



**Breakaway  
Research**

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### Company Information

ASX Code	GTE
Share Price	A\$0.23
Ord Shares	98.3m
Options*	26.5m
Unquoted options	4.35m
<b>Market Cap</b>	<b>A\$22.6m</b>
Cash (June 12)	A\$2.9m
Total Debt	A\$0m
<b>Enterprise Value</b>	<b>A\$19.6m</b>

### Directors

Chairman & MD	Jordan Lockett
Non-Executive Director	Frank Cannavo
Non-Executive Director	Craig Mathieson

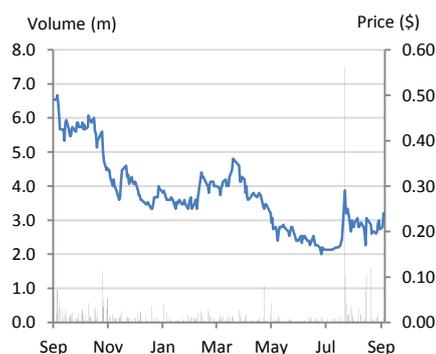
### Substantial Shareholders

Frank Cannavo	4.0%
Craig Mathieson	3.8%
Jordan Lockett	3.7%
BAM NR 1 Pty Ltd	3.7%
Soria Nominees	3.0%

### Company Details

Address	185 Hay Street PO Box 8142 Subiaco WA 6008
Phone	+618 6489 0101
Web	www.greatwesternexploration.com.au

### 1 Year Price Chart



Source: Bloomberg

# Great Western Exploration (GTE)

*Landmark JV agreement provides access  
to highly prospective mineral field*

**Recommendation: Speculative BUY**

## Key Points

- **JV agreement with Kazakhstan's state owned mining company**
- **GTE to earn 50% by funding exploration to completion of BFS**
- **Extensive historical exploration by the Soviets results highlight the prospectivity of the area**
- **Exploration target of between 750kt and 2Mt of contained copper**
- **Extensive copper mineralisation at numerous locations**
- **Possible early development of a heap leach operation**
- **Additional prospective Australian projects provide diversification**

*Great Western Exploration has signed a land mark JV agreement with Kazakhstan's state owned mining company allowing it access to a highly prospective land package. Previous exploration by the Soviets highlights the prospectivity of the licence area. Drilling will soon commence to verify historical results and positive news flow will likely follow.*

## Company Overview

Great Western Exploration (ASX: GTE) recently signed a 50:50 JV agreement with Kazakhstan's state owned mining company Tau-Ken Samruk (TKS). This Joint Venture paves the way for a period of active exploration in a highly prospective, previously explored region.

The Joint Venture encompasses the 12,500km<sup>2</sup> Spasskaya project which hosts 120 historical copper prospects. In the 1970's, the Soviets conducted extensive, albeit incomplete, exploration on eight 'high priority' sites. Wide zones of ore grade and predominantly oxide mineralisation were intersected at all eight locations with widespread outcropping mineralisation evident at four locations. Based on historical exploration results, just these eight projects have an exploration target of between 750,000 and 2 million tonnes of contained copper at an average grade of ~1.10% Cu.

Under the terms of the JV agreement, Great Western will earn its 50% interest by sole funding exploration on the project through to completion of a BFS. Great Western will soon commence a 5,000m drill program aimed at testing the integrity of the historical Soviet exploration. Should the historical work be deemed reliable, resource drilling campaigns will then commence.

In Australia, Great Western has exposure to prospective licences surrounding Western Areas' Flying Fox and Spotted Quoll nickel mines. In the North Yilgarn at the Bullseye prospect, GTE will also conduct follow up drilling on high grade gold intersects of 8m @ 25.1g/t Au and 8m @ 61.7g/t Au.



## Investment Review

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### Kazakhstan

*First JV to be negotiated with TKS*

Great Western recently signed a land mark Joint Venture (JV) agreement with Kazakhstan's state owned mining company Tau-Ken Samruk (TKS). **This is the first JV to be negotiated with TKS which is the national operator of the State's assets** in the metals and mining industry.

*Project encompasses 120 historical prospects*

**This JV should not be underestimated.** While the JV is still 'brand new', it provides Great Western with a unique competitive advantage, allowing the company to make significant investment in an undeveloped world class mineral district. The current JV agreement encompasses the 12,500km<sup>2</sup> Spasskaya project which comprises 120 historical projects where previous exploration reported significant occurrences of copper and other base metals.

