

11 September 2023

## ST GEORGE RAMPS UP EXPLORATION OF LITHIUM, RARE EARTHS AND COPPER TARGETS AT WOOLGANGIE PROJECT, WESTERN AUSTRALIA

St George Mining Limited (ASX: SGQ) (“St George” or “the Company”) is pleased to announce it has commenced a multi-faceted exploration programme at the Woolgangie Project located in the Eastern Goldfields of Western Australia.

St George’s first-ever field programme at Woolgangie – acquired earlier this year – will include aircore drilling, an airborne magnetic survey, a ground based electromagnetic survey and soil surveys. Prospects include targets for lithium, rare earths and copper.

The Project tenure comprises a dominant landholding of 3,350 sq km in an underexplored region of the Coolgardie Mineral Field and takes in +90km of the Ida Fault – a major crustal boundary that controls multiple major minerals deposits within Western Australia.

### HIGHLIGHTS

#### Lithium at Woolgangie:

- Multiple pegmatite outcrops have been identified across the Project tenure – there has been no previous lithium exploration at the Project
- Priority exploration target is an area ~25km long and adjacent to the western margin of the established lithium region that hosts several major lithium mines including the Mt Marion mine (71.3Mt @ 1.37% Li<sub>2</sub>O) of Mineral Resources (ASX: MIN)
- Field mapping, soil surveys and rock chip sampling of pegmatite targets is underway

#### Rare Earth Elements (REE) at Woolgangie:

- Historical drilling identified wide zones of REE anomalism including 84m @ 470ppm Ce+La+Y from 96m (WRC016) and 24m @ 649ppm Ce+La+Y from 8m (WRC014)<sup>1</sup>
- Previous REE intercepts neither assayed for heavy rare earths nor followed-up with a targeted exploration programme
- 2,500m aircore (AC) drill programme underway to test for ionic clay-hosted REE mineralisation across an area of 55 sq km

#### Copper at Woolgangie:

- Wide zones of copper mineralisation were intersected by historical drilling designed to test an electromagnetic (EM) conductor including 50m @ 0.20% Cu from 80m (WRC003)<sup>2</sup>
- No follow-up exploration despite extensive copper sulphides encountered by drilling
- St George will complete a ground based moving loop EM survey to better model prospective EM conductors ahead of plans for drilling

#### Mt Alexander and Lithium Star:

- Lithium-focused exploration programmes are also planned for Q4 2023 at the Mt Alexander Project and the recently acquired exploration licences held by Lithium Star

<sup>1</sup> See Mincor Resources December Quarterly Report 2010 and GSWA open file report A90100.

<sup>2</sup> See Mincor Resources December Quarterly Report 2010 and GSWA open file report A90100.

For personal use only

**John Prineas, St George Mining’s Executive Chairman said:**

“We are delighted to announce that we have commenced field work at Woolgangie, an exciting project that St George only acquired in February. Woolgangie offers an excellent opportunity for a new discovery in an area of the Eastern Goldfields that has seen very limited exploration other than for gold and nickel.

“Historical drilling has revealed thick zones of copper and rare earths mineralisation that present as attractive prospects and warrant follow-up work. In addition, extensive pegmatite trends at the Project have yet to be systematically explored for lithium.

“Woolgangie is an example of how St George is building out our portfolio of highly prospective exploration assets to deliver a pipeline of value-creating opportunities for shareholders.

“The Project is located in a Tier 1 mineral hotspot and – for the first time – is being worked over using modern exploration methods to fully investigate the potential for economic mineralisation.

“In parallel to Woolgangie, we are planning the next phase of lithium exploration at the Mt Alexander Project as well as our maiden field programmes for the lithium prospective tenements recently acquired through our subsidiary, Lithium Star Pty Limited. We will be announcing more about these field programmes soon.

“St George will be an active explorer for the remainder of this year. We look forward to reporting further on the multiple field programmes underway.”

**WOOLGANGIE – A RARE GREENFIELDS OPPORTUNITY**

The Woolgangie Project is another example of St George’s corporate strategy to identify high-leverage greenfields critical minerals projects in Tier 1 jurisdictions. A pipeline of high priority targets has already been identified at Woolgangie to provide an opportunity for St George to use advanced, modern exploration techniques to explore for economic mineralisation.

