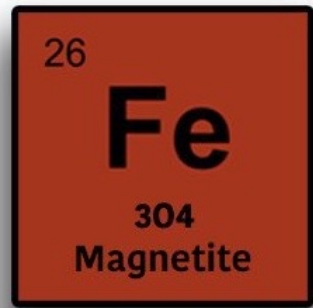




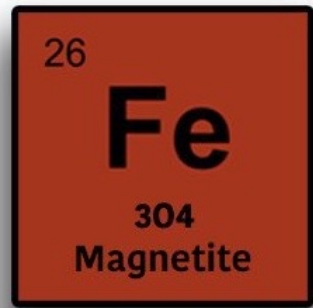
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OLARY FLATS PROJECT KEY FEATURES JANUARY 2021





- ❖ The Braemar Iron Province of South Australia hosts vast deposits of magnetite iron ore
- ❖ Lodestone has best in-situ magnetite grades in the Braemar - up to 2X that of competitors
- ❖ Production potential of Olary licences is 50 million tpy of magnetite for >50 years
- ❖ Will be “Started Small & Expanded Rapidly” obviating large capital needs and limiting dilution
- ❖ Concentrates with high Fe & low SiO₂ for Direct Reduction (DR) steel making can be produced
- ❖ The antidote for declining Pilbara Fe grades and increasing deleterious elements
- ❖ Letters of Intent are in place for up to 20 million tpy of magnetite concentrate
- ❖ The development is being sequentially de-risked
- ❖ Several development breakthroughs allow the approach of “Start Small - Expand Rapidly”



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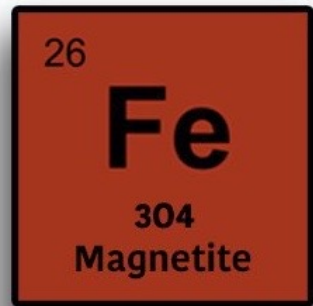
- ❖ At Olary NE 12 & 13 JORC resources by H&SA are > 500 million tonne averaging 21% DTR.
- ❖ PFS drilling is completed - chemical analysis and DTR pending - Will convert resources to JORC “Indicated” & “Measured” categories
- ❖ At Olary Creek JORC resources by SRK are 510 million tonne with average DTR >26% - 214 million tonne of “Indicated” will convert to reserves at PFS
- ❖ Further development underwritten by Letters of Intent (LOI's) for up to 20 million tpy - to convert to firm Sales and Purchase Agreements (SPA's) as part of any construction funding



RESOURCES - WHY LODESTONE

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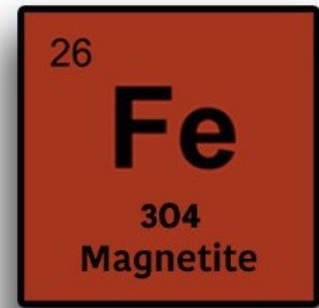




- ❖ High Concentrate iron grades possible - up to 70%
- ❖ Negligible deleterious components
- ❖ Good particle size distribution and blane index achievable
- ❖ Ideal for making Direct Reduction Pellets
- ❖ Strong, highly reducible pellets can be produced
- ❖ Slag rate from the EAF will be minimal



Mass Rec %	Rougher Rej %	Fe %	SIO2 %	AL2O3 %	P %	S %
25	30.9	70	1.82	0.24	0.005	nil



