

## Gold Fields Australia; Invincible

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Exploration Manager St Ives Gold Mine  
Diggers & Dealers, Kalgoorlie, August 2014



**GOLD FIELDS**



# Forward looking statements

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Certain statements in this document constitute “forward looking statements” within the meaning of Section 27A of the US Securities Act of 1933 and Section 21E of the US Securities Exchange Act of 1934.

In particular, the forward looking statements in this document include among others those relating to the Damang Exploration Target Statement; the Far Southeast Exploration Target Statement; commodity prices; demand for gold and other metals and minerals; interest rate expectations; exploration and production costs; levels of expected production; Gold Fields’ growth pipeline; levels and expected benefits of current and planned capital expenditures; future reserve, resource and other mineralisation levels; and the extent of cost efficiencies and savings to be achieved. Such forward looking statements involve known and unknown risks, uncertainties and other important factors that could cause the actual results, performance or achievements of the company to be materially different from the future results, performance or achievements expressed or implied by such forward looking statements. Such risks, uncertainties and other important factors include among others: economic, business and political conditions in South Africa, Ghana, Australia, Peru and elsewhere; the ability to achieve anticipated efficiencies and other cost savings in connection with past and future acquisitions, exploration and development activities; decreases in the market price of gold and/or copper; hazards associated with underground and surface gold mining; labour disruptions; availability terms and deployment of capital or credit; changes in government regulations, particularly taxation and environmental regulations; and new legislation affecting mining and mineral rights; changes in exchange rates; currency devaluations; the availability and cost of raw and finished materials; the cost of energy and water; inflation and other macro-economic factors, industrial action, temporary stoppages of mines for safety and unplanned maintenance reasons; and the impact of the AIDS and other occupational health risks experienced by Gold Fields’ employees.

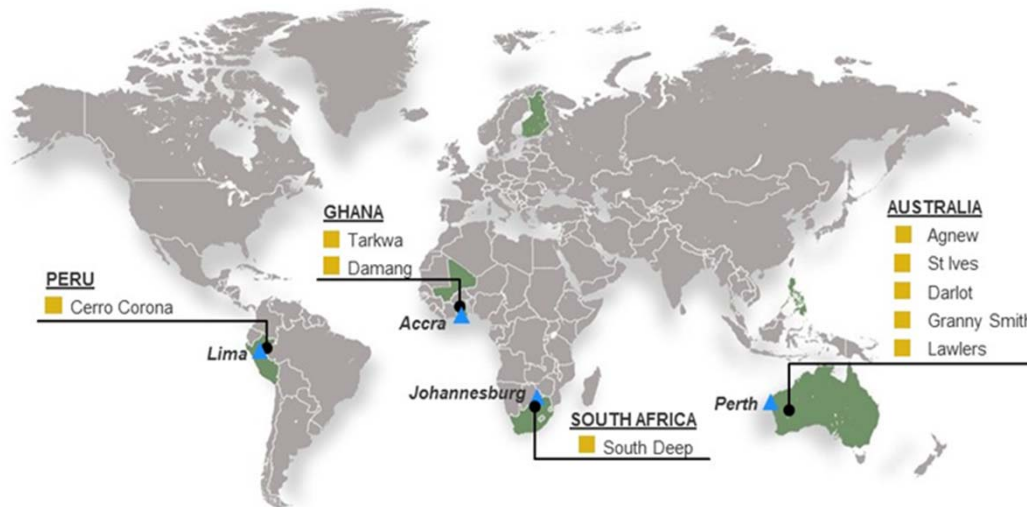
These forward looking statements speak only as of the date of this document. Gold Fields undertakes no obligation to update publicly or release any revisions to these forward looking statements to reflect events or circumstances after the date of this document or to reflect the occurrence of unanticipated events.



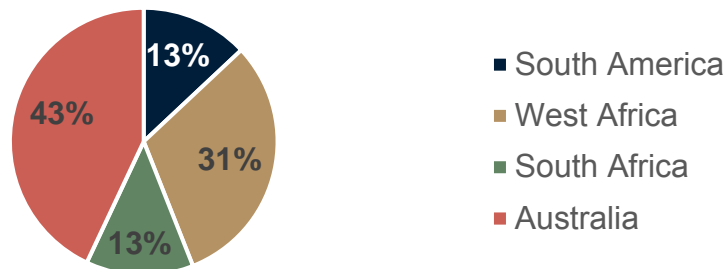
# Gold Fields Ltd.



## The Global Company



Gold Fields Attributable Global Production



## Gold Fields Australia at a Glance

### GOLD PRODUCTION CAPABILITY:

1,000,000+ ounces per annum

### MINERAL RESOURCES:

11.5 million ounces

### MINERAL RESERVES:

4.0 million ounces

### OPERATING MINES:

St Ives, Agnew/Lawlers, Granny Smith, Darlot

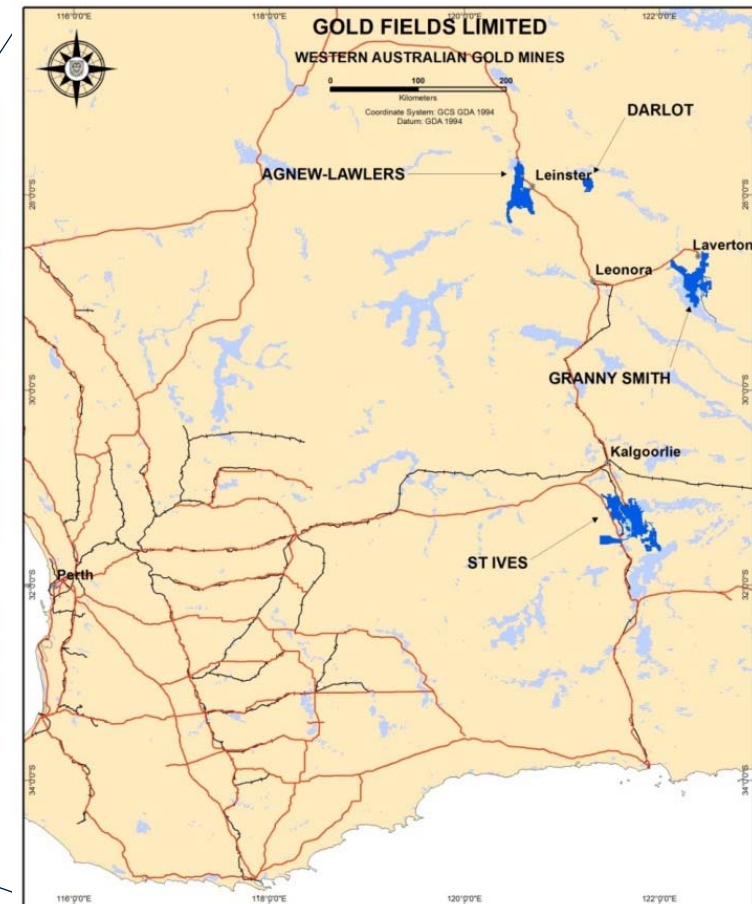
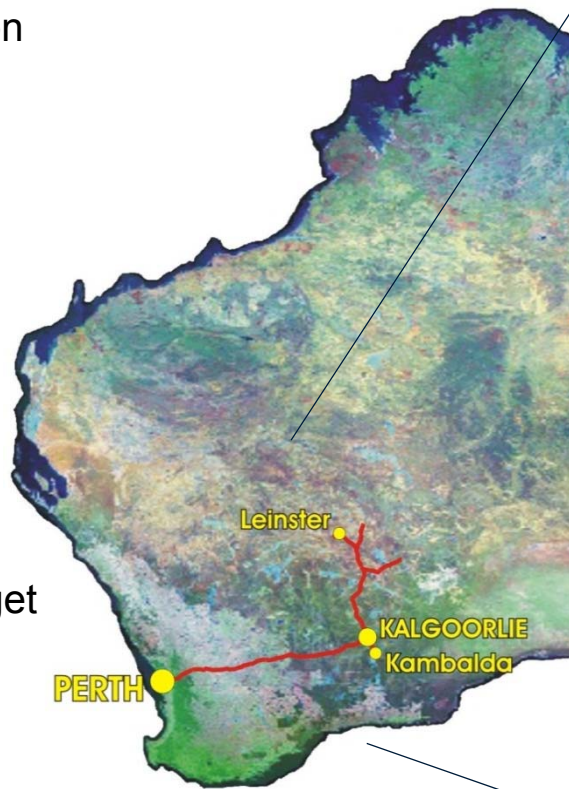


