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28 February 2024
ASX: GRR

GRANGE RESOURCES LIMITED

Australia's most experienced magnetite producer

Annual Resource & Reserve Statement – December 2023

Maiden underground Ore Reserve declared for Savage River Mine

Savage River Operations, Tasmania

HIGHLIGHTS

- Maiden underground Ore Reserve declared of 64 million tonnes @ 45% DTR.
- Ore Reserve has increased by 12.5 million tonnes to 109 million tonnes, compared with the December 2022 Mineral Resource and Ore Reserve Statement (31-March-2023).
- The Underground Ore Reserve will be mined by block and sub-level caving methods and are described in the North Pit Underground Definitive Feasibility Study (NPUG DFS).
- Further details specific to the NPUG DFS are provided in the accompanying NPUG DFS results release dated 27 February 2024.
- Total Mineral Resources are 472 million tonnes @ 44% DTR.



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The Mineral Resource estimate as at 31-December-2023 consists of 471.8 million tonnes at 44.4% DTR[1] (above a cut-off of 15% DTR) as detailed in Table 1.

The Ore Reserve estimate consists of 109.2 million tonnes at 44.6% DTR and includes ore to be mined by opencut methods (above a cut-off of 15% DTR) and by underground methods (above a cut-off of 28%-30%). The Ore Reserve estimate is detailed in Table 2.

The Mineral Resource estimate reported in Table 1 is inclusive of the Ore Reserve estimate reported in Table 2.

Table 1 Savage River Mineral Resource Estimate – 31 December 2023

	Measured Resources	Indicated Resources	Inferred Resources	TOTAL Resources
Tonnes (Mt)	169.1	161.2	141.5	**471.8**
DTR (%)	52.0	42.6	37.5	**44.4**
Fe (%)	67.9	68.3	68.9	**68.3**
Ni (%)	0.04	0.05	0.03	**0.04**
TiO2 (%)	0.82	0.67	0.63	**0.71**
MgO (%)	1.80	1.31	1.13	**1.43**
P (%)	0.005	0.007	0.007	**0.007**
V (%)	0.36	0.35	0.35	**0.35**
S (%)	0.07	0.10	0.08	**0.08**

- Elemental compositions were measured from Davis Tube Concentrate.
- Above a cut-off grade of 15% DTR
- Stockpiles were included in this summary table and are itemised separately in tables of individual mining pits and aggregated stockpiles.

[1] DTR (Davis Tube Recovery) is the percentage of material recovered using a laboratory scale version of the ore beneficiation process that separates magnetic from non-magnetic fractions. It is the most appropriate assay technique for determination of magnetite recovery from ore at Savage River.



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Table 2 Savage River Ore Reserve Estimate – 31 December 2023

	Proved Reserves	Probable Reserves	TOTAL Reserves
Tonnes (Mt)	34.7	74.5	**109.2**
DTR (%)[1]	45.7	44.1	**44.6**
Fe (%)	68.4	67.7	**67.9**
Ni (%)	0.04	0.03	**0.03**
TiO_2 (%)	0.68	0.91	**0.84**
MgO (%)	1.35	1.93	**1.75**
P (%)	0.01	0.00	**0.01**
V (%)	0.40	0.36	**0.37**
S (%)	0.08	0.05	**0.06**

- Elemental compositions were measured from Davis Tube Concentrate.
- Above a cut-off grade of 15% DTR for Opencut Reserves and 28%-30% DTR for Underground Reserves
- Stockpiles are included in this summary table and are itemised separately in tables of individual mining pits and aggregated stockpiles.

The Mineral Resource and Ore Reserve have been estimated by the company's technical staff assisted by external consultants and are reported in accordance with the guidelines of the JORC Code (2012 edition).

Independent technical reviews were performed by AMC Consultants Pty Ltd (AMC) in 2019, 2020 and 2023 regarding the resource estimation process, and the reserve estimation of Centre Pit and North Pit Underground. AMC considered, based on the available information, estimates have been completed using accepted practice.



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A comparison of Grange's Mineral Resources and Ore Reserves since last reported is presented in Table 3 and Table 4.

Table 3 Comparison of Mineral Resource to previous report

	As at December 2022		As at December 2023	
	Tonnes (Mt)	Grade % DTR[1]	Tonnes (Mt)	Grade % DTR[1]
Measured	173.0	51.5	169.1	52.0
Indicated	172.6	41.8	161.2	42.6
Inferred	139.4	37.4	141.5	37.5
Total	**485.0**	**44.5**	**471.8**	**44.4**

Mineral Resources have reduced by 13.2 million tonnes. The reduction is a result of mining depletion and updated assessment of a portion of the Western Lens. This portion no longer meets the requirements of Reasonable Prospects of Eventual Economic Extraction (RPEEE) due the influence of the block cave and its future recoverability.

Table 4 Comparison of Ore Reserves to previous report

	As at December 2022		As at December 2023	
	Tonnes (Mt)	Grade % DTR[1]	Tonnes (Mt)	Grade % DTR[1]
Proven	69.0	49.3	34.7	45.7
Probable	27.7	40.1	74.5	44.1
Total	**96.7**	**46.7**	**109.2**	**44.6**

Ore Reserves have increased by 12.5 million tonnes due to the inclusion of the underground Ore Reserves. Opencut Ore Reserves have reduced with a large proportion now planned to be mined from underground. This material is included in the underground Ore Reserves. All underground Ore Reserves have been classified as Probable due to the inherent mixing that occurs in caving operations and lower confidence in the dilution and recovery modifying factors.






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INTRODUCTION

This document has been prepared to summarise the Mineral Resource and Ore Reserve of Grange Resources' magnetite deposits, located at Savage River and Long Plains in Tasmania.

This statement covers the material remaining at the end of December 2023 and contains summary details on the history of Savage River, the geology of the deposit, and information used in producing Mineral Resource and Ore Reserve estimates.

LOCATION

The Savage River Mine and concentrator plant are located approximately 100km southwest by sealed road from Burnie. The pelletising plant and dedicated port facilities at Port Latta are located 70km northwest by sealed road from Burnie (Figure 2).

Local topography surrounding the mine is rugged, with incised valleys and steep hills. The west flowing Savage River dissects the deposit. Regional vegetation includes undisturbed rain forest with the mine area comprising wet eucalypt, acacia, and open heath land. Climate is wet temperate with an average annual rainfall of 1,950mm and mean monthly temperatures ranging from 3-19°C.



Figure 1 Savage River Project Location



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TENURE

Grange Resources operates under the conditions of Mining Lease 2M/2001 which consolidates and expands the previous lease 11M/97. This lease stands for 30 years from 2001, encompassing a total of 4,975 hectares.

The mining lease encompasses the Savage River Mine and concentrator, and the pelletising plant, wharf and shipping facilities located on the northwest coast at Port Latta. The operation and facilities were previously held under Mining Lease 44M/66 when Pickands Mather & Co International (PMI) were the managers of the project until 1997.

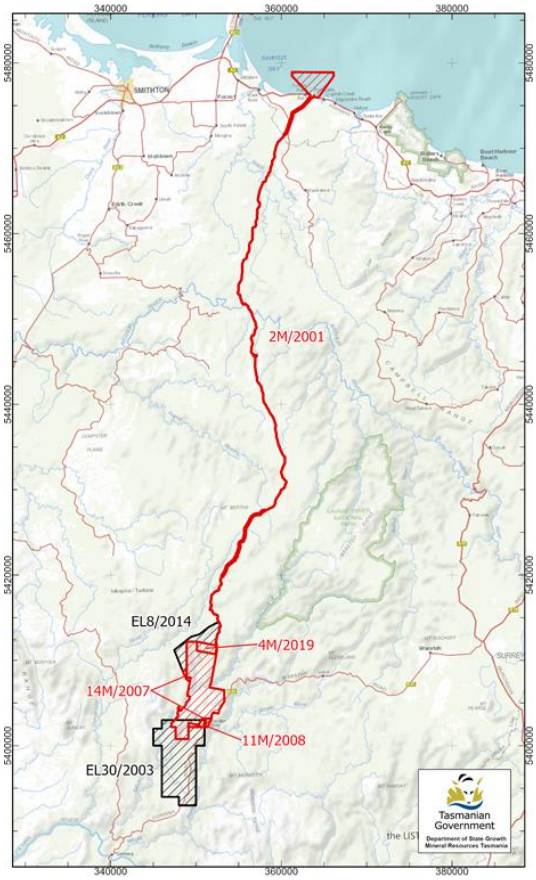


Figure 2 Tenements as at Dec 2023

Mining Lease 14M/2007 was granted in May 2008 to extend the coverage of 2M/2001 for a total of 91 hectares. Another lease, 11M/2008 was granted in August 2009 to extend coverage by a further 108 hectares. This lease was renewed 18 Dec 2017 and expires in 2031. 4M/2019 (235Ha) was granted 17 August 2020 and expires 7/10/2031.

