

6 December 2023

# HIGH-GRADE RARE EARTHS DISCOVERY AT DESTINY PROJECT, WESTERN AUSTRALIA

REE mineralisation – up to 5,125ppm TREO – hosted in near-surface clay zone confirmed by assays from the maiden drill programme at the Destiny Project

### **HIGHLIGHTS**

- Thick zones of high-grade Total Rare Earth Oxide (TREO) up to 42m thick intersected at the Destiny Project (previously called the Woolgangie Project)
- REE mineralisation is hosted in a thick, near-surface clay zone confirmed by drilling over a 7km-long strike with mineralisation open in all directions and less than 10% of the target area tested
- Significant assay results include:
  - WGAC0001: 8m @ 1,673ppm TREO, 342ppm MREO from 24m
  - WGAC0026: 30m @ 1,885ppm TREO, 399ppm MREO from 20m, including
     6m @ 3,578ppm TREO, 755ppm MREO from 32m, and including
     2m @ 5,125ppm TREO, 1,199ppm MREO from 32m
  - WGAC0030: 42m @ 1,832ppm TREO, 351ppm MREO from 12m, including
     14m @ 2,622ppm TREO, 515ppm MREO from 38m
  - ◆ WGAC0100: 29m @ 1,042ppm TREO, 200ppm MREO from 14m
- High-value Magnetic Rare Earth Oxides (MREO) such as neodymium and praseodymium needed for magnets used in electric vehicle motors – comprise a high percentage of TREO; 19% on average across all drill holes
- Heavy Rare Earth Oxides (HREO) comprise 17% of TREO based on the average across all drill holes
- The numerous thick, high-grade REE intercepts in the widely spaced maiden 61 air-core drill programme confirm the prospectivity for mineralisation of significant scale – and yet to be constrained
- Destiny Project comprises a dominant landholding of 3,350 sq km in an underexplored region of the Coolgardie Mineral Field and takes in approx. 90km of the Ida Fault zone
- In addition to the REE prospectivity at the Destiny Project, St George is advancing hardrock lithium exploration targets; field mapping and sampling of pegmatites is underway in an area adjacent to the Spargos Project of Neometals (ASX: NMT), where spodumene occurrences have been reported<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> See ASX Release by Neometals dated 13 November 2023 'Neometals Discovers Spodumene bearing Pegmatite at Spargos'



St George Mining Limited (**ASX: SGQ**) ("**St George**" or "**the Company**") is pleased to announce the discovery of a significant clay-hosted REE system at the Destiny Project (100% St George) in the Eastern Goldfields region of Western Australia.

St George acquired the Destiny Project, originally called Woolgangie, earlier this year and in September commenced on-the-ground exploration activities.

### John Prineas, St George Mining's Executive Chairman, said:

"These are ground-breaking results for the Company in our first-ever drill programme at the Destiny Project, with high-grade rare earths confirmed along a 7km-long strike of the Ida Fault.

"The high grades returned in the assays are very exciting. Together with the scale of the prospective geology – which may extend for more than 70km – the potential of the Project is impressive.

"Importantly, the assays show a high proportion of sought-after magnetic rare earths – a feature that could be a huge value driver for the Project.

"The flat-lying nature of the REE mineralisation and the host clay zone allow for a fairly simple follow-up exploration programme of drilling along strike as well as infill drilling. We want to be back drilling at Destiny early in 2024 to unlock the full potential of this exciting REE discovery.

"The REE project is complementary to our lithium and nickel assets, enhancing St George's position as a high-impact explorer of multiple battery metals in the Tier 1 jurisdiction of Western Australia.

"The Destiny Project covers 3,350 sq km and takes in more than 90km of the Ida fault – a regional scale crustal shear zone that is gaining increased interest as a control on major mineral deposits in Western Australia.

"The Kathleen Valley lithium deposit (156Mt @ 1.4% Li2O)<sup>2</sup> of Liontown (ASX: LTR) and the Mt Ida lithium deposit (14.6Mt @ 1.2% Li2O)<sup>3</sup> of Delta Lithium (ASX: DLI) are two major lithium deposits associated with the Ida Fault.

"We are excited to control more than 90km of the Ida Fault at our Destiny Project – and another 30km strike at our Mt Alexander Project – with advanced targets for lithium, rare earths, nickel and copper."