The Project area encompasses 3,350 sq km, representing a rare, district-scale opportunity in a historically fertile mineral field. St George acquired an option over nine tenements – seven granted Exploration Licences and two in application – as announced in the ASX Release dated 2 February 2023 *Acquisition of Critical Metals Project*. In addition, St George has applied for a further 13 Exploration Licences – many of which are contiguous.

The Project tenements cover three strategic areas – the Central Tenements, the Eastern Tenements and the Western Tenements.

The Central Tenements encompass approximately 90km of strike along the highly prospective Ida Fault – a major crustal boundary that controls multiple major mineral deposits within Western Australia. All historical intercepts mentioned in this ASX Release are sourced from these tenements.

Significant lithium deposits along the Ida Fault include the Mt Ida Project (MRE: 12.7 Mt @ 1.2% Li<sub>2</sub>O)<sup>3</sup> of Delta Lithium (ASX: DLI) and the Kathleen Valley Project (MRE: 156Mt at 1.4% Li<sub>2</sub>O and 130ppm Ta<sub>2</sub>O<sub>5</sub>)<sup>4</sup> of Liontown Resources (ASX: LTR).

<sup>3</sup> Red Dirt Metals ASX release dated 19 October 2022 “*Maiden Lithium Mineral Resource Estimate at Mt Ida*”

<sup>4</sup> Liontown Resources Limited release dated 11 November 2021 “*Kathleen Valley DFS confirms Tier-1 global lithium project*”

The Eastern Tenements are proximal to an established lithium region that hosts several significant lithium deposits and operating mines.

These include the Mt Marion mine (71.3Mt @ 1.37% Li<sub>2</sub>O) of Mineral Resources (ASX: MIN)<sup>5</sup>, the Buldania deposit (15Mt @ 1.0% Li<sub>2</sub>O)<sup>6</sup> of Liontown (ASX: LTR), the Bald Hill mine (26Mt @ 1% Li<sub>2</sub>O)<sup>7</sup>, the Pioneer Dome deposit (11.2Mt @ 1.21% Li<sub>2</sub>O)<sup>8</sup> being acquired by Develop (ASX: DVP) and the Kangaroo Hills Lithium project of Future Battery Minerals (ASX: FBM).

The Western Tenements cover ground with a geological setting interpreted to be favourable for REE mineralisation. Given the positive historical results in the area, the large land acquisition by St George presents a ‘first-mover’ strategy for REE in the region.

