#### CARPENTARIA'S AIM:

Build a long lasting, low cost premium iron business

#### CAPITAL STRUCTURE:

Ordinary Shares 123,987,777

#### MAJOR SHAREHOLDERS:

Silvergate Capital 18.19%

Conglin In't Invest'

Group 11.42%

**NEFCO** 3.2%

Management, Including **Unlisted Options** 6.1%

Cash on hand as at 31/12/2014 A\$3,748,762

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# **Highlights**

## **HAWSONS IRON PROJECT**

- Programme to make all aspects of project "BFS ready" well advanced and very successful in confirming earlier project assumptions on processing, power, water, supply chain and environment
- Network capability study confirms that the existing electricity infrastructure can deliver the required power for the Hawsons Iron Project with only limited network upgrades
- Preliminary results indicate that export of up to 20 million tonnes of iron ore concentrate through Port Pirie via transhipment to ocean going vessels is achievable using standard barges
- ➤ Pilot plant tests confirm that a very high-grade product >68%Fe and <3.6% SiO<sub>2</sub> can be produced using a very simple flow sheet
- Separate flotation test work highlights significant potential for direct reduction (DR) quality product >69%Fe, <2.0% silica plus alumina
- High grade product is well aligned with current trends in the steel industry and iron ore market
- NSW Office of Water confirms Carpentaria's view that the required water allocation is possible under existing regulations



Figure 1 – Existing power infrastructure at Hawsons

## PLANNED MARCH QUARTER DEVELOPMENT ACTIVITIES

## HAWSONS IRON PROJECT ("HAWSONS" OR "THE PROJECT")

A programme to make all aspects of the project ready for the bankable feasibility study (BFS) will be finalised when the Port Pirie rail port marine study is completed. This programme of de-risking will provide a platform from which the Company will seek additional investment to continue the development of the Project.

The investment case will emphasise:-

- the potential to produce a premium product that meets a specific high growth, high price market segment at a very competitive cost
- the accessibility to approximately \$1bn worth of existing infrastructure.
- the potential to produce excellent economic returns given the prevailing outlook of iron ore pricing

## Infrastructure

The Port Pirie rail-port-marine prefeasibility study by GHD, co-funded by Flinders Ports, will be completed this quarter.

## **Processing**

Following on from successful pilot scale test work completed last quarter and the production of nearly one tonne of concentrate, the Company is developing proposals for additional hydro-separation and flotation test work on this product. These tests would target producing a direct reduction quality product (<2% combined silica and alumina). If completed this test work would allow development of a process flow sheet design that will allow detailed assessment of the economic benefits of a direct reduction product option.

## **Marketing**

Carpentaria will continue to analyse and engage the market to maximise the benefits of the very successful test work results from last quarter.

## Regulatory

Stakeholder consultation including discussions on water in NSW and transport infrastructure in South Australia will continue. Environmental monitoring and cultural heritage assessment and consultation are ongoing.

## **REVIEW OF DECEMBER QUARTER ACTIVITIES**

#### **DEVELOPMENT UPDATE**

## Hawsons Iron Project JV (CAP 60%, Pure Metals P/L 40% (diluting))

The programme to bring all elements of the project to a BFS ready stage is well advanced and will be completed this quarter. This programme has successfully built on the considerable study work since discovery and has, in each case, supported the assumptions made early in the project life. It has built a platform for further investment.

The work has demonstrated that the project has a clear and achievable project pathway. In addition, the project is well positioned in the market given the potential for low costs and the long term trend of increasing demand for premium grade products.

This BFS ready programme has been very successful in confirming earlier project assumptions including those made:-

- for the low cost processing flow sheet and also identified the potential to produce even higher grade products.
- about the capacity of the existing power grid and the cost and ability to connect
- about the high yield water source and the ability to access that water through existing regulations
- about the supply chain, including rail and port access, port logistics and technical viability of transhipment in Port Pirie.
- about environmental sensitivity

Work carries out this quarter is detailed below.

## Infrastructure

During the quarter TransGrid completed a feasibility study report on aspects of the existing power network that is located 35km east of the Hawsons Iron Project site. The finalised report was issued in January 2015 (refer ASX Announcement 28 January 2014).