### HIGH-GRADE REE DISCOVERY IN MAIDEN DRILLING

St George completed a maiden drill programme at the Destiny Project during September 2023 to follow up thick intercepts of anomalous REE encountered in historical drilling in 2010 by Mincor Resources<sup>4</sup> while it was exploring for nickel sulphides.

The historical intercepts included 84m @ 470ppm Ce+La+Y from 96m (WRC016; no assays for HREO), indicating potential for significant REE mineralisation. For further details of historical exploration, see our ASX Release dated 11 September 2023 *Exploration Commences at Woolgangie*.

St George's drill programme comprised 61 air core (AC) holes for 2,145m of drilling. The area drilled covered 30 sq km and included a 7km stretch of the Ida Fault. Six drill traverses were completed with vertical drill holes generally wide-spaced and 500m apart, drilled to shallow depths up to a maximum 110m.

<sup>&</sup>lt;sup>2</sup> See Liontown Resources Limited (ASX: LTR) – Mineral Resources, Reserves and CP Statements April 2021

<sup>&</sup>lt;sup>3</sup> See Delta Lithium's ASX Release dated 3 October 2023 "Mt Ida Lithium Mineral Resource Estimate Update"

<sup>&</sup>lt;sup>4</sup> Mincor Resources ASX December Quarterly Report 2010 and GSWA open file report A90100



The programme was designed to confirm historic occurrences, test the extent of REE mineralisation and determine the base of the clay zone. Drilling also straddled the interpreted Ida fault zone to determine if deeper weathering caused by the fault would create a trap for thicker zones of REE mineralisation.

High-grade TREO (>500ppm) was intersected in 42 of the 61 drill holes, with a peak value of **2m @ 5,125ppm from 32m** downhole within a broader interval of **30m @ 1,885ppm from 20m** downhole. Significant intercepts are shown in Table 1 below.

The mineralisation in the high-grade intervals is largely homogenous, supporting the potential for further and consistent mineralisation across the clay zone.

TREO mineralisation is hosted within residual saprolitic clay horizons up to 100m thick, which sit above fresh granite and amphibolite lithologies – the likely source of the REE mineralisation.

Initial observations confirmed the thickness of REE mineralisation increased in drill holes closest to the Ida Fault – suggesting that the Ida Fault may be a trap site for accumulation of mineralisation. The Company believes this may prove to be a valuable targeting tool for further drilling.

With only 7km of the Destiny Project's 90km prospective horizon along the Ida Fault tested by drilling, the exploration upside and scale of the REE potential are substantial.

#### MREO – HIGH-VALUE MINERALISATION

Assays confirmed that the REE mineralisation includes a high proportion of MREO with an average of 19% MREO across all drilling. See Table 1 for details of MREO across the significant intercepts.

MREO – comprising Neodymium (Nd), Praseodymium (Pr), Terbium (Tb) and Dysprosium (Dy) – are highly sought-after for their use in high-strength permanent magnets. These types of magnets are critical for electric motors used in electric vehicles and have other wide applications for clean-energy solutions.

With a multi-decade transition to clean energy underway, demand for MREO is expected to increase strongly over coming years and underscore a need to secure local sources of supply.

The high proportion of MREO in the Destiny REE mineralisation is likely to be a key driver of value at the Project.

### **REE EXPLORATION AT DESTINY - NEXT STEPS**

Following the excellent results from the maiden campaign, a follow-up drill programme is being designed to further define the clay-hosted REE mineralisation. Drilling will test for potential extensions along strike from known mineralisation and include infill drilling of high-grade intercepts. This programme is planned to commence in early 2024.

Target generation and ranking is also being undertaken for additional REE targets identified within St George's extensive landholding at the Destiny Project; see Figure 1.

Initial metallurgical testing on selective drill samples is currently underway to determine the characteristics of the REE mineralisation including the extractability of mineralisation.



#### LITHIUM EXPLORATION UNDERWAY AT DESTINY

Mapping, rock-chip and soil sampling have also been initiated at the Destiny Project, where no previous systematic exploration for lithium appears to have been conducted.

A high-priority lithium target area at Destiny is located along strike to Neometal's Spargos Project, where spodumene-bearing pegmatites have been reported. Spargos is located along the Ida Fault and surrounded by the Destiny tenements on all sides; see Figure 1.

