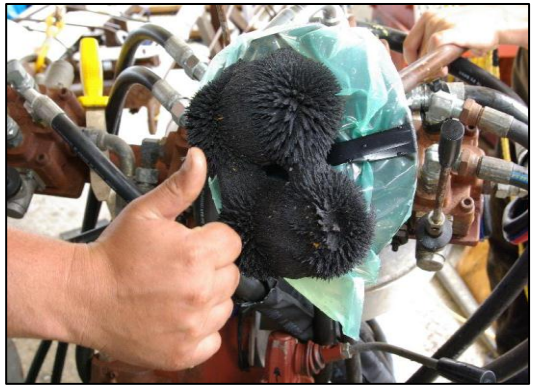
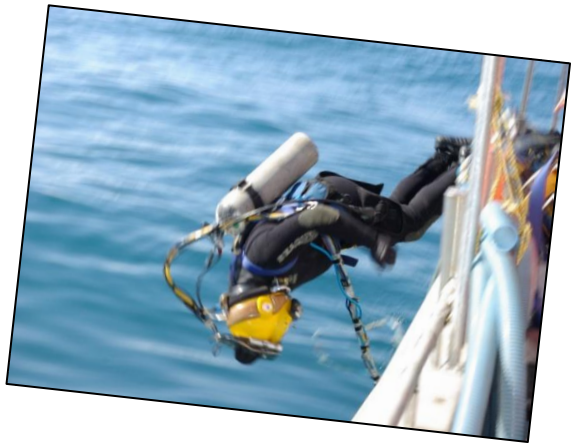
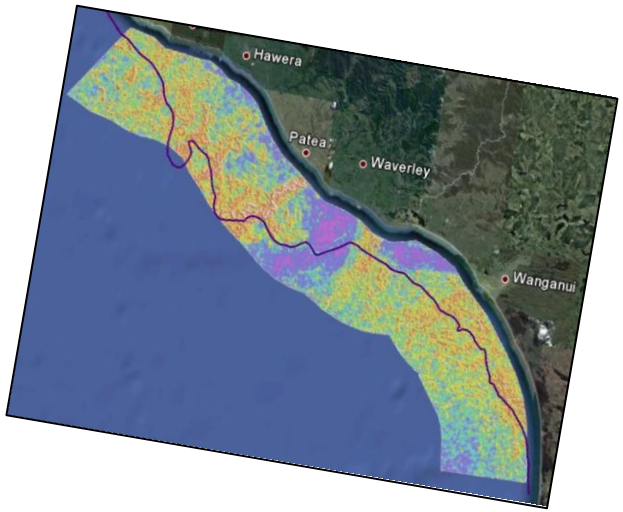


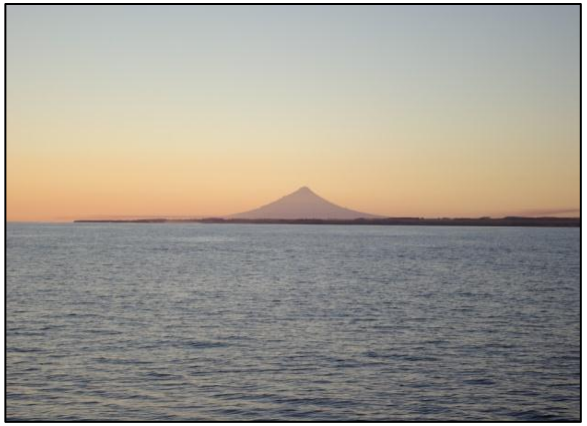


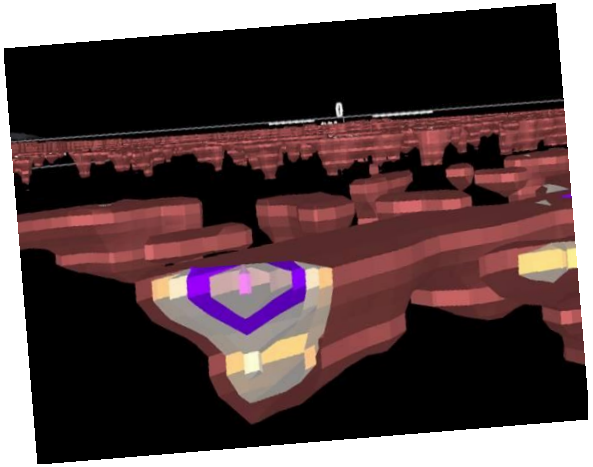
Innovative concept for offshore exploration of iron ore

AusIMM NZ Branch 2010 Annual Conference

24-26 November 2010







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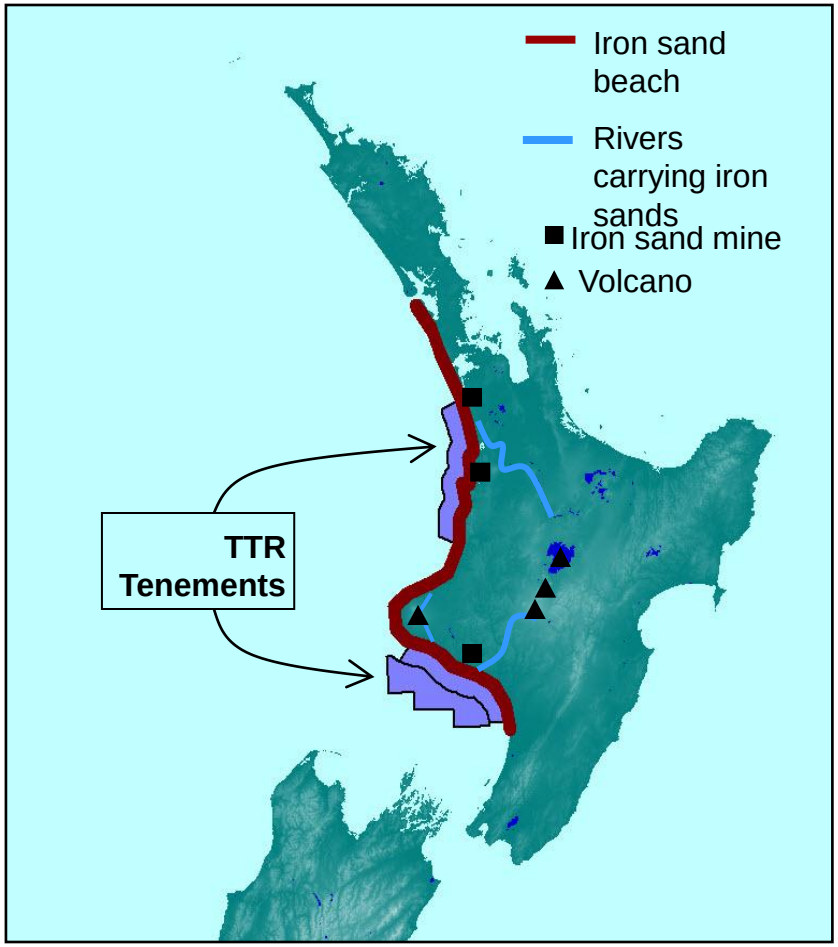
IRON SANDS IN NEW ZEALAND