*Exploration target of between 750,000t and 2Mt of contained copper*

Historical exploration undertaken during the Soviet era (early 1970's) targeted eight high priority prospects and intersected wide zones of 'ore grade' copper mineralisation at each of them. The Soviets estimated a total exploration target of between 750kt and 2Mt of contained copper at ore grades averaging ~1.10% Cu. A recent site visit to the area has confirmed the prospectivity with samples from several old trenches assaying as high as 40% copper with hand held XRF units. At the Shaitandinsky prospect, four of the five trenches which were recently sampled and recorded significant widths of outcropping high grade copper mineralisation including **14m @ 6.59% Cu, 14m @ 6.51% Cu, 12m @ 4.52% Cu and 18m @ 4.05% Cu.**

*Extensive work undertaken by Soviets*

The Soviet exploration was extensive however it was constrained by technology and drilling limitations. All diamond holes were drilled vertically which may not have adequately tested the targets, and only reached a maximum depth of 200-250m. Limited geophysical work has been undertaken. The Soviets prepared 23 volumes of reports (averaging 200 pages each) which include sections, pit designs and mining studies.

*5,000m of drilling to prove up integrity of past exploration results*

With the use of modern exploration techniques, Great Western (and TKS) now has an excellent opportunity to prove up resources in a highly prospective land package. An initial 5,000m drilling program is planned across four of the prospects (once final approvals are in place) aimed at testing the historical Soviet exploration results. If the Soviet data is proved reliable, resource drilling campaigns will likely commence.

*Drilling to test the extent of high grade intercepts*

### Australia

Great Western also has six early stage exploration projects in WA loosely grouped together as the 'North Yilgarn' and 'South Yilgarn' projects.

*Exploration licences surround Flying fox and Spotted Quoll*

Historical RAB drilling at the Bullseye prospect (located in the North Yilgarn) intersected **8m @ 25.1g/t gold** and **8m @ 61.7g/t gold**. Great Western intends to test the extent of this mineralisation with a drilling campaign as soon as the tenement is granted and the approvals are in place.

The 'South Yilgarn' exploration licences strategically surround Western Areas' Flying Fox and Spotted Quoll nickel mines and continue along strike on a perceived mineral trend to the south. Western Areas has formed a JV with GTE to earn 51% in the exploration ground surrounding the Flying Fox mine and recently committed to spending a further A\$ 1m to increase its interest in the JV to 70%.



## Project Review

### Spasskaya Project – Kazakhstan

Land mark JV and previous exploration by the Soviets pave the way for significant resource opportunities

*TKS is the sole state owned metals and mining company*

In April 2012, Great Western entered into a 50:50 Joint Venture agreement with Kazakhstan’s sole state owned mining company, Tauken Samruk (TKS), which is the country’s national operator of State assets in the metals and mining industry.

The Spasskaya project area covers 12,500km<sup>2</sup> and lies south east of the regional centre of Astana and is considered particularly prospective for large copper deposits.

### Spasskaya Project Location



### Spasskaya TKS JV

Source: Great Western Exploration

*Soviet work was pre-JORC*

During the 1970’s, the Soviets completed numerous drilling campaigns and trenching programs across eight identified prospects.

The drilling identified ore grade mineralisation across all eight prospects targeted and supported an estimated total exploration target of between 750,000t and 2Mt of contained copper ranging in grades from 0.6% to 2% Cu (averaging 1.10g/t Cu).

*Large exploration target based on historical results*

### Exploration targets for the 8 prospects at Spasskaya

Name	Ore Mt Cu		Average Grade % Cu	Contained Cu	
	Lower	Upper		Lower	Upper
Burnak	9.6	24	1.68%	161	400
Shokai	20.4	51	0.60%	122	305
Kylshoky	10.2	25.5	1.20%	122	305
Altyntobinsky	8.4	21	1.40%	118	295
Sharyktinsky	7.2	18	1.66%	120	295
Shaitandinsky	4.8	12	1.49%	72	175
Zhartassky	6	15	0.60%	36	88
Khadzhikongan	2.4	6	1.00%	24	60
<b>Total</b>	<b>69</b>	<b>173</b>	<b>1.10%</b>	<b>775</b>	<b>1,923</b>