Exploration licence EL30/2003 was granted in February 2010. The current 2-year tenure period expires on the 18 June 2025 is renewable via a successful extension of term application. Grange is currently on its eighth extension of term and an application for a further extension will be made prior to the renewal date. This license covers the entire Long Plains deposit. The lease comprises 38 sq km and adjoins 2M/2001 to the north. EL30/2003 covers all potential mining infrastructure sites and haulage routes envisaged should the Long Plains magnetite deposits prove up to be economical and progress to mining.

Grange was granted an exploration licence application “Pipeline Road” shown as EL8/2014 for an 11sq km lease north of 2M-2001 in 2014 and this licence is currently on its fourth extension of term which expires on 29 July 2025. An application for a further extension for EL30-2003 and EL8-2014 will be made 3 months prior to the renewal dates in 2025.

All leases and licences previously held by Australian Bulk Minerals (ABM) were transferred to Grange Resources Tasmania following the merger in January, 2009.



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PROJECT HISTORY

Ironstone outcrops around the Savage River were first discovered by State Government surveyor C.P. Sprent in early 1887 during one of his exploration journeys through western Tasmania. The deposits were first reported as a possible source of iron ore in 1919.

Systematic exploration techniques were employed by the Australian Bureau of Mineral Resources during 1956 that included ground and airborne magnetic surveys. The largest magnetic anomaly was detected at Savage River with two smaller anomalies being detected at Long Plains and Rocky River further to the south (Figure 3).

Diamond drilling commenced during the late 1950's and into the 1960's largely by Industrial and Mining Investigations Pty Ltd (IMI).

In 1965, Savage River Mines Ltd, a joint venture of Australian, Japanese, and American interests was formed to develop the project. PMI (Pickands Mather International) developed an opencut mine, concentrator plant and township at Savage River to access the magnetite reserve. A pipeline from the concentrator plant to the pelletising plant and dedicated port facilities at Port Latta located on the northwest coast were also constructed.

Mining commenced in 1967 to supply a consortium of Japanese steel mills with 45 million tonnes of pelletised iron ore over a twenty-year period. Annual pellet production reached a maximum of 2.4 million tonnes per annum during the period.

The Savage River Project was operated for the full term of a thirty-year lease by PMI. In early 1997, PMI ceased mining activities at Savage River, transferring ownership of the Savage River Project to the Tasmanian Government on March 26, 1997.

At the end of March 1997, ABM purchased the assets of the Savage River Project from the Tasmanian Government. Following this purchase ABM, continued mining the existing pits through a series of cut-back operations, mined the previously undeveloped South Deposit and began exploration around the Long Plains area.






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During 2006 a Feasibility Study into the Mine Life Extension Project (MLEP) for Savage River was completed. The study was based on mining a total of 60.4 million tonnes (Mt) over 14 years from the North Pit mine at an average grade of 52.6% DTR for a total concentrate production of 30.1 Mt at an average rate of 2.5 million tonnes per annum (Mtpa). The MLEP was a continuation of the present mining operation based on the North Pit only and commenced mining in 2007 and concentrate production in 2009. The MLEP used conventional open pit drill and blast; with excavator/shovel and truck mining methods, coupled to the existing concentrator and pellet plant facilities. The development plan utilises existing infrastructure, technology and mining methods.

In January 2009 Grange Resources merged with ABM and has continued to operate the open pit operation and further develop the mineral assets.

In early 2019, a feasibility study was completed to recommence opencut mining in Centre Pit which proved economic. Recommencement of mining of Centre Pit subsequently started in late 2019.

In 2021, a pre-feasibility study was completed to assess the potential for developing an underground mine within the North Pit mineralisation. The study determined that underground mining was technically and economically feasible. In 2023, a definitive feasibility study (NPUG DFS) was completed which confirmed the feasibility of underground mining using a combination of block caving and sub-level caving (SLC) mining methods.



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GEOLOGY

The Savage River magnetite deposit lies within and near the eastern margin of the Proterozoic Arthur Metamorphic Complex in north-western Tasmania. This complex is exposed along a northeast-southwest trending structural corridor, the Arthur Lineament, which separates Proterozoic sedimentary rocks to the northwest from a variety of Palaeozoic rocks to the southeast.

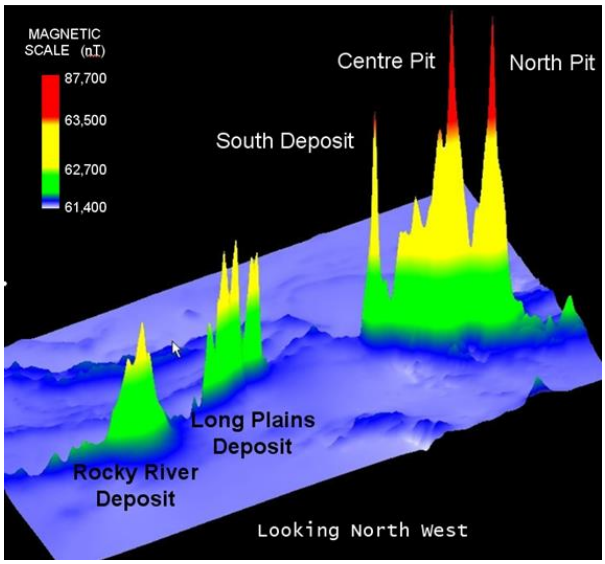


Figure 3: Savage River Regional Magnetics

The magnetite deposits at Savage River represent the largest of a series of discontinuous lenses that extend in a narrow belt for some 25 kilometres south of the Savage River Township. The deposit is subdivided into sections on the basis of areas that have been mined. The areas are referred to as North Pit, South Lens, Centre Pit, and South Deposit (Figure 3).

Magnetite ore is almost entirely enclosed within a highly sheared and strike-faulted belt of mafic and ultramafic rocks specifically serpentinite and talc-carbonate schist. The magnetite ranges in thickness from 40 to 150 metres in width and is termed the Main Ore Zone (MOZ).

Narrow (<20metre) lenses and layers also occur in the mafic sequence to the west. The mafic sequence comprises chlorite-calcite-albite schist and layered green amphibole-chlorite-albite schist.

A suite of late, strongly deformed metabasalt and metadolerite intrusive dykes occur either sub-parallel to or cut obliquely across the MOZ. Vein magnesite occurs adjacent to the MOZ with significant bodies developed in the east at South Lens and at the west in North Pit.

The magnetite ores comprise three volumetrically important groups: pyritic ores, ores associated with serpentine and talc-carbonate ores. The ore may be massive, layered, or disseminated and range from being fine-grained to coarsely crystalline. Accessory mineral phases may include talc, tremolite, actinolite, chlorite, epidote, apatite and carbonate in varying amounts. The mineral assemblages preserved at Savage River imply middle to upper green-schist facies metamorphic conditions.






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EXPLORATION, DRILLING, SAMPLING AND ANALYSIS

Exploration and resource definition over recent years at Savage River has involved dominantly diamond drilling with minor reverse circulation (RC) drilling.

There was no diamond drilling completed in 2023 on surface or underground for resource definition; orebody knowledge; geotechnical modelling and waste characterisation purposes. Two geotechnical holes were drilled as cover holes to inform potential hazards for a planned vent rise.