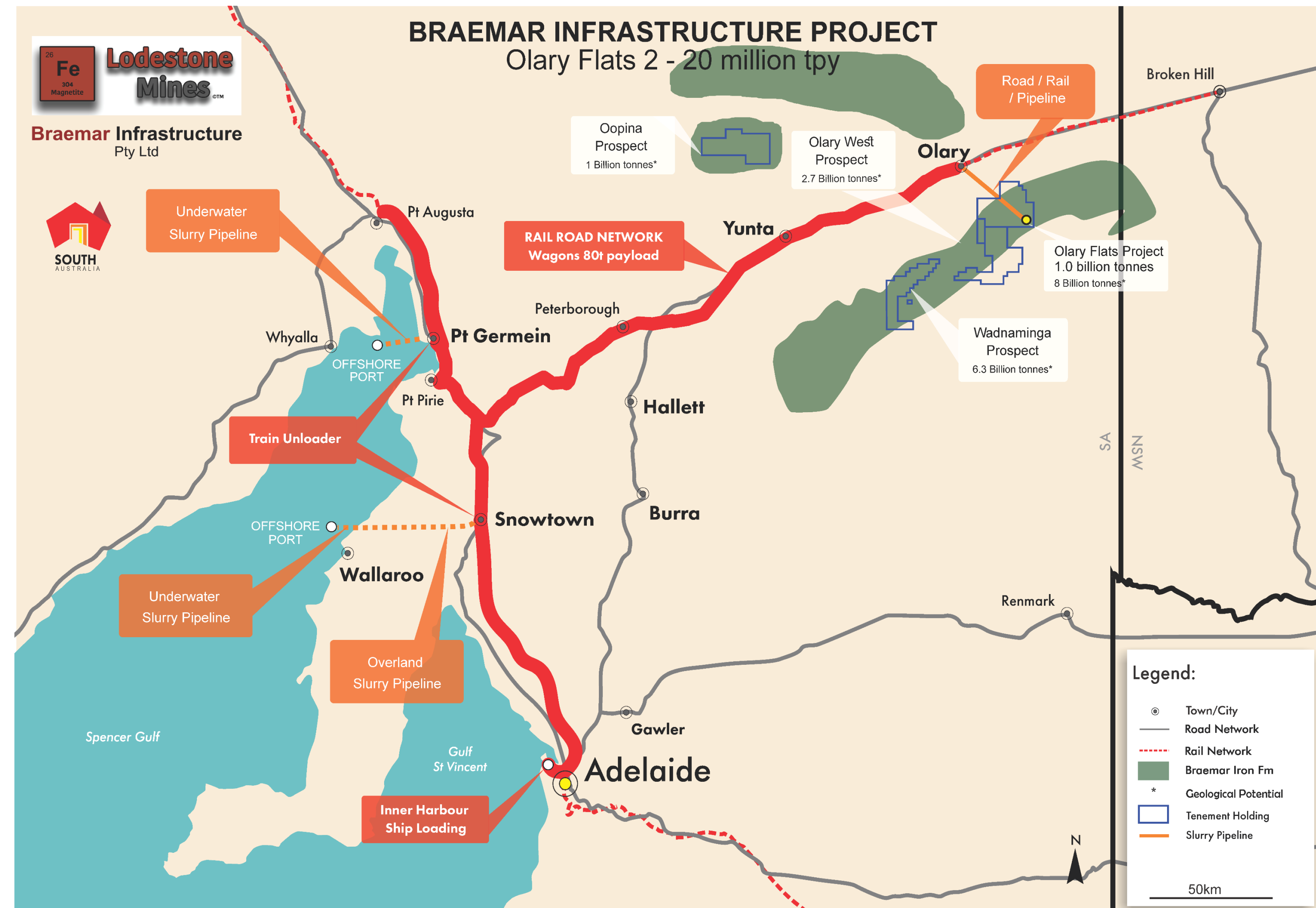
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- ❖ Abundant infrastructure already exists
- ❖ There is a stable & supportive government
- ❖ ARTC standard rail - 300 km to port sites
- ❖ 5 train operators competing for business
- ❖ Port sites are sheltered & cyclone free
- ❖ There are no tidal range constraints
- ❖ Local skilled workforce is available

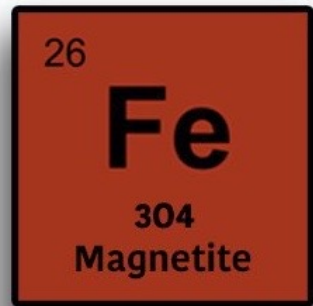


BRAEMAR REGION - INFRASTRUCTURE

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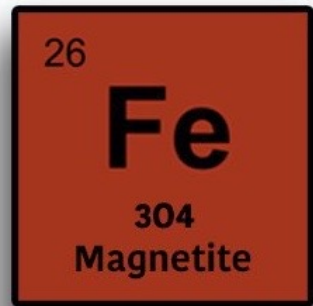


