Interbed Unit marks the transition from high (Unit 2) to lower (Unit 3) energy sediment deposition • The distribution of disseminated, inclusion-free magnetite in the Braemar Iron Formation at Hawsons is related to the composition and nature of the sedimentary beds. The idioblastic nature of the of the magnetite is believed due to one or more of a range of possible processes including in situ recrystallisation of

Criteria	JORC Code explanation	Commentary
		primary detrital grains, chemical precipitation from seawater, permeation of iron-rich metamorphic fluids associated with regional greenschist metamorphism. Grain size generally ranges from 10microns to 0.2mm but tends to average around the 40microns. The sediment composition and grain size appear to provide the main control on the mineralisation. There is no evidence for structural control in the form of veins or veinlets coupled with the lack of a strong structural fabric. • In the majority of the Core and Fold deposits the units strike south east and dip between 45 and 65˚ to the south west. The eastern part of the Fold deposit comprises a relatively tight, synclinal fold structure resulting in a 90^{o} strike rotation.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Exploration results not being reported
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Exploration results not being reported
Relationship between mineralisation widths and	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*	• Drilling has tended to be at a steep angle to the dip angle of the sedimentary beds.

Criteria	JORC Code explanation	Commentary
intercept lengths	• *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• Exploration results not being reported
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Exploration results not being reported
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• A substantial amount of polished and thin section work has been completed on both RC chips and diamond core. This work has confirmed the nature and style of both the original sediment and the iron minerals including magnetite, hematite, chlorite and ferroan dolomite. • Downhole geophysics comprises magnetic susceptibility, gamma and density and has been completed for a majority of the holes. This has resulted in the definition of a magnetic (and density-related) stratigraphy that is coincident with a chronostratigraphic interpretation.
Further work	• *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Exploration results not being reported

Section 3 Estimation and Reporting of Mineral Resources

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• Independently customised Access database by GR-FX Pty Ltd • Validation of database undertaken by Keith Hannan of Geochem Pacific Pty Ltd, an independent Geochemist/consultant. • Limited validation was conducted by H&S Consultants (H&SC) to ensure the drill hole database is internally consistent. Validation

Criteria	JORC Code explanation	Commentary
		included checking that no assays, density measurements or geological logs occur beyond the end of hole and that all drilled intervals have been geologically logged. The minimum and maximum values of assays and density measurements were checked to ensure values are within expected ranges. Further checks include testing for duplicate samples and overlapping sampling or logging intervals • H&SC has not performed detailed database validation and CAP personnel take responsibility for the accuracy and reliability of the data used to estimate the Mineral Resources. • H&SC created a local E-W orthogonal grid for all interpretation and modelling work
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Regular site visits have been carried out by Quentin Hill, Managing Director for CAP, who acts as the Competent Person with responsibility for reporting the exploration results and the integrity and validity of the database on which resource estimates were conducted. • A site visit has been undertaken in 2012 by Simon Tear of H&SC, Competent Person for the reporting of the resource estimates.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.* • *The effect, if any, of alternative interpretations on Mineral Resource estimation.* • *The use of geology in guiding and controlling Mineral Resource estimation.* • *The factors affecting continuity both of grade and geology.*	• The magnetite mineralisation is stratabound • The downhole geophysical data has been used in conjunction with DTR recovered magnetic fraction grades to allow for the generation of a set of 3D wireframes representing variously mineralised units. • The lithological interpretation of the Hawsons deposit is therefore relatively simple and reasonably well constrained by drilling and the high amplitude magnetic anomalies. • The consistency of the geophysical patterns for Unit 3 provides for a high level of confidence in the sediment interpretation. • Two main cross faults, possibly a conjugate pair, have been delineated and have caused small offsets in the mineral-bearing stratigraphy. • H&SC created eight conformable wireframes representing individual lithological units based on drill hole data. The outer boundary of the combined wireframes was used to constrain the Mineral Resource Estimate but the individual lithological boundaries were not used beyond aiding the identification of six individual modelling domains which represent volumes

Criteria	JORC Code explanation	Commentary
		separated by one of the two faults or by variations in strike due to folding. • H&SC also used the geological logs of the drill holes to create wireframe surfaces representing the base of colluvium, the base of complete oxidation and the top of fresh rock. • Any additional faulting in the deposit is assumed to be insignificant on the scale important to resource estimation. • H&SC is aware that alternative interpretations of the mineralised zones and fault are possible but consider the wireframes to adequately approximate the locations of the mineralised zones for the purposes of resource estimation. Alternative interpretations may have a limited impact the resource estimate.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	• The resources have a strike length of around 3.3km in a south easterly direction. The plan width of the resource varies from 700m to 1.9km with an average of around 1.1km (noting the relatively modest dip angle of the beds. The upper limit of the mineralisation occurs between 25 and 80m below surface (average 65m) and the lower limit of the resource extends to a depth of 440m below surface. The lower limit to the resource is a direct function of the depth limitations to the drilling.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.* • *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.*	• The head iron, Davis Tube Recovery (DTR) and concentrate iron, silica, alumina, phosphate and Loss on Ignition (LOI) were estimated using Ordinary Kriging on 5m composites in the Micromine software. H&SC considers Ordinary Kriging to be an appropriate estimation technique for the type of mineralisation and extent of data available from the Core and Fold deposits. All data has low coefficients of variation. • Of the 3,017 downhole composites produced 952 composites had no DTR values. A regression based on downhole magnetic susceptibility was used to calculate likely DTR values for untested intervals. A regression based on the hand held magnetic susceptibility data was used to estimate the DTR values where downhole magnetic susceptibility was not available. Missing Fe concentrate grades were calculated using a regression based on the DTR grades and the remaining concentrate elements were calculated using a regression based on the iron concentrate grade. Most of the missing DTR grades were on the periphery of the mineralisation (often unsampled areas) and the missing concentrate grades the result of

Criteria	JORC Code explanation	Commentary
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	insufficient sample being available for XRF analysis mainly from the Interbed Unit. • The outer boundary of the wireframed lithological units was used to constrain the Mineral Resource Estimates. The two fault surfaces were treated as hard boundaries forming three separate domains. Two of the domains were further subdivided into two and three sub-domains to reflect changes in strike due to folding. The search ellipse and variography were rotated to be parallel to strike for each of these domains but the boundaries between them were treated as soft boundaries i.e. searches could pass over the sub-domain boundaries. • No recovery of any by-products has been considered in the resource estimates as no products beyond iron are considered to exist in economic concentrations. • No top-cutting was applied as extreme values were not present and top-cutting was considered by H&SC to be unnecessary • No check estimate was carried out though the estimates were in line with previous estimates. Hellman & Schofield, the predecessor to H&SC, estimated the resources of Hawsons in 2010. The previous resource estimate was based on less data with an easting limit. The new resource estimates show an increase in size of the deposits by about 24% with only a 4% drop in DTR grade and a 20% increase in the amount of concentrate. The extra resource is primarily from the Fold area. • The concentrations of deleterious silica, alumina and phosphate in the magnetic concentrate were estimated. • Block dimensions are 50m x 100m x 20m (Local E, N, RL respectively). The east and north dimensions were chosen as they are around half the closet drillhole distances. The vertical dimension was chosen to reflect the sample spacing and possible mining bench heights. • Each element was estimated separately. Three search passes were employed with progressively larger radii or decreasing search criteria. The first pass used radii of 300x150x50m, the second and third used 450x225x75m (along strike, down dip and across mineralisation respectively). The first and second passes used a four sector search with a maximum number of data points per sector of 8 (total 32) whereas the third pass used two sectors with a maximum number of data points per sector of 16 (total