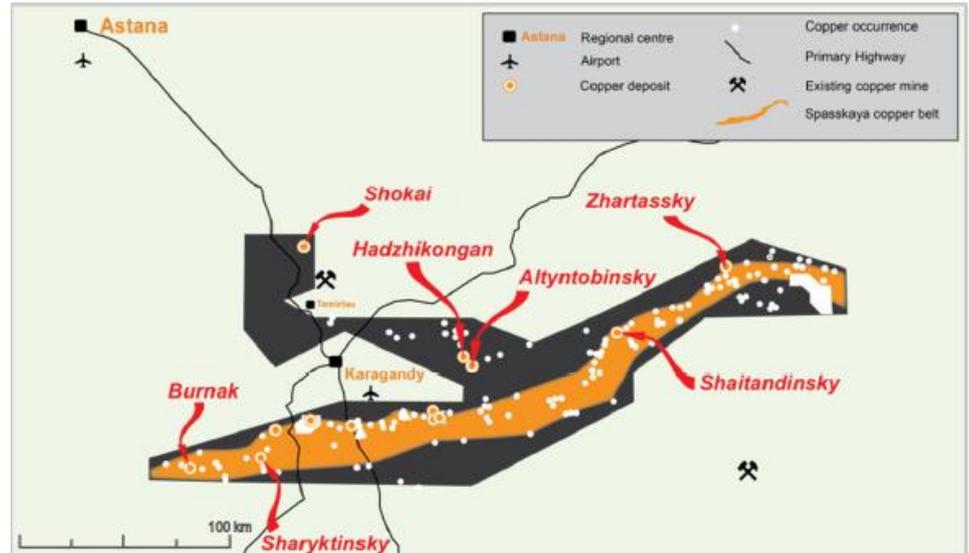
Source: Great Western Exploration

The exploration targets in the table above are derived from 1970’s Soviet data and are largely conceptual in nature. Additional exploration is required to support an initial JORC resource at each of the prospects. The above exploration target also makes no allowance for the additional 120 prospects identified in the project area.



## Prospect Location with major infrastructure

*Significant additional exploration potential*



Source: Great Western Exploration

*Soviets drilled vertically to 200-250m –additional potential at depth*

The drilling undertaken by the Soviets reached a typical maximum depth of between 200m and 250m with most of the deposits remaining open. The relatively shallow mineralisation has good potential to be mined by open cut methods.

*Potential for additional by-products*

While the Soviets were primarily targeting copper, historical metallurgical testing also indicated potentially economic concentrations of silver, gold and rhenium. (Rhenium is one of the rarest elements in the earth's crust and is mainly used in 'super alloys' for jet engines and trades for approximately ~US\$4,500/kg).

### Upcoming Drill Campaign

*5,000m drill campaign to test integrity of historical results*

Recent field work undertaken by the JV partners has confirmed 'abundant outcropping copper oxide mineralisation' at the Hadzhikongan, Altyntobe, Shokai, Shaitandinsky and Burnak prospects.

Great Western and TKS have planned an initial 5,000m diamond drill program with the aim of confirming the width and grade of the mineralisation encountered by the Soviets. The JV will initially drill test Hadzhikongan and Altyntobe, targeting a JORC inferred resource for the two prospects on the completion of this round of drilling. A small drill campaign will also be undertaken at the Burnak prospect in the latter part of the year.

### Additional Exploration Opportunity

*Significant exploration potential on highly prospective tenure*

The Spasskaya project area (~12,500km<sup>2</sup>) contains over 120 individual 'mineralisation occurrences' where significant copper and base metal mineralisation has been identified from surface (illustrated by the white dots in the image above) however, no trenching or drilling has been undertaken by the newly formed JV to determine the extent of the occurrences.

The JV partners, led by Great Western, intend to systematically re-assess each of these 'mineralisation occurrences' via a program of mapping and sampling, using a hand held XRF, to confirm the prospectivity. Follow up ground EM surveys will then be undertaken ahead of drilling campaigns.



## Terms of the JV agreement

The key terms of the JV agreement with TKS are listed below:

*GTE to earn its 50% interest by sole funding exploration through to completion of BFS*

- GTE will fund the project to completion of a BFS to earn its 50%. If GTE leaves the JV early, it will transfer its share in the JV company to TKS at no cost.
- GTE will act as the Operating Managers responsible for budgets, exploration planning, execution and all other technical and financial responsibilities.
- TKS will ensure exploration is carried out according to Kazakhstan rules and will assist in working with the local communities and in gaining approvals
- There is a deferred payment to TKS from GTE's portion of cash flow once in production and cash flow positive. It is calculated by multiplying the Measured and Indicated resources x overall recovery x copper price x 0.015 as defined in the BFS. The payment is amortised over a 10 year period.
- 100% of cash flow of the project is retained by the JV to pay off all the development capital (both bank finance and any GTE shareholder equity that has been used) and 100% of the BFS (reimburse GTE).
- The Deferred payment does not start until after all the bank finance and any GTE shareholder equity is repaid and the project is in free cash flow.