- ❖ High Intensity Blasting
- ❖ Large Hydraulic Excavators
- ❖ Electric Wheel FEL's
- ❖ Autonomous Mining Trucks
- ❖ All on maintained leases



MINING - PHOTO SUMMARY

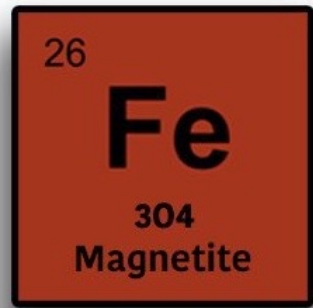
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The Processing Solution

- ❖ Dry grinding and air classification in proven Loesche integrated Vertical Roller Mills (VRM)
- ❖ Magnetic separation at final grind size
- ❖ Low water requirements
- ❖ Flowsheet fine-tuned during BFS
- ❖ Low footprint, low capital and low operating cost





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Initial Shipping Solution

- ❖ Use existing harbours
- ❖ Proprietary transfer from RR to dock
- ❖ Maximises use of existing infrastructure
- ❖ Unobtrusive RR discharge and ship and barge loading
- ❖ Minimises disruption to towns & recreation areas
- ❖ Barge option to 80,000dwt geared bulk carriers



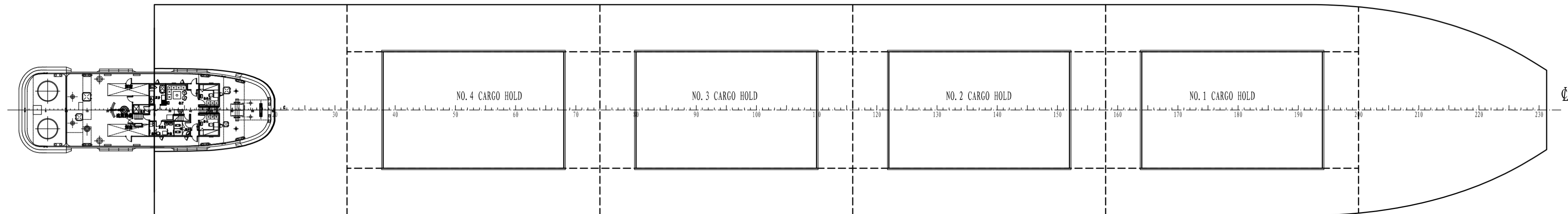
PORT - SHIPMENTS IN GEARED BULK CARRIERS

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图纸履历 PLAN HISTORY					
日期 DATE	标记 REV. NO	简 述 DESCRIPTION	设 绘 DWN	审 核 CHKD	批 准 APPD

A cross-sectional diagram of a cargo hold. The hold is rectangular with rounded ends. A dashed vertical line runs through the center, labeled 'C' with a vertical line through it (℄) below it. The hold is divided into three sections: 'VOID (S)' on the left, 'CARGO HOLD' in the center, and 'VOID (P)' on the right. The right side of the hold is labeled 'D. W. L.' (Dead Weight Limit). The hold has a flat bottom and a flat top. The ends of the hold are rounded and taper towards the bottom.



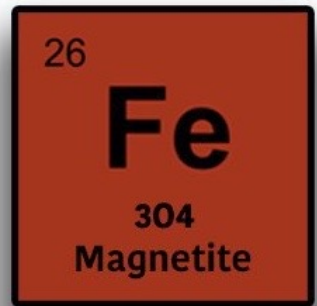
- ❖ **“Lodestone Designed” barges & push tugs**
- ❖ **Provides covered storage and transport to geared bulk carriers**
- ❖ **China Ex/Im Bank funding**

					23,000载重吨矿砂驳 23,000 DWT ORE BARGE		合同设计 CONTRACT DESIGN			
BOHAI SHIPBUILDING HEAVY INDUSTRY CO., LTD										
					总布置图 GENERAL ARRANGEMENT		本图适用于 ~ 号船 SUITABLE FOR NO ~			
							重量 WEIGHT	比例 SCALE	1: 300	面积, m ² AREA
标记 MARK	数量 QTY	修改单位 REV. SE. NO	签字 SIGN	日期 DATE			共 1 页 TOTAL SHEETS 1		第 1 页 SHEET 1	
设计	审核		审签				渤海船舶重工有限责任公司 BOHAI SHIPBUILDING HEAVY INDUSTRY CO., LTD			
校 对										
审 核										
标 检										
批 准				日期						