Criteria	JORC Code explanation	Commentary
		32). The first and second passes required a minimum of 16 data points from two drill holes or more and the third required a minimum of 8 data points with no drill hole restrictions. • The H&SC block model was reviewed visually by H&SC and CAP geologists and it was concluded that the block model fairly represents the grades observed in the drill holes. H&SC also validated the block model using a variety of summary statistics and simple plots.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnages of the Mineral Resource are estimated on a dry weight basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The resources are reported at a cut-off of 12% DTR as advised by CAP to H&SC. • Other constraints in reporting the resource estimates include below the top of the fresh rock surface and a vertical depth of -240mRL. • The cut-off grade at which the resource is quoted reflects the intended bulk-mining approach
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.*	• The Hawsons' resources were estimated on the assumption that the material is to be mined by open pit using a bulk mining method. • Minimum mining dimensions are envisioned to be around 25m x 10m x 10m (strike, across strike, vertical respectively). The block size is significantly larger than the likely minimum mining dimensions. • The resource estimation includes internal mining dilution. • A study was recently completed by GHD which developed a mine plan to produce 10Mtpa of magnetite concentrates via on site processing • The proposed mining method would use a combination of In Pit Crushing and Conveying as well as truck and shovel.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions*	• The idioblastic nature of the magnetite lends itself to relatively easy liberation • The ROM material is relatively soft for a magnetite deposit with a bond work index much lower than typical Banded Iron Formation deposits. • Initial laboratory testwork by the CSIRO in Brisbane identified that the ROM material could readily be reduced to a particle size less than 1mm in an impact crusher.

Criteria	JORC Code explanation	Commentary
	made.	• hrlTesting completed metallurgical testwork that showed better than 50% rejection can be achieved in the rougher stages. The ball mill operational power is lower than expected and at a P_{100} of 38µm a concentrate of ~69% Fe can be achieved.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The deposits lie in flat open country typical of Western NSW. • Predominantly scrub vegetation that allows for sheep grazing. • There are large flat areas for waste and tailings disposal • Small number of creeks with only seasonal flows • Baseline data collection of a variety of environmental parameters is in progress e.g. dust monitoring, surface water, weather records • Preliminary Ecology Assessments which have led to field ecology studies under the guidance of the Office of Environment and Heritage in NSW • A Water Optimisation Study identified ways to reduce water consumption in the plant and has led to a new process design considering paste thickening in the metallurgical plant instead of the original conventional thickeners.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• The downhole (short-spaced) density data was used for the density. This data had a correction factor of +5.2% applied based on testwork completed on 194 NQ core samples using the immersion-in-water (Archimedes) method. • The data was composited to 5m prior to modelling. • The density at Hawsons was estimated using Ordinary Kriging for search passes one to three and the remaining blocks were populated from values estimated from the Fe head grade of each block using a regression created from blocks where both variables had been estimated.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• The resources were initially classified on the search criteria with blocks populated by Passes 1, 2 and 3 all being classed as Inferred. A subsequent detailed sedimentalogical review for Unit 3, the upper half of the western part of the Core area, demonstrated strong stratigraphic continuity of the sediments in conjunction with the DTR grades. This allowed for the creation of a designed shape used to classify this part of Unit 3 of the resource estimate as Indicated. • Other relevant factors in the classification are the good overall geological understanding, the drillhole spacing, the QAQC data, and geophysical data including density.

Criteria	JORC Code explanation	Commentary
		• H&SC believes the confidence in tonnage and grade estimates, the continuity of geology and grade, and the distribution of the data reflect Indicated and Inferred categorisation. The estimates appropriately reflect the Competent Person's view of the deposit. H&SC has not assessed the reliability of input data and CAP personnel take responsibility for the accuracy and reliability of the data used to estimate the Mineral Resources.

Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• The estimation procedure was reviewed as part of an internal H&S Consultants peer review and the block model was reviewed visually by CAP geologists.
		• Behre Dolbear Australia ("BDA") completed a technical review for CAP in 2011 based on a GHD study. BDA considers that the broad geology and geological controls on mineralisation and the geological database are:
		  ○ Generally adequately defined at this stage for estimation of Inferred [2010] resources. BDA recommends the use of hard boundaries for modelling of the mineralisation.
		  ○ BDA considers that the analytical process adopted by Carpentaria is suitable for evaluation of recoverable magnetite concentrate proportions and quality. Overall the Hawsons database appears adequate for use in estimating Inferred resources under the [2004] JORC code
		  ○ The proposed mining method is conventional, but the geotechnical data is very preliminary.
		  ○ The proposed processing route is consistent with modern practice and flowsheets of other recently established operations.

Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.* • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.*	• No statistical or geostatistical procedures were used to quantify the relative accuracy of the resource. The global Mineral Resource estimates of the Hawsons deposit is moderately sensitive to higher cut-off grades but does not vary significantly at lower cut-offs. • The relative accuracy and confidence level in the Mineral Resource estimates are considered to be in line with the generally accepted accuracy and confidence of the nominated Mineral Resource categories. This has been determined on a qualitative, rather than quantitative, basis, and is based on the Competent Person's experience with similar deposits

Criteria	JORC Code explanation	Commentary
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The Mineral Resource estimates are considered to be accurate globally, but there is some uncertainty in the local estimates due to the current drillhole spacing and a lack of geological definition in places. • No mining of the deposit has taken place so no production data is available for comparison.

21ST March 2014

Mr Quentin Hill
Managing Director
Carpentaria Exploration
Brisbane, QLD
Australia

Subject: Hawsons Magnetite Project : Update of Resource Estimates

H&S Consultants Pty Ltd ("H&SC"), was requested by Carpentaria Exploration Ltd ("CAP") to complete updated Mineral Resource Estimates for the Hawsons Magnetite Project in western NSW, where fresh rock magnetite is the target commodity. The new resource estimates are based on the original 2010 drilling data in conjunction with a revised and improved geological model. The estimates are reported using the JORC 2012 Code and Guidelines and the author has the requisite experience to act as a Competent Person under the code.

The Hawsons Magnetite Project is situated within folded, greenschist facies Neoproterozoic rocks of the Adelaide Fold Belt. The Braemar Iron Formation, as the host stratigraphy, regionally comprises a series of relatively narrow, strike extensive magnetite-bearing siltstones with diamictites, generally with a moderate SW dip (circa 45^{o}-55^{o}). The airborne magnetic data clearly indicates the magnetite-bearing sediments as a series of parallel, narrow, high amplitude magnetic anomalies. 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 below surface. The Hawsons Project contains a series of deposits that are the result of deformation and brittle dislocation of the host stratigraphy. The resource estimates included in this report are for the Core and Fold deposits.