The study concluded that the existing poles and wires, plus the introduction of new voltage support, substation augmentation and communication systems, can more than support the delivery of the 120 megawatts (MW) required by the Hawsons Project (Figure 1).

A total of \$43.7m of network upgrades will be required, based on preliminary advice. However, additional studies may identify areas to optimise the connection arrangements and therefore lower the cost, according to TransGrid.

Carpentaria will now explore the opportunity for this capital cost to be recovered through annual network charges, resulting in no additional upfront capital cost to the project.

The study also found that should primary network upgrades be completed, there is potential, subject to additional studies, for the line rating to be further increased.

The estimated time to complete these works is 46 months. However, TransGrid notes that there is considerable opportunity for an accelerated delivery schedule.

The network capacity study investigated the reinforcement works required to provide a total of 120MW of installed power to three project sites, comprising the mine site, the proposed bore field and rail loading facility (Figure 2). Recent review of power requirements has increased the power load for the project to 134MW. However, the TransGrid study noted that, under this scenario, it expected the costs are likely to remain within the original estimate.

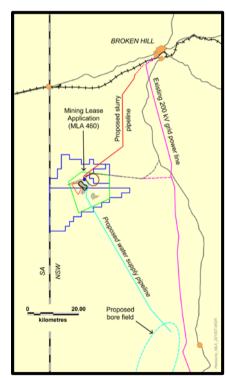


Figure 2 – Location and infrastructure plan of Hawsons Iron Project

Access to the existing power line gives the Project access to the National Electricity Market (NEM). Notably, NEM power prices in NSW are currently materially lower than those available for competing grid-connected projects located in South Australia and Western Australia. Hawsons has a much lower power requirement than other magnetite projects because of its soft rock, further reducing the power costs for the Project.

#### Port Study underway

A rail-port-marine prefeasibility level study was largely completed this quarter. However, some elements are still being finalised.

The study is jointly funded by Flinders Ports and the Hawsons joint venture. The joint study will increase engineering detail and certainty at the port of Port Pirie to a level consistent with other aspects of the Project.

Importantly, the preliminary results indicate that transhipment of up to 20 million tonnes of iron ore through Port Pirie to Cape size vessels (180,000t payload) in the Spencer Gulf is achievable using standard barges with payloads of between 12,000 and 17,000 tonnes.

This preliminary result confirms the joint venture assumptions and supports further the Company's claim of a clear and achievable project pathway.

Additional details of the study will be released when the report is finalised.

The study will build on the review by Balance Resources that found a Port Pirie export solution efficient and viable. The Balance Resources study supported the operating cost estimates of A\$21 per tonne to transport concentrate 360km from a rail head near Broken Hill to a loaded ship in the Spencer Gulf (refer ASX announcement 28 April 2014).



Figure 3 Aerial view of Port Pirie

The above work also builds on the agreement reached last year that secures for the joint venture foundation customer status and port access for up to 12 million tonnes per annum (mtpa) of iron ore concentrate through the existing berths at Port Pirie (ASX Announcement 22 July 2014) (Figure 3).

## Water Supply and Environmental

Carpentaria continues to meet its water and other monitoring requirements for successful delivery of the EIS.

The EIS is well advanced with cultural heritage surveys and consultation ongoing. In addition, a number of low cost, short period, specialist studies need to be completed to allow the drafting of the EIS.

Carpentaria has continued discussions with NSW Government on extending the time period available to lodge the EIS under the Director General Requirements (DGRs) to provide flexibility in lodgement timeframes. This is a common request in the development process and a response is likely early this quarter. The current DGRs were scheduled to expire in November 2014.

Carpentaria continued consultation with the NSW Office of Water (NOW) to progress the allocation of water on the Project. The Company has established that there is enough water available from the relevant ground water

source. That is, yields are sufficient to establish a suitable water supply bore field. NOW has confirmed in writing that there is enough unallocated water under the existing state and federal sustainable limits regulations for the project requirements. The joint venture will continue discussions regarding the price of the water.

