

COMPANY SNAPSHOT

LODESTAR MINERALS LIMITED
ABN: 32 127 026 528

CONTACT DETAILS

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CAPITAL STRUCTURE

Shares on Issue:
88,989,477 (LSR)

Options on Issue:
7,000,000 (Unlisted)

ASX: LSR

PROJECTS

Peak Hill – Doolgunna:
Base metals, gold

Penfold:
Nickel

Kimberley:
Nickel, copper, PGM's



ROADSHOW PRESENTATION AND EXPLORATION UPDATE

Please find attached a presentation to be given by Mr Bill Clayton today in Melbourne.

The presentation will also be available on our website www.lodestarminerals.com.au

Exploration Update

Lodestar wishes to advise that RC drilling has commenced on Marymia tenement E52/2492 to test two VTEM conductors. A program of RAB drilling is scheduled to commence at the end of September to test a wider area.

LODESTAR MINERALS LIMITED

COMPANY PRESENTATION



2011

Forward Looking Statements

Forward Looking Statements: This document may include forward-looking statements. Forward-looking statements include, but are not limited to, statements concerning Lodestar Minerals' exploration program and other statements that are not historical facts. When used in this document, the words such as "could", "plan", "estimate", "expect", "intend", "may", "potential", "should" and similar expressions are forward-looking statements. Although Lodestar Minerals believes that its expectations reflected in these forward-looking statements are reasonable, such statements involve risks and uncertainties and no assurance can be given that actual results will be consistent with these forward-looking statements.

JORC Compliance

The information in this report to which this statement is attached that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Bill Clayton who is a member of the Australian Institute of Geoscientists. Bill Clayton is a full-time employee of the Company. Bill Clayton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for the reporting of Exploration Results, Mineral Resources and Ore Reserves". Bill Clayton consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

- ❑ **ASX code:**
LSR
- ❑ **Issued Capital:**
89 million shares
6 million unlisted options
- ❑ **Cash:**
\$1.3 million
- ❑ **Market capitalisation @ \$0.11**
\$10 million
- ❑ **Top 20 Shareholders:**
44%

Board & Management

Rhod Grivas (Chairman)

Bill Clayton (Managing Director)

Mark Pitt (Non-Executive Director)

David McArthur (Executive Director & Company Secretary)

12 month Share Price Performance

Low	High	Current
0.05	0.17	0.11

Share Price Targets – Competitor Comparison



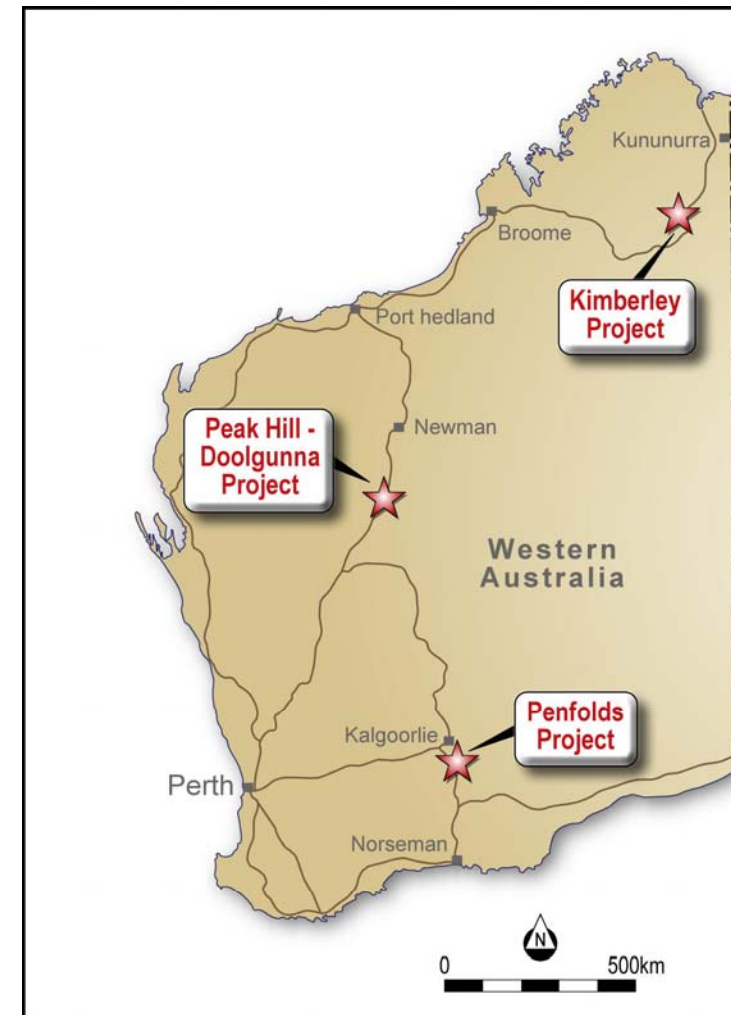
Company	Commodity	Status	Market Cap \$M
<i>Sandfire</i>	Cu-Au	Resource (Cu-Au)	1,077
<i>RNI</i>	Cu-Au	Exploration	111
<i>Talisman</i>	Cu-Au	Exploration	73
<i>Sipa</i>	Au, Cu-Au	Exploration	72
<i>Thundelarra</i>	Cu-Au	Exploration	44
<i>Great Western</i>	Cu-Au	Exploration	37
<i>Ventnor</i>	Cu	Exploration	21
<i>Lodestar</i>	Cu-Au	Exploration	12

□ Sandfire demonstrates the success case in this province

Peak Hill-Doolgunna Investment Opportunity



- A large, strategic tenement holding (2200sq km) in an emerging and under-explored base metal province
- Prospectivity on a par or better than many higher capped competitors
- Intensive exploration in 2011 – regional geochemistry, VTEM, drilling
- Lowest market cap entry into the province
- Major share price growth potential - early exploration stage project with multiple regional and prospect scale targets
- Primary exploration focus:
 - *Sediment-hosted Cu*
 - *Sediment-hosted Pb-Zn-Ag*
 - *Lode Au*