CAP has supplied an independently audited drillhole database for the deposit, which H&SC has accepted in good faith as an accurate, reliable and complete representation of the available data. H&SC 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; however responsibility for quality control resides solely with CAP.

The resource estimates were produced from a mixture of surface RC and diamond drillholes (HQ and NQ core sizes). Drillhole spacing ranges from 100m to 600m with a total of 52 holes for 15,318m. Downhole geophysical logging consisted of gamma, magnetic susceptibility and density logs. Sample intervals ranged from 2 - 10m with Davis Tube Recovery ("DTR") analysis for the recovered magnetic fraction on all samples within the main mineralised zones. This included head and concentrate XRF analysis for Fe, SiO_2, Al_2O_3, P and LOI. Geological interpretation has comprised a series of conformable sedimentary units with distinctive magnetic signatures and /or DTR recovered magnetic fraction grades. The units have diffuse margins and have been combined into a single mineral wireframe. This wireframe in conjunction with two cross cutting fault structures has been used to constrain the modelling.

A total of 3,017 5m downhole composites were generated of which 2,076 were in fresh rock and used in the Ordinary Kriging modelling. This modelling used a maximum search of 450m by 225m by 75m with a minimum number of 8 data points. Block size was 100m by 50m by 20m. A total of

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three geological domains and six search domains were used in the modelling, the latter a reflection of the variation in strike of the mineralised sediments, particularly in the Fold area. Density was modelled using 5m composites derived from the downhole geophysical logging with a small correction factor based on water immersion measurements of drillcore.

The Indicated and Inferred Resources are reported for a 12% DTR magnetite cut-off grade constrained by the base of oxidation and the geological wireframes to a vertical depth of -240mRL.

12% DTR cut off				**Concentrate Grades**				
Category	**BTonnes**	**DTR %**	**Fe Head %**	**Fe %**	**Al_2O_3 %**	**P %**	**SiO_2 %**	**LOI %**
Indicated	0.22	16.2	18.2	69.8	0.2	0.005	2.8	-3.0
Inferred	1.55	14.7	17.4	69.6	0.2	0.004	2.9	-3.0
Total	**1.77**	**14.9**	**17.5**	**69.7**	**0.2**	**0.004**	**2.9**	**-3.0**

(minor rounding errors)

The new estimate figures represent a 24% increase in the size of the estimates compared to the 2010 figure with a corresponding <4% drop in DTR recovered magnetic fraction grade This equates to 263Mt of magnetite concentrate, a 20% increase from the 2010 resource estimate. Importantly no significant change in the iron and silica concentrate grades is recorded. The new mineralisation is generally from the Fold deposit which abuts the mineralisation previously reported for the Core deposit.

The Indicated Resources are from Core West where a detailed sedimentalogical study using the downhole geophysical data and multi-element assays has upgraded the confidence in the geological model and the continuity of the magnetite grade.

More details are included in Appendix 1

Simon Tear
Director and Consulting Geologist
H&S Consultants Pty Ltd

The data in this report that relates to Exploration Results for the Hawsons Magnetite Project is based on information evaluated by Mr Q Hill who is a Member 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 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Hill is Managing Director 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 for the Hawsons Magnetite Project 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 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Tear is a director of H&S Consultants Pty Ltd and he consents to the inclusion in the report of the Mineral Resource in the form and context in which they appear.

Appendix 1

Figure 1 shows in plan on the airborne magnetic data the relationship of the magnetite-rich sediments of the Braemar Iron Formation for the Hawsons Magnetite Project. The black dots represent the 2009-2010 CAP drilling.

Figure 1 Airborne Magnetic Data and Prospect Areas

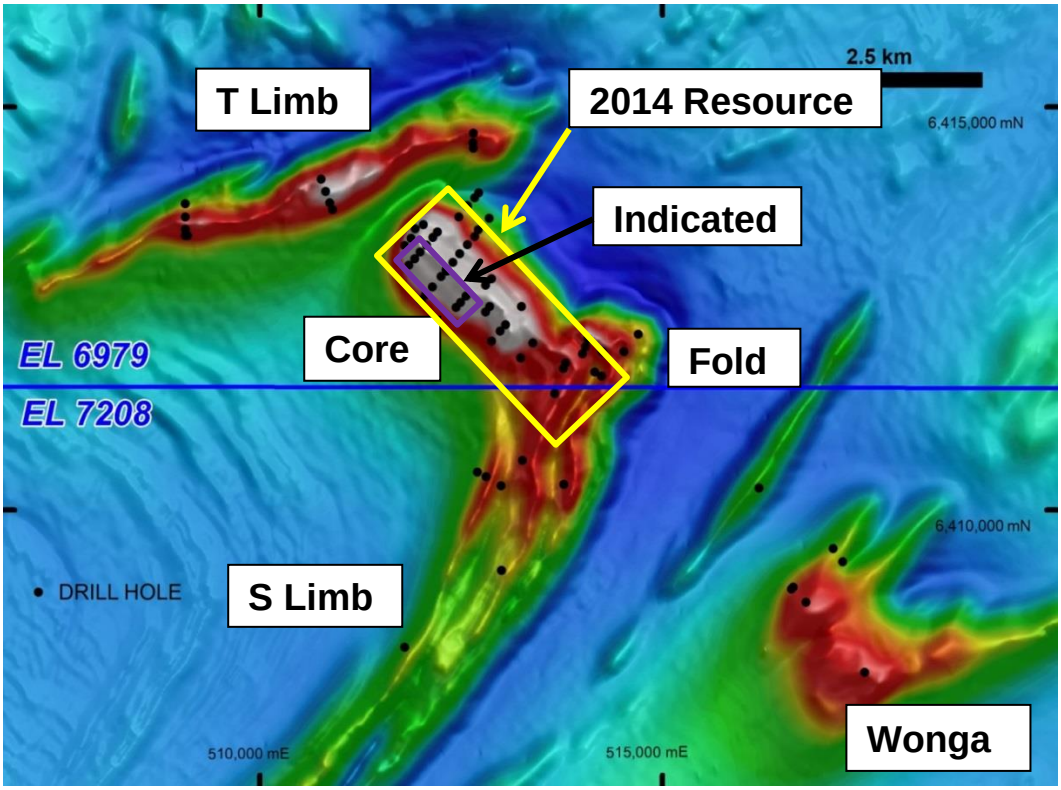


Figure 2 shows a schematic cross section of the deposit in the Core area.