### Metallurgical Processing and Product Marketing

During the quarter results were received from two batches of metallurgical test results and reported in ASX Announcement 22<sup>nd</sup> October 2014 and summarised in the September Quarterly Report (ASX Announcement 31 October 2014). The key findings are outlined below.

## Pilot plant test work - Western Australia

The test work included pilot plant scale operation of two stages of magnetic separation, single stage ball mill grinding and final upgrading using a hydroseparator.

Approximately one tonne of high grade concentrate has been produced for future test work.

The test work was very successful in confirming the joint venture's flow sheet assumptions and cost estimates, allowing for further plant design refinement and highlighting significant potential for improvement in the concentrate product to meet the new and developing market in high grade products. For more information please refer to previous announcements.

	Fe%	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	Р%	S%
Hawsons flow sheet pilot plant test concentrate	68.3	3.56	0.39	0.007	<0.001
Hawsons flotation bench test concentrate	69.1	1.19	0.54	0.025	NA

Table 1 Test work results

## Flotation test work - South Africa

In separate test work, bench scale flotation tests done on 60 kg of RC chips representative of the Hawsons deposit have also returned extremely encouraging results. The work was carried out by industry experts with proprietary technology at a university laboratory in South Africa.

The tests confirmed that the Hawsons ore has the potential to beneficiate into a direct reduction (DR) suitable feed and attract high premiums above the benchmark 62%Fe price. For further information please refer to previous announcements.

These combined test results support the view that the targeted grade will be achievable with ball milling as the only grinding stage and confirms previously identified cost and technical advantages of the Hawsons deposit compared to other harder magnetite ores.

## Market favouring high grade products

Recent market analysis by Wood Mackenzie (November 2014) has characterised the sustained lower 62%Fe fines iron ore price as defining a "new era" in iron ore pricing. In their analysis they have identified that "seaborne suppliers of high quality concentrate/pellet/sinter feed are winners" in the new era. Further, they identify that the premium for pellet feed concentrate is expected to widen.

Wood Mackenzie reasons that "pellet feed should command a bigger premium to reflect Fe grade differential, lower impurities, and implied "grinding premium" over concentrates."

It should be noted that not all fines and concentrates are suitable for pellet feed as they may be too coarse to make good pellets. Typical iron formations require often prohibitive additional grinding to achieve this fine grain size. Further, magnetite pellet feed can be favoured over hematite and itabarite pellet feed because it requires significantly less energy (less costs) to pelletise due to its different chemistry.

Wood Mackenzie has also forecast that China will have a rising dependency upon imported pellets. High grade pellets are favoured over sinter because they provide efficiency dividends in a blast furnace.

The Company believes Hawsons has the potential to realise a significant and growing premium for its unique product and also to be one of the lowest cost, highest grade magnetite pellet feed concentrate producers in the world.

#### **CORPORATE**

During the quarter, Carpentaria issued a non-payment notice to joint venture partner Pure Metals. Subsequently Pure Metals has elected not to contribute to the joint venture and therefore allow dilution of its interest in the joint venture for the budget period to June 2015.

During the quarter, 18% shareholder, Silvergate Capital requisitioned, then subsequently withdrew its requisition, for a general meeting for shareholders to consider a number of resolutions. Carpentaria held its Annual General Meeting on 10 November 2014. Preparation for the requisitioned meeting incurred significant abnormal administration costs to the Company in the December quarter.

## **OTHER ASSETS**

A number of parties continue to review the Company's significant central Lachlan Fold Belt gold portfolio.

During the quarter three tenements were relinquished in full. This amounted to a reduction in tenement holdings of some 77 units or 227 km2. Annually, this equated to a reduction in Carpentaria's minimum statutory exploration commitment of \$167,000.

The timing of tenement relinquishment is linked to the expiry of the licences to best manage costs and a further tenement will be surrendered next quarter.

#### ABOUT HAWSONS IRON PROJECT

The Hawsons Iron Project joint venture (Carpentaria 60%, Pure Metals P/L 40%) is currently undertaking aspects of bankable feasibility study based on low cost, long term supply of a high grade, ultra-low impurity iron product to a growing premium iron 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 typical magnetite mining and processing challenges (both technical and cost-related). The soft rock enables simple liberation of a premium magnetite product without complex and expensive processing methods. The Company is targeting the growing premium high grade pellet feed market that is separate to the bulk fines market and believes its targeted costs are very competitive and profitable at prevailing long-term price forecasts for this sector.