TTR holds exclusive prospecting license over 6300 km2 of iron rich seabed along the west coast of the north island of New Zealand. An additional high potential area of 2300 km2 under application.

- The NZ black sand or iron sand beaches cover 480km.
- The NZ black sand on shore deposits are the most extensive and the most concentrated in Fe in the world. Typical iron content is 20-25% Fe in weight for the beach sands.
- On shore iron sand dunes are currently mined by New Zealand Steel and support a small scale local production of high quality steels.
- The iron sands originate from erosion of volcanic rocks, then transported to the coast by rivers, and finally pushed back onto the beaches by shallow-marine long shore currents.
- The seabed areas in TTR tenements are typically shallow (20m-70m) in depth and are amenable to dredging (mostly sandy bottom).



* TTR has also lodged an application for an exclusive mineral exploration license over an additional area of 2300km2 , represented by the dotted line.

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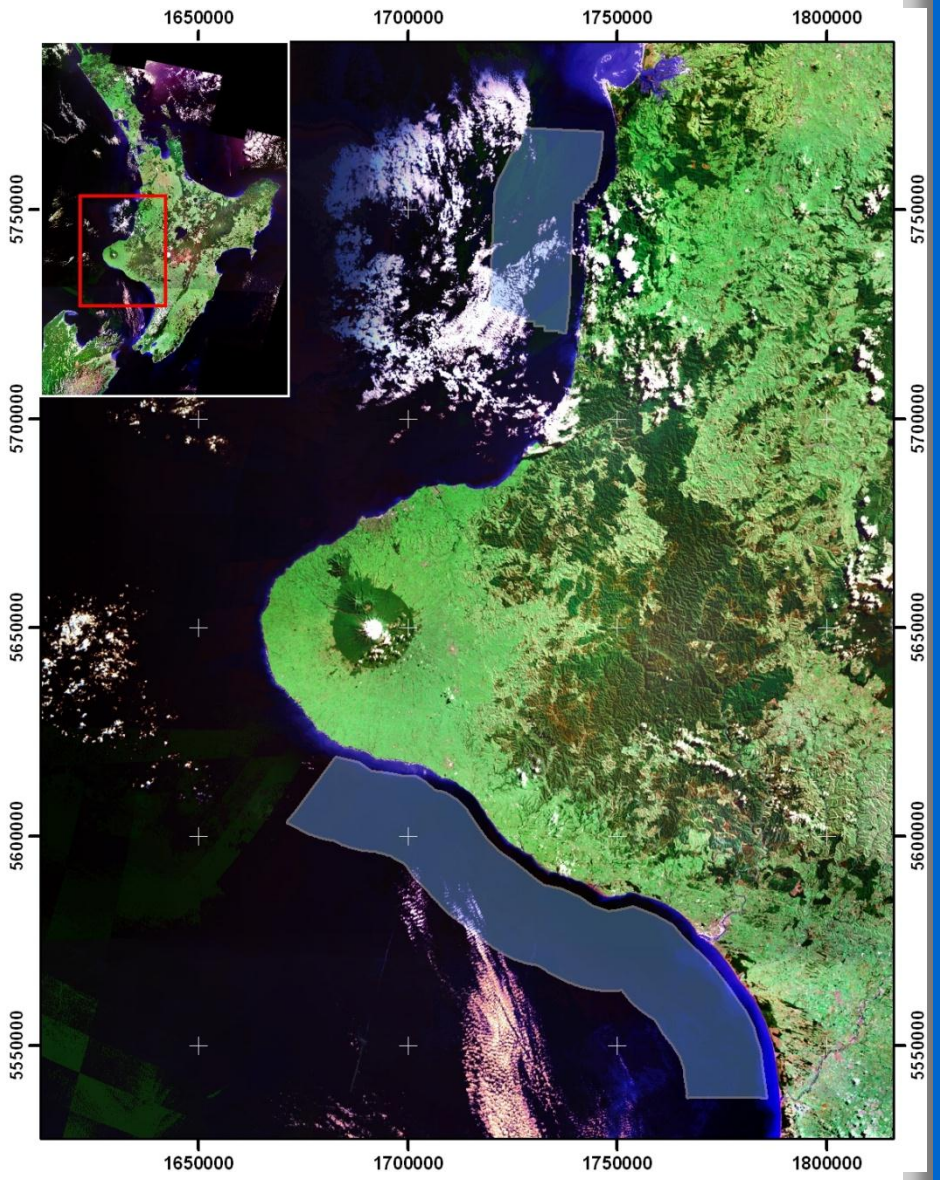
Aeromagnetic Survey Areas

- The survey areas are located along the west coast of the North Island of New Zealand.
- The areas are to the north and southeast of Cape Egmont (Mt Taranaki).