The deferred payment is essentially a 1.5% royalty on mining reserves for GTE's 50% share in the project. By way of example, the formula yields a deferred payment of US\$204m based upon 2 million tonnes of contained copper metal in JORC Measured and Indicated Category at a copper price of USD\$8,500/t and 80% recovery. This is then amortised over a 10 year period.

## Potential for early Development

*Possible heap leach operation to provide development cash flow*

Reports completed by the Soviets in the 70's and field work undertaken by Great Western indicate that at least four of the prospects are mineralised from the surface and appear to be deeply oxidised. In some cases the depth of oxidation has been interpreted to be greater than 100m which may make those sites amenable to a heap leach operation with low strip ratios.

Although it is too early to define hard production targets, this scenario is favourable due to significantly lower capital costs and a shorter time frame to reach production.

Breakaway anticipate GTE will initially target smaller high grade deposit (~20Mt @ ~2.0% Cu) to position the company as high margin operation in the early stages of development. Once sustainable cash flow has been established, the company is more likely to assess the economic potential of a larger tonnage, lower grade operation.

## Burnak Prospect – Outcropping copper oxide mineralisation

*Widespread outcropping*

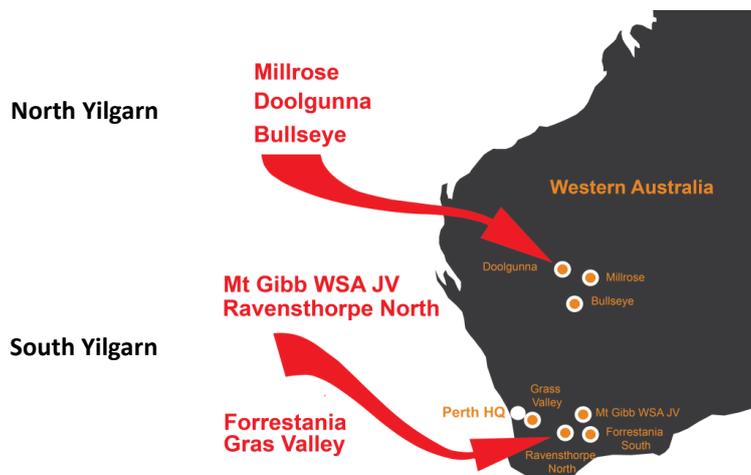


Source: Great Western Exploration



## Australian Based Projects

In addition to the highly prospective Kazakhstan project, Great Western also has an active exploration program across six projects in the Yilgarn Craton of WA.



### North Yilgarn

#### Doolgunna (prospective for copper)

*Soil sampling identifies copper anomalism*

The Doolgunna project encompasses early stage exploration on tenure thought to be prospective for copper mineralisation. An initial wide spaced (800m x 400m) soil sample program was carried out during late 2011 which indicated low level copper anomalism co-incident with a numerous gravity anomalies and structural corridors in the north part of the licence area. An infill soil sample program has now been scheduled to better define targets ahead of a possible drill campaign.

#### Millrose (prospective for gold)

The company has confirmed from field work this year that there is previously unmapped greenstone stratigraphy which is co-incident with a 10km long Au-As-Bi-Co pathfinder geochemical anomaly.

*Possible new greenstone belt identified through soil sampling*

This is a very encouraging greenfield project for the company. It has a track record of discovering previously unknown greenstone belt at Forrestania where the company proved the Forrestania belt extended at least a further 25km than previously known.

In March 2012, Great Western increased its footprint over the prospective area to control 100% of the interpreted greenstone area. Infill soil sampling programs are also planned ahead of possible drill campaign.

#### Bullseye (prospective for gold)

The Bullseye project comprises of two contiguous exploration licences which include the historic Gidgie Well gold prospect.