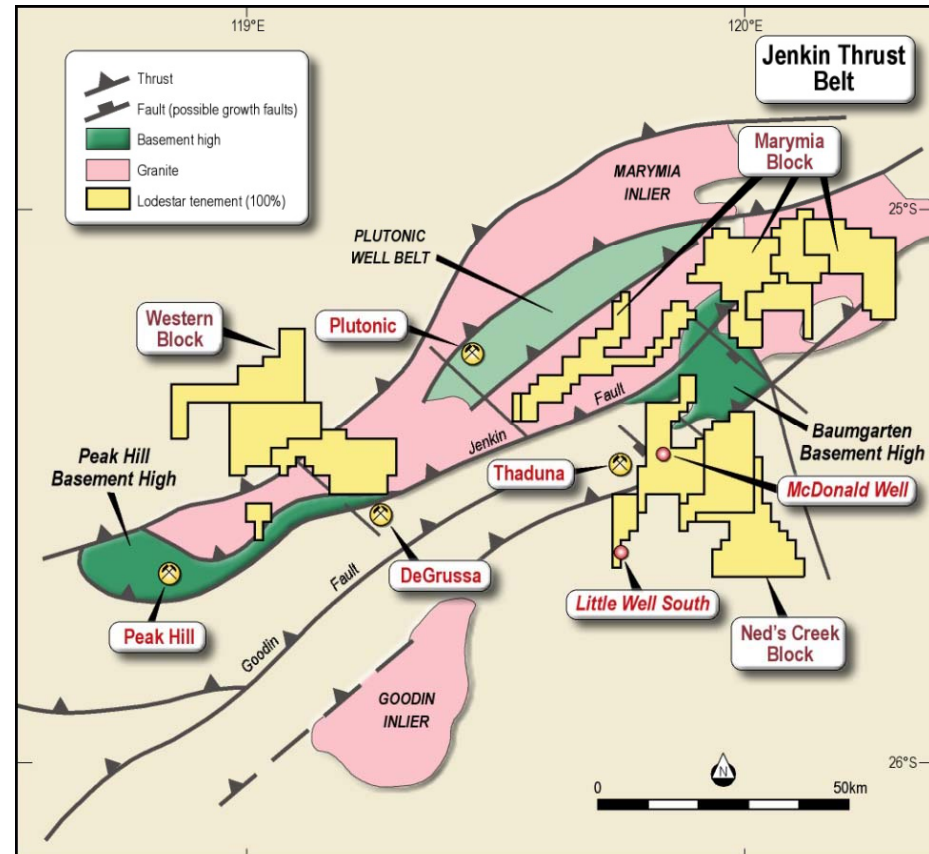


Key Project - range of prospective geological environments

Jenkin Thrust Belt – a New Base Metal Province

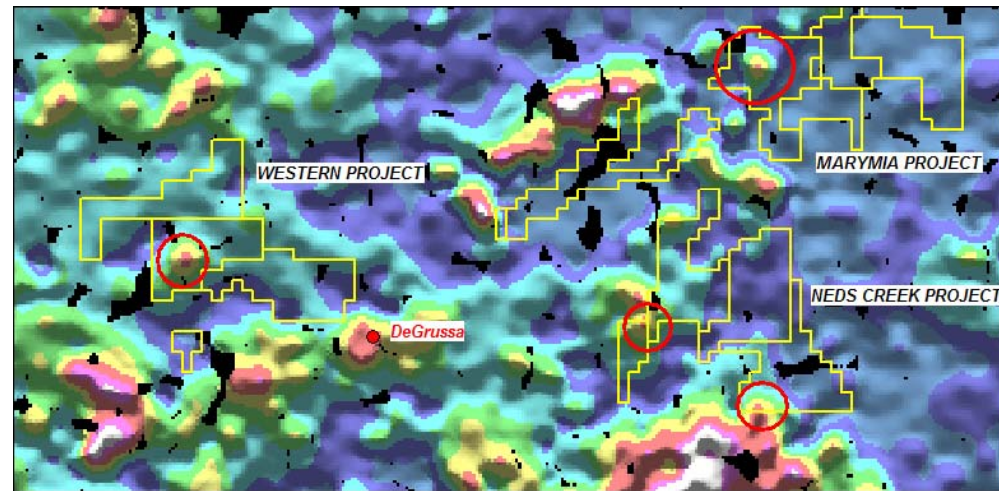


- Host to Sandfire's DeGrussa discovery, potentially the first major discovery in a new base metal province
- Base metal & gold mineralisation recorded at numerous locations over 100-150 kilometres
- Limited exploration & geological knowledge
- Lodestar's tenements include prospective basin sequences (fluids) , major structures (fluid transfer) and buried magmatic centres (heat flow) conducive to ore formation
- **Prospective Geological Environments**
 - Lower Yerrida Gp* -Sediment-hosted Cu; SEDEX Pb-Zn-Ag
 - Upper Yerrida Gp, Bryah Gp* -VMS Cu
 - Archaean* – Lode Au