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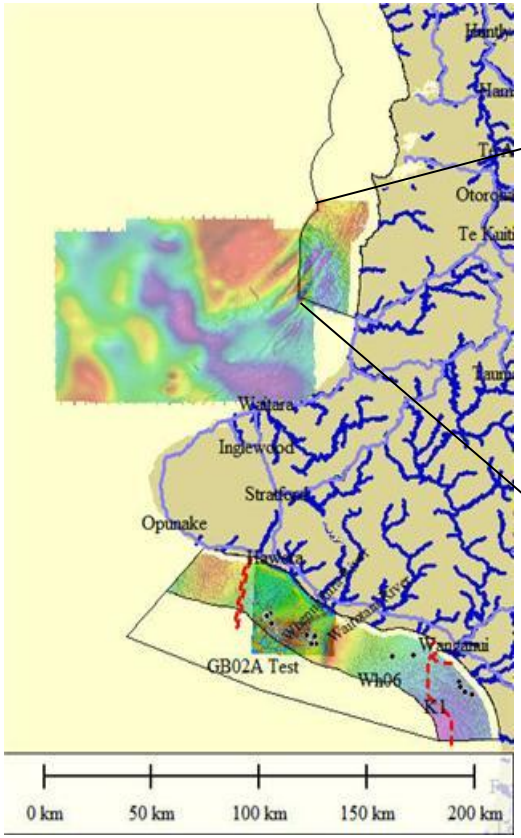
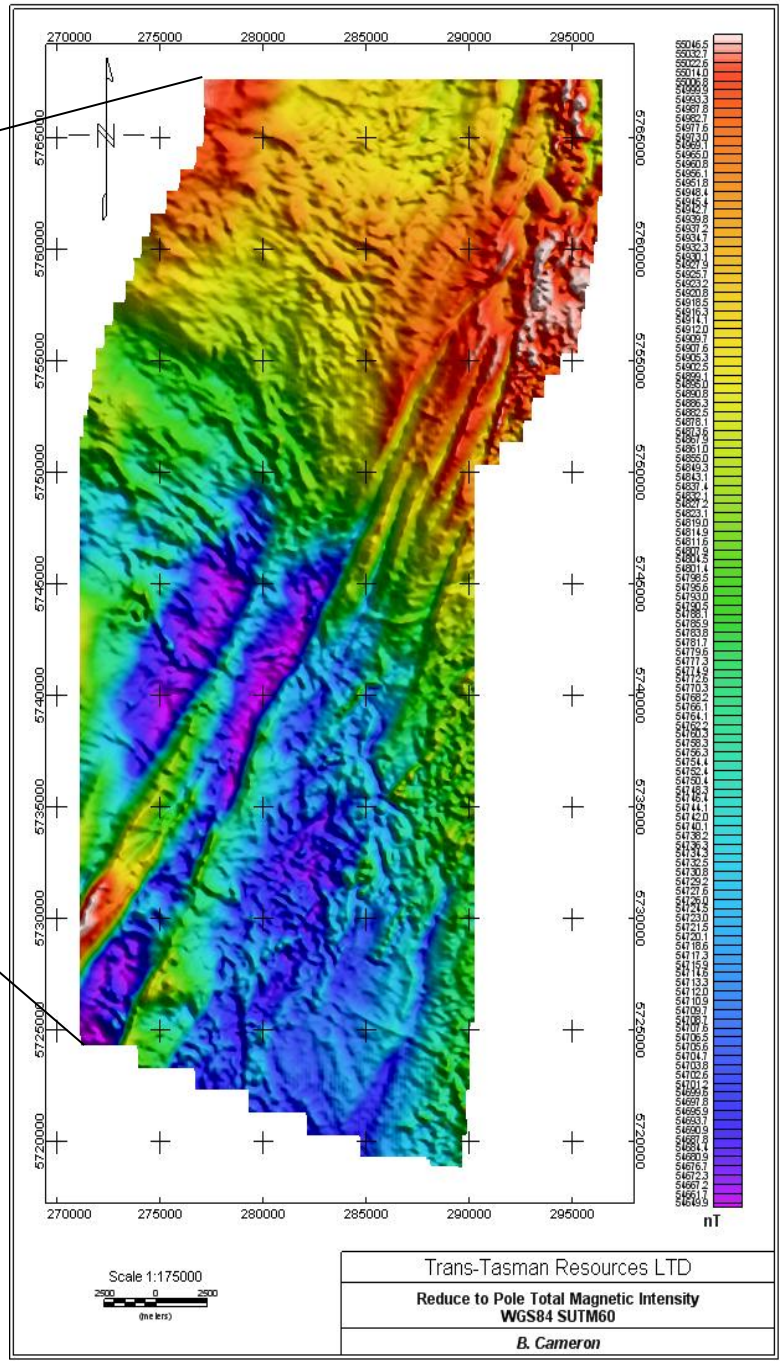
RESOURCE DEFINITION - EXPLORATION RESULTS