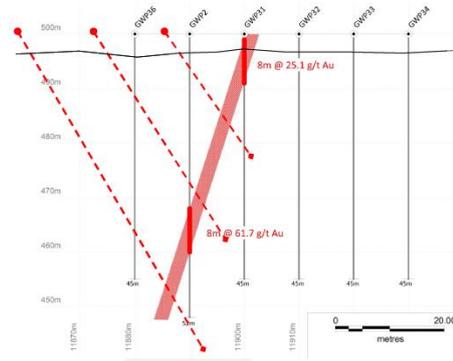
Modest exploration was historically undertaken by CRA and Julia Mines within the exploration licence area, however, both companies failed to adequately test two particular areas of interest which are represented by prominent magnetic lows (depicted by the purple shading in the following magnetic image). Great Western envisages conducting initial field work in these areas to better define targets ahead of a possible drill campaign.



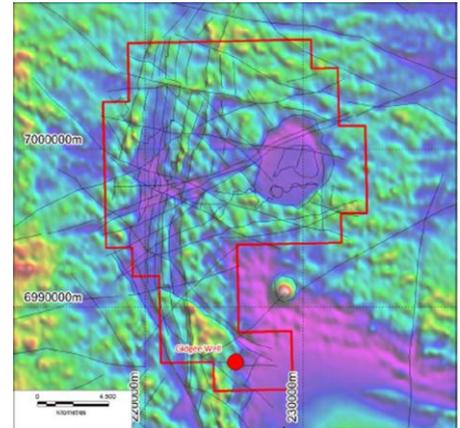
At the Gidgie Well prospect (towards the south of the licence), historical vertical RAB drilling intersected **8m @ 25.1g/t Au** and **8m @ 61.7g/t Au**.

**Bullseye – Historical RAB drill results at Gidgie Well with local magnetic image**

*Historical drilling intersected 8m @ 25.1g/t Au and 8m @ 61.7g/t Au*



Source: Great Western Exploration



Great Western has planned an initial 3 hole drill program (red dashed lines) to test the extent of the known mineralisation at Gidgie Well. The program is set to commence as soon as appropriate approvals are in place.

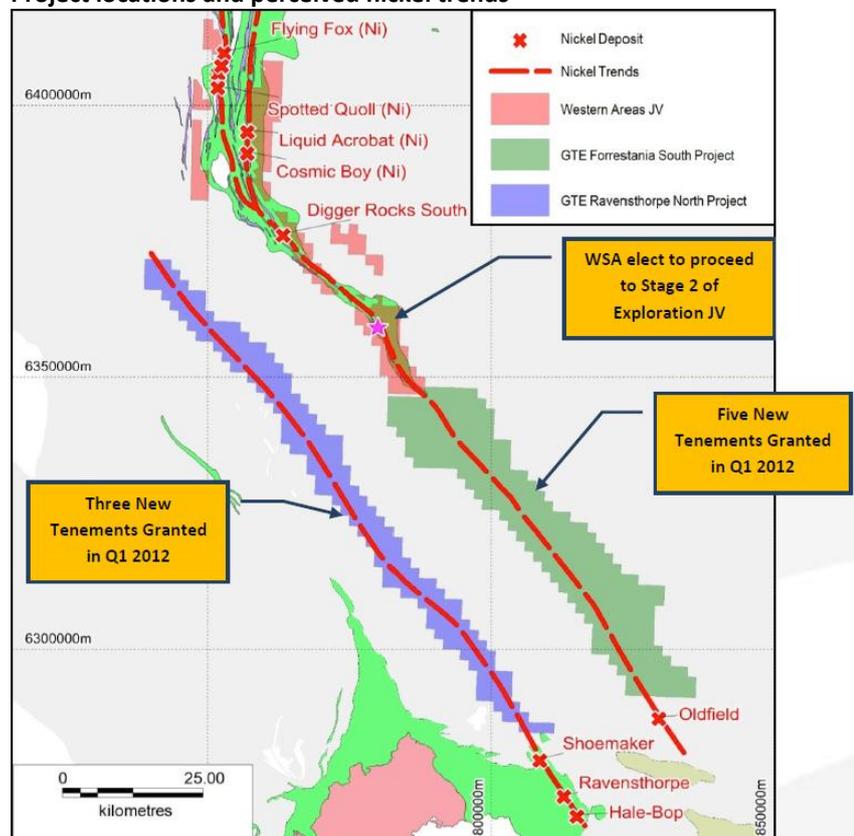
*Drilling to test extent of mineralisation*

**South Yilgarn**

The South Yilgarn projects encompass three closely spaced projects, namely Ravensthorpe North (100% interest), Forrestania South (100% interest) and the Forrestania JV project with Western Areas (ASX WSA) (WSA own 51%, moving to 70%).