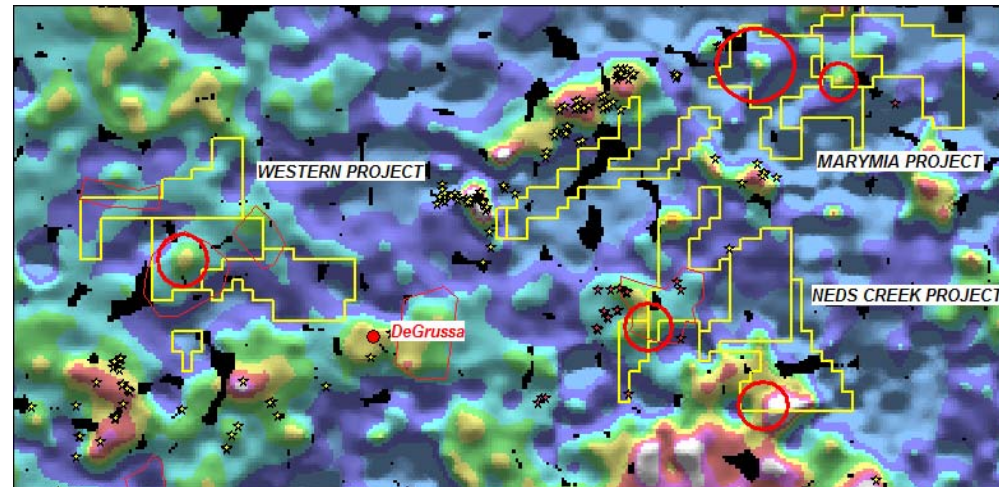


Relatively unexplored province – significant knowledge gaps

- GSWA regional regolith sampling– Cu distribution (raw data) influenced by regolith domain, bed rock composition, iron content
- GSWA sampling successfully identifies exploration targets at the regional scale (MINEDEX gold and base metal prospects/deposits shown; priority targets areas outlined in red)
- Priority geochemical targets identified at Neds Creek/McDonald Well and Western Project in addition to more subtle anomalies requiring follow up sampling, eg Marymia project tenements
- Sedimentary sequences generally contain low background Cu relative to mafic-ultramafic sequences.

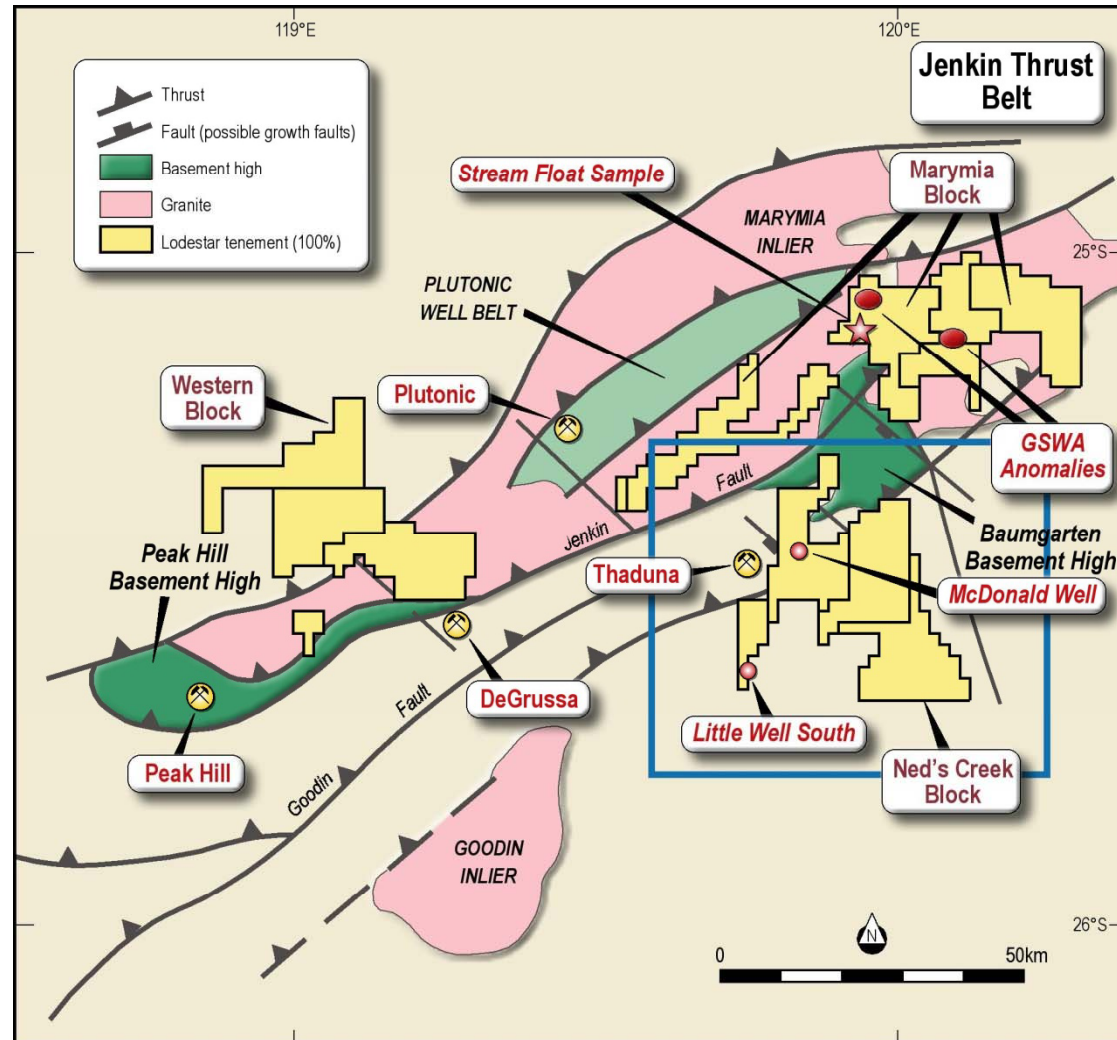


Raw data (Cu)



Leveled data (Cu) (regolith domain)

Ned's Creek Project :