Regarding the drilling program, core recoveries are generally high in the ore zones at Savage River (>90%) and there are no significant core recovery issues. Drill collars are surveyed using a combination of conventional surveying (total station) and/or high resolution RTK GPS.

All samples used in resource estimation are taken from diamond drill core of either HQ or NQ size or from reverse circulation drill holes employing a 140mm face sampling hammer.

Core was half core sampled as standard practice and rarely full core sampled to confirm historic drill intercepts or for metallurgical testing. Sampled length is generally between 0.75m to 2m within lithological units to preserve volume variance and to provide sample weights of 3kg. Reverse circulation drilling was used to give uniform 1m samples by cone or riffle splitter resulting in a 3kg sample. Field quality control procedures included insertion of prepared sample standards at a rate of 1:25 and limited field duplicate samples on the RC suite of samples.

Sample preparation techniques were industry standard for magnetite ores and used the sub-sampling protocol as recommended by the Savage River Laboratory. Sample preparation was conducted at an external NATA-accredited laboratory for both core and RC chips. The subsampling process for RC was identical to that of the core except for the coarse crush stage. For drill core, the core was first analysed for bulk density by immersion in water. All mineralised core samples have had a density determination completed. The half core samples were oven dried at 110 degrees for 12 hours, then coarse crushed to minus 2mm in a Boyd crusher then split to ~3kg, crushed again to 90% passing 1.7mm and split again with a 150g sub-sample taken for pulverising to 98% passing 75 microns.

A pulp sub-sample was collected analysed at Savage River's mine lab by Davis Tube Recovery.

The primary assay technique is Davis Tube Recovery (DTR) on a 10g sample, followed by Ferrous Iron (Fe^{2+}) via Satmagan and S, total Fe, TiO_2, MgO, V, P, S and Ni via XRF on the Davis Tube Concentrate (DTC) via XRF. All techniques are considered total. DTR is the most appropriate assay technique for determination of magnetite recovery. All DTR samples were completed on the mine site using the Savage River DTR technique. This technique has been used for 50 years and is supported by pit reconciliations.

All logging and assay data is stored in a database which was validated against original log sheets. The database includes holes drilled by Savage River Mines Limited, ABM and more recent holes drilled by Grange Resources.






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GEOLOGICAL INTERPRETATION AND RESOURCE ESTIMATION

Geological controls and relationships were used to define estimation domains with mostly hard boundaries, based on sharp mineralisation contacts and grade boundaries. A nominal grade cut-off of 15%DTR is a natural grade boundary between magnetite lenses and disseminated wall-rocks. This cut-off was used to help define the mineralised envelope within which the higher-grade sub domains were interpreted. 3D wireframes were used to code the drilling intersects and select samples within each domain.

Updated Centre Pit wireframing was completed in 2023 based on the CP 2022 drilling campaign. The geology, mineralisation and surface wireframes were generated in Surpac v2023 by Grange and modified by Snowden Optiro with direction from Grange. The mineralisation wireframes are all steeply dipping and represent the ZAZM (high grade) and ZS (low grade) mineralisation for the Centre Pit South and Centre Pit North, resulting in four domains.

Variography was determined for DTR, density, and 13 minor elements and used in ordinary kriging (OK) for all elements in all domains. OK is considered the most appropriate method with respect to the observed continuity of mineralisation, spatial analysis (variography) and dimensions of the domains.

The North Pit 2022 wireframing utilised the recent drilling completed in 2022. The updated domains contained less discreet lens of internal low grade and internal waste but more low-grade and waste incorporated into the Main Ore Zone Domain (MOZ). The updated wireframes for the MOZ and Western Lens (WL) resulted in a slight increase in tonnes. Category Indicator Kriging (CIK) was run on MOZ domain to discriminate high grade (>35% DTR), low grade (35% < 15% DTR) and internal waste domains. Geologists completed a review the adjusted wireframes and resolved interpretation conflicts between MOZ and WL.

Sample data at Savage River were generally composited to 1 metre down hole length using a best fit-compositing method. Residual samples (those composite intervals for which there was less than 75% of the composite length) were considered biased and hence were not included in the estimate.

Block models were prepared for each part of the deposit using Surpac Software. Models were estimated using Ordinary Kriging for all deposits except for the Sprent resource where Inverse Distance Cubed weighting estimation techniques were applied. Geostatistical analysis, including variography studies to develop spatial estimation parameters were prepared for each of the major areas of mineralisation by Snowden Optiro Consultants. These parameters were used to assist in the classification of the resource. The estimate for Centre Pit was completed in 2023 and is used for this report.






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Mineral Resources have been classified on the basis of confidence in geological and grade continuity using the drilling density, geological model, modelled grade continuity and conditional bias measures (kriging efficiency where available). Assessment for Reasonable Prospects of Eventual Economic Extraction (RPEEE) was undertaken, and assessment was based on a review of mineable shapes by opencut or underground methods, with consideration of impacts on extraction due to planned mining activities and economic viability at historical market highs. Areas below a pit shell or from underground with a true width less than 20 metres with unlikely prospectivity for extraction were excluded.

Block model validation results show good correlation between the input data to the estimated grades. The mineralised domains have demonstrated sufficient geological and grade continuity to support the definition of a Mineral Resource, and classifications were applied in accordance with the guidelines of the JORC Code (2012 Edition).

The Centre Pit Mineral Resource has been updated since the last statement with a new geological and statistical estimation. 6 holes drilled in 2022 are included in the 2023 resource estimate and the geological domains were updated and statistically re-estimated. New intercepts are included Appendix C. The result for the Centre Pit Resource is an increase in Mineral Resource tonnes with a decrease in DTR grade. The quantum of change is not considered significant to Savage River's total Mineral Resources or Ore Reserves.

There have been no other changes over the last year to the Mineral Resource for South Deposit, Sprent or Long Plains.

Oxidised hematite mineralisation is not included in the any of the resource estimation.

Mineral Resources at the Savage River Mine including Long Plains are as at 31 December 2023. Mineral Resources are categorised in accordance with the guidelines established in the JORC Code (2012 Edition). Estimated Measured and Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the estimated Ore Reserves.

Some Mineral Resources such as, Sprent and Long Plains have not had the required level of studies completed to report any Ore Reserves associated with those deposits. They are considered to meet the Mineral Resource requirement of having reasonable prospects of future eventual economic extraction.

Typical plans and geological sections are provided in Appendix B.






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MINERAL RESOURCE ESTIMATE BY DEPOSIT

The following tables represent the Mineral Resource for each part of the deposit.

Table 5 North Pit Mineral Resources – 31 December 2023

	Measured Resources	Indicated Resources	Inferred Resources	TOTAL Resources
Tonnes (Mt)	125.8	64.5	36.1	**226.4**
DTR (%)	53.6	42.3	37.1	**47.7**
Fe (%)	67.8	67.8	68.0	**67.8**
Ni (%)	0.03	0.04	0.04	**0.03**
TiO_2 (%)	0.95	0.93	0.92	**0.94**
MgO (%)	2.01	1.64	1.69	**1.85**
P (%)	0.004	0.005	0.004	**0.005**
V (%)	0.35	0.34	0.33	**0.34**
S (%)	0.04	0.07	0.06	**0.05**

- Elemental compositions were measured from Davis Tube Concentrate.
- Mineral resources are reported above a cut-off grade of 15% DTR.

Table 6 South Deposit Mineral Resources – 31 December 2023

	Measured Resources	Indicated Resources	Inferred Resources	TOTAL Resources
Tonnes (Mt)	2.0	3.8	5.2	**11.0**
DTR (%)	40.3	47.9	49.1	**47.1**
Fe (%)	67.0	67.7	67.7	**67.6**
Ni (%)	0.07	0.07	0.06	**0.07**
TiO_2 (%)	0.57	0.64	0.67	**0.64**
MgO (%)	2.03	1.70	1.51	**1.67**
P (%)	0.010	0.010	0.010	**0.010**
V (%)	0.27	0.28	0.28	**0.28**
S (%)	0.13	0.15	0.15	**0.15**

- Elemental compositions were measured from Davis Tube Concentrate.
- Mineral resources are reported above a cut-off grade of 15% DTR.



