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CARPENTARIA EXPLORATION LIMITED

www.carpentariaex.net.au

Level 6, 345 Ann Street
Brisbane Qld 4000

PO Box 10919, Adelaide St
Brisbane Qld 4000

e-mail: info@capex.net.au

For further information contact:
Quentin Hill
Managing Director
Phone: 07 3220 2022



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Positive Hawsons drilling results show potential for low-cost mining

Highlights

- Positive results returned for final 4 reverse circulation (RC) drill holes
- Mineralised intersections between 102m and 262m thick returned from 18 of 20 holes
- Best intersection of 262m at 15.3% magnetite mass recovery at the excellent 69.9% Fe concentrate grade in RC16BRP064, extending from top of fresh rock to the end of hole
- Potential mining widths confirmed at greater than 600m, allowing use of low-cost mining methods
- Results from latest holes in the Fold Zone consistent with existing interpretation, extending confidence in a mineral resource upgrade across 2,800m of strike length
- Two intersections of new mineralised zone in the north-east provide potential to increase the resource base
- H&S Consultants engaged for resource estimate upgrade, expected this month

Emerging iron producer Carpentaria Exploration Limited (ASX:CAP) announced today more positive results from the final batch of samples from recent drilling at its flagship Hawsons Iron Project, paving the way for a resource upgrade at Broken Hill's potential next major mine.

Importantly, the latest results indicate the potential for low-cost mining and processing methods at the project, which is located just 60 kilometres south-west of the Silver City and with access to existing rail, port and power infrastructure.

Drilling comprising 5,963m in 20 reverse circulation (RC) holes was completed in late Christmas 2016, with preliminary results for 16 holes reported on 20 December 2016 and 16 January 2017 (refer ASX announcements). The programme has been designed to support a resource upgrade followed by a new prefeasibility study, with a new resource expected from the independent H&S Consultants by the end of February.

Carpentaria Exploration's Managing Director, Quentin Hill said: "These results have boosted confidence in the size and continuity of the Hawsons resource. This resource is capable of producing a Hawsons Supergrade product that would be the highest grade product available in the seaborne market. Supergrade would meet the needs of steel makers across Asia and the Middle East increasingly seeking higher productivity, lower emissions and rare direct reduction specification."

He added: “Significantly, these results further demonstrate the extraordinary character of this deposit. At over 600m thick and approximately 3,000m long, the deposit is large and very consistent in both mining and metallurgical characteristics, meaning simple and low cost bulk mining and processing methods can be utilised. These characteristics really set it apart from other deposits and we look forward to completing a revised resource estimate and then a new mine plan.”