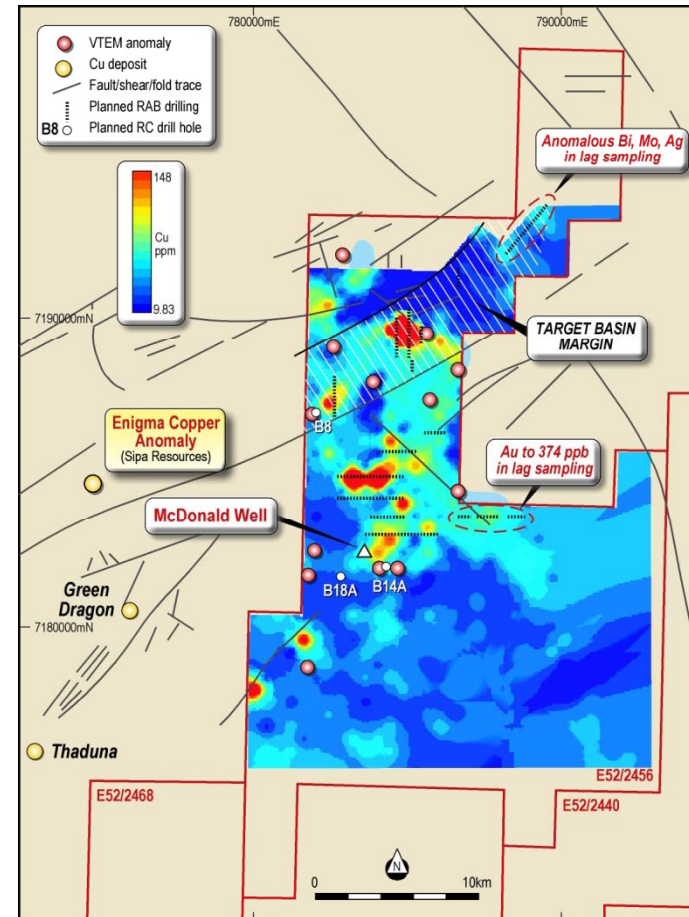


Prospective basin & structural setting within large copper mineralising system

Ned's Creek Project: McDonald Well Area



- Limited historic exploration:
 - WMC - rock chips to 4100ppm Cu and 1120ppm Zn, anomalous samples reported over 60 sq km
 - CRA -anomalous Cu in shallow auger drilling
- 2010 VTEM survey identifies “conductive unit” (black shale) coincident with anomalous base metal geochemistry, suitable host for sediment-hosted Cu
- >10 kilometres of prospective stratigraphy, plunging to SW
- Target Deposit Type Example – *Nifty* (+40Mt @ 2.4% Cu)



Coincident VTEM anomalies and base metal geochemistry endorse high prospectivity

Ned's Creek: Exploration Program



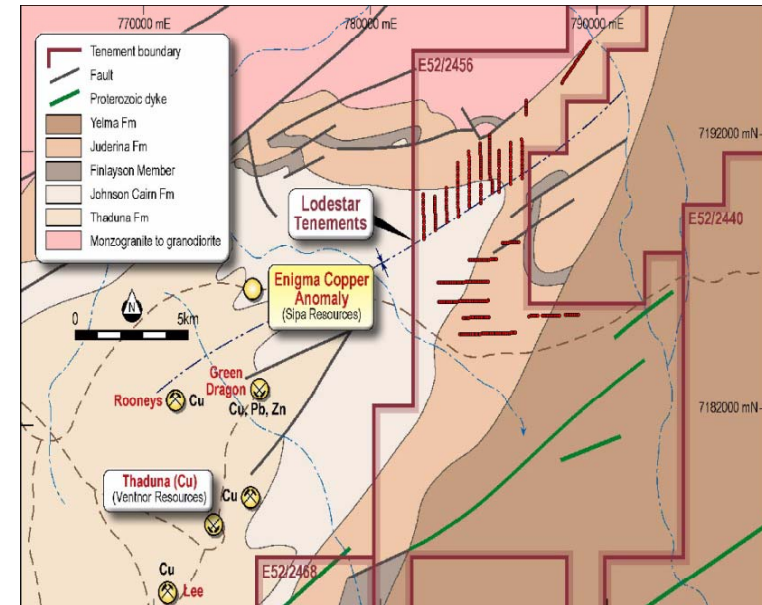
Completed

- VTEM - 2010
- 5 **Phase 1** RC holes
 - intersected variable thicknesses of carbonaceous, calcareous, siliceous shale and dolerite in the McDonald Well area
 - carbonaceous shale horizon beneath 60-70m of weathering, anomalous base metal, Ag, As, Sb, Bi +/- Au in shale at fresh rock interface