BARGING - NOTCHED BARGE EXAMPLE

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There are multiple possibility for chartering
third party shuttle vessels



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Transshipment to non-gearied Vessels

- ❖ Pontoon cranes
- ❖ Transfer concentrates from barges to non-gearied bulk carriers
- ❖ Transshipment services supplied by others



PORT EXPANSION - BARGE to SHIP TRANSHIPMENT EXAMPLE

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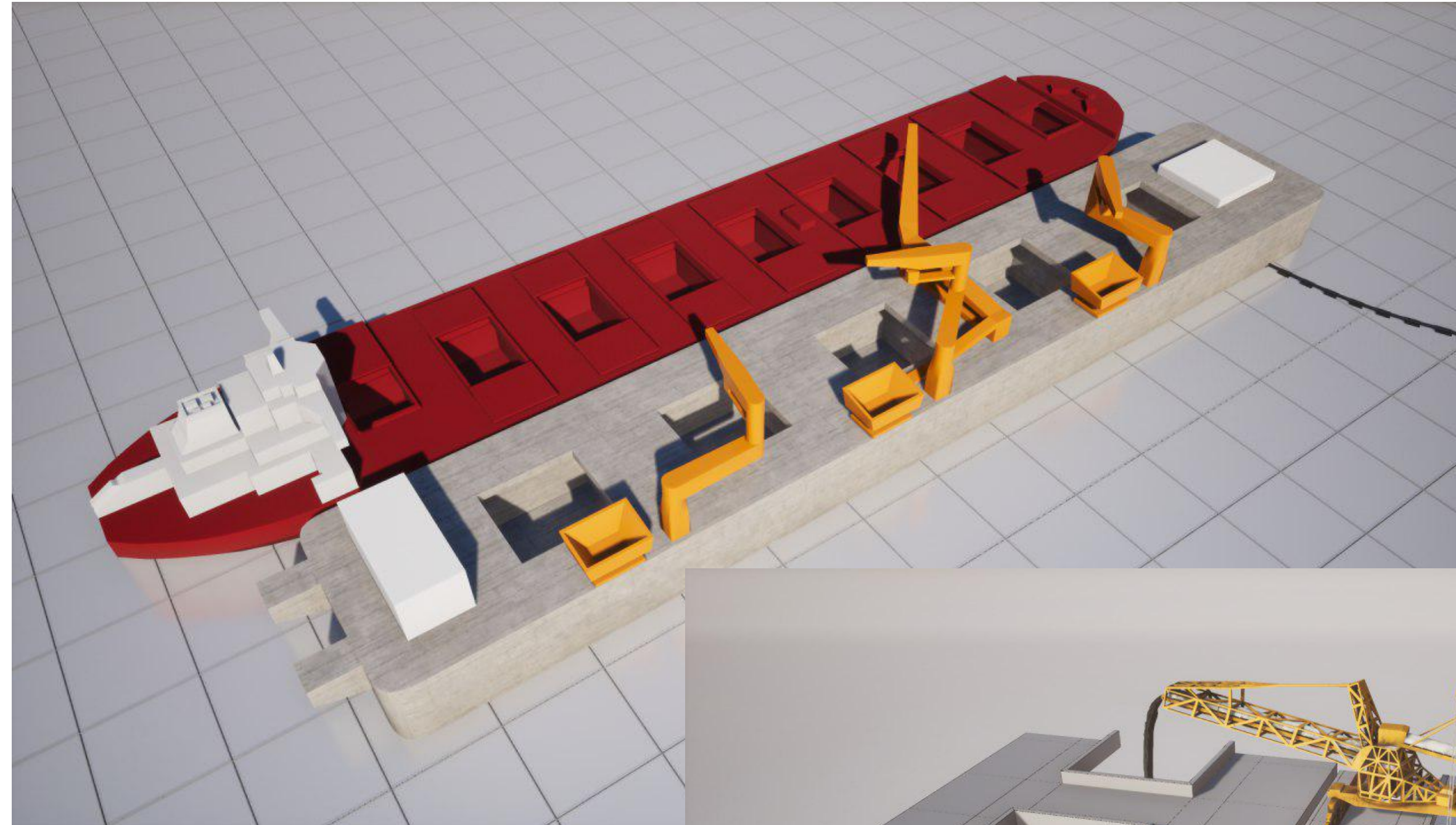