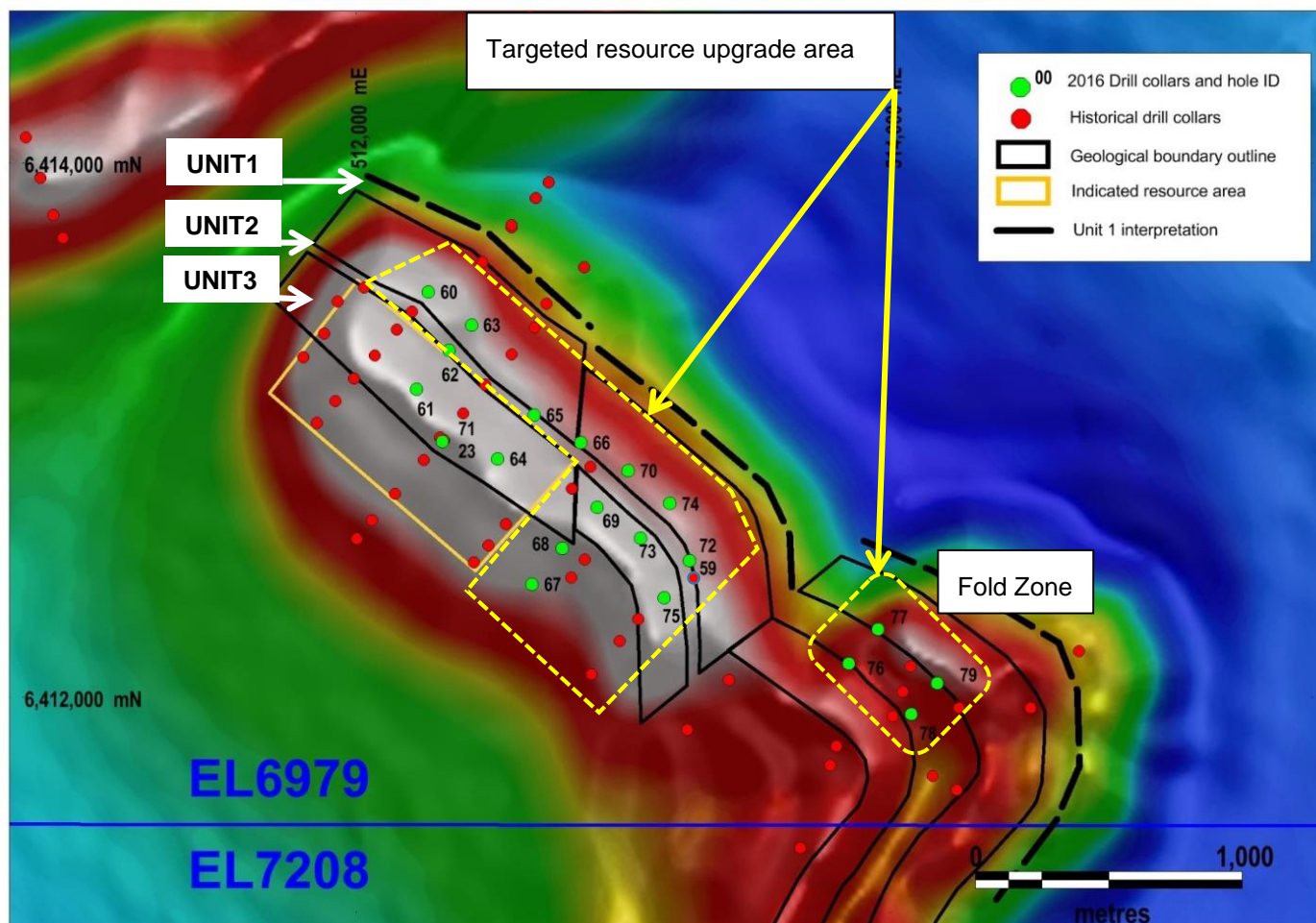
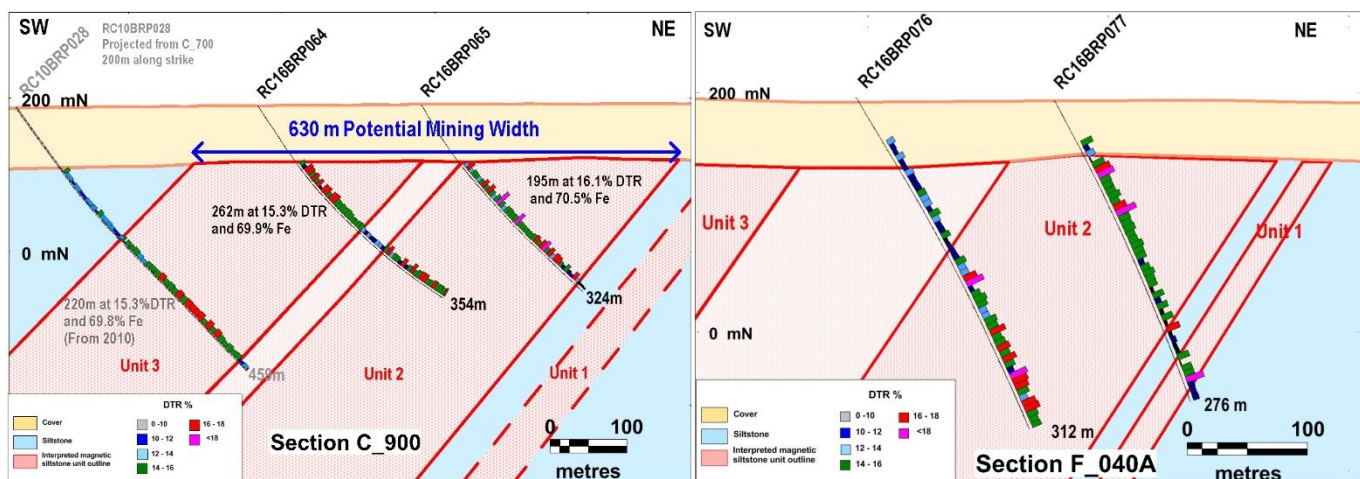