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Table 7 Centre Pit Mineral Resources – 31 December 2023

	Measured Resources	Indicated Resources	Inferred Resources	TOTAL Resources
Tonnes (Mt)	38.8	65.4	17.7	**121.9**
DTR (%)	48.9	45.6	43.3	**46.3**
Fe (%)	68.3	68.4	68.5	**68.4**
Ni (%)	0.05	0.05	0.04	**0.05**
TiO_2 (%)	0.43	0.45	0.41	**0.43**
MgO (%)	1.17	1.14	0.89	**1.11**
P (%)	0.009	0.010	0.010	**0.010**
V (%)	0.39	0.37	0.33	**0.37**
S (%)	0.15	0.15	0.14	**0.15**

- Elemental compositions were measured from Davis Tube Concentrate.
- Mineral resources are reported above a cut-off grade of 15% DTR.

Table 8 Sprent Mineral Resources – 31 December 2023

	Measured Resources	Indicated Resources	Inferred Resources	TOTAL Resources
Tonnes (Mt)	0.0	2.1	0.3	**2.4**
DTR (%)	-	51.1	49.8	**51.0**
Fe (%)	-	69.6	70.8	**69.8**
Ni (%)	-	0.06	0.02	**0.06**
TiO_2 (%)	-	0.50	0.18	**0.46**
MgO (%)	-	0.75	0.47	**0.72**
P (%)	-	0.008	0.010	**0.008**
V (%)	-	0.43	0.46	**0.44**
S (%)	-	0.27	0.06	**0.24**

- Elemental compositions were measured from Davis Tube Concentrate.
- Mineral resources are reported above a cut-off grade of 15% DTR.






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Table 9 Long Plain Mineral Resources – 31 December 2023

	Measured Resources	Indicated Resources	Inferred Resources	TOTAL Resources
Tonnes (Mt)	0.0	25.4	82.2	**107.6**
DTR (%)	-	33.9	35.6	**35.2**
Fe (%)	-	68.9	69.4	**69.3**
Ni (%)	-	0.05	0.03	**0.03**
TiO_2 (%)	-	0.63	0.56	**0.57**
MgO (%)	-	0.91	0.92	**0.91**
P (%)	-	0.004	0.007	**0.007**
V (%)	-	0.33	0.36	**0.35**
S (%)	-	0.05	0.07	**0.07**

- Elemental compositions were measured from Davis Tube Concentrate.
- Mineral resources are reported above a cut-off grade of 15% DTR.

Table 10 Stockpile Mineral Resources – 31 December 2023

	Measured Resources
Tonnes (Mt)	2.5
DTR (%)	30.7
Fe (%)	69.3
Ni (%)	0.08
TiO2 (%)	0.49
MgO (%)	0.87
P (%)	0.006
V (%)	0.40
S (%)	0.13

- Elemental compositions were measured from Davis Tube Concentrate.



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Table 11 Total Mineral Resources Savage River 31 December 2023

	Measured Resources	Indicated Resources	Inferred Resources	TOTAL Resources
Tonnes (Mt)	169.1	161.2	141.5	**471.8**
DTR (%)	52.0	42.6	37.5	**44.4**
Fe (%)	67.9	68.3	68.9	**68.3**
Ni (%)	0.04	0.05	0.03	**0.04**
TiO2 (%)	0.82	0.67	0.63	**0.71**
MgO (%)	1.80	1.31	1.13	**1.43**
P (%)	0.005	0.007	0.007	**0.007**
V (%)	0.36	0.35	0.35	**0.35**
S (%)	0.07	0.10	0.08	**0.08**

- Elemental compositions were measured from Davis Tube Concentrate.
- Mineral resources are reported above a cut-off grade of 15% DTR.

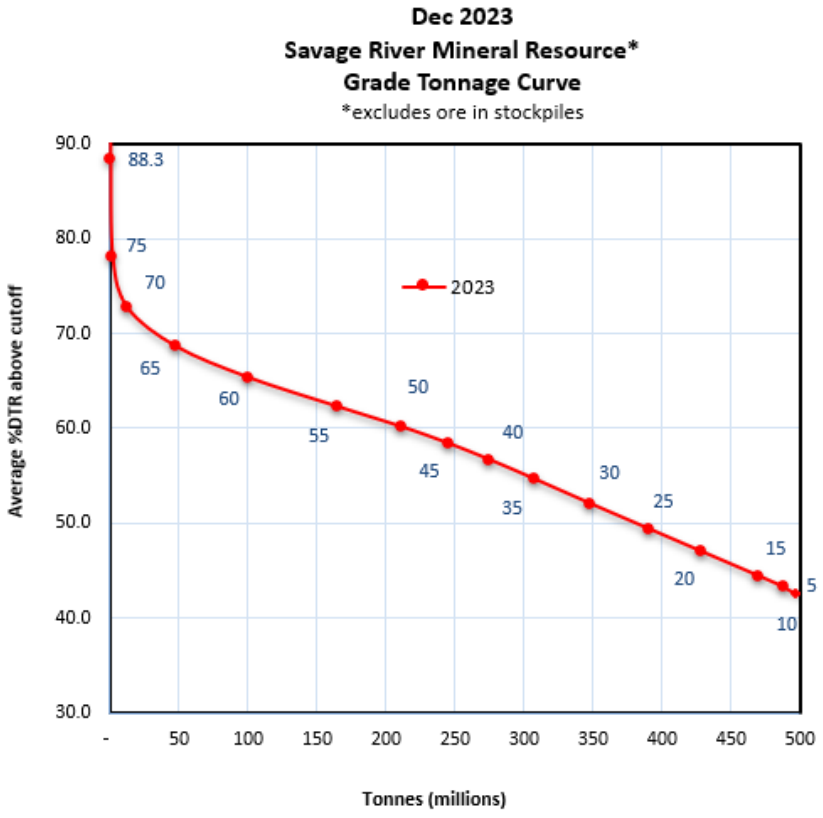


Figure 4 Total Resources Grade Tonnage Curve 31 December 2023






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ORE RESERVES

The Ore Reserves for Savage River Mine are reported as at 31 December 2023 and are derived through the application of modifying factors from the December 2023 Measured and Indicated Mineral Resources. The Ore Reserves are categorised into Proved and Probable categories in accordance with the guidelines established in the JORC Code (2012 Edition).

The Ore Reserve is to be mined by opencut methods from North Pit and the Centre Pit deposits, and by underground methods from the North Pit deposit from the zone below and immediately adjacent the North Pit Opencut.

Typical plans and sections showing the open cut and planned underground mine are provided in Appendix B

Opencut Ore Reserve

The Centre Pit Opencut Ore Reserve is based on an updated feasibility study completed in 2019 and on subsequently studies carried out as part of the 2024 Life-of-Mine Planning and Budgeting Process.

The North Pit Opencut Ore Reserve was based initially on a feasibility study completed in September 2006, and on subsequent studies carried out prior to, and during, the 2024 Life-of-Mine Planning and Budgeting Process. The North Pit Opencut Ore Reserve is contained within an opencut designed to ensure a practical interface between the opencut and the proposed North Pit underground mine.

The Geovia Whittle optimisation process was used to identify the portion of the Mineral Resource suitable for opencut mining, and to develop optimised opencut shells. Detailed opencut designs and schedules were then developed, guided by the optimised shells and the application of appropriate modifying factors.

The modifying factors include mining and recovery factors to account for the conventional bulk mining method used. Mining is carried out using hydraulic face shovels, excavators, dump trucks, and conventional drill and blast processes. The factors are based on reconciliations calculated periodically for the different areas of the deposit. Metallurgical factors are applied to account for mill performance. The overall pit slope criteria used for the design and optimisation are based on ongoing geotechnical studies.

The opencut cut-off grade of 15%DTR was determined as part of the initial feasibility studies and has been reviewed along with other Ore Reserve input parameters as part of Grange's 2024 Life-of-Mine Planning and Budgeting Process.