# Gold Fields Australia



## Overview

- Largest Global Production Centre for Gold Fields
- 3<sup>rd</sup> Largest Producer of Australian Gold
- 4 Operations
  - Agnew/Lawlers
  - Darlot
  - Granny Smith
  - St Ives
- A\$50M Exploration Budget C2014
- Continued Discovery





# Gold Fields Australia



## Invincible; The Headline Slide

- Small Maiden Resource Reported in 2012
- 2013 a Transformational Year
  - Major Mineralised System Discovered
  - 440% Growth in Resource @ <\$25/oz
  - Maiden Reserve Delivered
  - Low Cost/High Margin Pit Defined

2013 R&R Statement	Mt	g/t Au	koz
Resource*	9.2	4.5	1,329
Reserve**	3.7	4.1	492

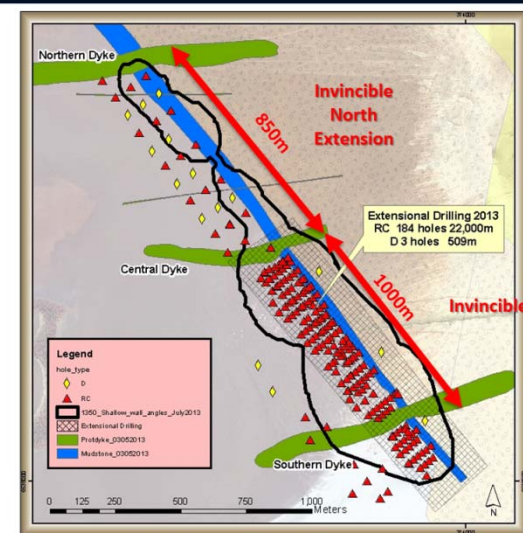
## Gold Fields Australian Operations



### Invincible Discovery – exciting potential

- Major Discovery in 2012
- Discovery Hole to Maiden Resource in 8 Months
- 8km from the Mill
- Shallow Cover (~10m)
- Excellent potential to grow

Inferred	Dec 2012
Open Pit	~160koz (1.6Mt @ 3.0g/t)
Underground	87koz (0.7Mt @ 4.0g/t)
Total	~247koz (2.3Mt @ 3.3g/t)



Significant upside expectations

GFI | Its All About Cash! | Diggers and Dealers | 6 August 2013 | Page 14

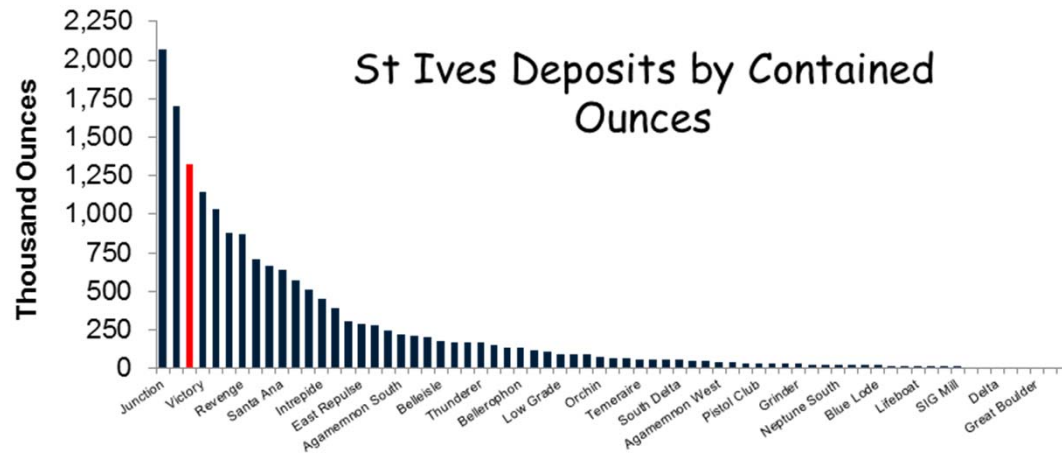
\* A\$1570/oz Au for Resource, \*\*A\$1370/oz Au for Reserve