Figure 1 – Drill hole location plan



Figures 2 and 3 - Representative cross sections of the deposit

Drilling programme

The work programme has improved the potential for a resource upgrade, as results have been broadly in line with expectations. The drill spacing has been tightened, Davis Tube analysis has been done on every interval and geophysics collected on 80% of the drilling, consistent with earlier drilling programmes.

The drilling has confirmed Hawsons as a very large deposit with simple geometry that includes potential mining widths of 630m and a strike length in excess of 3,000m (Figures 1, 2 and 3). Additionally, new analytical data for another mineralised unit, Unit 1, were received earlier from RC17BRP070 and 074, increasing the potential for the inclusion of additional mineralisation in a revised resource estimate and mine plan (Figure 1).

The deposit is characterised by very thick mineralised units, with 18 from 20 holes returning intersections between 102m and 262m in thickness. The two exceptions included a hole abandoned before the target was reached and a QAQC hole that targeted a shorter intersection.

Results for RC17BRP064 have been updated with new assay data. This hole (Figure 2) intersects mineralisation from the top of fresh rock to the end of hole through three mineralised units. This drill hole and cross section highlights the homogeneity of the deposit in terms of mass recovery and concentrate grade. In addition, because the Davis Tube Recovery test is a lab scale metallurgical test, the results also demonstrate high consistency of metallurgical properties throughout the deposit, a feature that is not common in deposits so large and provides increased confidence in results of the test work done to date.

Mr Hill commented: "Hawsons has the potential to form the basis of a long-term, low-cost premium iron business in Australia's world-class historic mining district. With the bulk of initial planned production already assigned to blue-chip buyers across Asia and the Middle East, Carpentaria is confident of securing the necessary investment to deliver this new magnetite mine for the benefit of all stakeholders."

About Hawsons Iron Project

The Hawsons Iron Project joint venture (Carpentaria 64%, Pure Metals P/L 36%) is currently undertaking development studies based on the low cost, long term supply of a high grade, ultra-low impurity iron concentrate to a growing premium iron market, including the direct reduction market.

The project has a clear technical and permitting pathway. It is located 60km southwest of Broken Hill, an ideal position for mining operations with existing power, rail and port infrastructure available for a conceptual 10 Mtpa start-up operation. A mining lease application has been lodged.

The project's soft rock is different from traditional hard rock magnetite and allows a very different approach from the typical magnetite mining and processing challenges (both technical and cost-related). The soft rock enables simple liberation of a Supergrade magnetite product without complex and expensive processing methods.

The Company is targeting the growing premium high grade product market, both pellets and pellet feed, which is separate to the bulk fines market, and believes its targeted cost structure is very competitive and profitable at consensus long-term price forecasts for this sector. It has secured offtake intent from blue chip companies Bahrain Steel, Emirates Steel, Formosa Plastics, Mitsubishi RtM and Gunvor.

The project is underpinned by Inferred and Indicated Resources totalling 1.8 billion tonnes at 15% mass recovery for 263 million tonnes of concentrate grading at 69.7% Fe. The Company confirms that it is not aware of any new data that materially affects this resource statement since the first public announcement and that all material assumptions and



Figure 4 Location of Hawsons Iron Project

technical parameters underpinning the resource estimates continue to apply and have not materially changed since first reported (refer ASX announcement 26 March 2014 and Table 2).