- Multiple Cu and base metal anomalies defined by lag sampling

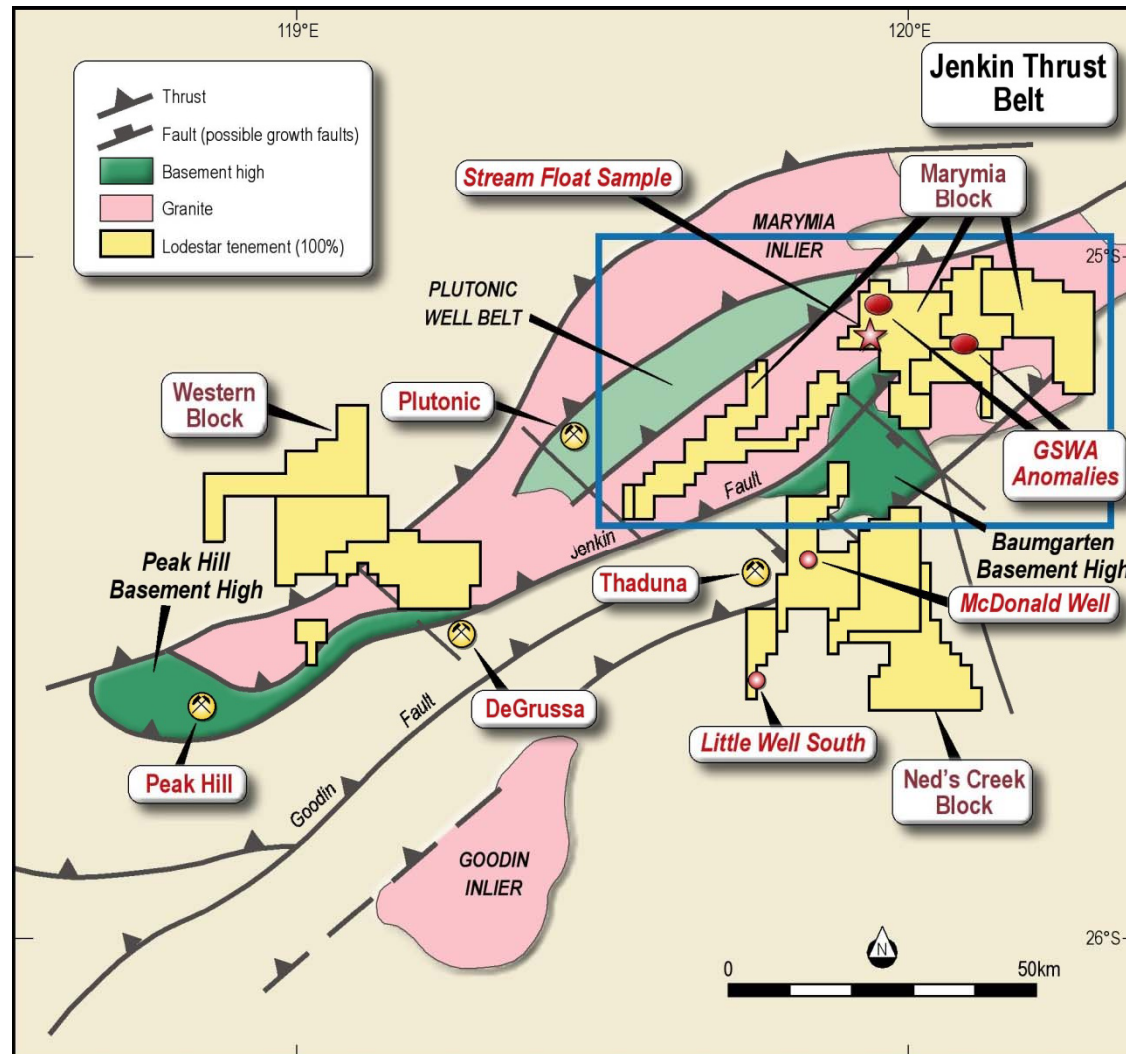
Commencing

- Extensive RAB drilling program to test geochemical targets – **along strike from Enigma.**
- RC Drilling to test three surface EM defined targets to depths of 250m
- Recent surface sampling - 682ppm Bi, 148ppm Mo, 45ppb Au, 4ppm Ag, 1320ppm Cu from weathered outcrop



Aggressive exploration/drilling through 2011

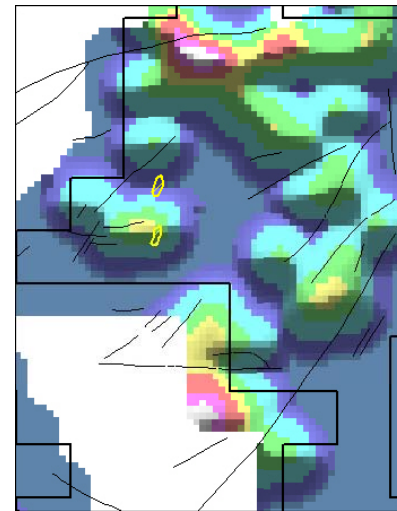
Marymia Project:



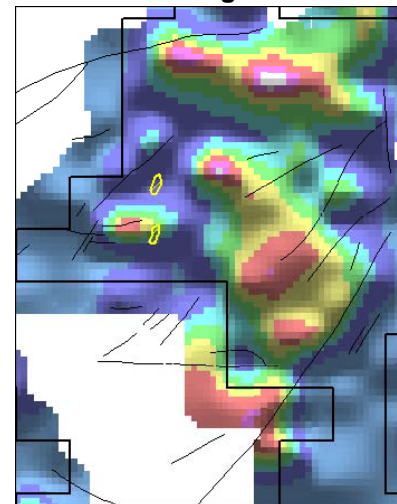
Marymia Project: The Exploration Opportunity



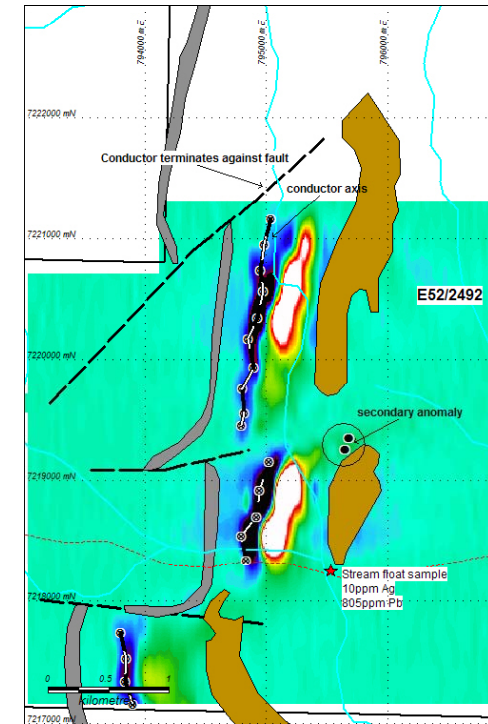
- Predominantly diamond & gold exploration
- GSWA geochemistry identifies regional targets within tenements
- Unexplored Proterozoic basin - Lodestar stream float sample reporting 10g/t Ag and 805ppm Pb confirms mineralised structures in sedimentary sequence
- VTEM anomalies identified on basin margin (*Transformer prospect*) – 1700m combined strike length
- Soil sampling confirms base metal anomalies up-dip from EM anomalies



