



# PLATSEARCH NL

ACN 003 254 395

---

Level 1, 80 Chandos Street, St Leonards NSW 2065 (PO Box 956, Crows Nest NSW 1585)

Telephone: (02) 9906 5220 Facsimile: (02) 9906 5233

Email: pts@platsearch.com.au Website: www.platsearch.com.au

---

4 September 2007

Company Announcements Office  
Australian Securities Exchange

## EASTERN IRON PROJECT PLATSEARCH STEPS UP IRON ORE SEARCH IN NSW

The PlatSearch Board is pleased to announce initial drilling results from its Eastern Iron Project, a bold new initiative to investigate the potential for iron ore production from the very large quantities of shallow, easily extractable iron-rich material that exists in the extensive networks of palaeochannels in parts of western NSW. Aircore drilling is being carried out on a broad scale to identify areas with the potential to produce significant tonnages of direct shipping quality iron ore (DSO) product.

Two phases of preliminary shallow aircore drilling have been completed at six sites and the results are



**Figure 1 - Maghemite ( $Fe_2O_3$ ) iron rich pisolites from PlatSearch's Eastern Iron Project**

sufficiently encouraging for PlatSearch to step up its commitment to the project. PlatSearch has formed a 100% owned subsidiary company *Eastern Iron Limited* to further these investigations and has moved decisively to secure a commanding tenement position of five granted tenements and 10 tenement applications covering a total area of approximately 4,300 square kilometres embracing many hundreds of kilometres of prospective palaeochannels.

The Eastern Iron Project is based on the following observations and premises:

- It has long been known that some palaeochannels in western NSW contain precious metals such as alluvial gold, tin and platinum. However, PlatSearch has recognised that these palaeochannels also contain significant quantities of pisolitic maghemite ( $\text{Fe}_2\text{O}_3$ ), a magnetic mineral with an identical chemical formula to haematite iron ore. These deposits of maghemite are similar in form and occurrence to the Channel Iron Deposits (CID) in the Hammersley and Pilbara regions of Western Australia that contain haematite ( $\text{Fe}_2\text{O}_3$ ) and goethite and are a well regarded source of iron ore for raw (or pig) iron production and then steel making.
- The maghemite pisolites occur from surface to shallow depths (0-20 metres) as unconsolidated gravels and it is likely that they can be easily extracted and amenable to low cost bulk surface mining. The areas are topographically flat and easily accessible. Furthermore, mined areas should be able to be fully rehabilitated without residual tailings dams and significant open pits.
- Because maghemite is magnetic, the palaeochannels that contain these gravels can be easily identified using specialised processing of aeromagnetic data by PlatSearch. The selection of prospective channels has been assisted by the availability of high quality aeromagnetic data provided by the NSW Department of Primary Industries.
- Although the in-situ iron grade is low (15-35%) compared with many CID projects, the grade is high compared with iron-bearing beach sands mined commercially elsewhere in the world. The magnetic properties of maghemite should enable the ore to be upgraded at the mining site using simple “off the shelf” magnetic beneficiation technology, with the possibility of achieving an acceptable DSO grade at the mine gate.
- Eastern Iron project areas are located on, or very near, road and heavy, publicly owned rail infrastructure leading to the eastern seaboard of Australia, a region richly endowed with infrastructure, energy (gas), deep bulk-export ports, iron and steel manufacturing plants and product markets.
- As well as the DSO target, a shallow easily extractible source of bulk tonnage iron ore in eastern Australia, even at lower iron grades, should also be amenable to upgrade through a pig iron production facility. A discovery by Eastern Iron could enable the iron making additives of coal and energy to be delivered to the bulk source of iron ore by reducing transport costs of the major constituent of iron. Pig iron production close to a bulk source of iron ore on Eastern Iron project areas would remove transport penalties for any slag component.

The technical work completed so far is as follows:

- Two phases of shallow aircore drilling totalling 62 holes. Six lines of holes have been drilled across six selected palaeochannels. Every hole drilled has intersected unconsolidated, iron-rich gravels from surface. Typical intersections included 13 metres at 15.1% Fe (0-13 metres), including 4 metres at 21.2% Fe (5-9 metres) in hole EIAC0007. A maximum bulk content of one metre at 36.7% Fe (5-6 metres) was intersected in hole EIAC0046. See attached example cross sections for Line 1 and Carpenters sites.
- Encouraging bulk iron content assays have been received for all drilling. Some metallurgical work and preliminary ore characterisation tests have been completed on the first phase of drilling. Simple magnetic beneficiation test work resulted in iron rich concentrates with assays of 52.7% Fe (75.2%  $\text{Fe}_2\text{O}_3$ ) (at surface), 48% Fe (68.6%  $\text{Fe}_2\text{O}_3$ ) (Zone 1, 0-2m), 48.8% Fe (69.8%  $\text{Fe}_2\text{O}_3$ ) (Zone 2, 5-9m) and 50.7% Fe (69.8%  $\text{Fe}_2\text{O}_3$ ) (Zone 3, 10-12m), from three separate zones within a 480m wide iron-rich palaeochannel. Similar test work on the samples from the second phase of drilling has commenced recently. (All  $\text{Fe}_2\text{O}_3$  values quoted are calculated values based on the