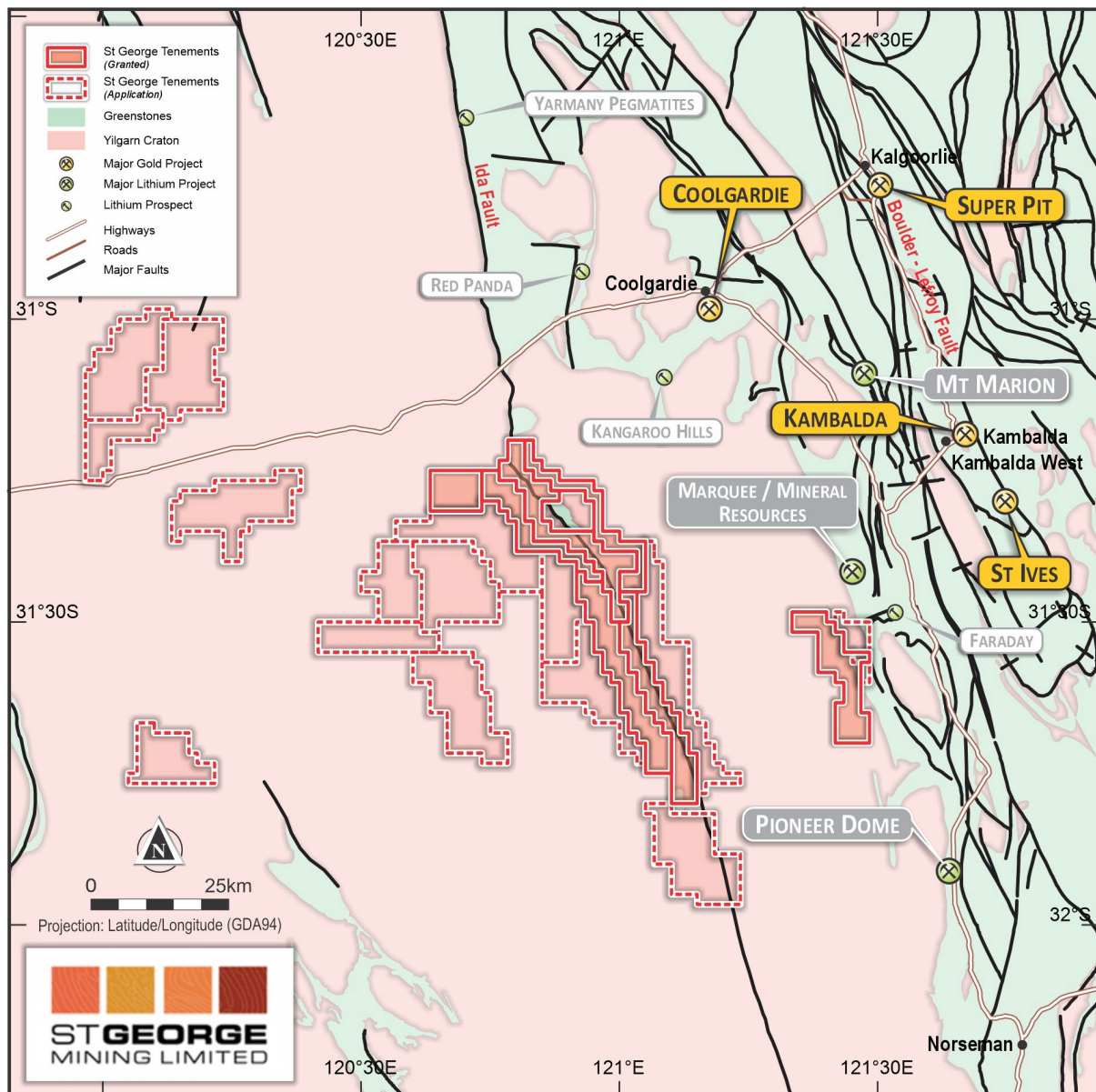


Figure 1: map showing the regional location of the Woolgongie Project.

<sup>5</sup> Mineral Resources (MIN) Mt Marion Mineral Resource Update - ASX Release 31 Oct 2018

<sup>6</sup> Liontown Resources (LTR) Potential new drill targets defined at Buldania - ASX Release 15 Jul 2021

<sup>7</sup> Bald Hill Mine - Lithium Ore Reserve Increase of 105% at Bald Hill, Tawana - ASX Release 6 June 2018

<sup>8</sup> Essential Metals (ESS) Dome North Resource upgrade - ASX Release 20 Dec 2022

**RARE EARTH ELEMENTS (REE) PROSPECTIVITY – WIDESPREAD OCCURRENCES**

Historical drilling in 2010 by Mincor Resources<sup>9</sup> identified anomalous REE elements in two widely separated areas (some 30km apart) while exploring for nickel sulphides; see Figure 2. These two areas – a southern area and a northern area – are within the Central Tenements.

A review by St George of the historical drilling indicates that the REE anomalism may relate to ionic clay-hosted rare earths rather than hard-rock carbonatite hosted mineralisation. The near-surface, extensive REE anomalism over a very broad area warrants follow-up with systematic exploration.

Significant intervals from historic drilling of the two separate areas include, within the southern area:

- 24m @ 649ppm from 8m Ce+La+Y in WRC014
- 36m @ 556ppm Ce+La+Y from 20m and 84m @ 386ppm Ce+La+Y from 96m (to EOH) in WRC016

In addition to these two RC holes, 16 of the 36 RAB holes drilled in the area (some 2km x 1.5km) returned elevated La (>200ppm La). Note: La was the only REE element reported. Intercepts include:

- 33m @ 225ppm La from 3m (to EOH) from KWB080
- 27m @ 257ppm La from 6m in KWB102

In the northern area, where drilling was focused on testing EM conductors (see below), drilling returned anomalous values in a number of holes including:

- 32m @ 236ppm Ce+La+Y from 24m in WRC009,
- 20m @ 567ppm Ce+La+Y from 86m in WRC008,
- 16m @ 382 ppm Ce+La+Y from 26m in WRC010 and
- 18m @ 244ppm Ce+La+Y from 28m in WRC013

Importantly, the historical drilling was not assayed for heavier rare earths including Neodymium (Nd), Praseodymium (Pr), Terbium (Tb) and Dysprosium (Dy), suggesting potential for exploration upside.