Figure 2 Core Area Schematic Cross Section

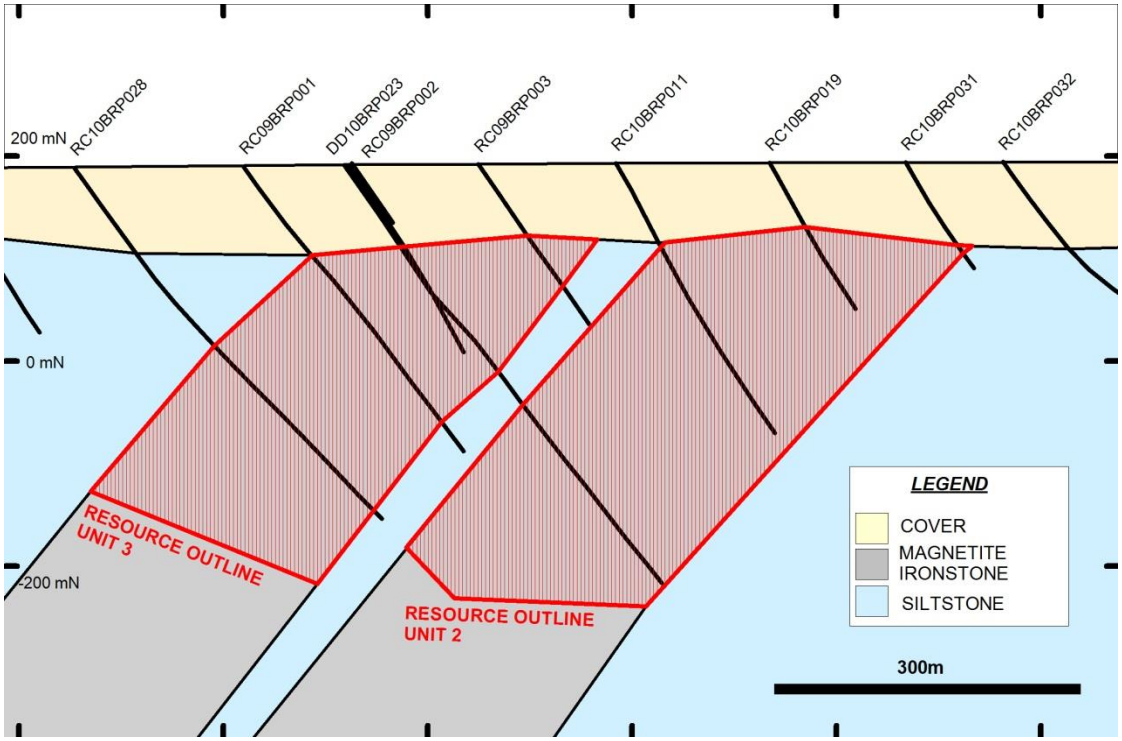
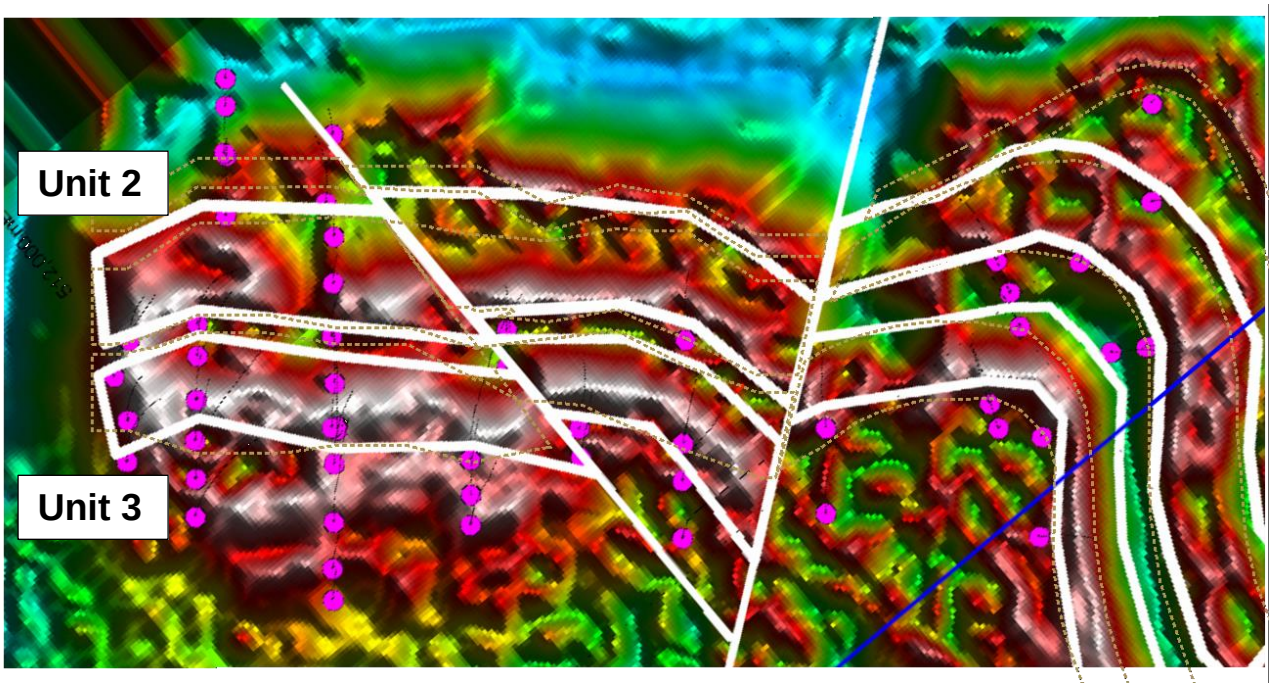


Figure 3 demonstrates the continuity of the magnetite-bearing siltstone units in the Core area. The white outlines indicate approximate position of the two main mineralised units ie Units 2 & 3 and the traces of the two cross cutting faults. The light brown dashes represent part of the new geologically modelled peripheral units.

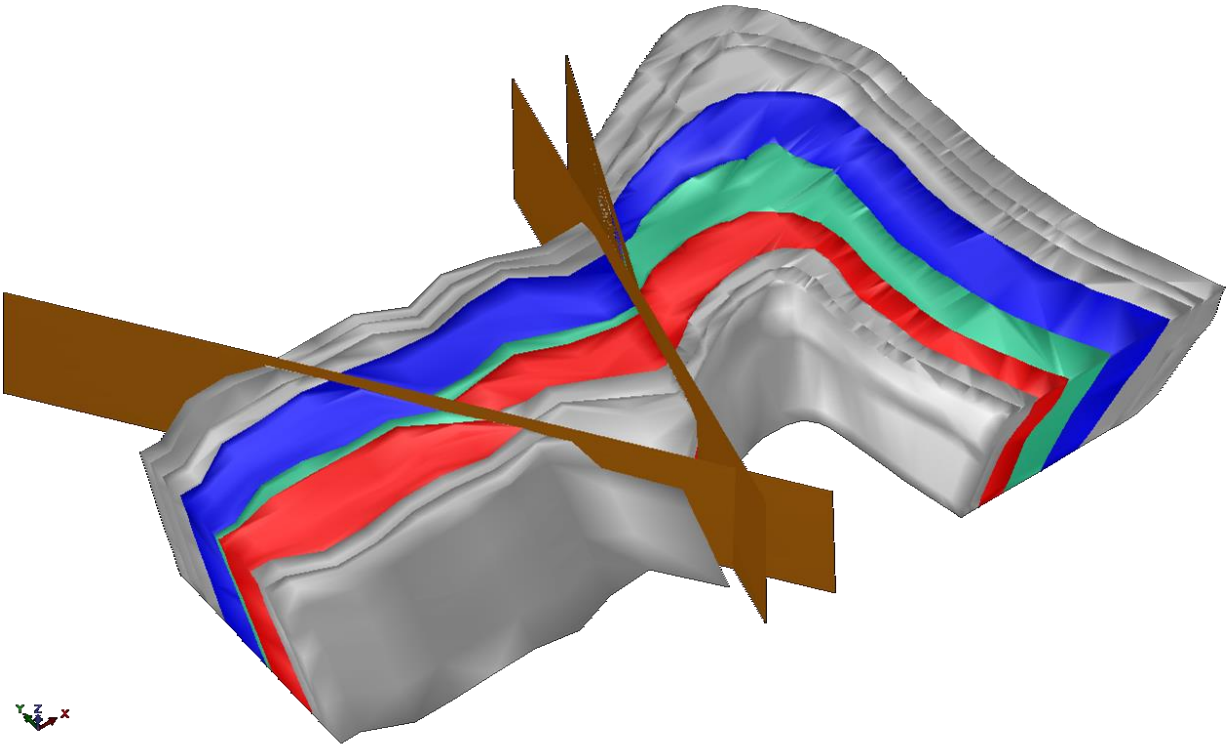
Figure 3 Core-Fold Prospects Geological Model & Ground Magnetic Interpretation