assumption that all iron is present as oxidised iron. Initial test work on magnetically separated material shows that iron resides in the samples as  $\text{Fe}_2\text{O}_3$ ).

- Limited surface sampling has been conducted at some palaeochannel sites by PlatSearch and previous explorers and has returned assays up to 56% total iron (80.1%  $\text{Fe}_2\text{O}_3$ ).
- Preliminary ore characterisation tests on pisolites by the University of Western Sydney using the scanning electron microscope confirmed the presence of maghemite as the only iron-bearing phase within the magnetically separated pisolite.
- From the limited drilling conducted to date, it is clear that there is significant variation in the nature of the iron-rich material from one palaeochannel to another and within palaeochannels. Some material contains a greater proportion of iron as pure maghemite pisolites and some material contains iron associated with rock fragments. One of the objectives of the planned drilling will be to delineate those zones that contain more iron-rich pisolites, enabling early definition of DSO iron ore resources.

Eastern Iron Limited is examining methods of funding a programme of extensive drilling, metallurgical test work and feasibility studies. This may include listing by Eastern Iron Limited on the ASX.

**Bob Richardson**  
Managing Director

Please direct any questions to Bob Richardson on (02) 9906 5220 or 0414 592 080.

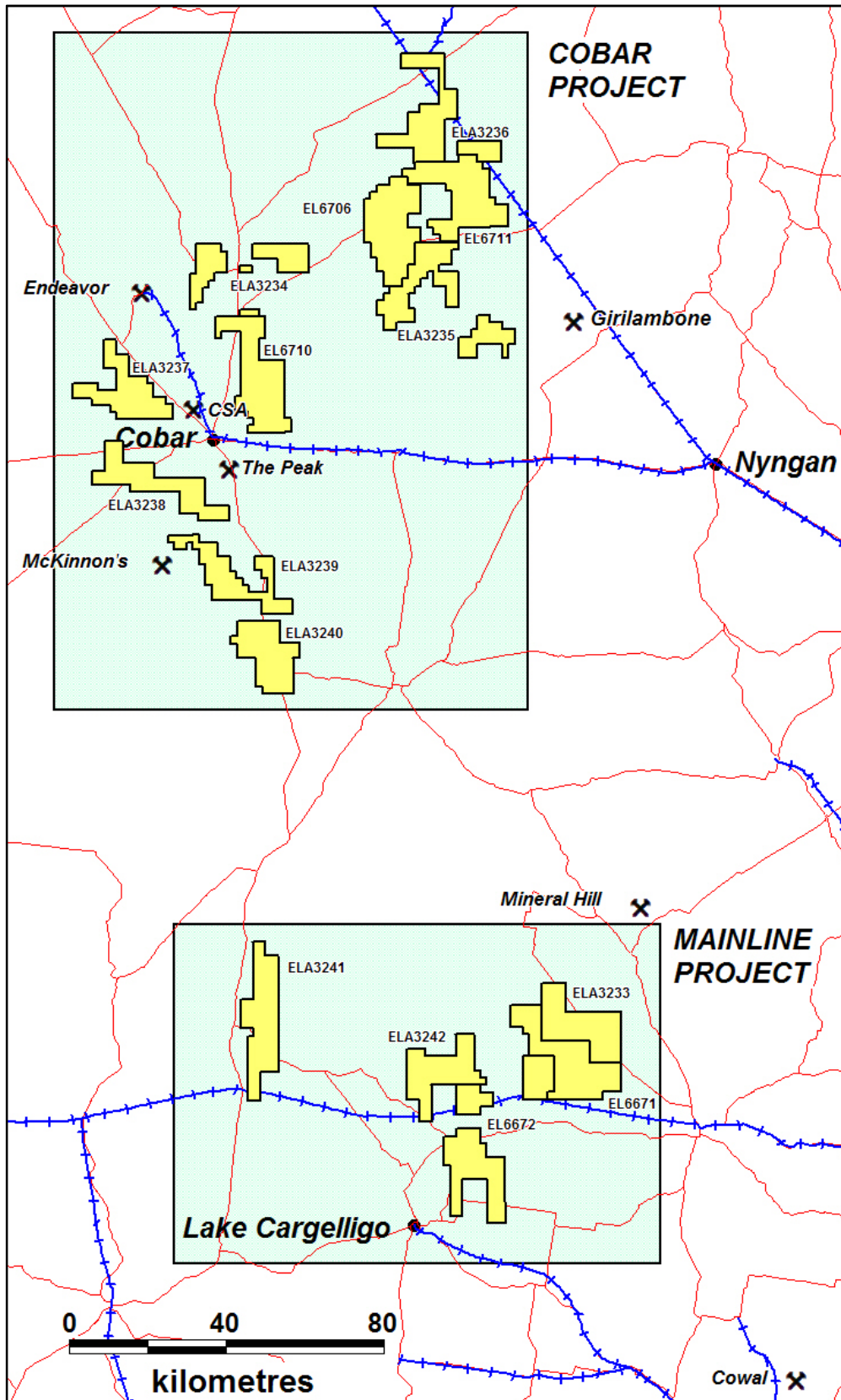
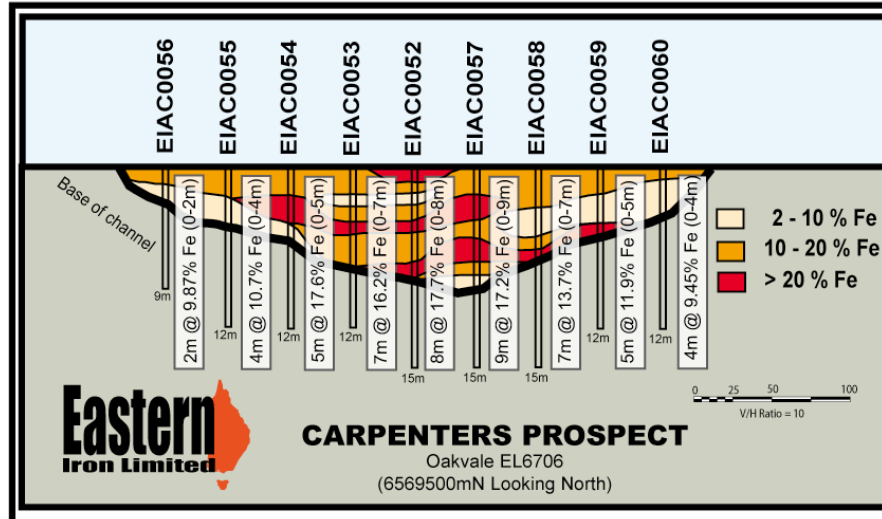
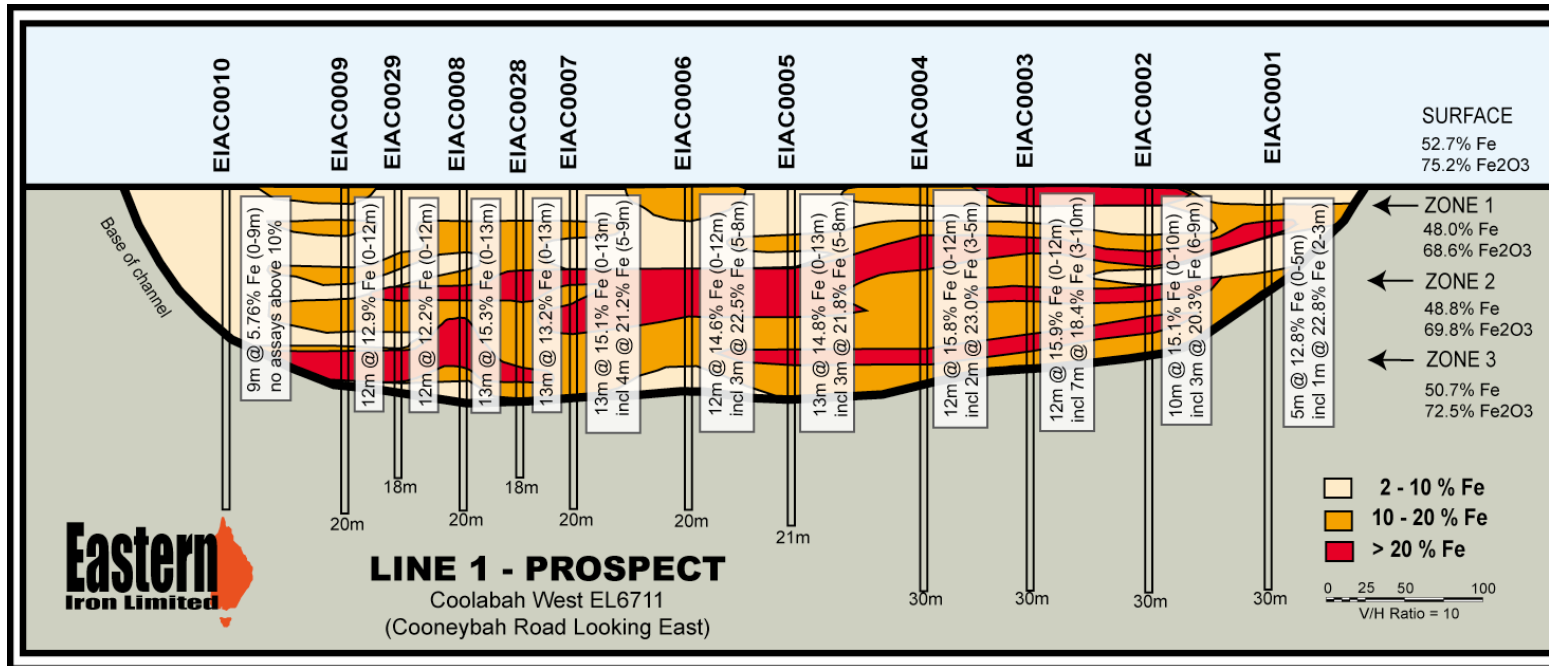