Northern aeromag – Reduced to Pole





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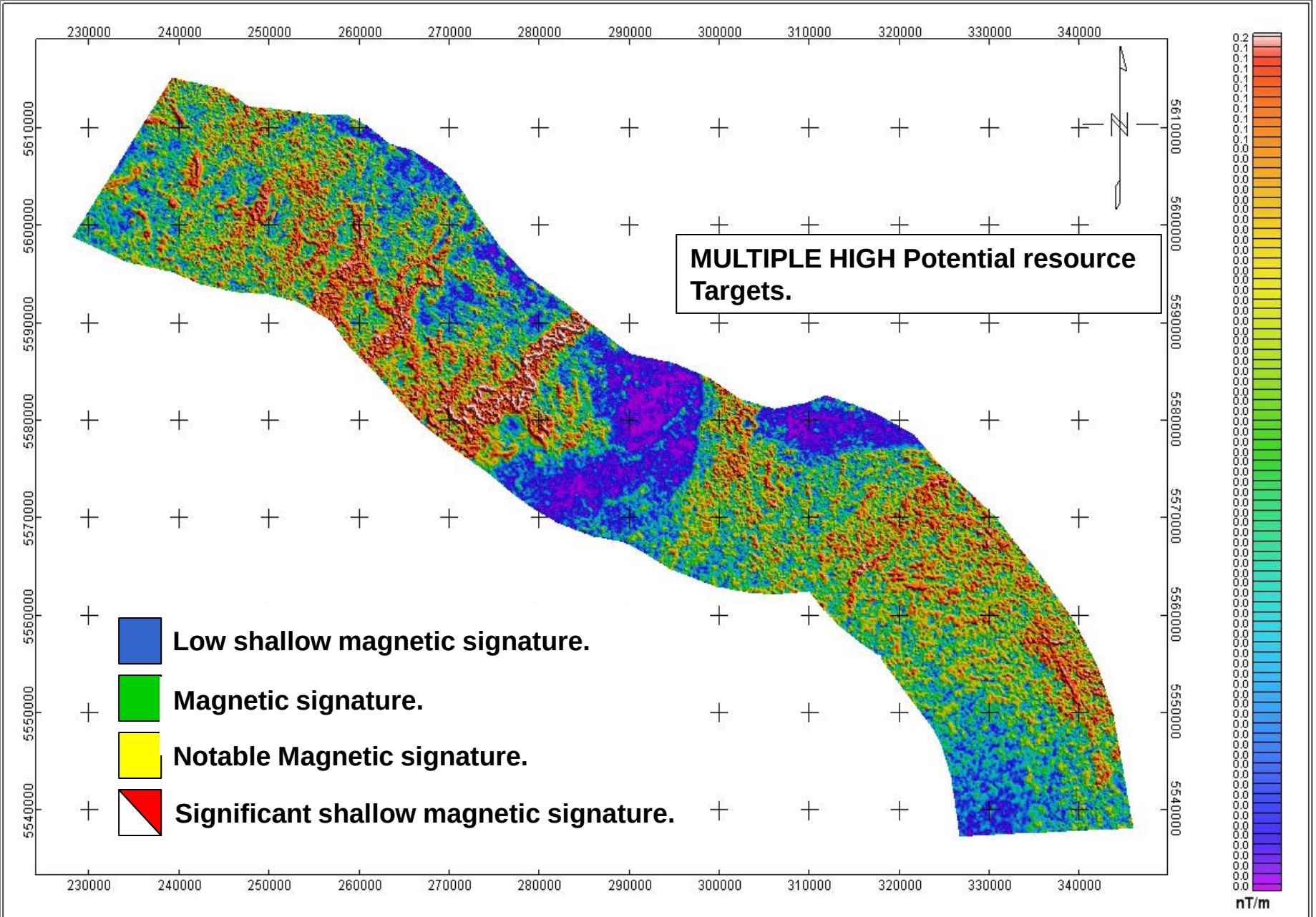
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MULTIPLE HIGH Potential resource Targets.
Low shallow magnetic signature.
Magnetic signature.
Notable Magnetic signature.
Significant shallow magnetic signature.
nT/m
Scale 1:400000
5000 0 5000 10000 15000 20000
(meters)
Trans-Tasman Resources LTD
Residual of TMI - Analytic Signal
WGS84 SUTM60
B. Cameron

INFERRED ECONOMIC MINERAL RESOURCE FOR SOUTHERN TENEMENT

Based on aeromagnetic survey flown 01/2010

3D MINERAL RESOURCE MODEL DERIVED FROM AERO-MAGNETIC SURVEY

(Partial view – Vertical exaggeration X5)

Estimated resource [1] > 988 Mt of TiFe @ 60% Fe

Iron sand deposits have no over burden and ~ 60m deep

- TTR flew an aeromagnetic survey over the Southern tenement using a 200m line spacing grid.
- TiFe is a highly magnetic mineral and it was possible to derive an accurate 3D mineral resource model based on the collected magnetic data.
- The 3D model was confirmed by the shallow drilling campaign
- A first very conservative estimate of the mineral was done assuming that TiFe has the same magnetic susceptibility as magnetite
- In reality TiFe has a much lower magnetite susceptibility than magnetite . With the correction (ongoing) the mineral resource could be 3 to 4 times larger.

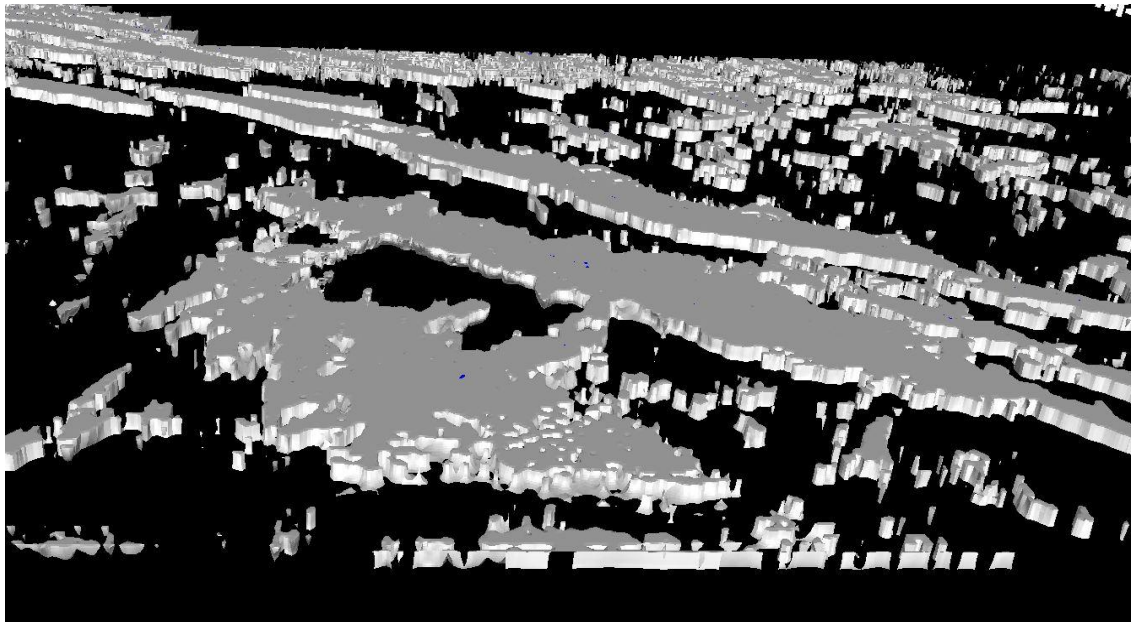
(1) Assuming TiFe has the same magnetic susceptibility as magnetite which is a very conservative assumption