Category	Billion Tonnes (cut off 12% mass recovery)	Magnetite mass recovery (%)	concentrate grades					Contained Concentrate million tonnes
			Fe%	SiO ₂ %	Al ₂ O ₃ %	P%	LOI%	
Inferred	1.55	14.7	69.6	2.9	0.20	0.004	-3.0	228
Indicated	0.22	16.2	69.8	2.8	0.20	0.005	-3.0	35
Total	1.77	14.9	69.7	2.9	0.20	0.004	-3.0	263

Table1 JORC compliant resources- Hawsons Iron Project

Hole ID	From (m)	To (m)	Thickness (m)	Magnetite Mass Recovery % (DTR)	Head Fe %	Concentrate grades						comment
						Fe%	SiO ₂ %	Al ₂ O ₃ %	P %	S %	LOI	
RC16BRP064 <i>incl.</i>	92	354	262	15.3	16.7	69.9	2.53	0.13	0.001	<0.000	-3.10	EOH
	152	212	60	16.5	17.5	69.3	3.25	0.16	0.003	<0.000	-3.03	
	297	354	57	17.3	17.1	70.4	2.12	0.11	0.000	<0.000	-3.31	EOH
RC16BRP076 <i>incl.</i>	93	123	30	11.1	21.1	69.8	2.69	0.15	0.003	0.000	-3.07	transition zone
	158	312	154	16.1	17.3	69.1	3.44	0.20	0.003	0.000	-2.98	EOH
	213	303	90	17.5	18.3	69.1	3.38	0.20	0.004	0.001	-2.94	
RC16BRP077 <i>incl.</i>	40	215	175	14.3	19.0	69.5	2.79	0.15	0.004	<0.000	-2.68	
	235	260	25	14.7	21.6	71.1	1.49	0.06	0.001	0.001	-3.23	Unit 1
	60	125	65	18.1	17.9	69.3	3.15	0.14	0.004	0.000	-2.88	
RC16BRP078 <i>incl.</i>	166	186	20	11.1	11.2	68.6	4.38	0.15	0.001	<0.000	-3.13	
	196	300	104	16.2	17.3	68.7	4.13	0.19	0.003	0.000	-3.06	EOH
	231	281	50	18.2	18.2	68.7	4.15	0.18	0.004	0.000	-3.06	
RC16BRP079 <i>incl.</i>	56	166	110	14.6	17.1	68.6	3.85	0.20	0.004	0.000	-2.77	
	116	166	50	17.8	16.5	69.2	3.46	0.22	0.002	0.002	-3.062	
	186	261	75	12.0	22.1	70.0	2.51	0.10	0.001	0.001	-3.12	
<i>incl.</i>	236	241	5	19.4	32.8	71.6	0.68	0.04	0.001	<0.000	-3.30	

Table 2 Significant intersections (10% magnetite mass recovery cut off, no more than 5m of internal dilution) (Note RC16BRP064 is an exception and includes one 10m interval from 227m composed of two samples grading at 9.4% and 9.7% magnetite mass recovery)

For further information please contact:



Quentin Hill
Managing Director
+61 7 3220 2022

Media Enquiries

Anthony Fensom
Fensom Communication
+61 (0) 407 112 623

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The information in this report that relates to Exploration Results, Exploration Targets and Resources 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.