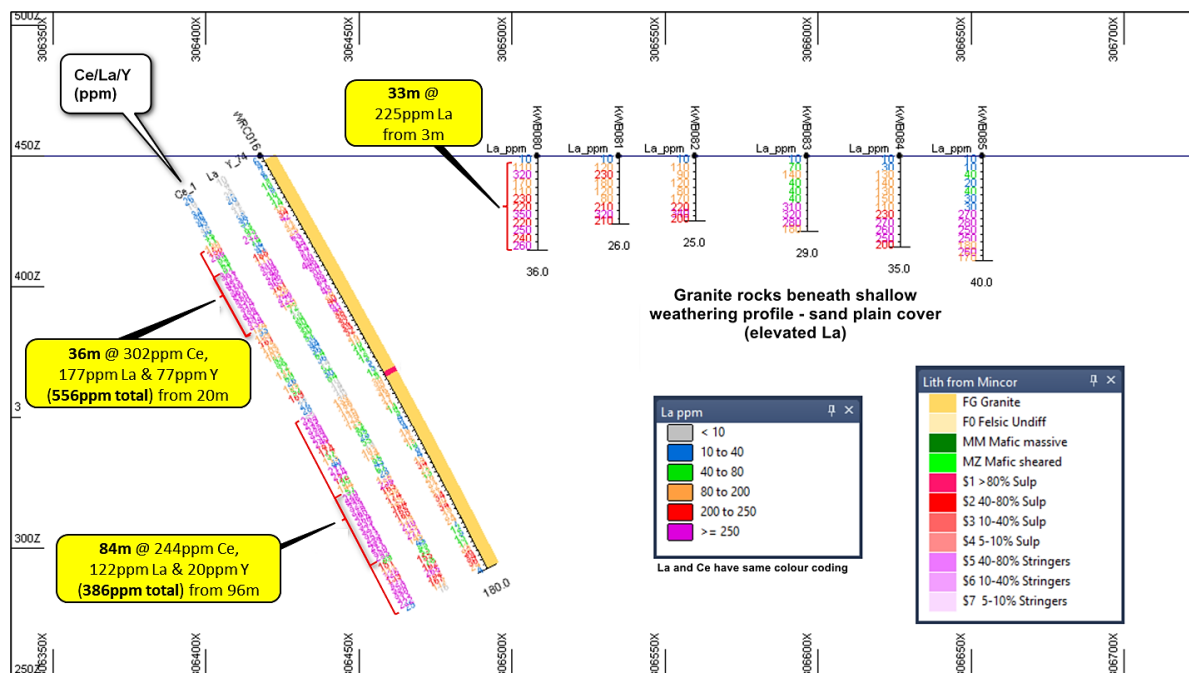


Figure 2: section showing REE anomalism (sourced from Mincor’s ASX December Quarterly Report 2010 and GSWA open file report A90100). \*Note, the Cerium maximum cut-off is 500ppm used for calculations based on the assay analysis performed.

<sup>9</sup> Mincor Resources ASX December Quarterly Report 2010 and GSWA open file report A90100



**COPPER PROSPECTIVITY – THICK SULPHIDES AND MULTIPLE EM CONDUCTORS**

Historical drilling by Mincor on Emu NL ground (see Emu’s ASX Release dated 19 October 2010) encountered thick intervals of copper sulphides in several drill holes including 50m @ 0.20% Cu and 2.1 g/t Ag from 80m (WRC003) and 58m @ 0.054% Cu and 0.9g/t Ag from 140m (WRC007).

These wide intercepts are highly anomalous and unusual, warranting further follow-up. The mineralisation is open at depth with the source/host yet to be determined. The geochemistry also includes anomalous silver and molybdenum values suggesting that it is an intrusive related system.

The original drilling was designed to test EM conductors identified from an airborne versatile time-domain EM (VTEM) survey. A review of the modelling of the EM conductors indicates that the drilling orientation may have been sub-optimal.