INFERRED ECONOMIC MINERAL RESOURCE FOR NORTHERN TENEMENT

Based on aeromagnetic survey flown 01/2010

3D MINERAL RESOURCE MODEL DERIVED FROM AERO-MAGNETIC SURVEY

(Partial view – Vertical exaggeration X5)



Estimated resource (1) > 3043 Mt of TiFe @ 60% Fe

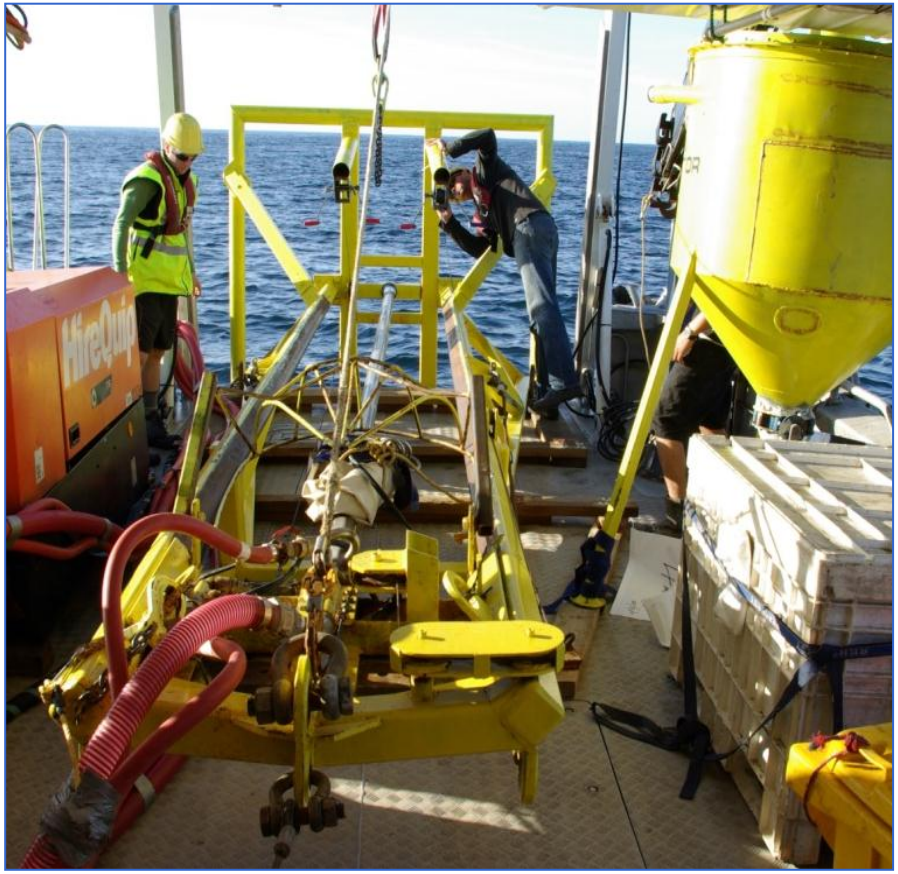
Computed to a depth of 60m but many voxels are still open

- TTR flew an aeromagnetic survey over approximately a third of the Northern tenement using a 200m line spacing grid.
- TiFe is a highly magnetic mineral and it was possible to derive an accurate 3D mineral resource model based on the collected magnetic data.
- No drilling has been completed.
- A first very conservative estimate of the mineral was done assuming that TiFe has the same magnetic susceptibility as magnetite
- In reality TiFe has a much lower magnetite susceptibility than magnetite . With the correction (ongoing) the mineral resource could be much larger.

(1) Assuming TiFe has the same magnetic susceptibility as magnetite which is a very conservative assumption

TTR DRILLING TECHNOLOGY (1/2)

TTR has developed its own proprietary JORC compliant ultra low cost shallow drilling technology to define the worlds first off shore iron ore mineral resource . TTR has recently patented* the key aspects of the technology which creates a substantial barrier for other hopeful off shore iron sand explorers . The technology is applicable for many other marine exploration activities (gold, tin, diamonds, environmental monitoring ...).



RC DIVER OPERATED RIG – EXISTING

- ✓ Over 150 seabed samples recovered to date
- ✓ Reverse Circulatory Drilling system modified for submersible operation
- ✓ Diver operated, limited to 30m water depths
- ✓ 6m of penetration

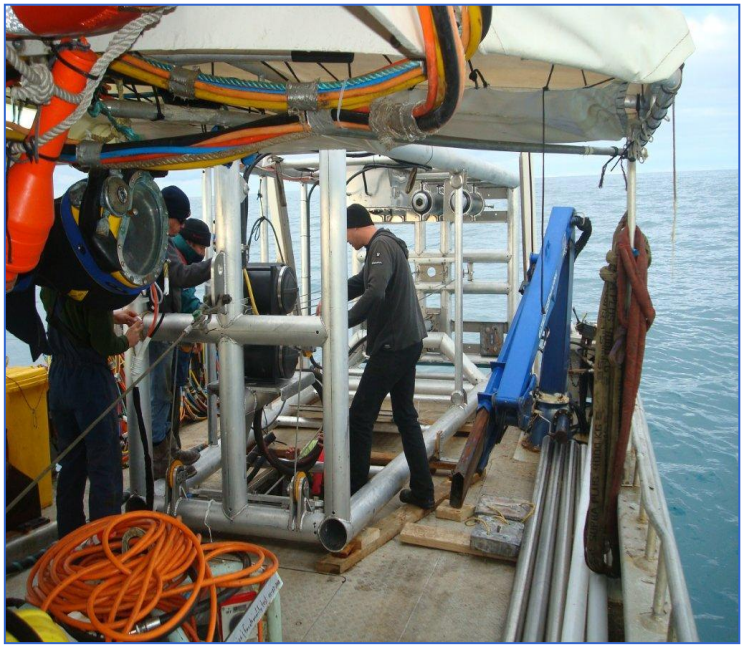
** Worldwide patent protection for 12 months.*