Hole ID	Hole Type	GDA_East	GDA_North	RL	Dip	Azimuth (Grid)	Hole Depth	Assay Result Status
RC16BRP060	RC	512263	6413511	196	-60	40	336	Received
RC16BRP061	RC	512225	6413155	194	-60	40	282	Received
RC16BRP062	RC	512349	6413301	195	-60	40	354	Received
RC16BRP063	RC	512435	6413395	195	-60	40	264	Received
RC16BRP064	RC	512532	6412895	190	-60	40	354	Received
RC16BRP065	RC	512670	6413058	191	-60	40	324	Received
RC16BRP066	RC	512845	6412953	191	-60	40	265	Received
RC16BRP067	RC	512659	6412422	189	-60	40	181	Received
RC16BRP068	RC	512770	6412557	188	-60	40	354	Received
RC16BRP069	RC	512904	6412712	189	-60	40	348	Received
RC16BRP070	RC	513019	6412851	191	-60	40	355	Received
RC16BRP071	RC	512322	6412968	191	-60	40	214	Received
RC16BRP072	RC	513243	6412516	194	-60	40	184	Received
RC16BRP073	RC	513064	6412597	192	-60	40	354	Received
RC16BRP074	RC	513174	6412726	192	-60	40	324	Received
RC16BRP075	RC	513152	6412375	193	-60	40	312	Received
RC16BRP076	RC	513845	6412129	195	-60	40	312	Received
RC16BRP077	RC	513952	6412254	193	-60	40	276	Received
RC16BRP078	RC	514078	6411938	195	-60	40	300	Received
RC16BRP079	RC	514175	6412053	193	-60	40	270	Received

Table 3 Drillhole collar data

JORC Code, 2012 Edition – Table 1 Hawsons Iron Project

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> Nature and quality of sampling (eg 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 (eg ‘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 (eg submarine nodules) may warrant disclosure of detailed information. 	<ul style="list-style-type: none"> A total of 20 drillholes were drilled by CAP. All results have been received. Drillholes were reverse circulation (RC) from surface. All sampling was to industry standard RC drillholes were drilled to obtain 1m samples with sample compositing applied to obtain a 5m 6kg sample which was pulverized to produce 150g aliquot for X-Ray Fluorescence (XRF) and Davis Tube Recovery (DTR) analysis. Magnetic susceptibility measurements and geological logging was completed for every metre of every drillhole. Endeavour Geophysics carried out down hole geophysical logging and gyroscope surveying on all drillholes. Surveys were conducted on open hole. The geophysical logging consisted of natural gamma, magnetic susceptibility, density and caliper 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	<ul style="list-style-type: none"> Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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). 	<ul style="list-style-type: none"> Drilling was RC. RC drilling was carried out using a truck mounted Sandvik DE 840 (UDR1200) and truck mounted UDR1000. Both used 4.5 inch rods and 5 ½ inch face bits.
Drill sample recovery	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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, No numerical RC chip recovery data exists to date, however a sampling program is underway to weigh representative RC samples to collect a numerical measure of recovery and therefore investigate the relationship between sample recovery and mineral grade. Twin RC and diamond holes have shown no bias in sampling.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> 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	<ul style="list-style-type: none"> <i>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.</i> <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i> <i>The total length and percentage of the relevant intersections logged.</i> 	<ul style="list-style-type: none"> Every RC 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 relevant intersections were logged Geological logging was of sufficient detail to allow the creation of a geological model.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i> <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> <i>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.</i> <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<ul style="list-style-type: none"> RC samples were composited using the riffle split method. A 1/8 split was taken from the rig every metre then composited by splitting again using a 50/50 riffle splitter. Field duplicates, blanks (washed sand) and standards we used for quality control measures All sampling methods and samples sizes are deemed appropriate
Quality of assay data and	<ul style="list-style-type: none"> <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> <i>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</i> 	<ul style="list-style-type: none"> Pulverizing <ul style="list-style-type: none"> Crush the sample to 100% below 3.35 mm. Separate a sample of 150 g for pulverizing in a <u>C125 ring pulverizer</u> (record weight) – DTR SAMPLE. Initially pulverize the 150 g sample for nominal 30 seconds – the sample is unusually soft for a ferro-silicate rock!