Greenstone sequences including mapped ultramafics at the contact zone with the potentially fertile Burra Monzogranite to the east of the Ida Fault present a priority target area for potential lithium mineralisation.

St George will work up the schedule for a maiden lithium drill programme at Destiny once the initial field work has been completed and results analysed.

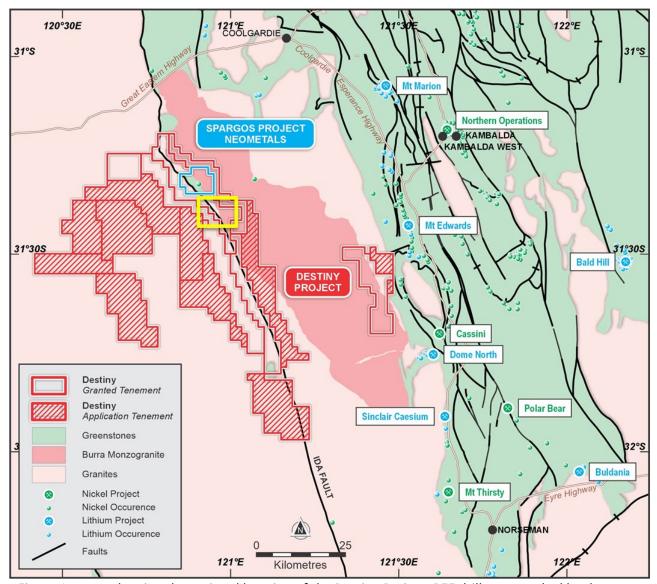


Figure 1 – map showing the regional location of the Destiny Project. REE drill area marked by the yellow polygon.



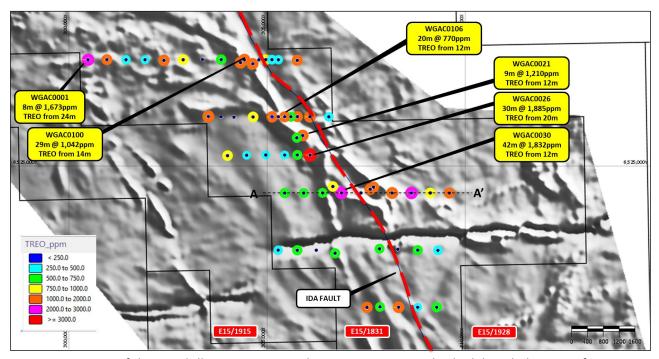


Figure 2 – map of the REE drill area at Destiny showing maximum individual downhole assays for TREO (set against project magnetics data).

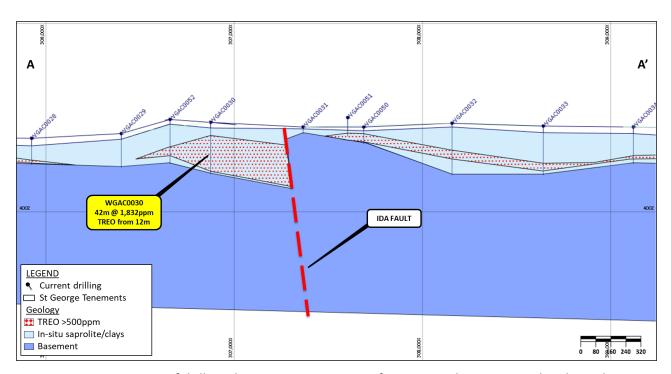


Figure 3 – cross-section of drilling showing concentration of REE mineralisation near the Ida Fault.

Note: 5x vertical exaggeration.



Table 1: Table of significant intercepts above 500ppm TREO cut-off.