The Tasmanian EPA issued approvals for Centre Pit mining in 2019 and 2022. The EPA approval has allowed some Ore Reserves in Stages 2 and 3 of the Centre Pit that were previously classified as Probable to be reclassified as Proved Ore Reserves.






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Underground Ore Reserve

The NPUG DFS has demonstrated that a large part of the North Pit deposit below the North Pit opencut could be mined using the block caving method and that a small portion of the deposit to the north of the opencut could be mined using a SLC method. The SLC mining area could be partly mined prior to mining the block cave.

The NPUG DFS identified the most suitable block cave extraction level and the area to be undercut during the caving process. The NPUG DFS also established the layout and design of the block cave and SLC mining areas, and the portion of the Mineral Resource that would be mined by each method.

Three modelling techniques, PGCA, LR4-FS4, and PCBC were used to simulate the caving process and its impact on underground development, the opencut, and the surface topography. These methods are commonly used when planning and operating underground mines that use caving methods.

PGCA is a particle to particle-based flow modelling technique, which can account for material properties, cave back constraints and other properties which are influential in the flow of broken rock within the cave.

Numerical modelling of the block cave and SLC designs was completed to simulate stress, strain and subsidence for several iterations of the mine plan (both design and schedule) using an LR4-FS4 model. This modelling was used to estimate cave growth, recovery and grade forecast, surface subsidence and stability and deformation of underground development. The LR4-FS4 technique is a physics-based tool for forecasting cave growth and excavation stability incorporating a mine's lithological, structural and excavation geometry.

Multiple simulations were carried out using the three modelling techniques to identify the most suitable mine design and the likely range of possible production scenarios. Production from both the block cave and SLC areas were finally modelled using PGCA software. The Final PGCA production output, which includes modifying factors relating to mining recovery and dilution, forms the basis of the Underground Ore Reserve. The Underground Ore Reserve includes ore recovered during development of the block cave and SLC areas.

Even though a portion of the Ore Reserve originates from Measured Mineral Resources, the entire Underground Ore Reserve is classified as a Probable Ore Reserves due to the uncertainties associated with the caving process, the mixing of Proved and Probable Resources and other material within the cave, and the overall confidence level of the modifying factors.



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The proposed North Pit underground mine is within the current mining lease and utilises the existing processing and infrastructure at Savage River. A development application for the underground mine will be made to Waratah Wynyard Council following the drafting of an Environmental Impact Statement. Final permitting is expected to occur in 2024. Given the existing nature of the mining operation, leases and the current underground exploration decline the Company has confidence that the final required permits for underground mining will be obtained.

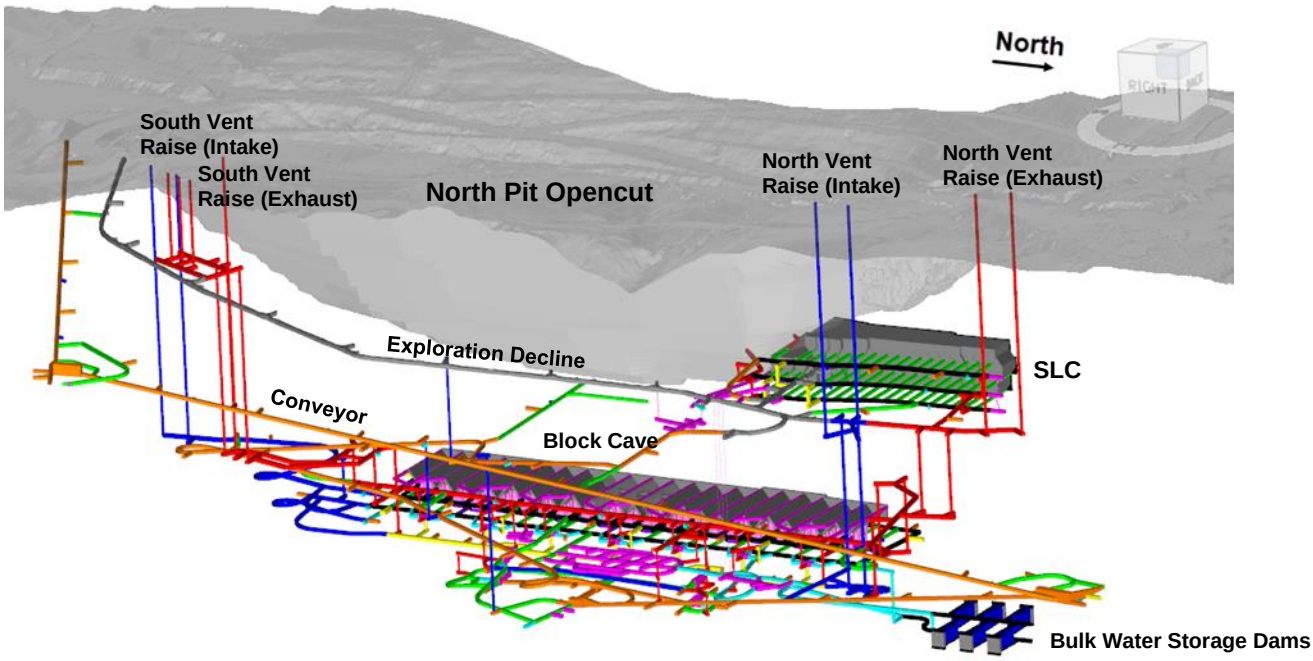


Figure 5 DFS design for the North Pit Underground Mine






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Processing

The Concentrator at Savage River grinds the ore to down to 80% passing 45 microns and magnetically separates the magnetite proportion from the gangue. The Concentrator has been in operation for over 55 years during which time it has processed the ore from North Pit, Centre Pit, South Deposit, and Sprent. The concentrator typically recovers 96% of the tested DTR. After processing, the concentrate slurry is transported by pipeline to the Port Latta Pelletising plant.

At Port Latta the concentrate is rolled into balls around 12mm in diameter which are indurated in a vertical furnace. The induration process hardens the pellet and oxidises the magnetite to hematite.

The final product is sold under either contract or on a spot basis to customers mainly in the Asia Pacific Region. The final product normally exceeds the 65% Fe fines index in quality and attracts premiums for pelletisation and presents with low impurities.

Ore from the proposed North Pit underground mine has been assessed as suitable for processing by magnetic recovery through the existing concentrator to produce high quality pellets. A bulk sample drive was developed through the ore body during the PFS. The bulk sample ore was processed through the concentrator at Savage River and achieved the expected performance.

Ore from the block cave will be crushed underground using eccentric roll crushers and transported to surface by conveyor. Underground ore will be blended with opencut ore on the ROM during the early stages of the block cave to manage the feed rate and quality.






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ORE RESERVE ESTIMATE BY DEPOSIT

The following tables represent the Ore Reserves for each part of the deposit.

Table 12 North Pit Opencut Ore Reserve Estimate – 31 December 2023

	Proved Reserves	Probable Reserves	TOTAL Reserves
Tonnes (Mt)	16.9	1.0	**17.9**
DTR (%)	51.3	25.7	**49.9**
Fe (%)	67.9	65.9	**67.7**
Ni (%)	0.03	0.07	**0.03**
TiO_2 (%)	0.93	0.61	**0.91**
MgO (%)	1.80	1.55	**1.79**
P (%)	0.005	0.013	**0.006**
V (%)	0.36	0.32	**0.36**
S (%)	0.04	0.19	**0.05**

- North Pit Opencut Ore Reserves are reported to completion of current planned opencut mining.
- Elemental compositions were measured from Davis Tube Concentrate.
- Opencut Ore Reserves are reported above a cut-off grade of 15% DTR.






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Table 13 Centre Pit Opencut Ore Reserve – 31 December 2023

	Proved Reserves	Probable Reserves	TOTAL Reserves
Tonnes (Mt)	15.3	9.1	**24.4**
DTR (%)	41.9	40.6	**41.4**
Fe (%)	69.0	68.7	**68.9**
Ni (%)	0.05	0.05	**0.05**
TiO_2 (%)	0.44	0.47	**0.45**
MgO (%)	0.94	0.98	**0.96**
P (%)	0.008	0.009	**0.008**
V (%)	0.44	0.42	**0.43**
S (%)	0.12	0.14	**0.13**

- Centre Pit Opencut Ore Reserves are reported to completion of current approved opencut mining.
- Elemental compositions were measured from Davis Tube Concentrate.
- Opencut Ore Reserves are reported above a cut-off grade of 15% DTR.