Criteria	JORC Code explanation	Commentary
laboratory tests	<p>derivation, etc.</p> <ul style="list-style-type: none"> Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> 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 <u>DTR work</u> 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> <ul style="list-style-type: none"> Pulverizer 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 Collect the concentrate in small collector (magnetic fraction) and discard tails. <u>X-Ray Fluorescence (XRF) Assaying</u> <ul style="list-style-type: none"> Head Sample Using the Head Sample, analyse by <u>XRF fusion method</u> for the following elements: Al₂O₃ %, As %, Ba %, CaO %, Cl %, Co %, Cr %, Cu %, Fe %, K₂O %, MgO %, Mn %,

Criteria	JORC Code explanation	Commentary
		<p>Na₂O % , Ni % , P % , Pb % , S % , SiO₂ % , Sn % , Sr % , TiO₂ % , V % , Zn % , Zr % & LOI.</p> <ul style="list-style-type: none"> DTR Concentrate Sample <ul style="list-style-type: none"> Dry the DTR concentrate and report the weight of the concentrate as a percentage of measured feed and report – DTR Mass Recovery. Analyse the concentrate 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 metres were using 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, Blanks and Standards at a frequency of 10 per 100 samples. Internal QAQC measures were also undertaken by ALS. Samples were sent to InterTEC acting as an umpire laboratory. Satisfaction of precision, accuracy and any lack of bias was made by an independent consultant using control plots. All sampling and assay methods and samples sizes are deemed appropriate.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Data was stored in an 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 and lab certificates were presented to verify the data.
Location of data points	<ul style="list-style-type: none"> Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> Drill holes collars were located using a Differential GPS accuracy to less than one metre by a local surveyor. 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.

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> Topographic control was collected using a high resolution Differential GPS by a local surveyor Location methods used to determine accuracy of drillhole collars is considered appropriate
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The deposit is drill at a nominal spacing of 150m to 200m in section and plan. The drill spacing was deemed adequate for the interpretation of geological and grade continuity noting the homogeneity of the deposit and style of mineralisation. Drill samples were composited at a nominal 5m
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Drilling was completed at -60°, 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 deviated to the right (east) with depth. Drilling orientations are considered appropriate with no bias.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> All samples were stored on site under company personnel supervision until transporting to the companies Broken Hill office Intensity of magnetite mineralisation is difficult to see visually but detectable using a magnet.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> Sample procedures and results were reviewed by company personnel systematically. The QAQC data is being reviewed by Carpentaria staff and an external consultant.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <i>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.</i> <i>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.</i> 	<ul style="list-style-type: none"> 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 64% and Pure Metals 36% 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.
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <i>Acknowledgment and appraisal of exploration by other parties.</i> 	<ul style="list-style-type: none"> 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 6 m 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 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.
<i>Geology</i>	<ul style="list-style-type: none"> <i>Deposit type, geological setting and style of mineralisation.</i> 	<ul style="list-style-type: none"> 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 narrow, strike extensive magnetite-

Criteria	JORC Code explanation	Commentary
		<p>bearing siltstones generally with a moderate dip (circa 45°). The airborne magnetic data clearly indicates the magnetite siltstones 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 in depth.</p> <ul style="list-style-type: none"> • 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 eg the diamictites in the lower part of the sequence. 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. The top of the Interbed Unit marks the transition from high to lower 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 idiomorphic nature 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 40micron mark. The sediment composition and grain size appear to provide a 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 deposit the units strike south east and dip between 45 and 65° to the south west. The eastern Fold deposit comprises a relatively tight synclinal fold structure resulting in a 90° strike rotation.

Criteria	JORC Code explanation	Commentary
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> See Table 3 for all drill hole information in this report
Data aggregation methods	<ul style="list-style-type: none"> In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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. 	<ul style="list-style-type: none"> All significant intercepts reported are downhole weighted averages with magnetite mass recovery (DTR) 10% bottom cut off grade with no more than 5m (one sample) of internal dilution in Table 2.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> Drilling was planned to intersect the geology as close to perpendicular as possible to bedding to achieve true widths.
Diagrams	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Figure 1 illustrate drill hole locations

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Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All significant intercepts reported are downhole weighted averages with no top or bottom cuts.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Downhole geophysics comprises magnetic susceptibility, gamma and density 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	<ul style="list-style-type: none"> The nature and scale of planned further work (eg 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. 	<ul style="list-style-type: none"> Further environmental and engineering studies are planned which will form part of the current PFS completion.