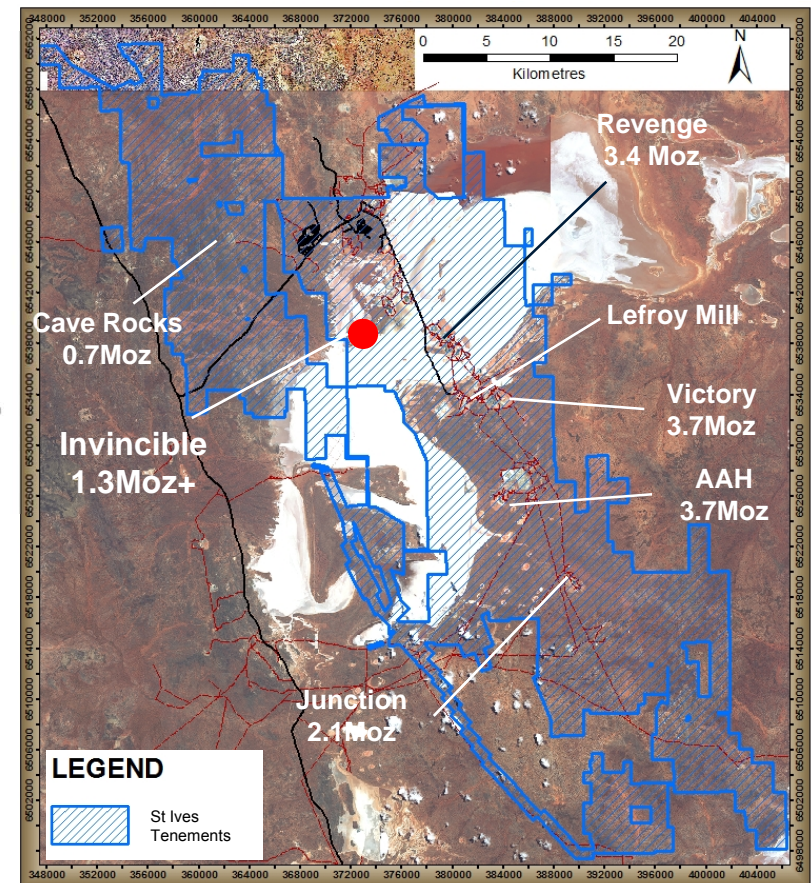
# Gold Fields Australia



## St Ives - A Well Endowed Camp



- 1,275km<sup>2</sup> Lease Holding 60km South of Kalgoorlie
- +11.6Moz of Gold Produced Over 34 years
- Major Deposits Discovered
- Invincible Competing with its Peers
- Continuous Discovery Replenishes the Resource & Reserve Base





# Gold Fields Australia



## Invincible Location



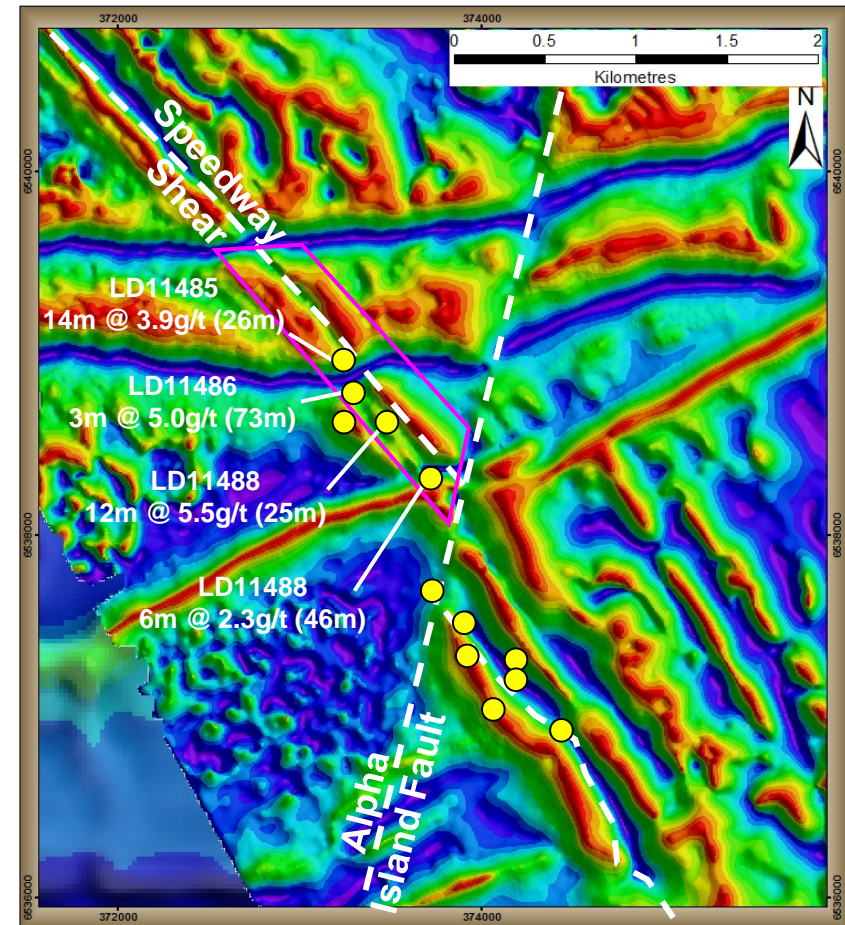


# Gold Fields Australia



## Invincible; Discovery

- Structural Offset Target, Santa Ana Analogue
- Air Core & Percussion Holes Drilled in the Area pre-2011
  - No Significant Results from this Drilling
  - Structure not Effectively Tested
- 12 Hole Diamond Programme Testing the Prospective Position of the Structure in 2012
- 4 Holes Hit Ore Grade Intersections in Q1 2012 – DISCOVERY
- Absence of Regolith Development Explained Weak Geochemical Signature



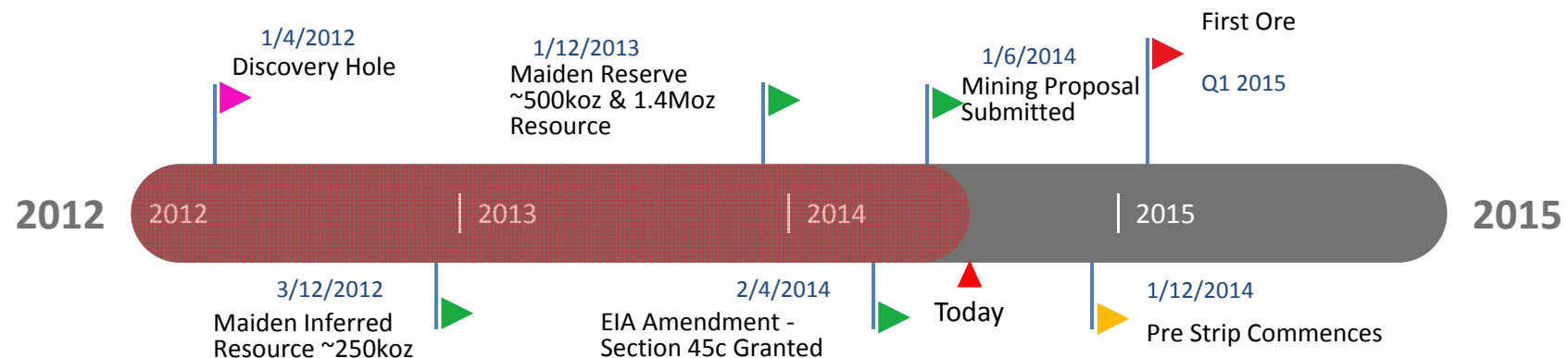


# Gold Fields Australia



## Invincible; Development Timeline

- 20 Months from Discovery to +1.3Moz Resource & 0.5Moz Reserve
- Fast Track Development for Open Pit
- Environmental Permits Granted
- Mining Proposal Pending Approval from DMP
- Planned Open Pit Pre Strip Q4 2014