Table 14 North Pit Underground Ore Reserve - December 2023

	Proved Reserves	Probable Reserves	TOTAL Reserves
Tonnes (Mt)	0.0	64.4	**64.4**
DTR (%)	-	44.9	**44.9**
Fe (%)	-	67.6	**67.6**
Ni (%)	-	0.03	**0.03**
TiO_2 (%)	-	0.98	**0.98**
MgO (%)	-	2.07	**2.07**
P (%)	-	0.004	**0.004**
V (%)	-	0.35	**0.35**
S (%)	-	0.03	**0.03**

- Elemental compositions were measured from Davis Tube Concentrate.
- All Underground Ore Reserves are classified as Probable Ore Reserves. No Proved Ore Reserves are reported.
- The Ore Reserve includes production from block cave and SLC mining estimated using a PGCA flow and recovery model (which accounts mining dilution and mining recovery), plus ore from underground development with 10% mining dilution.
- No grade has been assigned to dilution entering the cave during the mining process or during development.
- The production cut-off grade for the block cave is ≥ 30% DTR.
- The cut-off grade for the SLC is ≥ 28% DTR.






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Table 15 Stockpiles Ore Reserves – 31 December 2023

	Proved Reserves
Tonnes (Mt)	2.5
DTR (%)	30.7
Fe (%)	69.3
Ni (%)	0.08
TiO_2 (%)	0.49
MgO (%)	0.87
P (%)	0.006
V (%)	0.40
S (%)	0.13

- Elemental compositions were measured from Davis Tube Concentrate.

Table 16 Total Ore Reserves Savage River – 31 December 2023

	Proved Reserves	Probable Reserves	TOTAL Reserves
Tonnes (Mt)	34.7	74.5	**109.2**
DTR (%)	45.7	44.1	**44.6**
Fe (%)	68.4	67.7	**67.9**
Ni (%)	0.04	0.03	**0.03**
TiO_2 (%)	0.68	0.91	**0.84**
MgO (%)	1.35	1.93	**1.75**
P (%)	0.006	0.005	**0.005**
V (%)	0.40	0.36	**0.37**
S (%)	0.08	0.05	**0.06**

- Elemental compositions were measured from Davis Tube Concentrate.
- Ore Reserves are reported above a cut-off grade of 15% DTR for Opencut Reserves and 28%-30% DTR for Underground Reserves.
- Stockpiles are included in this summary table and are itemised separately in tables of individual mining pits and aggregated stockpiles.






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MINERAL RESOURCE & ORE RESERVE GOVERNANCE

In accordance with ASX Listing Rule 5.21.5, governance of the development and management of Grange's Mineral Resource and Ore Reserve is a key responsibility of Senior Management.

Grange's senior staff designated with responsibility for internal review of the Mineral Resources and Ore Reserves include:

- Roger Hill – Senior Geology Manager,
  - 35+ years of mining geology and resource estimation experience in open cut and underground metalliferous mining in Canada and Australia. Most recent twelve years of experience spent at Grange Resources with the Savage River Mine.
  - Member of AusIMM and previously certified as Professional Geoscientist in Canada.

- Matthew Anderson - Savage River Mine Manager
  - 20 years of technical and operational experience in open cut mining at the Savage River Mine.
  - Member of AusIMM.

- Nicholas van der Hout – Technical Services Manager
  - 20 years of operational and consulting experience in open cut and underground metalliferous mining throughout Australia and Southeast Asia. Most recent five years of experience spent at Grange Resources with the Savage River Mine.
  - Member of AusIMM with Chartered Professional Status in Mining Engineering.

- Elisabeth Wynn – Principal Underground Mining Engineer
  - 20 years of technical and operations experience in underground metalliferous mining in Australia, Indonesia, and Sweden. Includes project development of the Telfer Underground sub-level cave and the Grasberg Block Cave mine. Nine years involvement with the Grasberg Block Cave mine including as Technical Expert Underground Mine design and subsequently Strategic Planning Engineer for Freeport McMoRan. Recently two years with Grange Resources as part of the underground DFS and PFS study team.
  - Member of AusIMM.

- Ben Maynard – Chief Operating Officer
  - 25 years of technical and operational experience including mining geology and resource estimation in open cut mining at the Savage River Mine and WA.
  - Member of AusIMM.

These staff oversee the planning and implementation of exploration and resource evaluation programs. The evaluation process incorporates internal skills and knowledge in operation and project management, downstream processing, and commercial/financial areas of the business.



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The Chief Operating Officer, in consultation with senior staff, facilitates the planning, monitoring, and the estimation and reporting of resources and reserves. The process is reviewed by an internal peer review team. External consultants are also utilised to supplement internal resources in the estimation process, with independent technical review undertaken as required.

Mineral Resource and Ore Reserve reporting is based on substantiated geological and mining assumptions and prepared in accordance with the Australasian Joint Ore Reserves Committee (JORC) Code 2012.

Grange reports Mineral Resources and Ore Reserves on an annual basis. The Competent Person named is a member of the Australasian Institute of Mining and Metallurgy (AusIMM) and qualify as Competent Person as defined in the JORC Code 2012.

COMPETENT PERSON STATEMENT

The information in this report that relates to Mineral Resources and Ore Reserves is based on information compiled by Mr Ben Maynard, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy. In producing this statement Mr Maynard has relied on documentation prepared by others and is satisfied that that their work is acceptable and meets the required standard. Mr Maynard is a full-time employee, holds shares in Grange Resources, and is eligible to participate in short and long-term incentive schemes.

Mr Maynard has sufficient experience which 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 Maynard consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.






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About Grange Resources

Grange Resources Limited (Grange or the Company), ASX Code: GRR, is Australia's most experienced magnetite producer with over 55 years of mining and production from its Savage River mine and has a projected mine life beyond 2038. Grange produces a high-quality iron ore pellet with low levels of impurities that support reduced environmental impacts for end users.

Grange's operations consist principally of owning and operating the Savage River integrated iron ore mining and pellet production business located in the north-west region of Tasmania. The Savage River magnetite iron ore mine is a long-life mining asset. At Port Latta, on the north-west coast of Tasmania, Grange owns a downstream pellet plant and port facility producing more than two million tonnes of premium quality iron ore pellets annually.

Grange has a combination of spot and contracted sales arrangements in place to deliver its pellets to customers throughout the Asia Pacific region. In addition, Grange owns the major magnetite development project at Southdown, near Albany in Western Australia.

Contacts

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-ENDS-






GRANGE RESOURCES

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APPENDIX A - JORC TABLE 1 SAVAGE RIVER

Note: All comments refer to all deposits on the Savage River Mining Lease; comprising North Pit, Centre Pit North, Centre Pit South, Sprent and South Deposit (and to Long Plains on an adjacent exploration lease) unless individually identified as being related to a particular prospect.

SECTION 1: SAMPLING TECHNIQUES AND DATA

Criteria	Sampling Techniques and Data	Comments
Sampling techniques	• Nature and quality of sampling (e.g., 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.	• The deposits were sampled using diamond drilling (DD) with limited Reverse Circulation (RC) pre-collaring. Drilling was conducted on approximately 50-100m spaced sections orientated perpendicular to the overall orebody strike. On section spacing (down-dip) varies but is commonly 50-70m. The mineralisation is sub-vertical, and the holes are typically inclined at -60°. • All recent samples are assayed for DTR, Fe^{2+}, Total Fe, Ni, TiO_2, MgO, P, V, S, CaO, SiO_2 and Al_2O_3.
	• Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. • Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (e.g., 'reverse 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 (e.g., submarine nodules) may warrant disclosure of detailed information.	• The drill hole locations are surveyed, and down-hole surveys were completed. • Diamond core was used to obtain the best possible sample quality for lithology, structural, grade and density information. • Drilling of Diamond core was a combination of HQ and NQ sizes. All resource drilling has been drilled with triple tube equipment since 2005. • Samples were controlled based on geological contacts and generally no more than 2m in length. Sample selection was nominally >=0.75m and <=1.25m. • All core samples were half cored. Core was split by diamond sawing. • Samples were dried, crushed, split and pulverised to nominally 98% passing 75µm for Davis Tube Recovery (DTR) determination.