A new ground based MLEM survey will be completed over the target area to optimise modelling of historic EM conductors and survey at greater depths than the extent of the previous airborne VTEM survey. The new survey is arranged by our external geophysical consultants at Newexco, and will be completed on a loop size of 200m x 200m with line spacing of 200m and station spacing of 100m.

A drill programme will be scheduled to further test these EM conductors following a review of the new survey data.

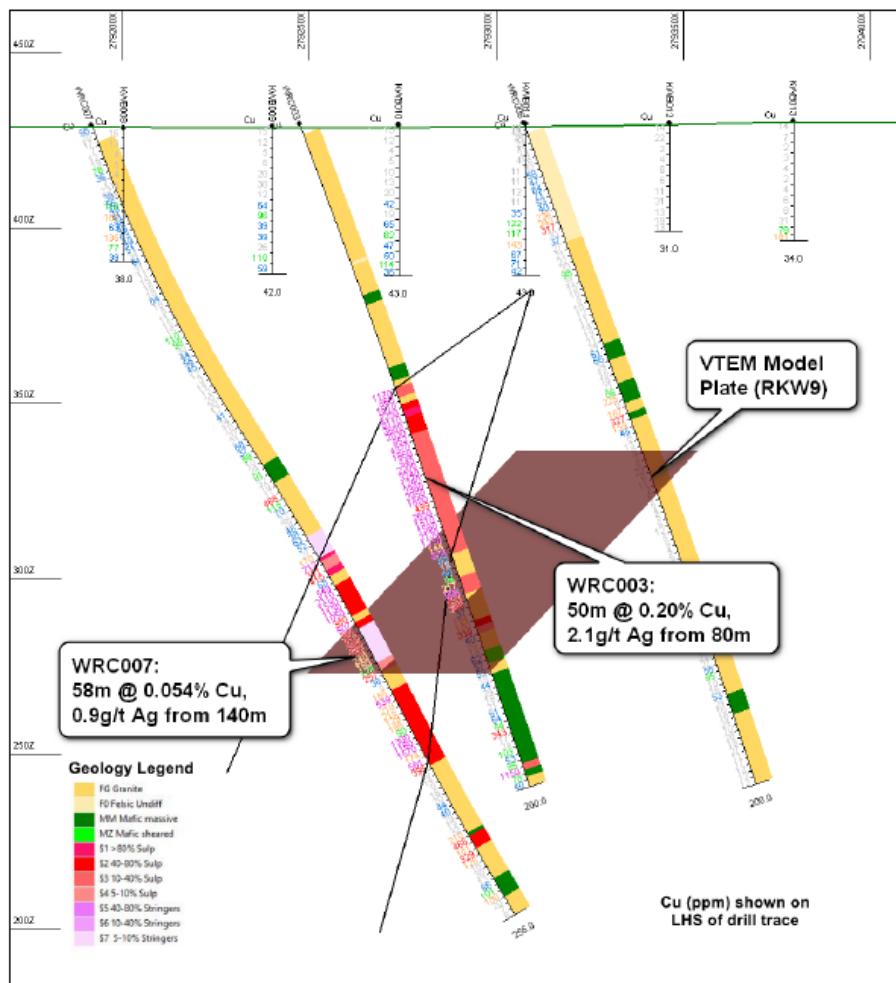


Figure 3: section showing historical drilling and modelled EM plates (sourced from Emu’s ASX Release dated 19 October 2010).

For personal use only

**MAIDEN DRILL PROGRAMME**

St George’s maiden drill programme at Woolgangie comprises approximately 60 planned aircore (AC) drill holes for circa. 2,500m of drilling. Drilling is scheduled to be completed next week with assay results expected within 4-6 weeks from when samples are submitted to the laboratory.

Figure 4 shows the target areas and planned drill holes in detail. These initial drill holes have been designed to follow-up historic intercepts of anomalous REE (Figure 2) and possible extensions to previous drilling.

Metallurgical test work will also be completed where appropriate to better assess the economic potential of any REE mineralisation.

A new airborne magnetic (AMAG) survey will also be completed in the current field programme. This detailed, high-resolution magnetic survey will provide data to advance structural and geological understanding of the project area, and will aid in target generation for follow-up drilling and other exploration activities.

The magnetic survey will comprise approximately 9,000 line kilometres flown at 100m line spacing. It will cover the northern portion of the Central Tenements where much of the current exploration activity is currently focused. The survey outline is shown in Figure 4.