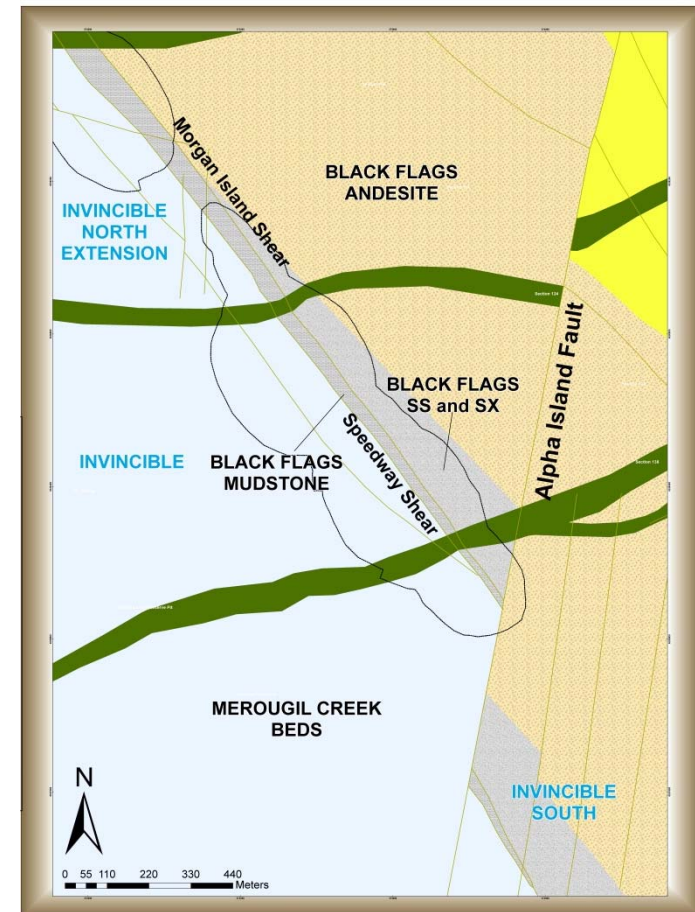
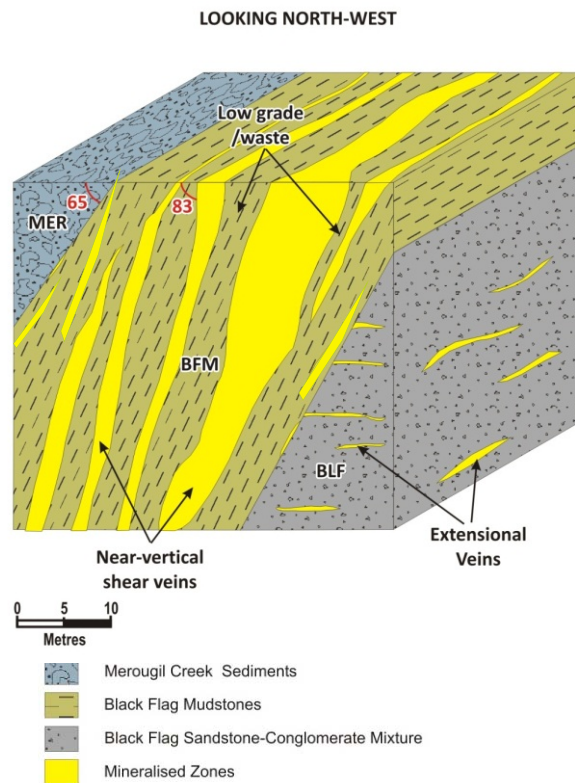




# Gold Fields Australia



## Invincible; Deposit Characteristics & Geology





# Gold Fields Australia

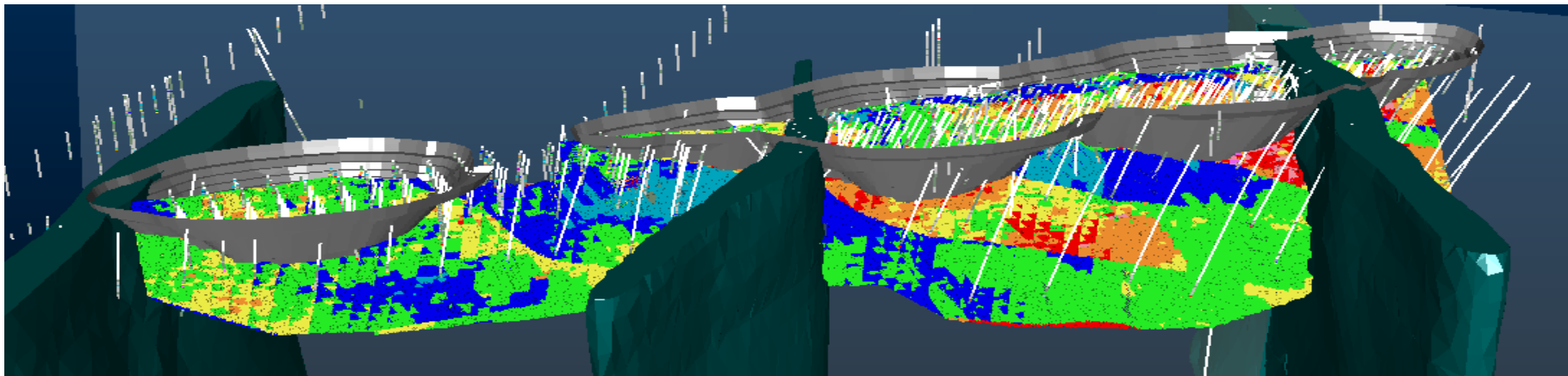


## Invincible; The Orebody & the Resource

- Shallow Plunging High Grade Ore Shoots
- Wide High Grade Zones
- UG Resource Constrained by Model Limits

2013 R & R Statement		Mt	g/t Au	koz
OPEN PIT	Resource*	6.2	4.7	946
	Reserve**	3.7	4.1	492
UG	Resource*	3.0	4.0	383
	Reserve**	-	-	-
TOTAL	Resource*	9.2	4.5	1,329
	Reserve**	3.7	4.1	492

\* A\$1570/oz Au for Resource, \*\*A\$1370/oz Au for Reserve





# Gold Fields Australia



## Invincible; Technical Challenges

- Exploration Faces Multiple Challenges
- Lake Based Track Mounted Rigs for Initial Drilling
- 15km of Causeways Constructed for Permanent Access
- Land Rigs Utilised for Exploration Drill Out