(E-W local grid projection; purple circles = drillhole collars)

Figure 4 shows the new 3D geological interpretation for the different magnetic units comprising the Braemar Iron Formation in the Core and Fold areas based on the drilling information. The main mineral units are Unit 2 (dark blue) and Unit 3 (red). The green band is the Interbed Unit.

Figure 4 Core-Fold Prospects 3D Geology



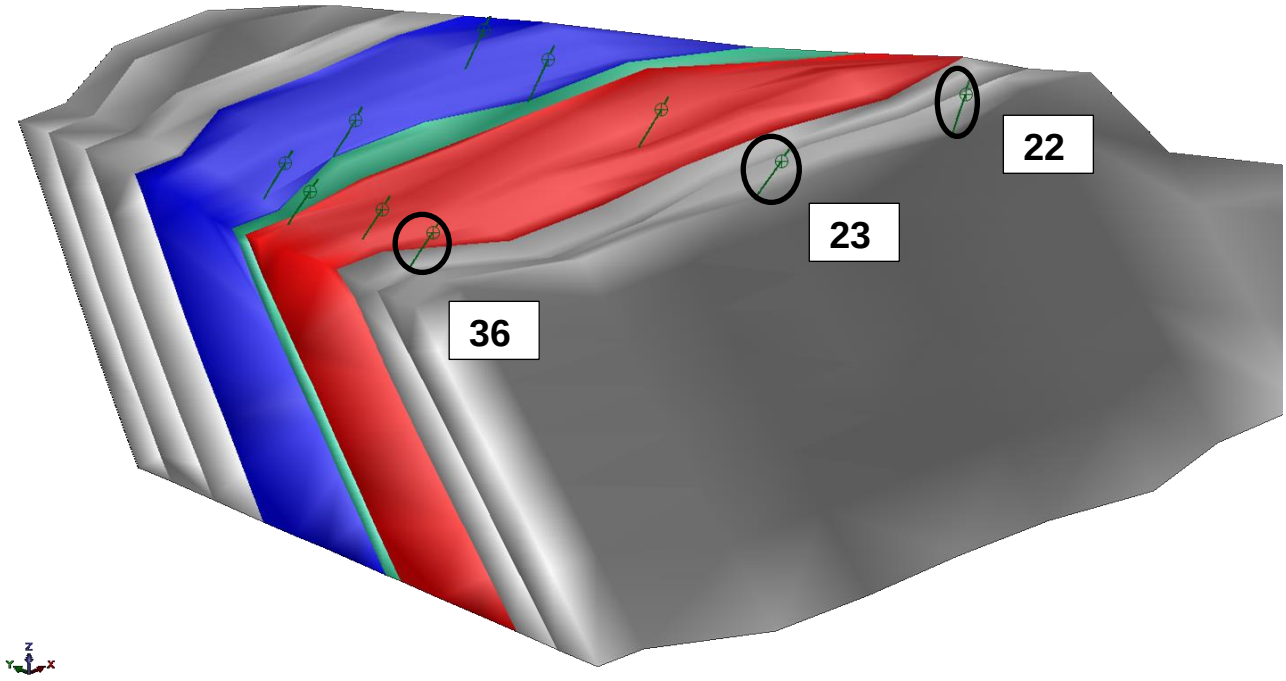
(view : looking down & to grid NE; brown planes = fault surfaces; grey zones = peripheral sediment units

The distribution of disseminated, inclusion-free magnetite in the Braemar Iron Formation at Hawsons is related to the composition, nature and geometry of the sedimentary beds. The idioblastic nature of the of the magnetite is believed due to one or more of a range of possible processes including in situ recrystallisation of primary detrital grains, chemical precipitation from seawater, permeation of iron-rich metamorphic fluids associated with regional greenschist metamorphism . Grain size generally ranges from 10microns to 0.2mm but tends to average around the 40microns. The sediment composition and grain size appear to provide the control on the stratabound mineralisation. There is no evidence for structural control in the form of veins or veinlets coupled with the lack of a strong structural fabric.

The depositional environment for the Braemar Iron Formation is believed to be a subsiding basin, with initial rapid subsidence related to rifting, possibly in a graben setting, as suggested by the diamictites of Unit 2. A possible sag phase of cyclical subsidence followed with deposition of finer grained sediments (Unit 3) with more consistent, as compared to Unit 2, bed thicknesses, style and composition. The top of the Interbed Unit marks the transition from high (Unit 2) to lower (Unit 3) energy sediment deposition.

The consistent bed thicknesses, styles and composition of the Unit 3 sediments, allied with the greater amounts of drilling in the Core West area (Figure 5), meant the area was considered suitable for more detailed sedimentalogical analysis.

Figure 5 Core West Deposit Geological Delineation of Units for Detailed Study



(green traces = drillholes, black circles = drillhole used in sedimentalogical study; view looking to local grid NE)