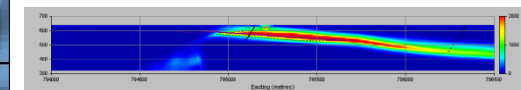
Ag



Pb



Transformer Prospect



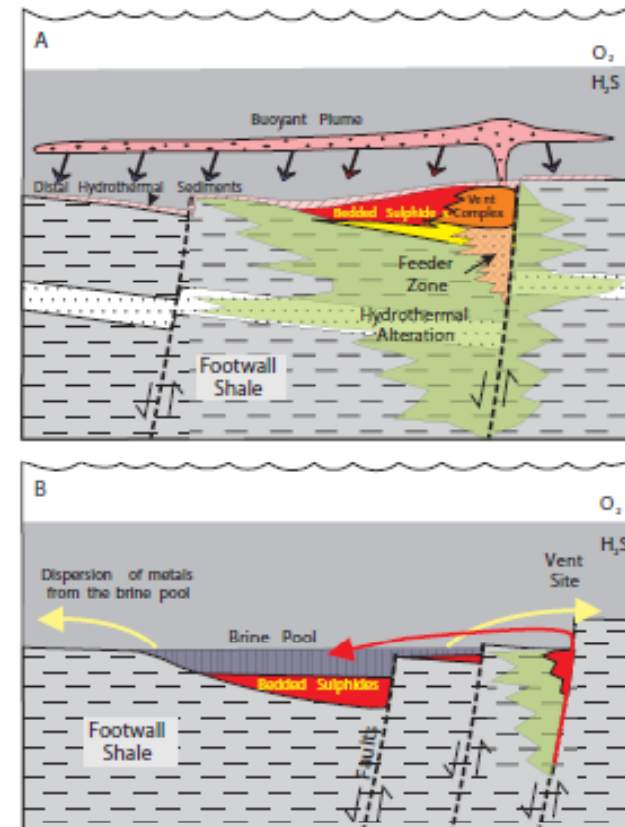
Modelled conductor - profile

Transformer - Large shallow-dipping VTEM targets

Marymia Project: The Exploration Model



- SEDEX Deposits (Zn-Pb-Ag)
 - Major source of base metals
 - Proximal and distal to vent
 - Strong fault control on vent discharge sites
 - Distal deposits controlled by basin topography
- Geometry
 - High aspect ratio – thickness to lateral extent, typically sheet-like or tabular lenses up to 10's of metres thick and more than a kilometre in length
- Geochemistry
 - enriched in Fe, Mn, **P**, Ba, Ca, Mg, Hg, **Cd**, **As**, **Sb**, **Se**, **Sn**, **In**, Ga, **Bi**, Co, Ni & Tl
 - hydrothermal indicator – phosphatic sediments



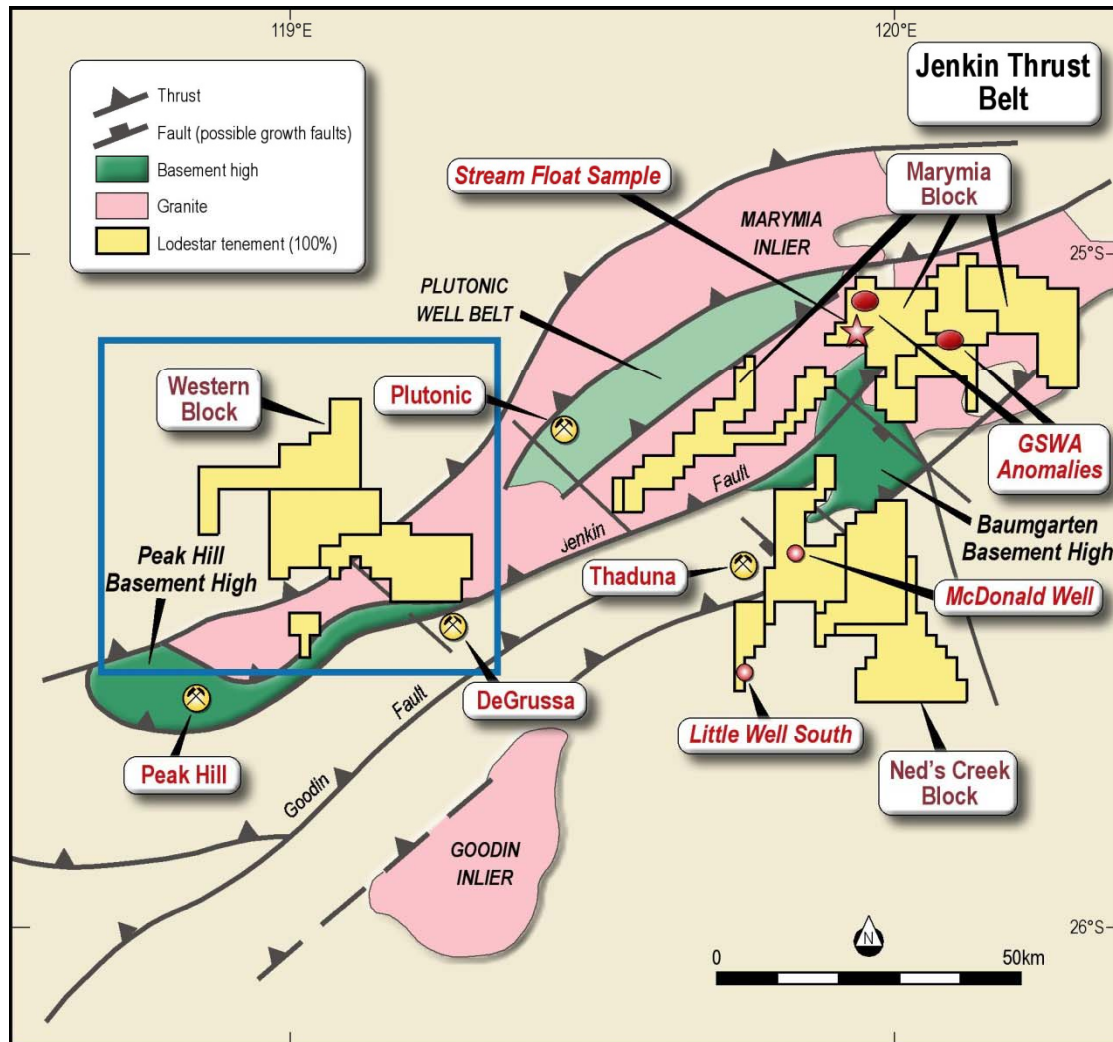
Goodfellow and Lydon (2007)