Drill Type	No. Holes	Metres
Diamond	145	30,227
RC	363	59,161
<b>TOTAL</b>	<b>508</b>	<b>89,388</b>



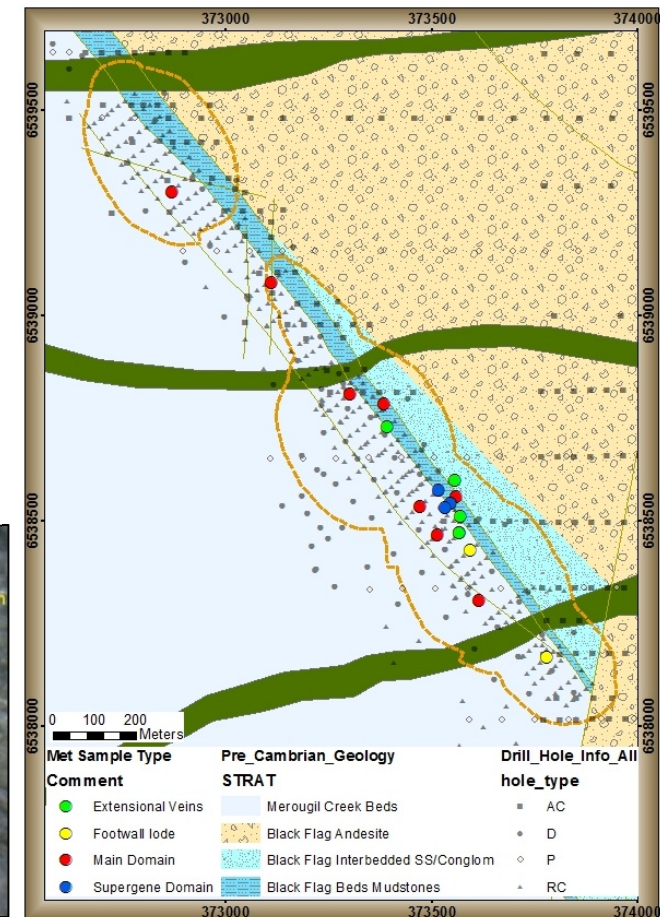
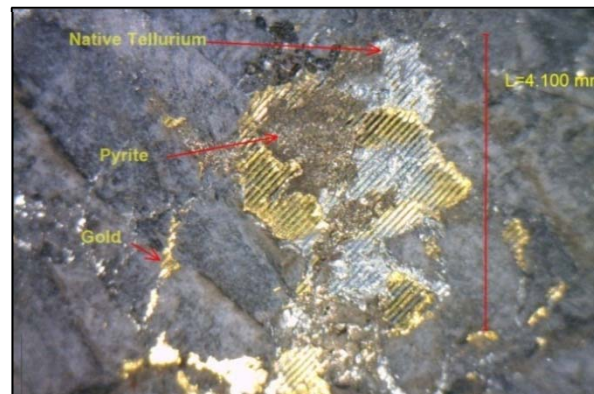
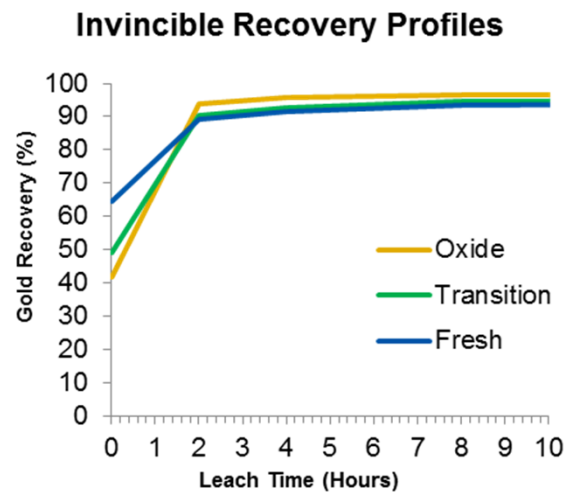


# Gold Fields Australia



## Invincible Metallurgy

- 19 Samples for Metallurgical Testwork
- Non-Refractory Ore
- High Recoveries
  - Up to 67% Gravity
  - +93% after 8h Leach
- No Deleterious Elements
- Physical Characteristics Optimum for St Ives SAG Mill Circuit