HOLE	FROM	ТО	INTERVAL		TREO	MREO	HREO	MREO %
ID	(m)	(m)	(m)		(ppm)	(ppm)	(ppm)	(MREO/TREO)
WGAC0001	24	32	8	@	1673	342	131	19.9
WGAC0001	28	30	2	incl.	2465	549	201	22.3
WGAC0002	20	21	1	@	1006	180	70	17.9
WGAC0005	20	26	6	@	944	174	81	18.1
WGAC0006	16	24	8	@	828	136	61	16.4
WGAC0008	18	22	4	@	655	128	53	19.6
WGAC0008	24	30	6	@	581	122	42	21.1
WGAC0008	32	36	4	@	628	133	44	21.2
WGAC0009	20	38	18	@	1217	239	152	19.4
WGAC0012	30	36	6	@	767	129	47	16.6
WGAC0013	56	60	4	@	1336	362	231	25.4
WGAC0015	58	60	2	@	726	158	84	21.8
WGAC0015	68	70	2	@	926	218	98	23.5
WGAC0016	6	14	8	@	848	133	33	16.3
WGAC0016	16	19	3	@	950	179	101	18.8
WGAC0017	28	30	2	@	599	159	78	26.6
WGAC0018	12	20	8	@	926	169	40	18.0
WGAC0020	2	3	1	@	580	124	66	21.3
WGAC0021	12	21	9	@	1210	212	109	17.2
WGAC0022	62	64	2	@	551	64	73	11.7
WGAC0022	98	100	2	@	854	197	133	23.1
WGAC0026	20	50	30	@	1885	399	218	20.6
WGAC0026	28	30	2	incl.	3052	798	434	26.1
WGAC0026	32	38	6	incl.	3578	755	381	20.5
WGAC0026	32	34	2	incl.	5125	1199	544	23.4
WGAC0026	42	44	2	incl.	2073	403	264	19.5
WGAC0027	10	12	2	@	627	128	46	20.5
WGAC0027	14	18	4	@	610	121	47	19.9
WGAC0028	24	26	2	@	509	129	48	25.3
WGAC0029	34	36	2	@	522	108	63	20.7
WGAC0030	12	54	42	@	1832	351	183	18.9
WGAC0030	28	30	2	incl.	2415	470	201	19.5
WGAC0030	38	52	14	incl.	2622	515	311	19.7
WGAC0032	22 28	24 36	8	@	556 1191	99 224	54 93	17.9 18.9
WGAC0032	48	50	2	@	545	139	87	25.5
WGAC0032 WGAC0033	38	48	10	@	1092	192	73	18.0
WGAC0033	44	46	2	incl.	2539	428	149	16.9
WGAC0033	38	39	1	@	795	182	65	22.9
WGAC0034	28	30	2	@	1162	300	89	25.8
WGAC0033	40	41	1	@	690	156	79	22.6
WGAC0037	32	36	4	@	564	96	51	17.0
WGAC0039	38	40	2	@	626	154	76	24.6
WGAC0040	32	34	2	@	942	188	100	20.0
WGAC0041	26	28	2	@	540	108	50	20.1



WGAC0043	24	28	4	@	584	119	46	20.4
WGAC0045	24	26	2	@	534	132	305	24.7
WGAC0045	32	34	2	@	1238	369	139	29.8
WGAC0046	14	18	4	@	1266	289	124	22.7
WGAC0046	20	24	4	@	673	131	47	19.4
WGAC0046	26	28	2	@	845	199	99	23.6
WGAC0048	24	26	2	@	673	104	46	15.5
WGAC0049	20	21	1	@	502	106	44	21.0
WGAC0050	6	8	2	@	672	101	23	15.1
WGAC0050	10	18	8	@	680	128	39	19.1
WGAC0051	12	16	4	@	858	150	32	17.5
WGAC0051	18	20	2	@	1689	291	72	17.2
WGAC0052	32	34	2	@	800	188	86	23.5
WGAC0053	20	26	6	@	540	118	40	21.9
WGAC0100	14	43	29	@	1042	200	107	19.0
WGAC0101	18	29	11	@	991	205	223	21.2
WGAC0102	24	28	4	@	619	129	37	20.9
WGAC0102	32	34	2	@	818	148	43	18.1
WGAC0106	4	24	20	@	770	152	88	19.8
WGAC0107	36	42	6	@	822	158	103	19.4

Based on the intersection angle of the drilling with the modelled clay zone, downhole widths noted above are interpreted to be close to true widths.