**Project locations and perceived nickel trends**

*Exploration licences surround Western Areas*



*EL's encompass the perceived continuation of the nickel trend and perspective parallel trend*

Source: Great Western Exploration



### **Forrestania Nickel and Gold JV (GTE 49%, WSA 51%, moving to 70%)**

*JV with Western Areas  
on surrounding  
licences*

The Forrestania Nickel and Gold project comprises of ~303km<sup>2</sup> of exploration licences surrounding Western Areas Nickel operations and includes an additional eight exploration licences (totalling~1,350km<sup>2</sup>) along strike to the south.

Western Areas NL owns and operates the Flying Fox and Spotted Quoll nickel mines and other significant infrastructure in the region which includes a nickel concentrator, grid power and plant & equipment. It has also discovered and delineated extensive high grade mineralisation in the area.

Western Areas recently earned a 51% interest in the joint venture tenements by fulfilling an expenditure requirement (of A\$ 1m) via the sole funding of 159 auger holes and 11 diamond drill holes (for 2,897m).

*WSA to move to 70%  
by sole funding  
additional A\$ 1.5m of  
exploration*

Two of the diamond holes intersected narrow massive sulphide veins containing high grade nickel, 50km southeast of the Flying Fox nickel mine, at Mt Gibb (indicated by the pink star on the previous image). The sulphides were intersected in the vicinity of thick ultramafic sequences that are believed to be the source of the nickel.

Western Areas has now committed to fund a further A\$1.5m of exploration to increase its interest in the JV to 70%. Downhole EM surveys will now be carried out on all the diamond holes in order to identify conductors that could represent significant targets..

### **Forrestania South (100% interest – prospective for nickel)**

*Possible continuation  
of nickel trend*

Following on from the exploration work completed by WSA, Great Western recently applied for exploration licences to the south of the JV project area (dark green in previous image) on the basis the company believes the Forrestania nickel trend could continue a further 72km to the south east of Mt Gibb based on interpreted aerial magnetic data. No work field work has yet been undertaken on these exploration licences.

### **Ravensthorpe North Project (100% interest – prospective for nickel)**

*Possible parallel nickel  
trend*

The Ravensthorpe North licences were applied for on the same basis as the Forrestania South licences. During the Forrestania geological review, Great Western also identified the possibility of a parallel nickel trend which extends 100km north of the Ravensthorpe nickel deposits.



## Directors

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### **Chairman & Managing Director**

#### **Jordan Lockett**

**Jordan Lockett** has been a member of a number of successful exploration teams that have made discoveries in Western Australia, Queensland, Canada and Africa.

Mr Lockett has a Bachelor of Science degree and is a member of the Australasian Institute of Mining and Metallurgy and has 20 years' experience in both exploration and mining geology, having worked throughout Australia, North America and Africa. He has a broad experience that includes grass roots exploration, project generation, resource definition, underground mining and geological management.

### **Non - Executive Director**

#### **Frank Cannavo**

**Frank Cannavo** is an experienced public company director with significant business and investment experience including exploration companies in the mining industry. He has been instrumental in assisting companies achieve their growth strategies.

Mr Cannavo has extensive experience in creating solid, workable business strategies, capital raisings, investment, acquisitions and IPO's. Mr Cannavo is currently an Executive Director of Fortis Mining Limited (ASX: FMJ).

### **Non - Executive Director**

#### **Craig Mathieson**

**Craig Mathieson** has extensive commercial experience and is currently a Non-Executive Director of Funtastic Ltd and CEO of the Mathieson Group: a large family group with diverse investments including property, business and rural interests.

*\*Director CV's taken from company Annual Report and company announcement*



### **Analyst Verification**

We, Grant Craighhead and Andrew McLeod, as the Research Analysts, hereby certify that the views expressed in this research accurately reflect our personal views about the subject securities or issuers and no part of analyst compensation is directly or indirectly related to the inclusion of specific recommendations or views in this research.

### **Disclosure**

Breakaway Investment Group (AFSL 290093) may receive corporate advisory fees, consultancy fees and commissions on sale and purchase of the shares of Great Western Exploration and may hold direct and indirect shares in the company. It has also received a commission on the preparation of this research note.

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