For personal use only

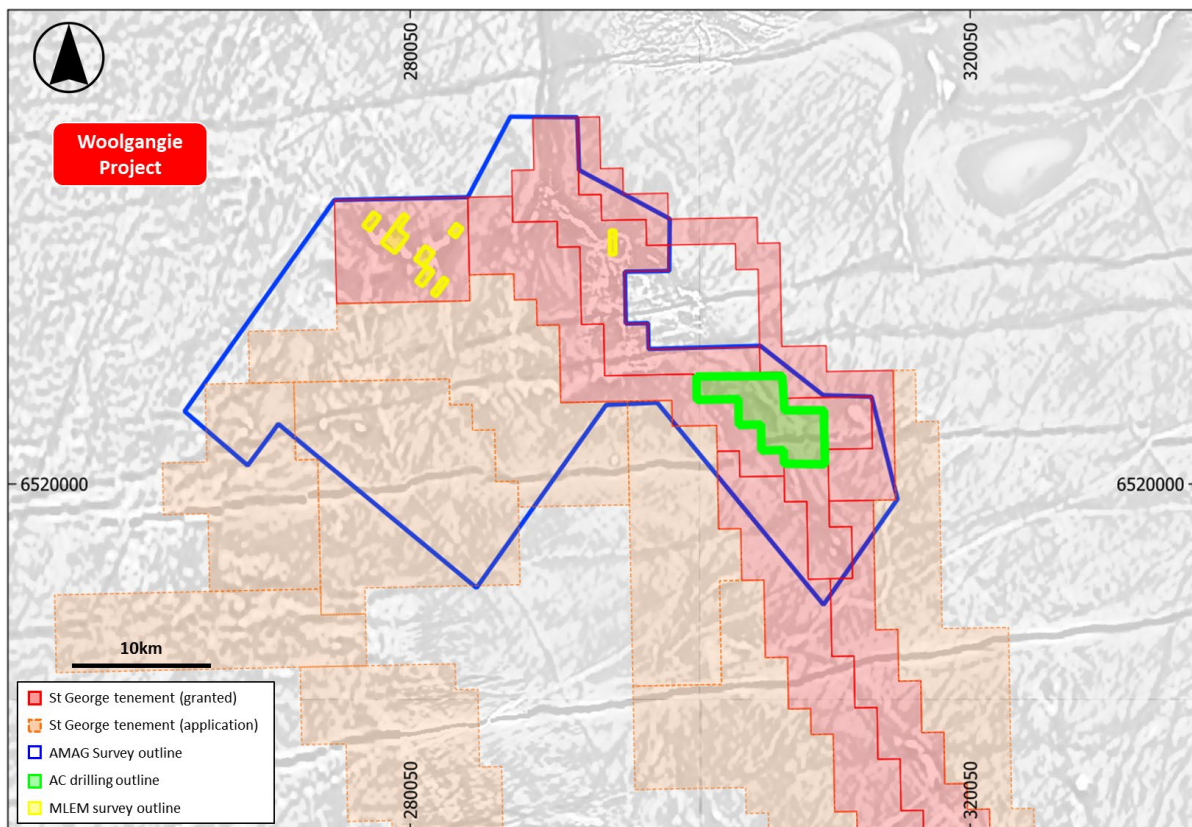


Figure 4: Northern extent of the Central Tenements at the Woolgangie project showing the various active surveys overlying regional greyscale magnetics.

**LITHIUM PROSPECTIVITY – UNEXPLORED PEGMATITE TRENDS**

The Central and Eastern Tenements at Woolgangie are considered prospective for lithium. Numerous pegmatites have been mapped for many kilometres within these tenements. No previous systematic exploration for lithium appears to have been conducted within the area of these tenements.

Initial assessment of the Central Tenements interprets more extensive greenstone sequences than have been historically mapped in that area. These present as viable lithium targets coupled at the contact zone with the potential fertile Burra monzogranite to the east of the Ida Fault. The AMAG survey will assist further in delineating these target zones with on-ground activity to follow.

An initial soil survey has commenced at the Eastern Tenements with first assays expected within 4 weeks. Further field mapping, soil surveys and rock chip sampling of the pegmatite field are also planned.