Table 2: Drill hole details for the programme

HOLE ID	EAST	NORTH	RL	DEPTH	DIP	AZIMUTH	DH Drill Type
WGAC0001	300481	6527678	461	33	-90	360	AC
WGAC0002	300957	6527680	465	21	-90	360	AC
WGAC0003	301440	6527679	465	24	-90	360	AC
WGAC0004	301919	6527679	468	14	-90	360	AC
WGAC0005	302397	6527663	473	26	-90	360	AC
WGAC0006	302882	6527679	476	24	-90	360	AC
WGAC0007	303369	6527683	481	16	-90	360	AC
WGAC0008	303842	6527681	484	36	-90	360	AC
WGAC0009	304330	6527604	487	39	-90	360	AC
WGAC0010	304792	6527676	491	35	-90	360	AC
WGAC0011	305284	6527678	490	35	-90	360	AC
WGAC0012	305760	6527663	494	36	-90	360	AC
WGAC0013	303518	6526248	497	60	-90	360	AC
WGAC0014	304163	6526234	504	53	-90	360	AC
WGAC0015	304646	6526236	501	75	-90	360	AC
WGAC0016	305125	6526734	500	19	-90	360	AC
WGAC0017	305601	6526241	501	40	-90	360	AC
WGAC0018	306080	6526240	500	20	-90	360	AC
WGAC0019	306557	6526239	498	30	-90	360	AC
WGAC0020	305750	6525713	498	3	-90	360	AC



WGAC0021	305900	6525769	496	21	-90	360	AC
WGAC0022	304002	6525261	502	110	-90	360	AC
WGAC0023	304484	6525270	499	40	-90	360	AC
WGAC0024	305443	6525278	494	41	-90	360	AC
WGAC0025	304965	6525278	496	9	-90	360	AC
WGAC0026	306083	6525277	486	50	-90	360	AC
WGAC0027	305444	6524318	479	27	-90	360	AC
WGAC0028	305924	6524320	478	28	-90	360	AC
WGAC0029	306400	6524323	483	36	-90	360	AC
WGAC0030	307366	6524322	495	55	-90	360	AC
WGAC0031	305760	6525279	490	7	-90	360	AC
WGAC0032	308157	6524319	494	55	-90	360	AC
WGAC0033	308642	6524318	491	52	-90	360	AC
WGAC0034	309120	6524322	490	39	-90	360	AC
WGAC0035	309601	6524321	488	39	-90	360	AC
WGAC0036	305280	6522879	480	35	-90	360	AC
WGAC0037	305762	6522877	470	41	-90	360	AC
WGAC0038	307366	6524322	495	8	-90	360	AC
WGAC0039	306241	6522878	469	40	-90	360	AC
WGAC0040	306717	6522801	468	73	-90	360	AC
WGAC0041	307198	6522879	477	31	-90	360	AC
WGAC0042	307838	6522915	484	18	-90	360	AC
WGAC0043	308801	6522879	477	35	-90	360	AC
WGAC0044	309312	6522874	474	50	-90	360	AC
WGAC0045	307523	6521436	465	62	-90	360	AC
WGAC0046	308318	6521441	461	47	-90	360	AC
WGAC0047	308799	6521441	463	25	-90	360	AC
WGAC0048	309281	6521440	465	31	-90	360	AC
WGAC0049	307848	6521449	464	21	-90	360	AC
WGAC0050	305922	6522579	468	18	-90	360	AC
WGAC0051	307691	6524472	500	20	-90	360	AC
WGAC0052	307602	6524415	498	47	-90	360	AC
WGAC0053	306659	6524483	489	68	-90	360	AC
WGAC0100	304427	6527679	489	43	-90	360	AC
WGAC0101	304638	6527576	492	35	-90	360	AC
WGAC0102	304963	6527680	491	39	-90	360	AC
WGAC0103	305123	6527681	491	38	-90	360	AC
WGAC0104	303838	6526239	502	3	-90	360	AC
WGAC0105	305284	6526239	502	3	-90	360	AC
WGAC0106	305443	6526240	503	24	-90	360	AC
WGAC0107	305766	6526243	502	42	-90	360	AC

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



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### **Competent Person Statement:**

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves for the Mt Alexander Project is based on information compiled by Mr Dave Mahon, a Competent Person who is a Member of The Australasian Institute of Geoscientists. Mr Mahon is employed by St George Mining Limited to provide technical advice on mineral projects, and he holds performance rights issued by the Company.

Mr Mahon has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Mahon consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### **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.

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# The following section is provided for compliance with requirements for the reporting of exploration results under the JORC Code, 2012 Edition.