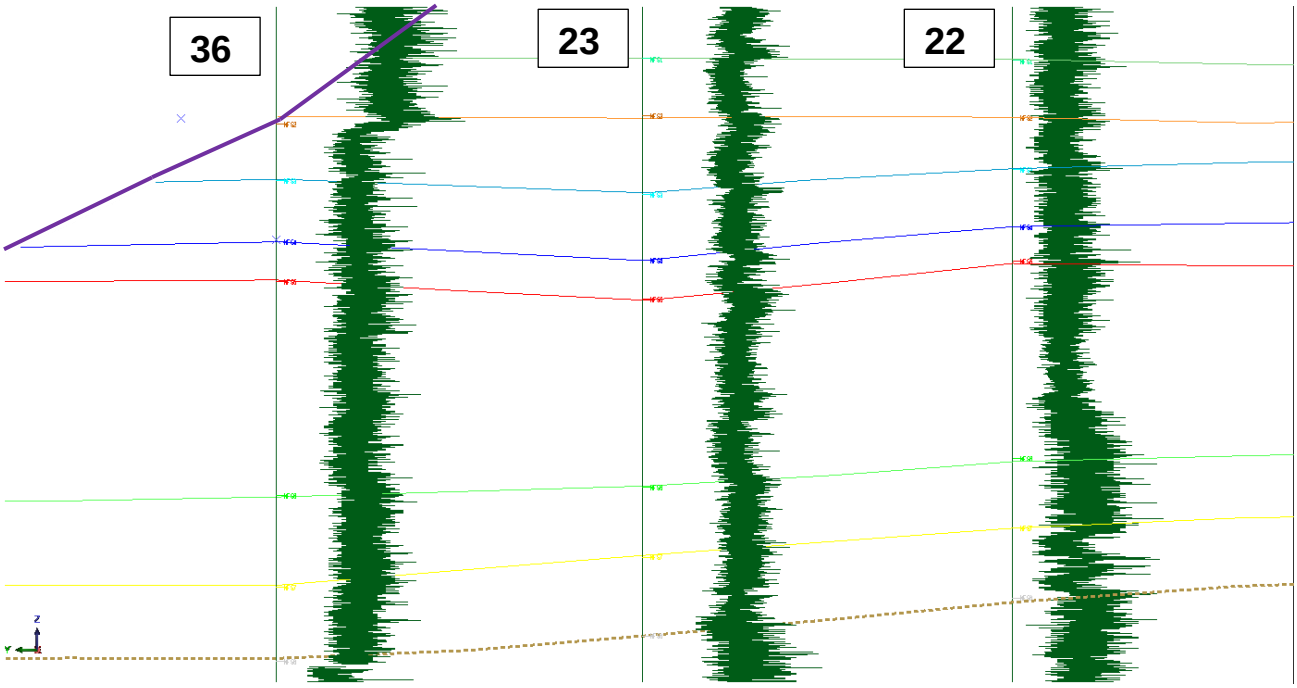
A chronostratigraphic interpretation was undertaken using the downhole gamma logs to identify a series of maximum flooding surfaces (“MFSs”). Subtle but consistent downhole trace patterns revealed a series of MFSs that were correlatable across 3 sections, each 400m apart (Figure 6).

Correlation patterns are also visible in the downhole density data that are parallel to the chronostratigraphic interpretation and confirm the sedimentalogical divisions recognised in the gamma logging. The density data is also a reflection of the composition of the sediment in particular the magnetite content and helps to reinforce the link between the sediment architecture and distribution of the mineralisation.

The downhole magnetic susceptibility data shows very clear stratigraphic signatures that are repeatable across the area under consideration (Figure 7). There is a strong relationship between DTR recovered magnetic fraction grade and downhole magnetic susceptibility, as would be

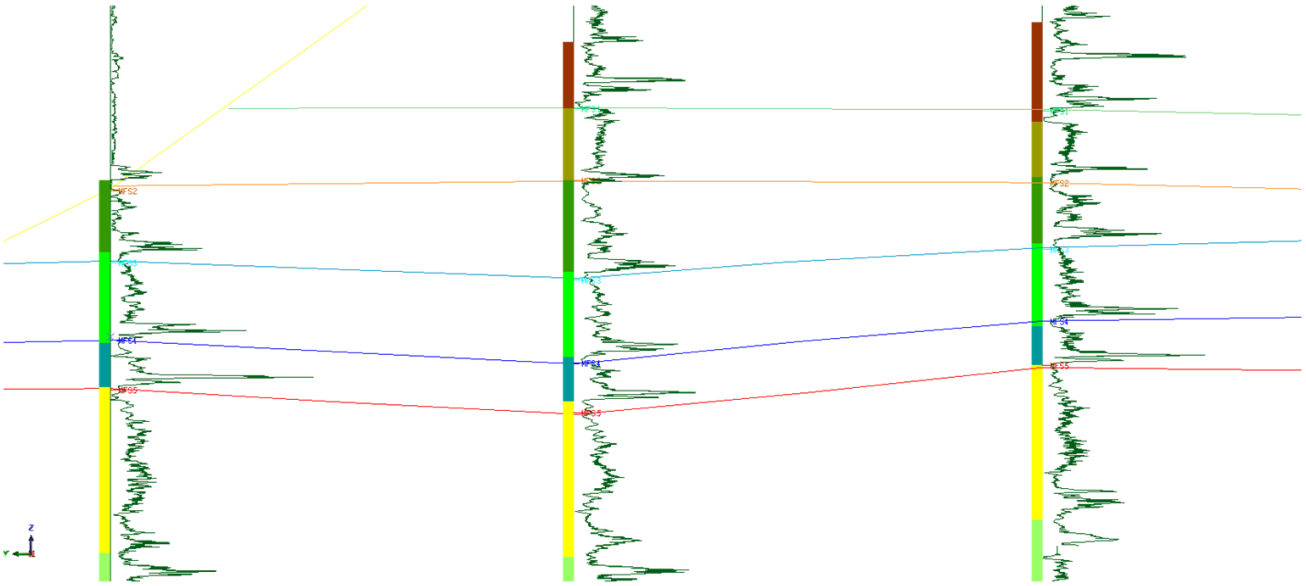
expected. A CAP supplied downhole magnetic susceptibility interpretation showed a matching boundary pattern of the magnetic units to the MFSs.

Figure 6 Core West Gamma Log Interpretation of Flooding Surfaces from Drillholes



(section looking west) (purple cross cutting line = base of oxidation) (MFS 1 = turquoise; MFS2 = brown; MFS3 = cyan; MFS4 = blue; MFS5 = red; MFS6 = green; MFS7 = yellow; MFS8 = fawn dashed line)

Figure 7 Downhole Magnetic Susceptibility Data with CAP Interpretation & MFS Interpretation



The primary nature of the sediments is considered to be equi-dimensional within the Core West area and therefore any extrapolations, inferences etc in a down dip direction can be equally applied to an along strike direction and vice versa.

The conclusion from the sedimentalogical study is that the magnetite distribution is controlled by the sediment sequences that match the chronostratigraphic interpretation (Figure 8). Comparison of the average DTR grades from 5m composites in individual holes bounded by the MFSs indicated a variation in grade of <10%. This is used to imply that there is good grade continuity within the bed sets as defined by the MFSs for distances in excess of 400m of strike. The fence

diagram (Figure 8) represents a fenceline of drillholes extending for 1.4km covering 800m of strike and 300m of down dip. The increased level of confidence in the grade continuity from the geological interpretation permits the classification of Indicated Resources in the Core West area.