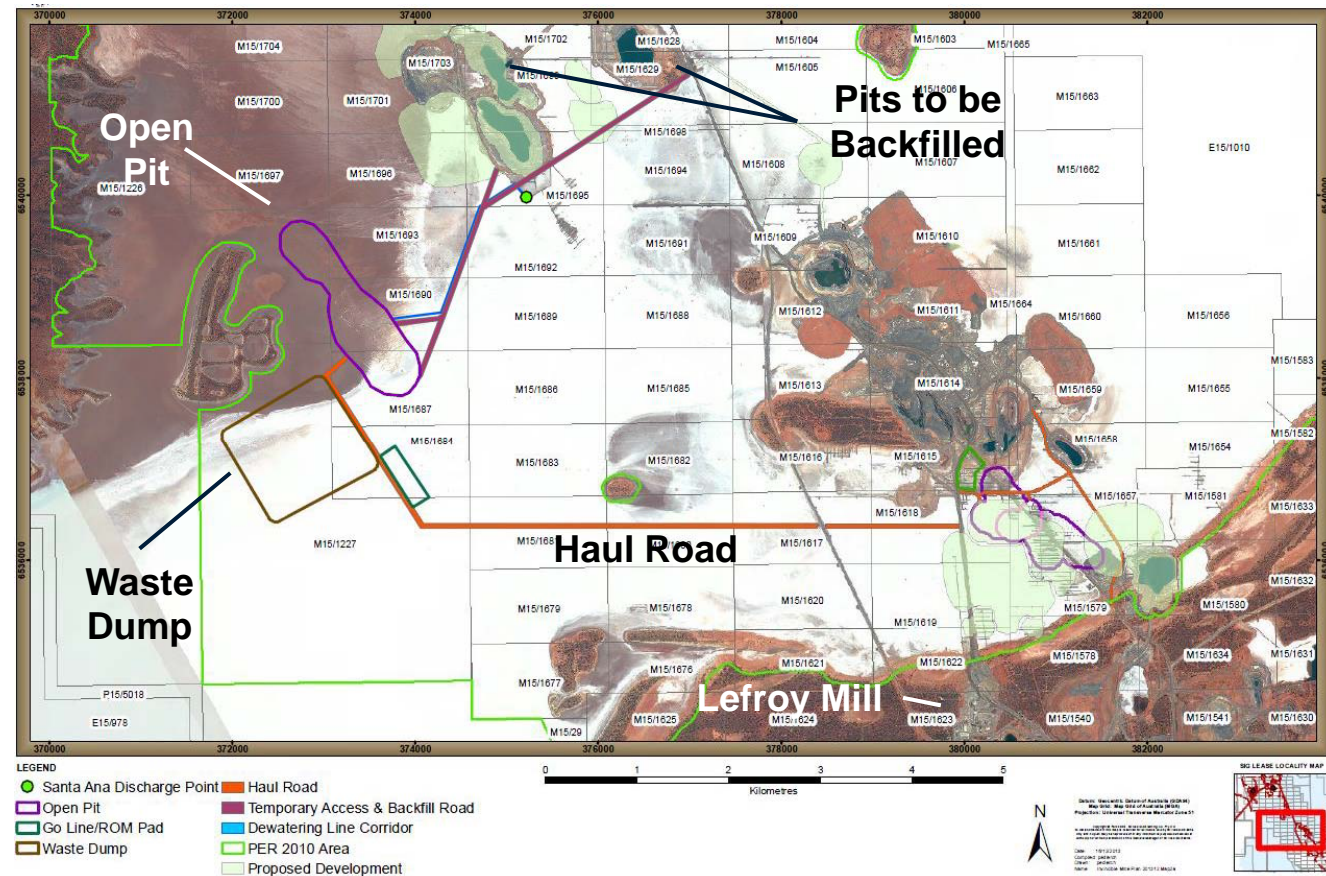


# Gold Fields Australia



## Invincible; Site Layout

- Lake Based Mining
- Open Pit
  - 2km Long
  - 350m Wide
  - 160m Deep
- Waste Backfilling Old Pits
- New Lake Based Waste Dump
- Bespoke Ore Haulage Causeways to Lefroy Mill





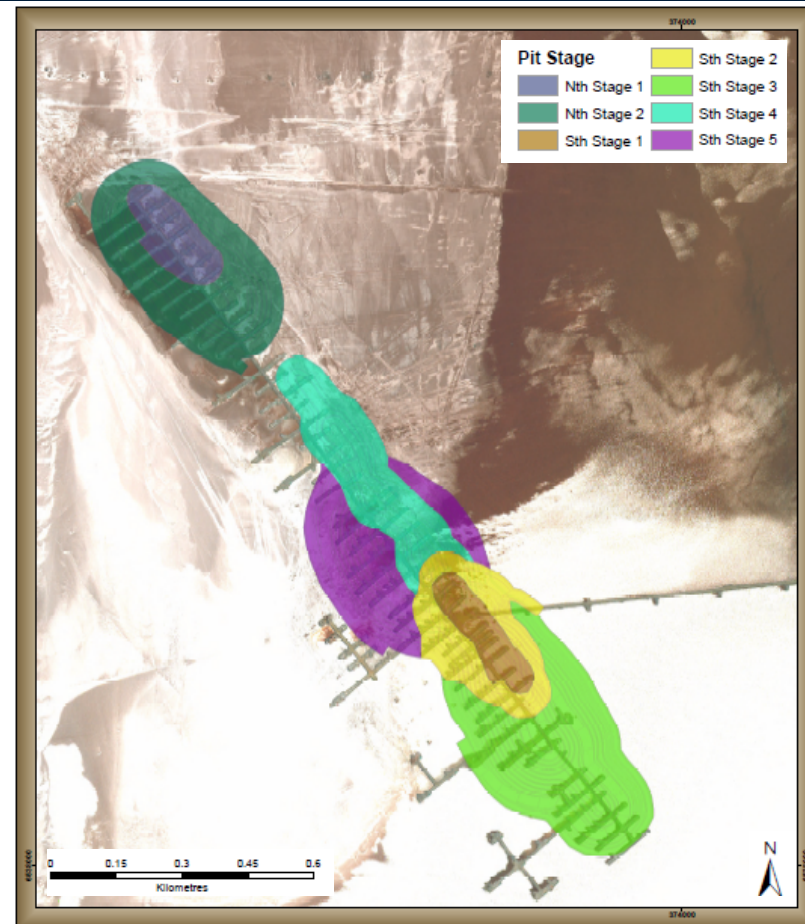
# Gold Fields Australia



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## Invincible; Open Pit

- Open Pit Mining Commencing Q4 2014
- First Ore Delivery Q1 2015
- Pit Mined in 8 Stages
- Robust Economics
- Comfortably Exceeds +15% Free Cash Margin
- Inferred Resource Drillout Completed
- Modelling Underway
- Resource Update Due Early 2015  
Pending Internal & External Reviews