# **Section 1 Sampling Techniques and Data**

(Criteria in this section apply to all succeeding sections)

Criteria	JORC Code explanation	Commentary
Sampling techniques	Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.	AC Sampling: All samples from the AC drilling collected through a cyclone and are taken as 1m samples and placed into 1m interval sample piles. AC drilling was sampled using a combination of 1m and 2m composites via spear method. Samples were then collected in a numbered calico bag for laboratory assay.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	AC Sampling: Samples are taken on a one metre basis and collected using uniquely numbered calico bags. The cyclone is cleaned with compressed air after hole unless wet sample or clays are encountered then the cyclone is opened and cleaned manually and with the aid of a compressed air gun. A blank, duplicate and standard sample is inserted at a rate of 1:50.
		Geological logging of AC chips is completed at site with representative chips being stored in drill chip trays. Downhole surveys were not conducted and all holes were drilled at and dip of -90 degrees.
		The drill-hole collar locations are recorded using a hand-held GPS, which has an accuracy of +/- 5m deemed as sufficient for the stage of exploration.
	Aspects of the determination of mineralisation that are Material to the Public Report.	AC Sampling: A combination of 1m and 2m composite sample is taken from the bulk sample of AC chips that may weigh in excess of 40 kg. Each sample collected for assay typically weighs 2-3kg, and once dried, is prepared for the laboratory.
	In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse	All samples were sent to Labwest Laboratories and assayed for 62 Elements suites go through the following two analytical methods:
	circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	Other elements will be analysed using an acid digest and an ICP finish. These elements are: Ag, Al, Ba, K, Bi, Ca, Cd, Ce, Y, Yb, La, Nd, Pr, Sm, Tb, Dy, Li, Cs, Ta, Sn, Be, As, Cu, S, Co, Cr, Er, Eu, Fe, Ga, Gd, Ge, Hf, Hg, Ho, In, Lu, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Pt, Rb, Re, Sb, Sc, Se, Sr, Te, Th, Ti, Tl, Tm, U, V, W, Zn & Zr. The sample is digested with nitric, hydrochloric, hydrofluoric and perchloric acids to effect as near to total solubility of the sample as possible. The sample is then analysed using ICP-OES or ICP-MS.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diametre, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	AC Drilling AC drilling was used to obtain 1-metre samples that were passed through a cyclone and collected in a bucket which was then emptied on the ground.

Criteria	JORC Code explanation	Commentary			
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	AC Sampling: RC samples are visually checked for recovery, moisture and contamination. Geological logging is completed at site with representative RC chips stored in chip trays.			
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	AC Sampling: Samples are collected in a bucket and put into 1m piles on the ground. Geological logging of AC chips is completed at site with representative chips being stored in drill chip trays.			
	Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.	To date, no sample recovery issues have yet been identified that would impact on potential sample bias in the soil profile or sampling methods.			
Logging	Whether core and chip samples have been geologically and geotechnically	Each sample is recorded for the lithology, type and nature of the soil. The surface topography and type is recorded at the sample location.			
	logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.	Logging of samples records lithology, mineralogy, mineralisation, structures (core only), weathering, colour and other noticeable features. Chips were photographed in both dry and wet form.			
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	The logging is both qualitive and quantitative in nature, with sample recovery and volume being recorded,			
	The total length and percentage of the relevant intersections logged.	All drill holes are geologically logged in full and selective samples are collected by the field XRF unit. The data relating to the elements analysed is used to determine further information regarding the detailed rock composition.			
Sub-sampling techniques and sample preparation	If core, whether cut or sawn and whether quarter, half or all core taken.	N/a			
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	AC samples are collected in dry form. Samples are collected using spear form sample piles Geological logging of AC chips is completed at site with representative chips being stored in drill chip trays.			
	For all sample types, the nature,	AC Sampling: Sample preparation for AC chips follows a standard protocol.			
	quality and appropriateness of the sample preparation technique.	The entire sample is pulverised to 75 $\mu$ m using LM5 pulverising mills. Samples are dried, crushed and pulverized to produce a homogenous representative sub-sample for analysis. A grind quality target of 90% passing 75 $\mu$ m is used.			
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Quality control procedures include submission of Certified Reference Materials (standards), duplicates and blanks with each sample batch. QAQC results are routinely reviewed to identify and resolve any issues.			
		AC Sampling: Field QC procedures maximise representivity of RC samples and involve the use of certified reference material as assay standards, along with blanks. No duplicates were taken during the current AC programme.			
	Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.	No duplicates were taken during the current AC programme.			