TTR DRILLING TECHNOLOGY (2/2)

TTR has successfully trialled at sea on the 12th of July the world's first self extractible new vibracore drilling system. This system is diverless and will enable TTR to reach exploration targets in up to 200m of water depth. The self extraction system is hydraulically operated and powered by marine hydraulic accumulators located on the rig

P5 DIVERLESS VIBRACORE:

- Diverless, operates remotely
- Takes 6m sleeve core sample
- Capable of deep submersion (up to 200m water depth)
- Self extractible with on board mobile hydraulic accumulators
- Enables JORC compliance of RC units *



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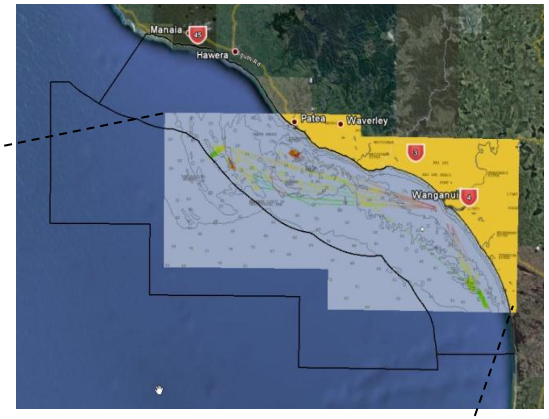
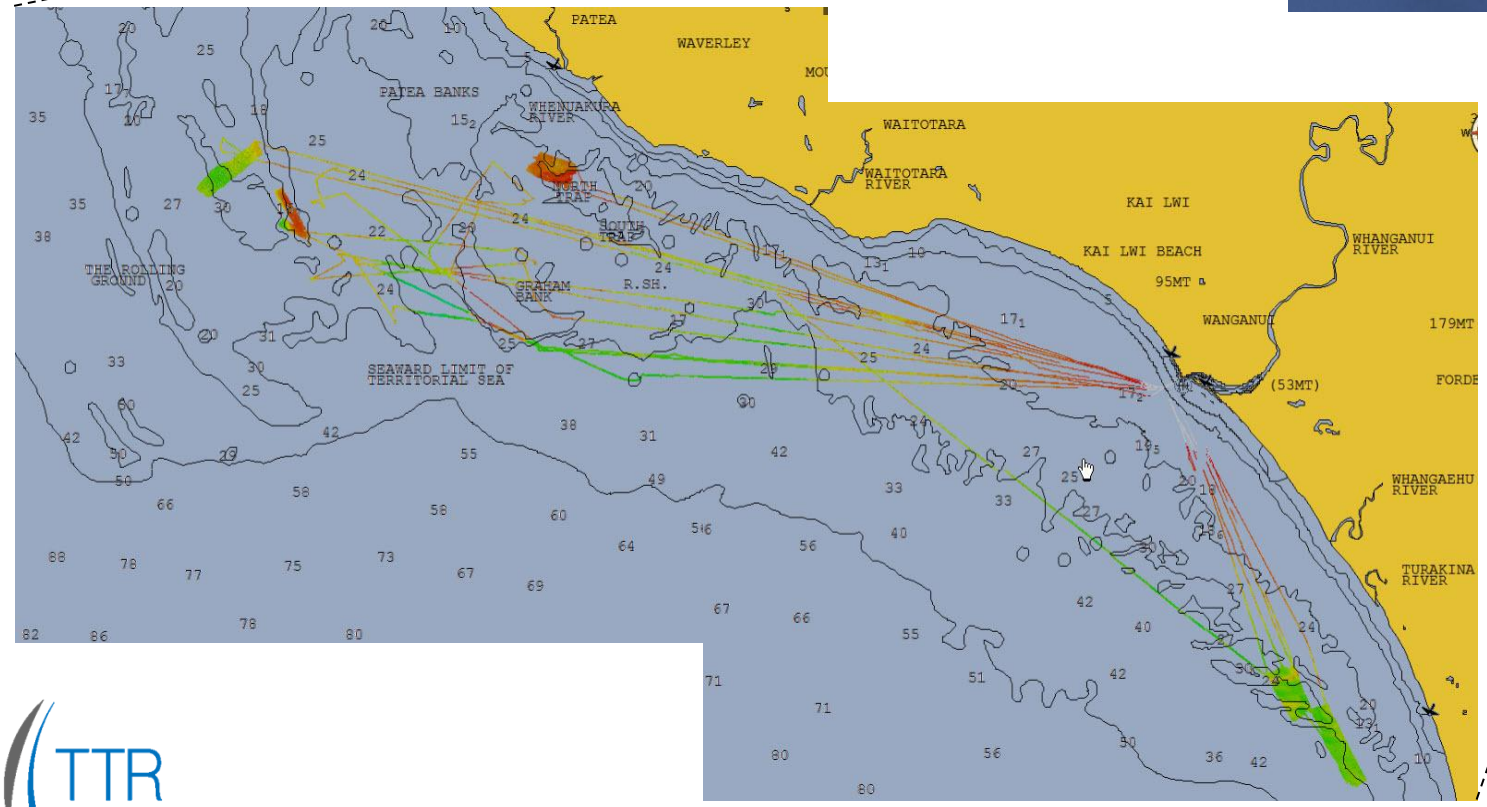
BATHYMETRY MEASUREMENTS