Figure 2 – Location of PlatSearch/Eastern Iron tenements in western NSW



ELEMENTS		Fe	Fe <sub>2</sub> O <sub>3</sub>	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	CaO	P	S	LOI
EI0001	Surface mag sep	52.65	75.24	18.88	7.81	0.12	0.07	<0.01	0.52
EI0002	Bulk soil	9.18	13.12	65.3	10.68	0.11	0.04	<0.01	2.28
EI0005	Mag sep from EI0002	47.47	67.87	23.19	9.11	0.06	0.06	<0.01	0.79
EI0006	Surface mag sep	51.02	72.94	22.33	7.06	0.08	0.07	<0.01	0.54
EI0007	Surface mag sep	48.39	69.18	26.02	7.01	0.09	0.05	<0.01	0.24
EI0008	Surface mag sep	41.03	58.66	33.68	8.11	0.11	0.09	<0.01	0.44
EI0009	Surface mag sep	52.87	75.59	19.8	7.08	0.13	0.06	<0.01	0.35
EI0010	Surface mag sep	44.68	63.88	32.16	6.66	0.1	0.06	<0.01	0.57
EI0031	Dry mag separation	46.74	66.82	19.41	8.53	0.12	0.142	0.016	2.32
EI0031C	Wet Sive	47.96	68.57	18.1	8.38	0.11	0.141	0.019	2.24
EI0122	Dry mag separation	45.05	64.41	21.08	9.11	0.06	0.134	0.054	2.63
EI0123	Dry mag separation	42.86	61.28	22.98	9.12	0.11	0.126	0.088	2.95
EI0147	Dry mag separation	43.17	61.72	22.58	10.08	0.04	0.076	0.039	3.27
EI0168	Dry mag separation	43.15	61.69	21.83	10.17	0.11	0.065	0.018	3.23
EI0168C	Wet Sive	45.21	64.64	20.06	9.86	0.04	0.067	0.016	2.99
EI0276	Dry mag separation	42.88	61.31	18.89	12.25	0.09	0.055	0.011	3.98
EI0276C	Wet Sive	46.24	66.11	16.87	10.52	0.09	0.053	0.012	3.01
EI0576	Dry mag separation	43.97	62.87	20.82	9.89	0.16	0.072	0.032	3.57
EI0576C	Wet Sive	45.42	64.94	19.67	9.49	0.05	0.073	0.031	2.85
EI0577	Dry mag separation	43.29	61.9	20.59	9.77	0.16	0.071	0.031	3.9
EI0595	Dry mag separation	41.95	59.97	22.01	11.55	0.04	0.054	0.011	3.49

Figure 3 – Drill sections at Line 1 and Carpenters prospects and summary table of metallurgical testwork results. (Iron grades in the table represent iron values obtained from a variety of trial separation methods including dry separation and should not be considered indicative of the final iron or impurity levels obtained from future testwork.)