Criteria	JORC Code explanation	Commentary				
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are mineralisation and as	considered to be appropriate sociated geology based on: to ickness and consistency of the social control of th	he style of mineralisation		
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	The assay method and detection limits are appropriate for analysis of the elements required.				
	For geophysical tools, spectrometres, handheld XRF instruments, etc, the parametres used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation,	provide an indicative taken per sample. The	ument (Olympus Innov-X Spec assay of the geochemical sam e instruments are serviced and of the XRF instrument using	ple onsite. One reading is I calibrated at least once a		
	etc.		ults are only used for prelimina compositions, prior to the red y.			
	adopted (eg standards, blanks, duplicates, external laboratory checks)		Laboratory QAQC involves the use of internal lab standards using certified reference material (CRMs), blanks and pulp duplicates as part of in-house procedures. The Company also submits a suite of CRMs, blanks and selects appropriate samples for duplicates.			
accuracy (ie lack of bias) and precision have been established.		Sample preparation checks for fineness are performed by the laboratory to ensure the grind size of 90% passing 75 $\mu$ m is being attained.				
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Significant intersections and assays are verified by the Company's Technical Director and Consulting Field Geologist.				
	The use of twinned holes.	Twinned holes have been designed using alternative drill methods in order to correlate assay figures to historic RC drilling				
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Primary data is captured onto a laptop using acQuire software and includes geological logging, sample data and QA/QC information. This data, together with the assay data, is entered into the St George Mining central SQL database which is managed by external consultants.				
	Discuss any adjustment to assay data.	<ul> <li>Rare earth element analysis was originally reported in elemental form but has been converted to relevant oxide concentrations as per the industry standard:</li> <li>TREO (Total Rare Earth Oxides) = La2O3 + CeO2 + Pr6O11 + Nd2O3 + Sm2O3 + Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 + Lu2O3 + Ho2O3 + Er2O3 + Y2O3 + Yb2O3</li> <li>MREO (Magnetic Rare Earth Oxides) = Pr6O11+ Nd2O3+ Tb4O7+ Dy2O3 + HREO (Magnetic Rare Earth Oxides) = Eu2O3 + Gd2O3 + Tb4O7 + Dy2O3 +</li> </ul>				
		Lu2O3 + Ho2O3 + Er2O3 + Y2O3 + Yb2O3  Multielement results (REE) are converted to stoichiometric oxide (REO) using the following element-to-oxide conversion factors:				
		Element	Conversion Factor	Oxide		
		Ce ppm	1.228	CeO2 ppm		
		La ppm	1.173	La2O3 ppm		
		Y ppm	1.27	Y2O3 ppm		
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Criteria	JORC Code explanation	Commentary			
		Er ppm	1.143	Er2O3 ppm	
		Eu ppm	1.158	Eu2O3 ppm	
		Gd ppm	1.153	Gd2O3 ppm	
		Ho ppm	1.146	Ho2O3 ppm	
		Lu ppm	1.137	Lu2O3 ppm	
		Nd ppm	1.166	Nd2O3 ppm	
		Pr ppm	1.208	Pr6O11 ppm	
		Sm ppm	1.16	Sm2O3 ppm	
		Tb ppm	1.176	Tb4O7 ppm	
		Tm ppm	1.142	Tm2O3 ppm	
		Yb ppm	1.139	Yb2O3 ppm	
Location of data points	Accuracy and quality of surveys used to locate drill holes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.  Specification of the grid system used.	expected accuracy of considered adequate f	,	andheld GPS system with an ing and elevation. This is the surveys.	
	Specification of the grid system doed.	. ne gna system useu i.	. 55/15 1, MON 2011C 51.		
	Quality and adequacy of topographic control.	location across the pro	n acquired using handheld ( ject, including drill collars, a ic surface has been created	and entered into the central	
Data spacing and distribution	Data spacing for reporting of Exploration Results.	The spacing and distribution of holes is not relevant to the drilling programs which are at the exploration stage rather than definition drilling.			
	Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.	The completed drilling at the Project is not sufficient to establish the degree of geological and grade continuity to support the definition of Mineral Resource and Reserves and the classifications applied under the 2012 JORC code.			
	Whether sample compositing has been applied.	AC sample compositing occurred over 1m to 2m intervals, using a spear on 2 sample piles and combined in a calico bag for a combined weight approximately 2-3kg			
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	perpendicular orientat	ion (unless otherwise stated be locally variable and any re	mineralised zones at a near d). However, the orientation elationship to mineralisation	
	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	No orientation based s	ampling bias has been ident	tified in the data to date.	
Sample security	The measures taken to ensure sample security.	certified assay laborate stored on secure sites or a competent agent Transport logs have be	ory for subsampling and ass and delivered to the assay t. When in transit, they ar	ntil samples pass to a duly saying. The sample bags are laboratory by the Company e kept in locked premises. ess of samples. The chain of e assay laboratory.	