In order to collect vital accurate bathymetric data, TTR has acquired and deployed a WASSP multi-beam system with backscatter capabilities

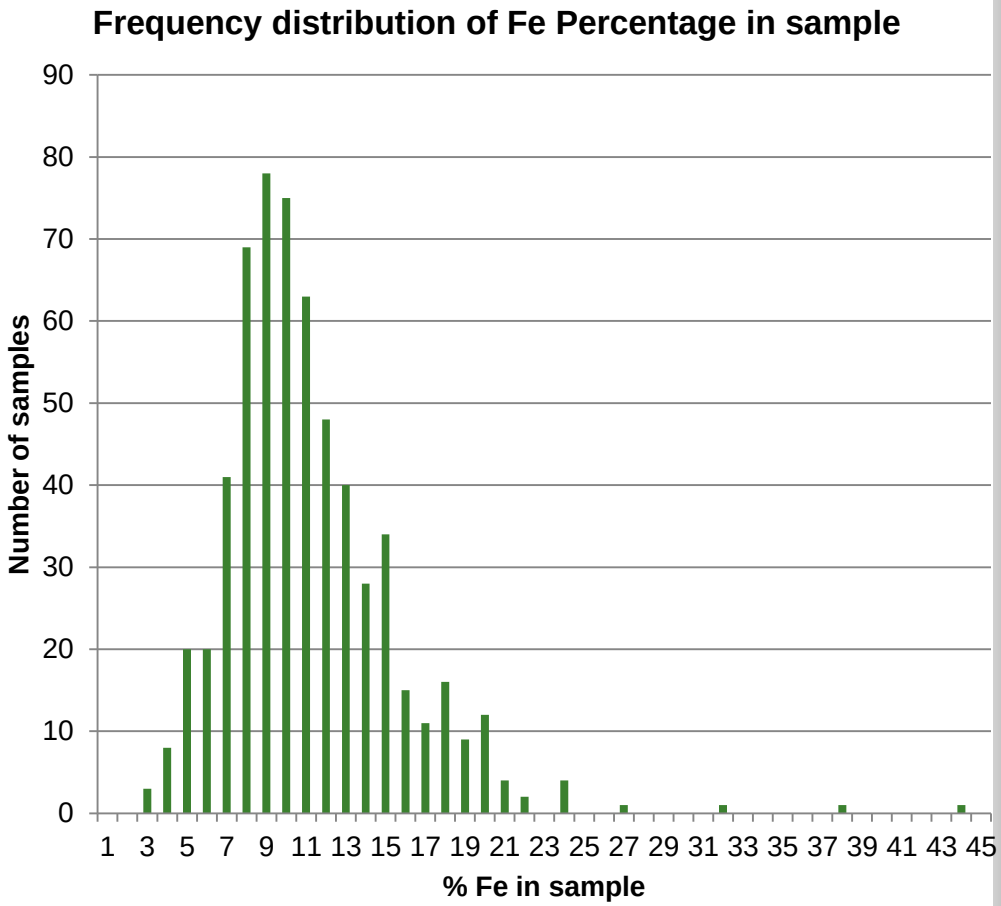
- Bathymetric data critical for calibrating 3D resource model and for environmental test work in the future
- 90m grid purchased, and used in 3D inversion model
- WASSP Multibeam system being used to produce 25cm grid





Resource Definition

- Aeromagnetic survey has delineated a resource of ~4 billion tonnes
- 5m Shallow drilling to date has failed to intersect the high grades as calculated by Fugro.
- An intensive program was embarked upon to determine the difference in grades between drilling and aeromagnetic resource
  - Magnetic susceptibility measurement of bulk versus a small sample
  - Titanohematite content of samples
  - +2mm fraction of samples
  - Davis Tube Recovery of selected samples
  - None of these produced an improvement in correlation. HOWEVER,
- Drilling data shows surprising consistency of results around 10% Fe.



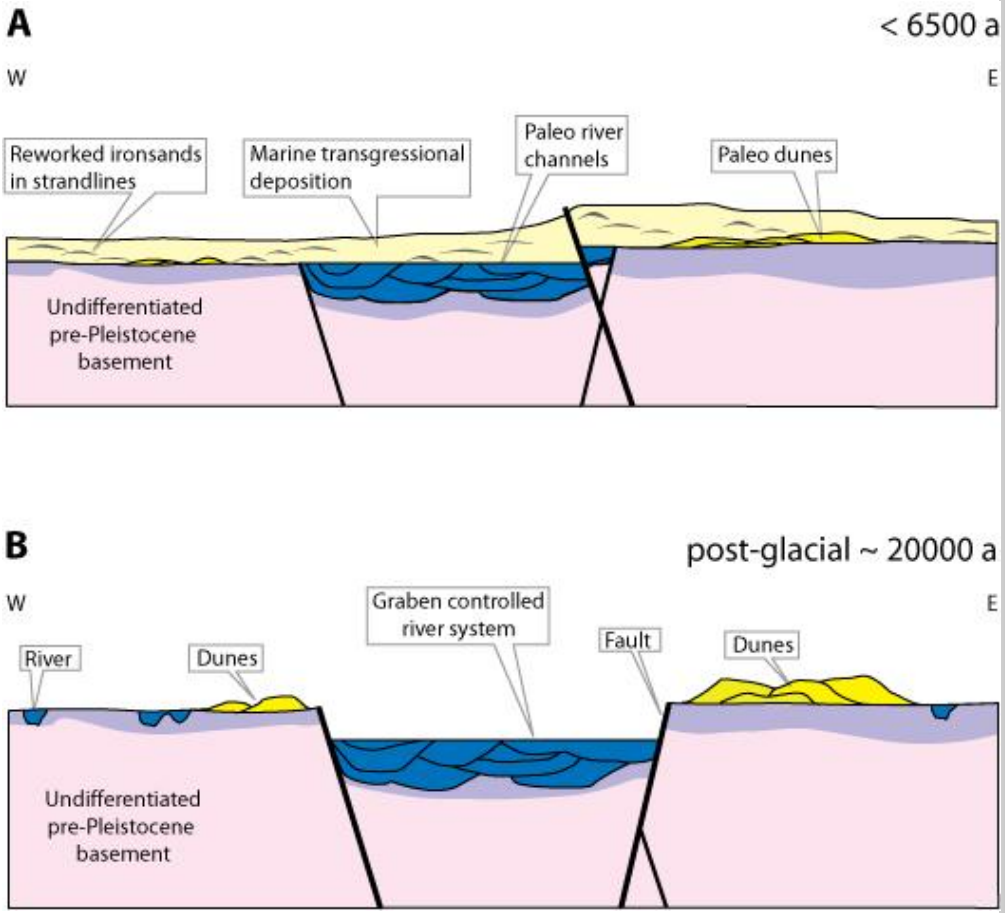
Palaeogeographic Model – Southern Permit Area