Criteria	Sampling Techniques and Data	Comments
Drilling techniques	• Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g., core diameter, 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.).	• Samples used in the resource estimation were taken from diamond drill core of either HQ or NQ size or RC samples. • 80% of holes informing the resource were diamond holes and 13% were reverse circulation (RC) holes. 5% of the total were percussion holes (isolated to CP resource) and 2% other hole types. • RC pre-collars were used in only 16% of the Long Plains campaign 2011-2013 to reduce drilling cost. RC was drilled to refusal and holes completed with diamond tails. (10 holes for 2,592m drilling in 2012-3) • Sonic pre-collars were used in the 2018 CP drilling campaign to penetrate waste dumps over-lying the remaining ore in Centre Pit North. Sonic pre-collars were typically 50-80m in inclined HQ3 diamond holes. (9 holes for 1,862m drilled in 2018) • Where appropriate core was oriented using triple tube drilling techniques and employing Reflex orientation system on drill rigs.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • Measures taken to maximise sample recovery and ensure representative nature of the samples. • 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.	• Core recoveries were recorded in the geotechnical logs and in the sample records. • Core recoveries in the ore zones at Savage River are generally high (>90%) and there are no significant core recovery issues. Drill core from the 2018-2022 drilling programs returned an average of 97% core recovery. • RC chip recoveries are also high. Recoveries below 80% have been recorded in the sample sheets. These poorer recoveries were typically in very wet holes. Most RC holes terminate when they encounter the water table and thereafter, diamond tails are utilised to finish the hole. • Drilling penetration rates were controlled in order to maximise recovery in ore zones. • No relationship between sample recovery and grade is known at Savage River.
Logging	• Whether core and chip samples have been geologically and geo-technically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. • Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.	• Core samples from all deposits have been logged for lithology, mineralogy, alteration and mineralisation. • Geotechnical logging is undertaken routinely. detailed geotechnical logging is completed on oriented holes. Holes since 2018 are fully geotechnically oriented, logged including domain and structural defects. Logging is both qualitative and quantitative. • The level of detail is sufficient to support Mineral Resource estimation, mining studies and metallurgical studies. • Logging is a combination of qualitative and quantitative. • Core was photographed wet and dry. No photos were available for the oldest core.

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Criteria	Sampling Techniques and Data	Comments
	• The total length and percentage of the relevant intersections logged.	• All core and RC chips were fully logged.
Sub-sampling techniques and sample preparation	• If core, whether cut or sawn and whether quarter, half or all core taken.	• Core was half core sampled as standard practice and rarely full core sampled in the very few older holes. • Core was cut using a diamond impregnated saw blade on site at the Savage River core farm. • Core is cut on the centre axis and has no offset. The ore is relatively massive and the preferred orientation for core sawing is just left of the orientation line and along the centre line for non-oriented core. .
	• If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.	• RC samples passed through a cyclone with dust collector and were split at the drill rig using a three-stage riffle splitter or a rig mounted con splitter. • Sample interval was 1m in recent programs and 2m in programs prior to 2000. • For non-core, samples are dry riffled and sampled dry. When RC sample was damp, samples were speared uniformly.
	• For all sample types, the nature, quality, and appropriateness of the sample preparation technique.	• Sample preparation techniques are industry standard for magnetite ores and use the sub-sampling protocol as recommended by the Savage River laboratory. • Sample prep on drill core drilled prior to 2011 was completed on site. • Between 2011-2013 sample prep was completed at a commercial lab [NATA accredited]. • In 2013 the Savage River lab upgraded the crushers and ovens and since then all core has been processed at the Savage River lab.
	• Quality control procedures adopted for all sub-sampling stages to maximise the representativeness of samples.	• As per standard operating procedure diamond core is dried and crushed according to Grange standard operating procedure, Diamond core was dried overnight in an oven at 1100C, crushed in a jaw crusher to 6mm, crushed in a Rolls crusher to 3mm. • Since 2011 a Boyds crusher was installed in the lab enabling this comminution step to crush to 2mm. Following secondary crushing, the samples are riffle split to 2-3kg then a 150-gram sample is pulverised using a Rocklabs 3 ring grinder. • RC chips were riffle split at the rig when dry and a 3kg sample was taken for each single metre drilled as described above. When RC sample was damp, samples were speared uniformly.
	• 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.	• Field QC procedures for RC and diamond samples involve the insertion of assay standards at a rate of 1 in 25. Standards were derived from the 2006 MLEP drilling campaign and by commercially prepared standards since then in North Pit Savage River. • No duplicates or blanks have been taken except 27 field duplicates taken in the 2006 MLEP program which equates to 0.15% of all samples have duplicates and 0.4% have blanks. Duplicate samples have not been

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Criteria	Sampling Techniques and Data	Comments
		taken as they are deemed of little importance in this deposit due to the continuous nature of the mineralisation, very low nugget and long variography ranges.
	• Whether sample sizes are appropriate to the grain size of the material being sampled.	• The sample sizes are considered to be appropriate based on the style of mineralisation, the thickness and consistency of the intersections and assay range for the primary analysis (% recoverable magnetite concentrate).
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 primary assay technique is Davis Tube Recovery (DTR) on a 10g sample, followed by Ferrous Iron (Fe^{2+}) via Satmagan and S, total Fe, TiO_2, MgO, V, P, S and Ni via XRF on the Davis Tube Concentrate (DTC). • All techniques are considered total. DTR is the most appropriate assay technique for determination of magnetite recovery. • All DTR samples completed on site using Savage River technique. This technique has been used for 50 years at Savage River and pit reconciliations are within accepted tolerance.
	• For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.	• Magnetic susceptibility instruments are used for initial geological logging to help the geologist classify the logged interval as ore grade or waste. • Grange uses TerraPlus KT-10 MagSus meters to classify ore and provide an indicative grade estimate ahead of DTR analysis. Ore samples have sample prep, DTR and XRF determinations done, and these inform the resource estimate. • No mag sus values are used in the resource estimate.
	• Nature of quality control procedures adopted (e.g., standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e., lack of bias) and precision have been established.	• Standards- Field assay standards are inserted at a rate of 1 in 25 in drilled core and RC through ore zones. • No field duplicates were analysed. Pulp duplicates have been collected for drillholes completed between 2019-2020. Blank material is inserted into the drill core sample stream at a rate of 1:20 drill core samples. The blank material has been sourced from the Magnesite Fault which is known to have no magnetic minerals present. • Data analysis of standards has been performed and the data demonstrates sufficient accuracy and precision for use in Mineral Resource estimation. • Three Standards were derived from 2006 MLEP drilling campaign and a commercial standard was purchased in 2019 for use in the 2019-2022 drill campaigns at Savage River. Standards for recent Centre Pit and North Pit drill campaigns (2013 onwards) were prepared on site by a staff geo-chemist and are sourced from core from Long Plains. • Results to date show good agreement with expected value which implies that the lab is producing accurate and repeatable analyses.