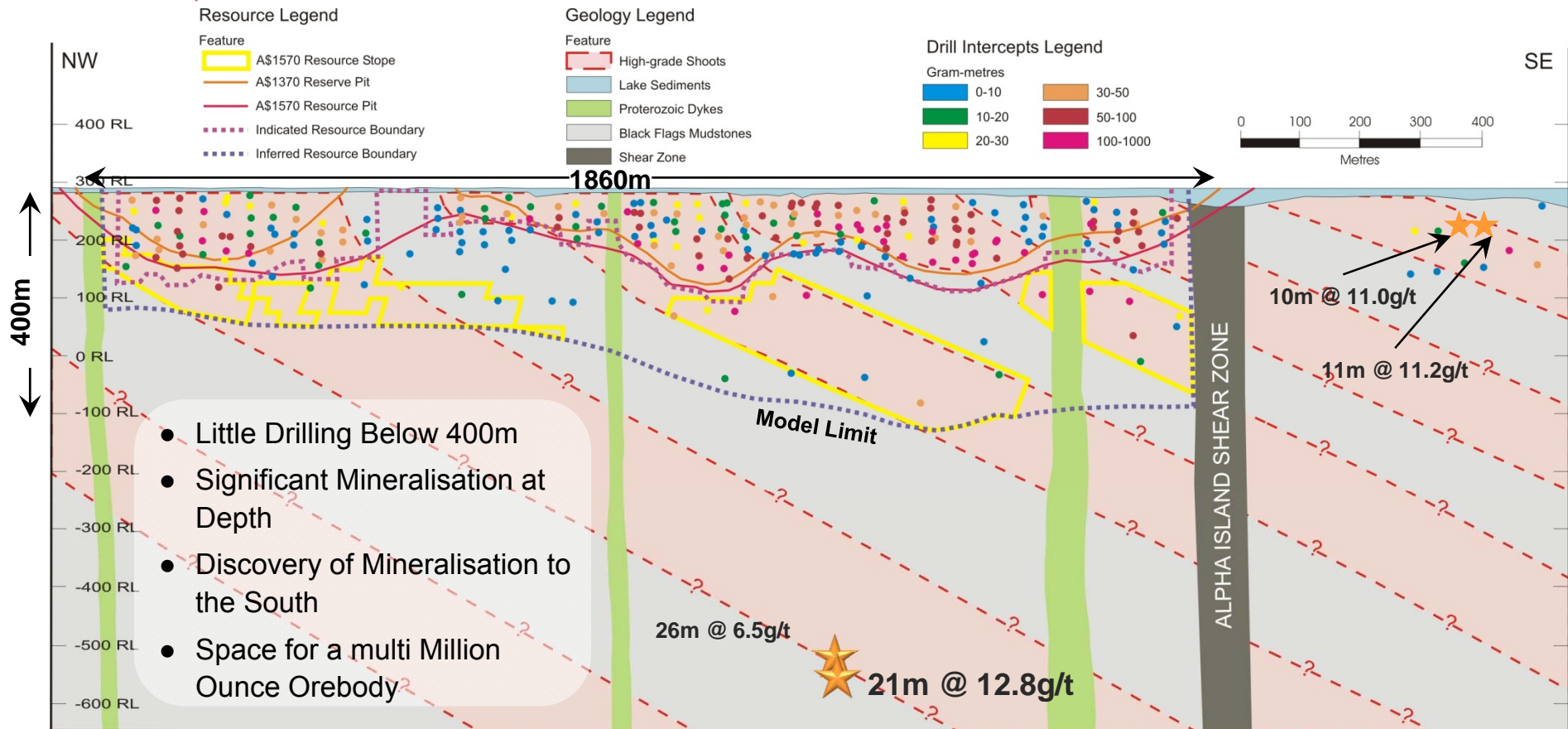




# Gold Fields Australia



## Invincible; Growth Potential



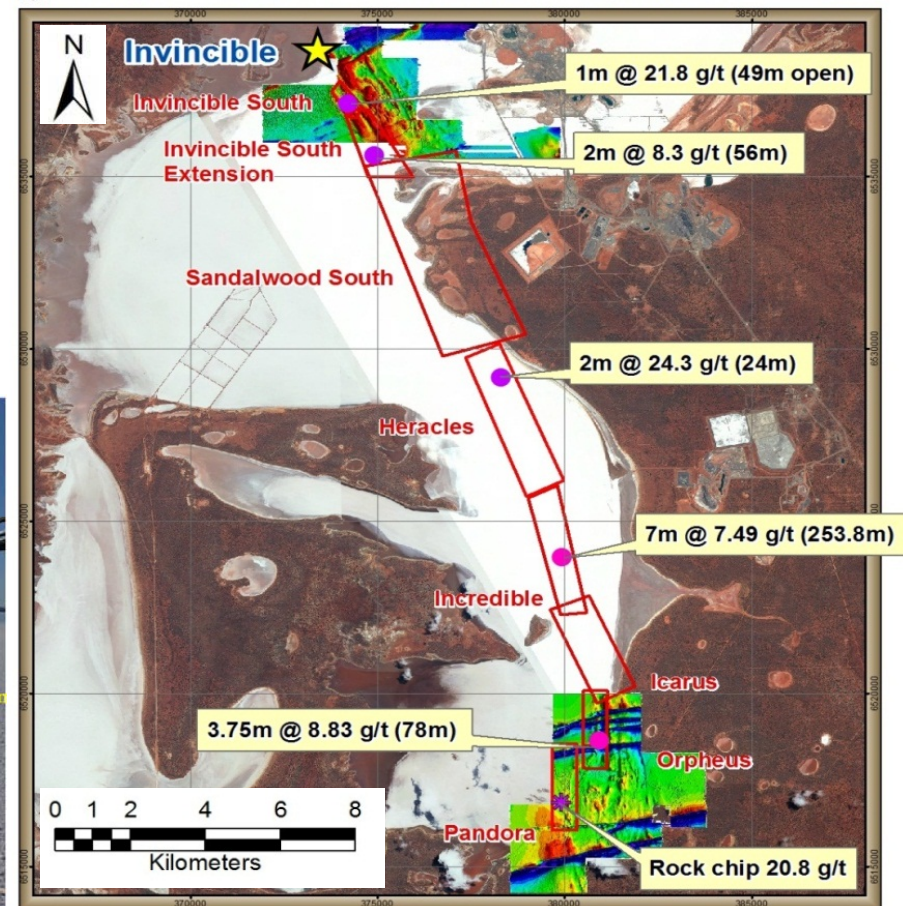
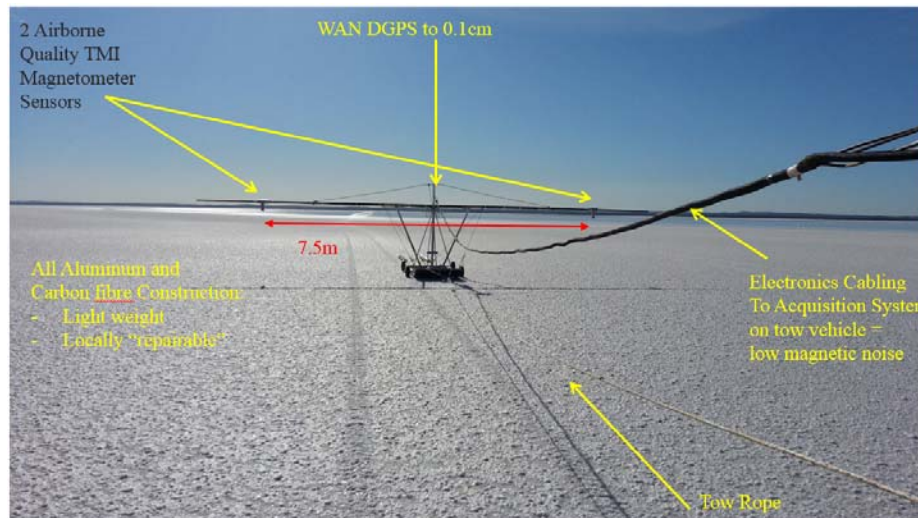


# Gold Fields Australia



## Project Generation; Speedway Trend

- Poorly Explored Trend with Proven Success
- 2013 Focus of Early Stage Assessment
- Evidence of Gold Along 22km Strike Length
- 100% Gold Fields Lease Holding