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 technical parameters underpinning the resource estimates continue to apply and have not materially changed since first reported (ASX Announcement 26 March 2014 and Table 1).

		Magnetite mass		con	centrate	e grades	3	Contained Concentrate
Category	Billion Tonnes (cut off 12% mass recovery)	(04)	Fe%	SiO₂%	Al <sub>2</sub> O <sub>3</sub> %	Р%	LOI%	million tonnes
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

Table 1 JORC compliant resources- Hawsons Iron Project based on Davis Tube test work of drill material

For further information

Quentin Hill Managing Director +61 7 3220 2022

## We find it. We prove it. We make it possible.

The information in this announcement that relates to Exploration Result, Exploration Targets and Resources is based on information compiled by Q.S. Hill who is a member of the Australian Institute of Geoscientists and has had sufficient experience which is relevant to the style of mineralization 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'. Q.S.Hill is a full-time employee of Carpentaria and consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

## Carpentaria Exploration Tenement Schedule at end of 2014 December Quarter

<u>Licence</u>		<u>Name</u>	Original Grant Date	<b>Expiry Date</b>	<b>Equity</b>	Sub-blocks	Area (km²)
EL 6901		Combaning	8/10/2007	8/10/2015	100%	154	435.8
EL 6936	1	Euriowie	7/11/2007	7/11/2015	100%	16	46.9
EL 6979	2, 3	Redan	11/12/2007	11/12/2016	60%	62	179.8
EL 7208	3	Burta	22/09/2008	22/09/2015	60%	100	289.7
EL 7504	3	Little Peak	8/04/2010	8/04/2017	60%	14	40.6
EL 7735		Koonenberry 1	16/05/2011	16/05/2016	100%	29	86.3
EL 7736		Koonenberry 2	16/05/2011	16/05/2016	100%	21	62.3
EL 7737		Koonenberry 3	16/05/2011	16/05/2016	100%	15	44.4
EL 7738		Koonenberry 4	16/05/2011	16/05/2016	100%	8	23.7
EL 7739		Mt Shannon	16/05/2011	16/05/2016	100%	46	137.1
EL 7740		Wertago	16/05/2011	16/05/2016	100%	29	85.5
EL 7741		McDougalls D	16/05/2011	16/05/2016	100%	13	38.3
EL 7829		Yanco Glen	2/09/2011	2/09/2016	100%	50	146.2
EL 7896		Barellan	6/02/2012	6/02/2016	100%	50	141.7
EL 8082		Tooloom	1/05/2013	1/05/2016	100%	100	297.4
EL 8095		Advene	28/05/2013	28/05/2015	100%	100	287.1
EL 8189		Grong Grong	29/10/2013	29/10/2016	100%	148	418.7
EL 4395	4	South Dam	10/12/2009	9/12/2014	100%	27	77.9
EPM 14955	5	Mount Agate	29/06/2006	28/06/2016	100%	55	175.5
MLA 460	6, 7	Hawsons Iron	Under application	Under application	100%	n/a	187.0
Totals		20 li	cences and application	s		1,038	3,201.9

 <sup>100%</sup> Willyama Prospecting Pty Ltd (wholly owned subsidiary of Carpentaria).

<sup>2. 1.5%</sup> NSR royalty to Perilya Broken Hill Pty Ltd.

<sup>3.</sup> JV farm-out; Pure Metals Pty Ltd.

<sup>4.</sup> Under renewal process.

<sup>5.</sup> JV farm-out; ActivEX Ltd.

MLA made on 18 October 2013; tenement application subject to unspecified grant date and conditions.

<sup>7.</sup> Subject to the Hawsons Joint Venture with Pure Metals Pty Ltd.



# Appendix 5B

## Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001 ,01/06/2010.