- Fugro described that the ironsands of the river channels and dunes are partially reworked by currents and longshore drift and are re-deposited along the shore lines of the transgressing sea (Figure A).

- We might have some overburden.

Fortunately, the TTR business case has always been based on a 10% TiFe content in the sediment.

- We now have two JORCing work streams:
  - Original work stream to define the 4 Bt resource, needing some deep holes.
  - Upgrading the shallow overburden to JORC Inferred status.



Schematic representation of the development of the shelf area of the southern permit area, at A) < 6500 a and B) post-glacial times around 20000 a.

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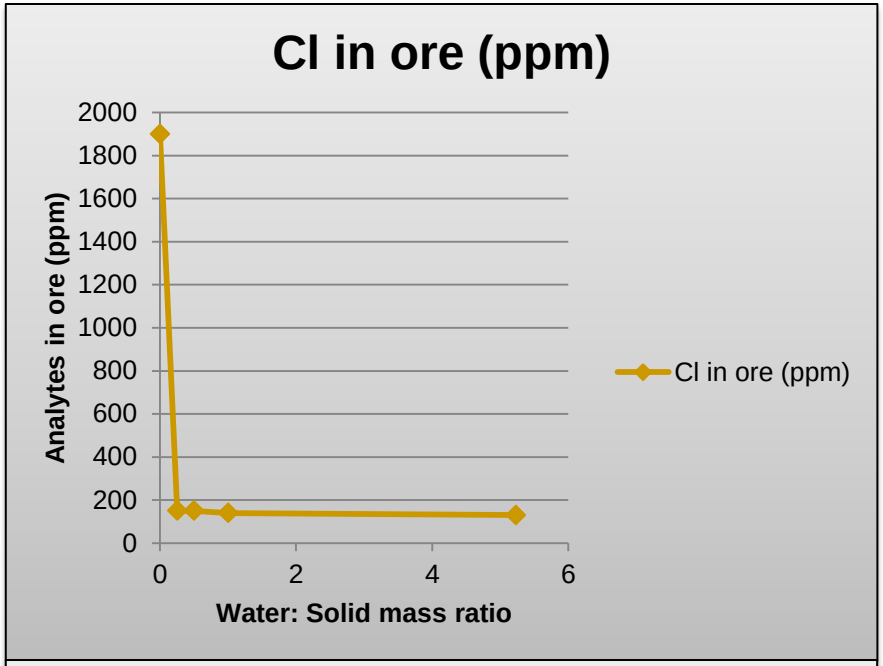
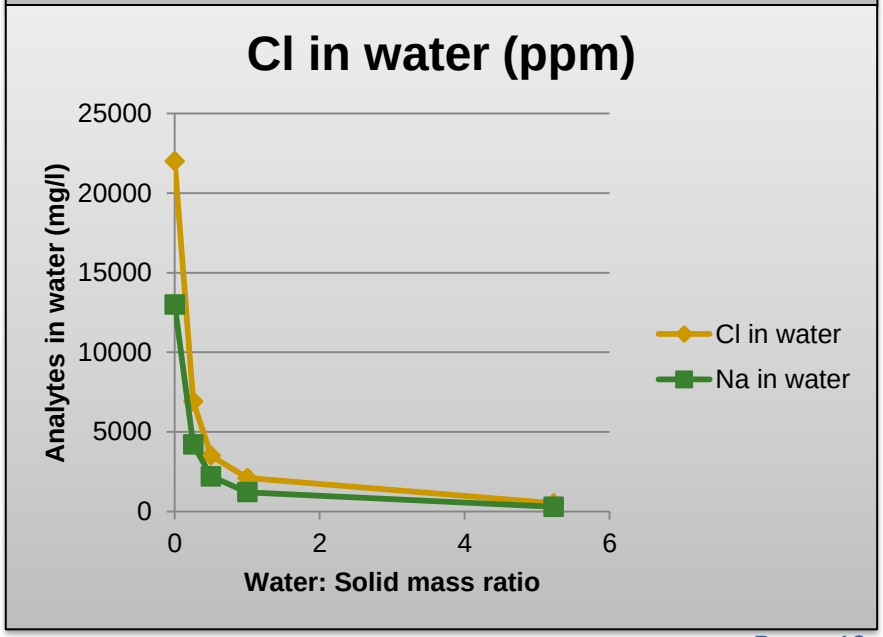
Desalination

- Since beneficiation will be performed with seawater, salt has to be removed from the concentrate before shipping.
- Tests were performed in a local laboratory to quantify the water requirement for desalination.
- A water to solid ratio of 0.3 to 1 is sufficient to remove sea salt from the TTR concentrate.





CONCLUSION

- The TTR resource definition work points to a very large, very low cost iron ore resource.
- Innovative low cost drilling techniques were developed to upgrade the resource to JORC status.
- Resource definition will be complete in 2011.
- Environmental, beneficiation and engineering work streams are on track.

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