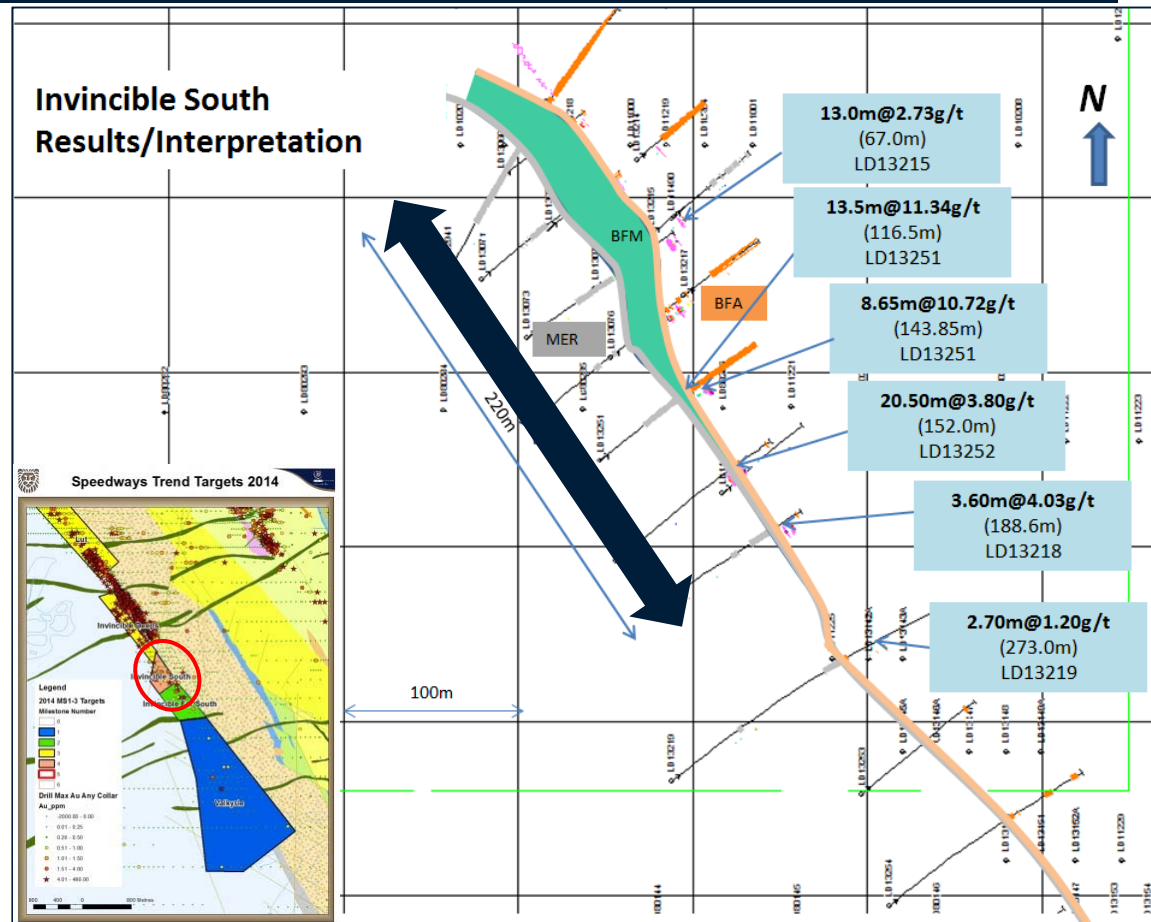


# Gold Fields Australia



## Project Generation; Invincible South

- Located 400m South from Invincible
- Faulted Offset of Mineralisation from Invincible
- Initial 10 Hole Programme Drilled in Q1 2014
- Steep Vein Mineralisation Discovered in Footwall Sandstone
- 220m Mineralised Zone
- Follow Up Drilling Underway - to be Completed in July
- Targeting Maiden Resource 2014



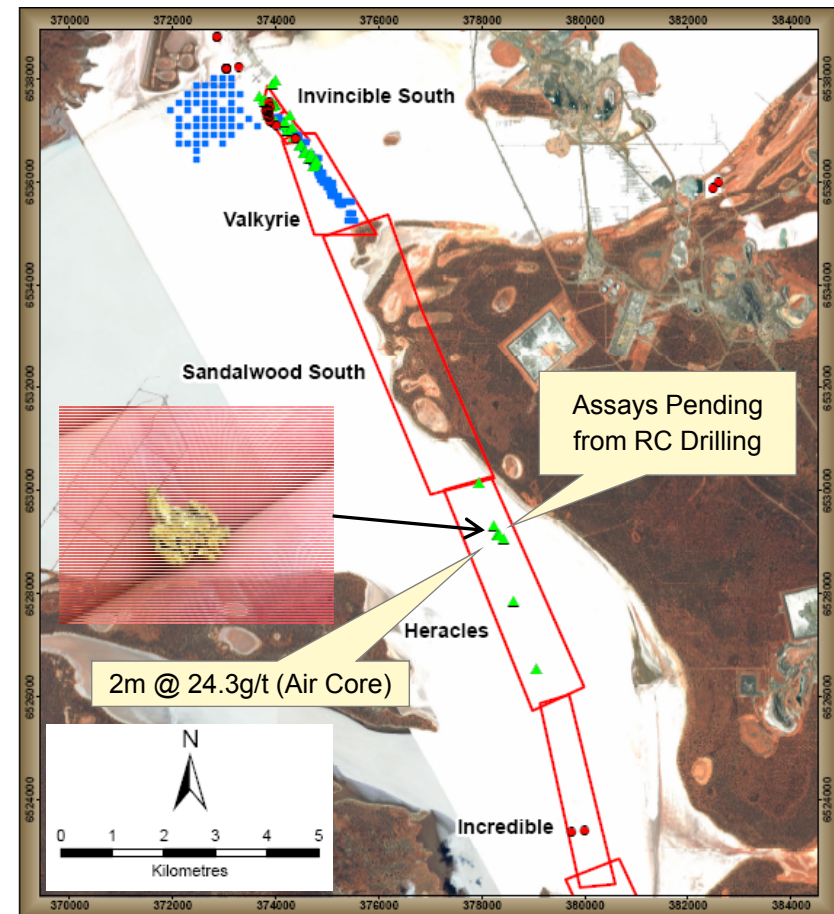


# Gold Fields Australia



## Project Generation; Valkyrie to Heracles

- Ongoing Assessment of the Speedway Trend
- 1g Gold Nugget in RC Chips at Heracles
  - Following up 2m @ 24.3g/t Au AC Hit
  - Extensive Quartz & Sulphides in DH
  - Primary Mineralisation Textures
  - Represents Vein Source, not alluvial





# Gold Fields Australia



## Closing Remarks

- A Major Australian Producer
- 1Moz Annual Production from Our Australian Assets
- Extensive Land Holding for Continued Growth & Development
- Continued Investment in Exploration to Sustain Production
- Proven Continued Discovery from a Mature Asset Base
- Game Changing Opportunity with the Speedway Trend
- A 1Moz Deposit Coming in to Production <3yrs since Discovery





# Gold Fields Australia; Invincible



## Investor Relations

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