Figure 8 Fence Diagram : MFS Correlation with Magnetic Susceptibility Log & DTR Grades

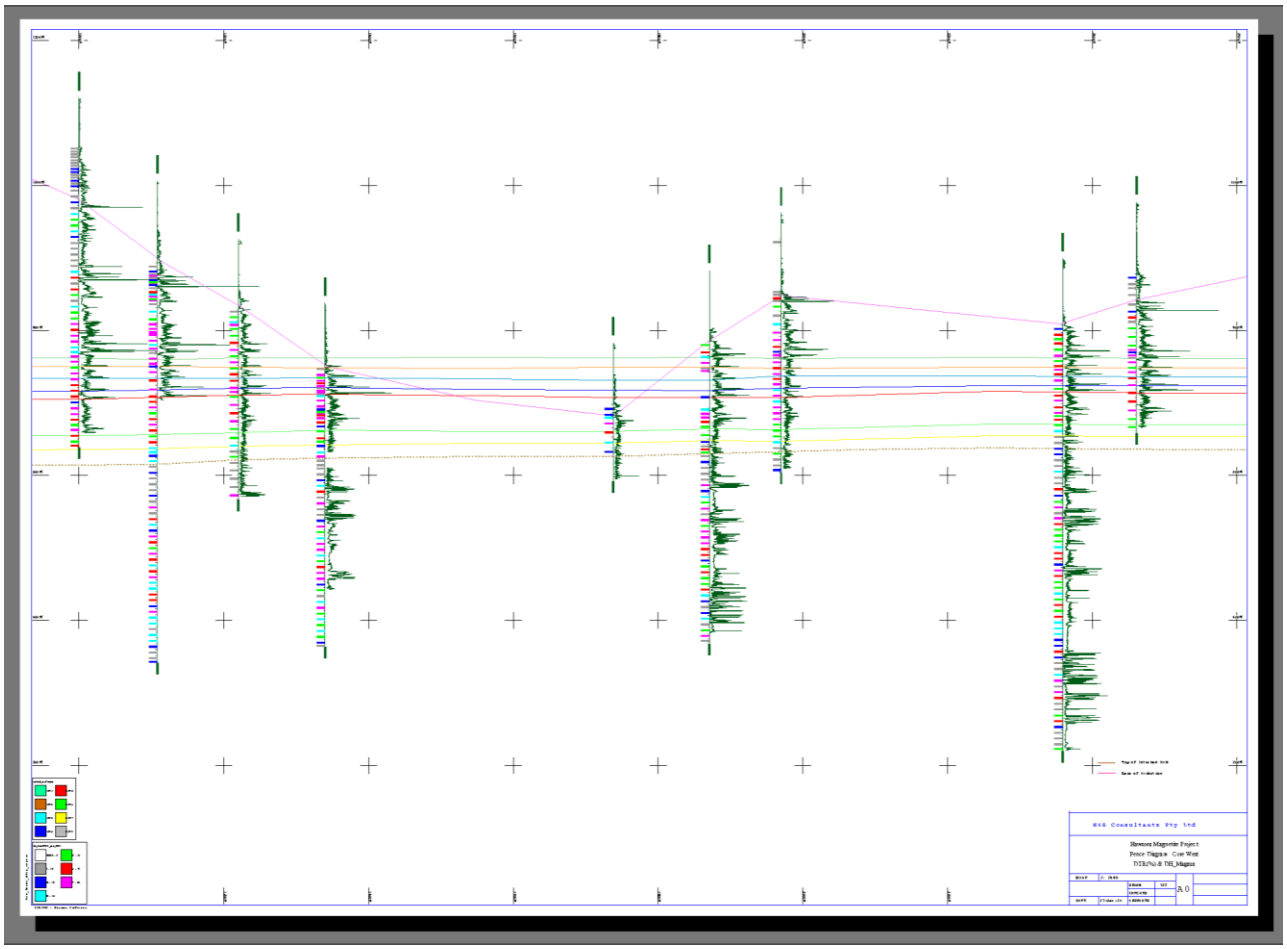


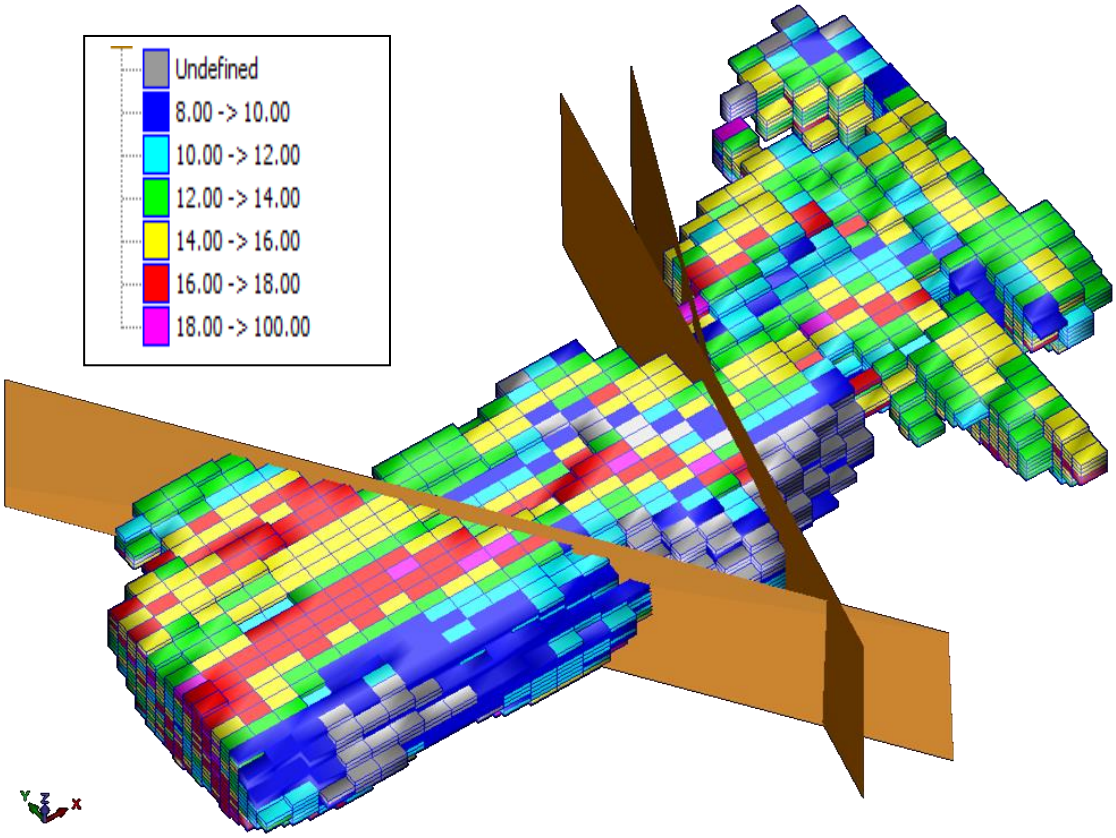
Table 1 details the new resource estimates for a 10% and 12% DTR cut off. Other reporting constraints are below the base of oxidation to a maximum depth of -240mRL.