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**Offshore Slurry and/or Barge delivery
& discharge to/from the Off Shore Port
(OSP) - we will transition to this
Lodestone designed offshore port over
time**

- ❖ **No draft constraints**
- ❖ **Slurry pipeline on sea bed - buried
on land – very low visible impact**
- ❖ **Concept can be deployed as a
loading port or as a discharge port**
- ❖ **Ideal for discharging feed to a pellet
plant**

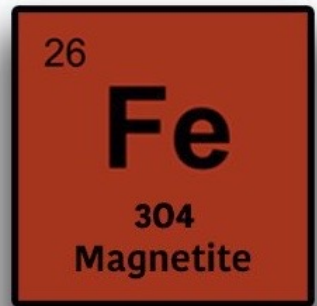


FINAL CONFIGURATION - HIGH VOLUME CUSTOM BUILT OSP

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- ❖ **Lodestone is completing an AACE Class 4 Pre-Feasibility Study (PFS) and then undertaking an AACE Class 2 Bankable Feasibility Study (BFS) for the early implementation of a profitable “Start Up” project as follows:**
 - ✓ **In-house Preliminary Feasibility Study (PFS) to complete drilling, testing, plant design and ancillaries**
 - ✓ **The “Start Up” BFS and detailed design**
 - ✓ **Investment structure can be tailored to investors requirements via equity, unincorporated JV, off-take funding or other structures**



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**Pre-Feasibility
Study**

Drilling
Completed
Engineering
Studies
Fine tuning

4 months

**Bankable Feasibility
Study**

Final concepts,
engineering,
infrastructure and
mine plan
at BFS level

9 months

Construction

Initial production rate
1.5 Million tpy
Total budget c A\$200M
mostly financed with
Export Credit and EPC
Finance

18 months

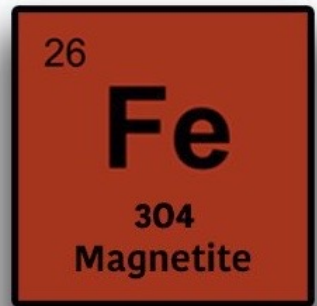
Production

Incremental ramp up. First
unit of 1.5 million tpy.
Subsequent units of 2.2
million tpy. Infrastructure
incrementally expanded too



OLARY - INVESTMENT TIMELINE

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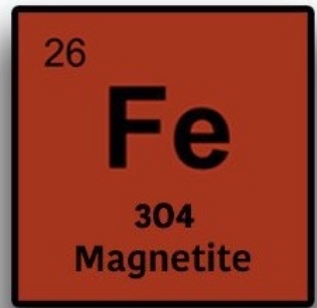
- ❖ **Production of low impurity magnetite with margins competitive with Direct Shipping Ores planned by 2023 from one billion tonne drilled JORC resource**
- ❖ **New Paradigm - PFS in progress to be followed by BFS**
- ❖ **Start small (1.5 million tpy) and expand rapidly**
- ❖ **Ultimate target - 50 million tpy for >50 years from Lodestone licenses.**
- ❖ **Production could commence within 30 months of securing BFS funding**
- ❖ **Sales LOI's convert to firm SPA's as part of a construction funding package**



Staying Cost Competitive

After starting small and whilst expanding tonnage output, operating costs can be reduced by very clear cut actions that include:

- ❖ Replace trucks in the mine with conveyor belts**
- ❖ Build a railroad spur from the mines at Olary Flats to the mainline at Olary**
- ❖ In the future it may be economic to expand using slurry pipelines from mine to port. This would enjoy a 1:7 operational cost benefit over rail.**
- ❖ Take over the operation of trains**
- ❖ Connect to grid power**
- ❖ Develop high volume, deep water, offshore port facilities**



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THANK YOU



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