Base Metal Exploration - Jenkin Thrust extension

- Geochemistry
 - 1km grid lag sampling completed
 - In-fill soil sampling 200m lines – continuing
 - Extensive soil cover impedes surface geochemistry over eastern region
 - Historic drilling indicates that cover does not exceed 4-8m depth over large areas
- Drilling:
 - initial RAB drilling to test up-dip from VTEM conductors
 - RC drilling to test modeled VTEM targets at depths of 100m to 200m depth
- Aeromagnetics – Eastern region
 - Acquire multiclient data – interpretation & orientation geochemistry (auger/RAB) in areas under cover



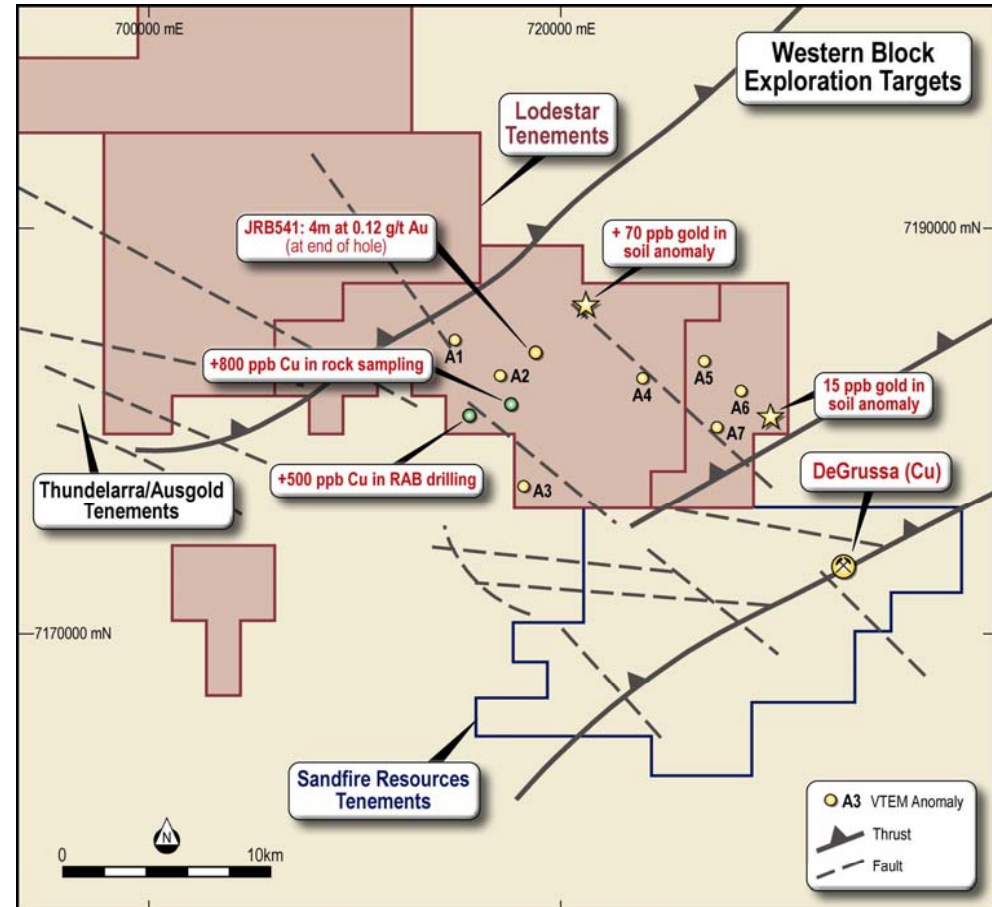
Western Project:



Western Project: The Exploration Opportunity

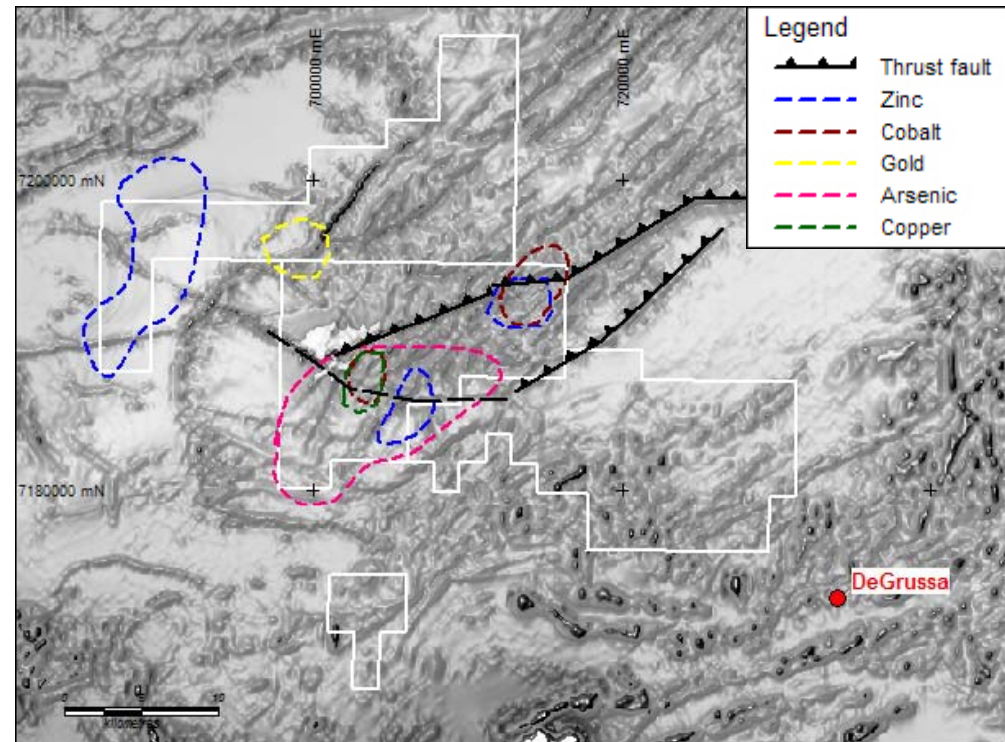


- Adjoins Sandfire tenements
- Between major gold camps, 6km NW of DeGrussa
- Historic Exploration
 - effectiveness reduced by extensive soil/hardpan cover
 - soil sampling anomalies to 80ppb Au
 - wide spaced RAB reported 4m @ 0.12g/t at end of hole (not followed up)
- Structures
 - NE trending thrust faulting
 - Anomalous Cu to 800ppm in rockchip and RAB in breccia zone
- VTEM
 - Low amplitude anomalies identified under cover
- Untested GSWA regional geochemical anomalies
- Untested calcrete radiometric anomaly



NE thrust faulting and linking structures – potential controls on mineralisation

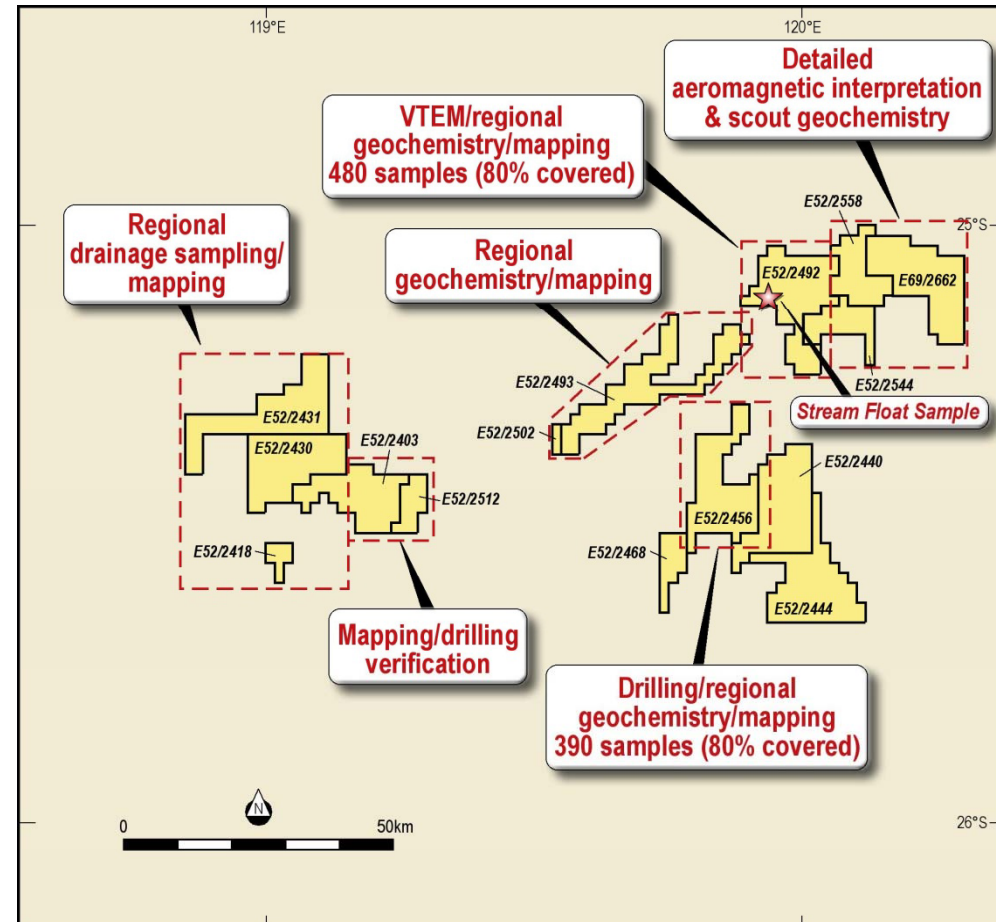
- Geochemistry
Regional stream/soil/rock chip geochemistry – first pass exploration gold, copper, base metals
Follow up GSWA regional geochemical anomalies.
- Exploration under cover
Geological / structural study – identify geological sequence, focus on potentially mineralised structures and lithologies within Marymia Inlier/thrust zone



Exploration program going forward



- Intensive RAB/AC program targeting Cu anomalies >5km strike - Neds Creek
- Detailed soil geochemistry over northern zone E52/2456 targeting Bi, Mo, Ag anomaly
- Detailed soil geochemistry over basin margins E52/2492 - Marymia
- First – pass drilling Western tenements



Funded to actively explore in 2011

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