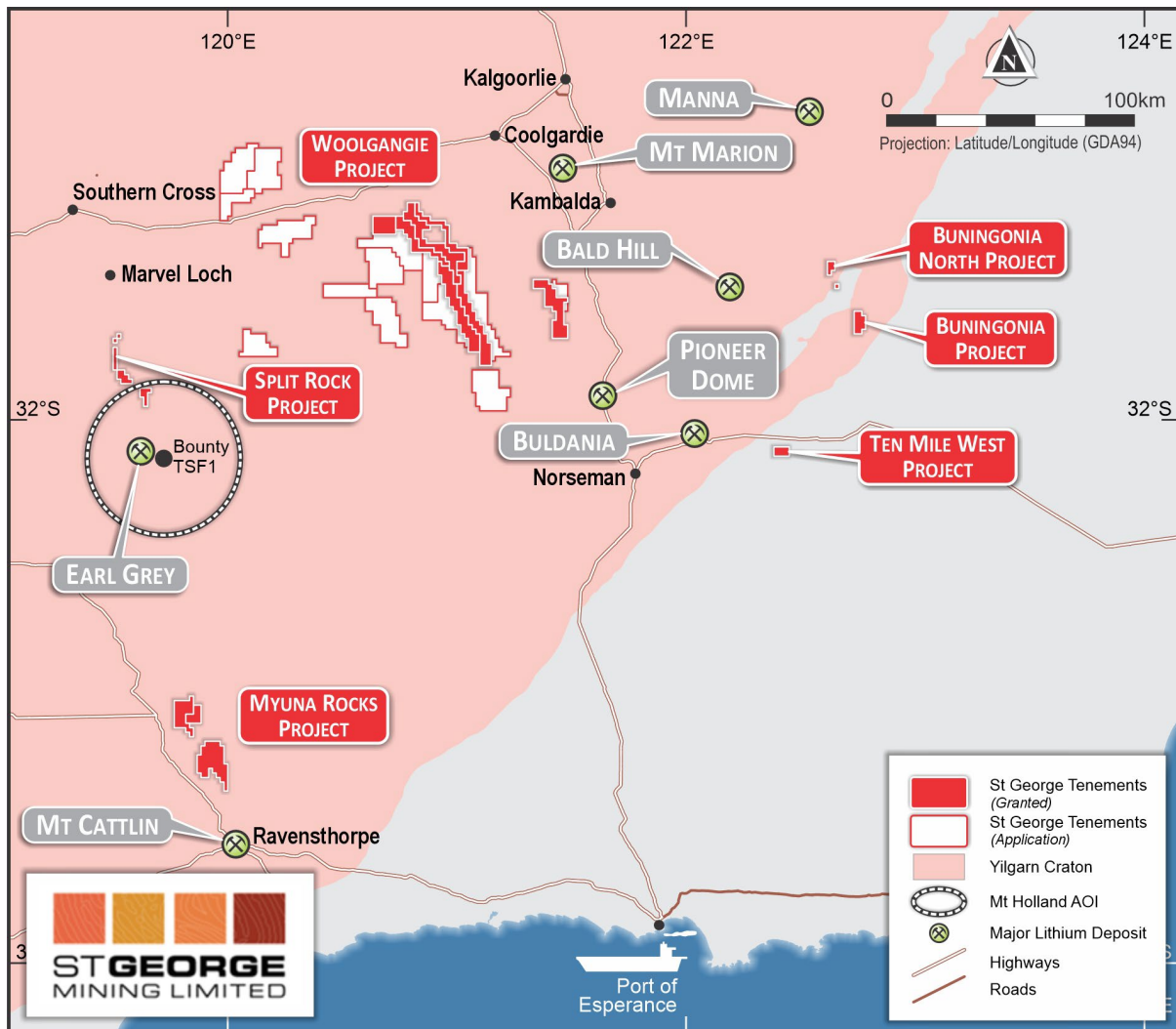


Figure 5: map showing the regional location of the Woolgangie Project as well as St George's other lithium projects in the region. Major lithium mines and projects are also highlighted.