Table 1 Mineral Resource Estimates for the Hawsons Magnetite Project

10% DTR cut off				**Concentrate Grades**				
Category	**MTonnes**	**DTR %**	**Fe Head %**	**Fe %**	**Al_2O_3 %**	**P %**	**SiO_2 %**	**LOI %**
Indicated	227	16.0	18.2	69.8	0.20	0.005	2.7	-3.0
Inferred	2,011	13.9	17.2	69.7	0.21	0.004	2.8	-3.0
Total	**2,238**	**14.1**	**17.3**	**69.7**	**0.21**	**0.004**	**2.8**	**-3.0**
12% DTR cut off				**Concentrate Grades**				
Category	**MTonnes**	**DTR %**	**Fe Head %**	**Fe %**	**Al_2O_3 %**	**P %**	**SiO_2 %**	**LOI %**
Indicated	215	16.2	18.2	69.8	0.2	0.005	2.8	-3.0
Inferred	1,554	14.7	17.4	69.6	0.2	0.004	2.9	-3.0
Total	**1,769**	**14.9**	**17.5**	**69.7**	**0.2**	**0.004**	**2.9**	**-3.0**
Block Model = hawsons_working_231211_190314.mdl								

Figure 9 shows the distribution of the DTR recovered magnetic fraction block grades for the complete Indicated and Inferred Resources with no cut off.

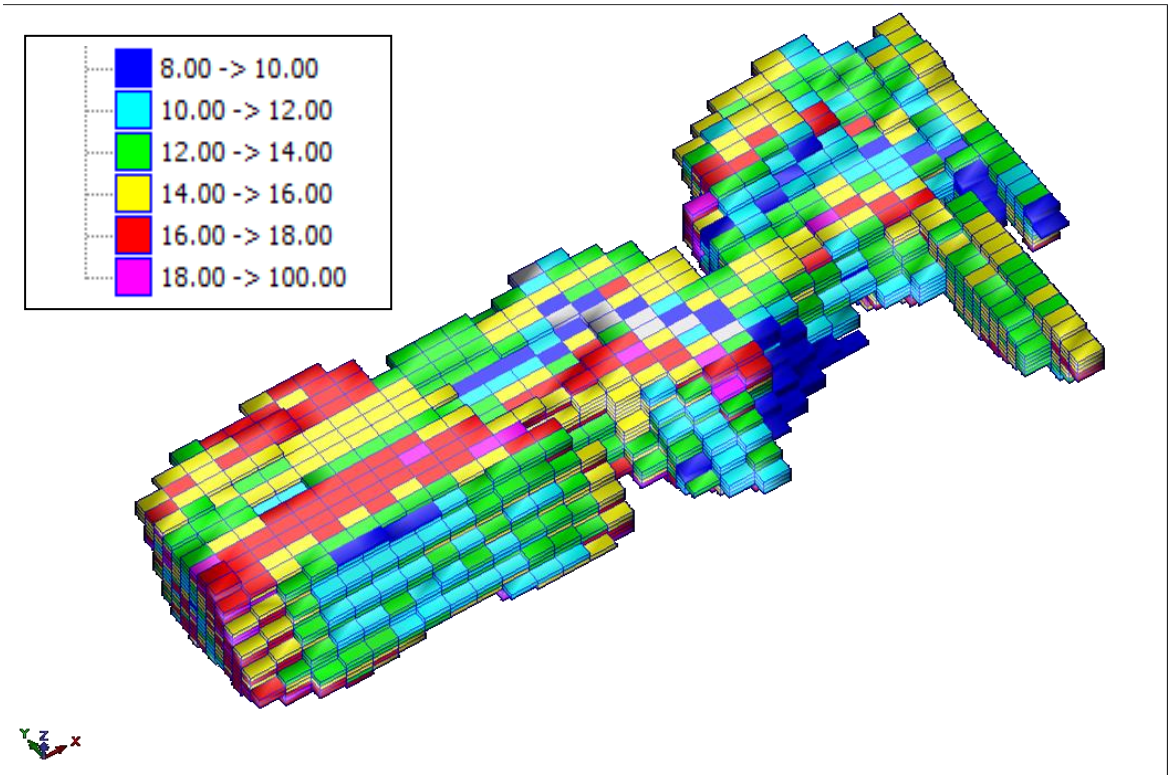
Figure 9 Core & Fold Prospects Block Model DTR Magnetite Grade Distribution



(view looking down to grid NE)

Figure 10 shows the distribution of the DTR recovered magnetic fraction block grades for the Indicated and Inferred Resources from the main magnetite zone ie Units 2, 3 and the Interbed Unit.

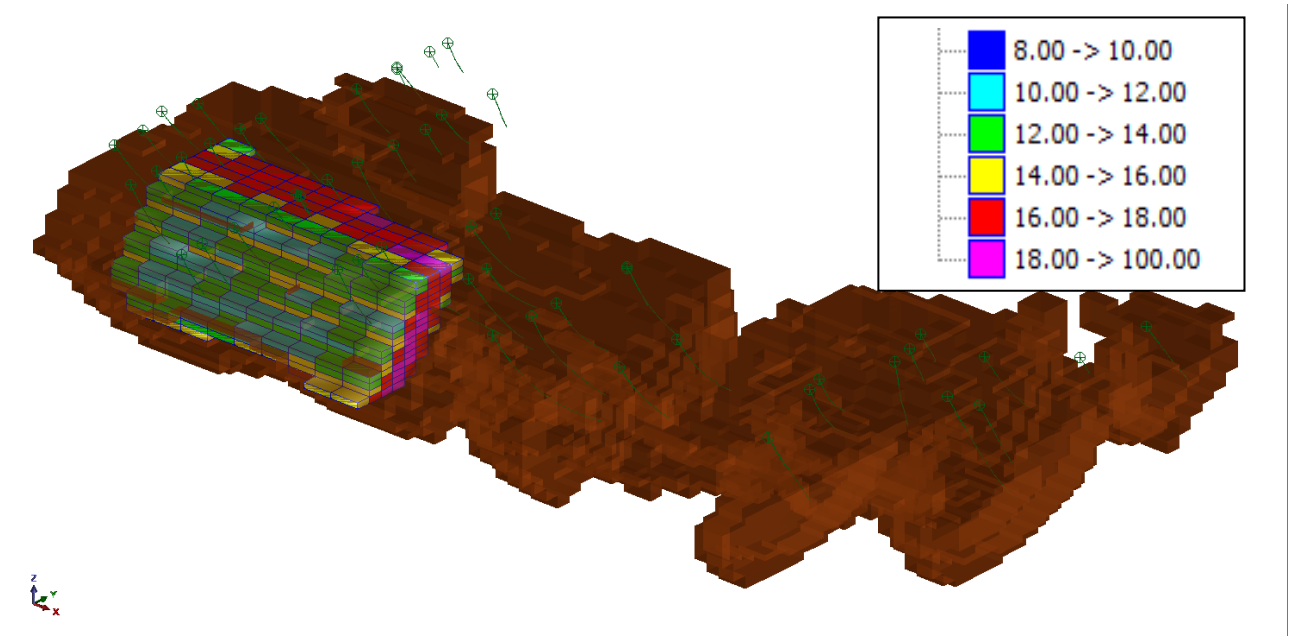
Figure 10 Block Model DTR Magnetite Grade Distribution for Main Magnetite Zone



(view looking down to grid NE)

Figure 11 shows the Indicated Resource zone in Core West.

Figure 11 Location of Indicated Resources



(view looking down to grid NW; green traces = drillholes)

Figure 12 shows the global resources grade-tonnage curves for a range of cut off grades

Figure 12 Hawsons Magnetite Project Grade – Tonnage Curves