Criteria	JORC Code explanation	Commentary
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	Sampling techniques and procedures are regularly reviewed internally, as is the data.

# **Section 2 Reporting of Exploration Results**

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	The Destiny Project is comprised of 7 granted Exploration Licences (E15/1798, E15/1915, E15/1928, E15/1899, E15/1831, E15/1834 and E15/1898). All are 100% owned by St George Mining Ltd.  No environmentally sensitive sites have been identified on the tenements.  No known registered Heritage sites have been identified within the tenements.  All 7 tenements are in good standing with no known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Exploration in the broader Coolgardie region has historically targeted gold mineralisation form circa 1880s.  These where surface and orogenic style gold deposits.  More recently Mincor has conducted exploration targeting nickel and base metals in the 2000's including over the existing live tenements.  Since then, no major exploration has taken place within the region.  No previous exploration has targeted clay hosted rare-earth element and pegmatite hosted lithium deposits within the region.
Geology	Deposit type, geological setting and style of mineralization.	St George is targeting clay hosted rare earth element deposits and pegmatite hosted Lithium deposits at the Destiny project.  This is based on geophysical and geological interpretations of recently acquired modern datasets.  The project lies within the Archaean age granite -greenstone terrane within the Coolgardie mineral district. The target greenstone stratigraphy within this domain is generally trending NNW and straddles the dominant Ida fault zone of the same orientation.  These greenstone sequences are considered prospective for gold, nickel, REE, lithium and copper.
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this</li> </ul>	Drill hole collar locations are shown in the maps and tables included in the body of the relevant ASX releases

Criteria	JORC Code explanation	Commentary
	exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggregation methods	<ul> <li>In reporting Exploration         Results, weighting averaging         techniques, maximum and/or         minimum grade truncations         (eg cutting of high grades)         and cut-off grades are usually         Material and should be         stated.</li> <li>Where aggregate intercepts         incorporate short lengths of         high grade results and longer         lengths of low grade results,         the procedure used for such         aggregation should be stated         and some typical examples of         such aggregations should be         shown in detail.</li> <li>The assumptions used for any         reporting of metal equivalent         values should be clearly         stated.</li> </ul>	Reported assay intersections are length and density weighted. Significant intersections are determined using both qualitative (i.e. geological logging) and quantitative (i.e. lower cut-off) methods.  For high grade intersection of REEs, the nominal lower cut-off is 750ppm TREO.  Any high-grade intervals internal to broader zones of mineralisation are reported as included intervals.  Any mineralisation with (usually) >2,000ppm TREO are grouped with the reported intervals for calculating significant intersections and the mineralisation is reported as an including intersection.
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	Assay intersections are reported as down hole lengths. Drill holes are planned as perpendicular as possible to intersect the target litholigies and geological targets so downhole lengths are usually interpreted to be near true width.
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	A prospect location map, cross section and long section are shown in the body of relevant ASX Releases.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Reports on recent exploration can be found in ASX Releases that are available on our website at www.stgm.com.au:  The exploration results reported are representative of the mineralisation style with grades and/or widths reported in a consistent manner.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	All material or meaningful data collected has been reported
Further work	The nature and scale of planned further work (eg	A discussion of further exploration work underway is contained in the body of recent ASX Releases.
	tests for lateral extensions or depth extensions or large-scale step-out drilling).  • Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Further exploration will be planned based on ongoing drill results, geophysical surveys and geological assessment of prospectivity.