Name of entity

## Carpentaria Exploration Limited

ACN or ABN Quarter ended ("current quarter")
63 095 117 981 31-Dec-14

## Consolidated statement of cash flows

		Current quarter	Year to date
	Cash flows related to operating activities	\$A'000	(6 months) \$A'000
	•		
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for		
	(a) exploration and evaluation	(478)	(684)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(342)	(901)
	(e) business development	(124)	(238)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	3	42
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes received	-	1,123
1.7	Other (provide detail if material)	-	-
	Net Operating Cash Flows	(941)	(658)
	Cash flows related to investing activities		
1.8	Payment for purchases of:		
	(a)prospects	-	-
	(b)equity investments	-	-
	(c) other fixed assets	-	-
1.9	Proceeds from sale of:		
	(a)prospects	-	134
	(b)equity investments	-	-
	(c)other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other - Exploration Advance	-	-
	Net investing cash flows	-	134
1.13	Total operating and investing cash flows (carried forward)	(941)	(524)



1.13	Total operating and investing cash flows (brought forward)	(941)	(524)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	-	-
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	(2)	(4)
1.18	Dividends paid	-	-
1.19	Share issue costs	-	-
	Net financing cash flows	(2)	(4)
	Net increase (decrease) in cash held	(943)	(528)
1.20	Cash at beginning of quarter/year to date	4,691	4,276
1.21	Exchange rate adjustments to item 1.20		•
1.22	Cash at end of quarter	3,748	3,748

Payments to directors of the entity and associates of the directors

Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	113
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25	Explanation necessary for	an understanding of	the transactions
1.20	Explanation recognary for	ari uriuci stariurig or	tile transactions

Item 1.23 relates to Directors Remuneration, Fees and Superannuation Contributions.

## Non-cash financing and investing activities

2.1	material effect on consolidated assets and liabilities but did no involve cash flows

2.2	Details of outlays made by other entities to establish of increase
2.2	their share in projects in which the reporting entity has an interest

#### Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available	Amount used
		\$A'000	\$A'000
3.1	Loan facilities	12	12
3.2	Credit standby arrangements	-	-



## Estimated cash outflows for next quarter

+Ordinary securities Un-Quoted (restricted)

(b) Decreases through returns of capital, buy-backs

7.4 Changes during quarter
(a) Increases through issues

Estimated cash outflows for next quarter			\$A'000
Exploration and evaluation *			3
Development			
Production			
Administration (includes Business development)			2
		Total	6
Reconciliation of cash Reconciliation of cash at the end of the quarter (as shown in consolidated statement of cash flows) to the related items in accounts is as follows.		Current quarter	Previous quarte
Cash on hand and at bank		66	4.0
Deposits at call		3,512	4,0
Bank overdraft Other (provide details)			
Changes in interests in mining tenements		3,748	4,6
	Tenement Reference	Nature of interest (note (2))	Interest at beginn of quarter Interest at end of quarter
Interests in mining tenements relinquished, reduced or lapsed		EL 7655 EL 7656 EL 7657	Begin 100% End N Begin 100% End N Begin 100% End N
Interests in mining tenements acquired or increased		-	- -
<b>Issued and quoted securities at end of current quarte</b> Description includes rate of interest and any redemption or conversion rights tog with prices and dates.		Number quoted	Issue price pe
Preference +securities (description)		7	security (see not
Changes during quarter			
(a) Increases through issues			
(b) Decreases through returns of capital, buy-backs, redemption	ons		
+Ordinary securities Quoted		123,887,777	
Options Quoted			



7.5	+Convertible debt securities (description)		
7.6	Changes during quarter		
	(a) Increases through issues		
	(b) Exercise of Options		
7.7	Options (description and conversion factor)	Number	Exercise price Expiry date
		4 500 000	0.440
	Unlisted Options CAPAO	1,500,000	29-Nov-15
7.8	Issued during quarter		
7.9	Exercised during quarter		
		2 600 000	0.290
7.10	Expired during quarter	2,600,000	15-Dec-14
7.11	Debentures	-	
	(totals only)		
7.12	Unsecured notes (totals only)	-	

#### **Compliance statement**

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does give a true and fair view of the matters disclosed.

Company Secretary Chris Powell 30-01-15

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 Issued and quoted securities The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report.
- Accounting Standards ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.