**Historical Exploration:**

As noted above, information regarding historical exploration has been sourced from the following documents:

- ASX Release by Emu NL (ASX: EMU) dated 19 October 2010 and titled 'Massive Sulphides Intersected at Woolgangie'
- ASX December 2010 Quarterly Report issued by Mincor Resources NL (previously ASX: MCR)
- Geological Survey of Western Australia (GSWA) open file report A90100
- Geological Survey of Western Australia (GSWA) open file report A86426

For personal use only

Table 1: Collar details of historic holes mentioned in this release. All co-ordinates are in MGA zone 51.

Hole_ID	Hole_Type	EOH_Depth	East	North	RL	Dip	Azimuth
WRC003	RC	200	279248	6537442	470	-70	100
WRC007	RC	256	279193	6537464	470	-70	100
WRC008	RC	130	278802	6537525	470	-70	340
WRC009	RC	240	278827	6537445	470	-78	340
WRC010	RC	190	280975.2	6534516	470	-90	360
WRC013	RC	170	281014.5	6534581	470	-90	360
WRC014	RC	250	307440.2	6524197	470	-63	060
WRC016	RC	180	306416	6524336	482	-60	055
KWB080	RAB	36	306507	6524390	470	-90	360
KWB102	RAB	33	305985	6525819	470	-90	360

Assay methods utilised were for historic results:

- RC drilling - ME-MS61: Ultra trace level of 47 Elements by 4 Acid (HF-HNO<sub>3</sub>-HClO<sub>4</sub> digestion HCl leach) (near total) digestion and combination of ICPMS and ICPAES finish
- RAB Drilling Assay - ME-ICP61 Trace level of 27 Elements by 4 Acid (HF-HNO<sub>3</sub>-HClO<sub>4</sub> digestion HCl leach) (near total) digestion ICPAES

Authorised for release by the Board of St George Mining Limited.

**For further information, please contact:**

**John Prineas**

Executive Chairman

St George Mining Limited

+61 411 421 253

[john.prineas@stgm.com.au](mailto:john.prineas@stgm.com.au)

**Peter Klinger**

Media and Investor Relations

Cannings Purple

+61 411 251 540

[pklinger@canningspurple.com.au](mailto:pklinger@canningspurple.com.au)



## Forward Looking Statements:

This announcement includes forward-looking statements that are only predictions and are subject to known and unknown risks, uncertainties, assumptions and other important factors, many of which are beyond the control of St George, the directors and the Company's management. Such forward-looking statements are not guarantees of future performance.

Examples of forward-looking statements used in this announcement include use of the words 'may', 'could', 'believes', 'estimates', 'targets', 'expects', or 'intends' and other similar words that involve risks and uncertainties. These statements are based on an assessment of present economic and operating conditions, and on a number of assumptions regarding future events and actions that, as at the date of announcement, are expected to take place.

Actual values, results, interpretations or events may be materially different to those expressed or implied in this announcement. Given these uncertainties, recipients are cautioned not to place reliance on forward-looking statements in the announcement as they speak only at the date of issue of this announcement. Subject to any continuing obligations under applicable law and the ASX Listing Rules, St George does not undertake any obligation to update or revise any information or any of the forward-looking statements in this announcement or any changes in events, conditions or circumstances on which any such forward-looking statement is based.

This announcement has been prepared by St George Mining Limited. The document contains background information about St George Mining Limited current at the date of this announcement.

The announcement is in summary form and does not purport to be all inclusive or complete. Recipients should not rely upon it as advice for investment purposes, as it does not take into account your investment objectives, financial position or needs. These factors should be considered, with or without professional advice, when deciding if an investment is appropriate.

The announcement is for information purposes only. Neither this announcement nor the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in any jurisdiction. The announcement may not be distributed in any jurisdiction except in accordance with the legal requirements applicable in such jurisdiction. Recipients should inform themselves of the restrictions that apply to their own jurisdiction as a failure to do so may result in a violation of securities laws in such jurisdiction.

This announcement does not constitute investment advice and has been prepared without taking into account the recipient's investment objectives, financial circumstances or particular needs and the opinions and recommendations in this announcement are not intended to represent recommendations of particular investments to particular persons.

Recipients should seek professional advice when deciding if an investment is appropriate. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments. To the extent permitted by law, no responsibility for any loss arising in any way (including by way of negligence) from anyone acting or refraining from acting as a result of this material is accepted by St George Mining Limited (including any of its related bodies corporate), its officers, employees, agents and advisers.