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Criteria	Sampling Techniques and Data	Comments
		• Results from the 2006 Mine Lease Extension Project (MLEP) campaign showed a correlation coefficient of 1.00 for 27 pairs of data
Verification of sampling and assaying	• The verification of significant intersections by either independent or alternative company personnel.	• Significant intersections MagSus readings) are verified by alternate company geologists present in the core shed as part of the process of developing the cut-sheet instruction. • The cut sheet defining sample lengths for cutting and sampling is selected based on the MagSus values
	• The use of twinned holes.	• No twinned holes have been drilled. Twinned holes have not been drilled as they are deemed of little importance in this deposit due to the continuous nature of the mineralisation, very low nugget and long variography ranges.
	• Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	• Prior to 2005 Primary data is captured in paper format and transferred manually to an Access database. • From 2005 Primary data was captured directly to standard template Microsoft Excel log sheets using tough book laptops with standard logging codes and data entry control. • The data is verified by the geologist and then loaded into the central (project-wide) database. • From July 2019 logged data is captured directly in DataShed-LogChief software with validation controls.
	• Discuss any adjustment to assay data.	• Adjustments are made to density measurements when measurements fall above 5 or below 2 g/cm^3 respectively as these considered as sample errors and recent studies of these outliers confirmed that the measurements were un-reliable. • In the drilling campaigns since 2019 a small proportion of the parent sample were excluded for destructive geotechnical testing prior to assay. These represent <1% of all the composite assays and will have no material effect on the estimate. • Extensive use of re-submitted pulps has been used in the past for NP, especially in the 2006 drill campaign.
Location of data points	• Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.	• All significant surface features including drill collars were surveyed by Grange staff surveyors using a combination of conventional surveying (total station) and/or high resolution RTK GPS. • In each case, the collars were located to within 100mm in X, Y and Z. • For downhole surveys, older drilling used single-shot Eastman dips at 50m spacing downhole (accurate to 0.5°). • Since 2013 North seeking gyro was used prior to the use of the DeviFlex downhole survey tool. • The stated accuracy for DeviFlex is +/- 0.01° per station in azimuth and +/- 0.1° in dip, with stations every 3m downhole.
	• Specification of the grid system used.	• The grid system used is the Savage River Mine Grid, where: ○ 10^0 18’ 23” (N) SRG= 0^0 (N) GDA94

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Criteria	Sampling Techniques and Data	Comments
	• Quality and adequacy of topographic control.	• The topographic surface in the vicinity of the deposit was surveyed by Grange staff surveyors using a combination of conventional surveying (total station) and/or high resolution RTK GPS. In each case, the data points are located to within 100mm in X, Y and Z and the point spacing is approximately 5m in X and Y. For areas further away from the deposit, LIDAR data is used.
Data spacing and distribution	• Data spacing for reporting of Exploration Results.	• For Deposits on the Savage River Mine lease the nominal drill hole spacing is 50m (between sections) and by 50-70m (on section). • Drill spacing at Long Plains is wider given that the parts of the resource are at an early stage of delineation. Indicated Mineral Resources at Long Plains have been defined generally in areas of 50 by 50 m drill spacing. • Inferred Mineral Resources at Long Plains have been defined in areas of 100x100 metre up to 600x100 metre drill spacing.
	• 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.	• Data spacing and distribution were analysed using semi-variograms. The general quality of the experimental variograms was good. The ranges of the variograms were used to provide guidance for resource classification.
	• Whether sample compositing has been applied.	• Samples have been composited prior to geostatistical analysis and Mineral Resource estimation. At Savage River Mine, for the 2006 MLEP the composite length was 2m. At Long Plains, the composite length was 1m. The most common composite length was 1m and the second most common was 2m. For the resource estimates, the Surpac best-fit algorithm was used which resulted in composite lengths of 0.5 to 1.5m. This approach was adopted because a selection of a uniform composite length would have resulted in duplicated values in composites created from longer intervals, which may reduce the nugget values in variograms.
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.	• The majority of drill holes are oriented to achieve intersection angles as close to perpendicular to the mineralization as is practicable.
	• 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 significant sampling bias occurs in the data due to the orientation of drilling with regards to mineralized structures/bodies.
Sample security	• The measures taken to ensure sample security.	• All samples are logged and bagged on site by Grange geological staff and chain of custody remains with Grange staff.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	• During the Mine Life Extension Project in 2006 AMC peer reviewed the NP resource for the mine life extension project (MLEP).

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GRANGE RESOURCES

Criteria	Sampling Techniques and Data	Comments

		• Following recent major drill campaigns, the resource was reviewed by AMC (March 2019, August 2019 and October 2020).
		• A sample prep audit was conducted for the external provider. An internal review of the SR lab was completed in June 2019. That review was satisfied with procedures, calibration sand methods.
		• In 2019, AMC peer reviewed the NP and CP Resources and CP Reserves. Their comments for EOY2018 noted QA/QC practices at Savage River were to an acceptable standard, with recommendations:
		  ○ There is opportunity to improve QA/QC by including external umpire check assays as a means of further validation.
		  ○ It was recommended to continue submitting standards and add duplicate and blank samples at a rate of 5% particularly when drilling new areas.
		• During the 2019-22 drilling campaigns these recommendations were adopted including a migration of all exploration data to the DataShed database.

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SECTION 2: REPORTING OF EXPLORATION RESULTS

Criteria	*JORC Code explanation*	*Commentary*
Mineral tenement and land tenure status	• 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.	• 4 Mining and 2 exploration leases are held in Tasmania and are 100% owned by Grange Resources Tasmania Ltd. (formerly Goldamere Proprietary Ltd operating as Australian Bulk Minerals).
	• 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.	• Mining lease 2M/2001 was granted 11/12/2001 comprising 4,987 hectares which includes the main orebodies North Pit (NP), South Lens (SL), Centre Pit (CP), Sprent (SP) and South Deposit (SD) and the pipeline corridor from site to the Port Latta pellet plant. Locality is listed as Savage River-Port Latta. This lease expires 7 Nov 2031 and currently has a security bond held by the State of Tasmania. • Land tenure on ML 2M /2001 includes State forest, Forest Reserve, Informal reserve, Crown Land, Private parcel, Conservation area, Regional Reserve and national Estate. • Mining lease 14M/2007 was granted 14/5/2008 comprising 91 hectares as an easement (including a sewerage easement) on the Savage River townsite. This lease expires 7 Nov 2031, and no bond is held by the State of Tasmania. Land tenure on ML 14M/2007 includes Forest Reserve, Regional Reserve, Private land, Proposed public reserve-CLAC, Crown land Authority Land and Crown Land • 4M/2019 (235Ha) was granted 17 August 2020 and expires 7/10/2031. This portion was relinquished from EL8-2014. This expires 7/10/2031. A bond is held by the State of Tasmania. • Mining lease 11M/2008 was renewed on 18 December 2017 and expires 7/10/2031 and comprises two lots totalling 108 hectares with the northwest area required for the South Deposit Tailings Storage facility on Main Creek and the eastern lot required to cover the remaining part of the Savage river town ship not previously covered by a mining lease. A bond is held by the State of Tasmania. • The term for Exploration Licence EL8/2014 was extended in 2021 until 2023. • Exploration License EL30/2003 was granted in February 2010 and a seventh extension of term has been granted on 5th July 2021 and expires on 18 June 2023. This lease covers the entire Long Plains deposit. The lease comprises 38 sq km and adjoins 2M/2001 to the north.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	• Systematic exploration commenced during the late 1950's with the Bureau of Mineral Resources conducting airborne & ground magnetic surveys to delineate Savage River & two smaller anomalies south at Long Plains & Rocky River.

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Criteria	*JORC Code explanation*	*Commentary*
		• Diamond drilling commenced in the late 1950's-early 1960's by Industrial & Mining Investigations Pty Ltd (8 holes). Savage River Mines Ltd formed in 1965 as a JV to develop the project and mined Savage River for the next 30 years before Australian Bulk Minerals (ABM – now Grange) took over the mine lease in 1997.
Geology	• Deposit type, geological setting, and style of mineralization.	• The Savage River Magnetite deposit lies within and near the eastern margin of the Proterozoic Arthur Metamorphic Complex in north-western Tasmania. This complex is exposed along a northeast–southwest trending structural corridor, The Arthur Lineament, which separates Proterozoic sedimentary rocks to the northwest from a variety of Paleozoic rocks to the southeast (Turner 1990). These Paleozoic rocks include some major mafic and ultramafic intrusive complexes which lie just to the east of Savage River. • The magnetite orebodies are enclosed within a highly sheared and strike faulted belt of mafic and ultramafic schists and mylonite. This belt is 0.5km wide, strikes North-north-east to south-south-west, and is enclosed in a thick sequence of quartz-white mica schist (Whyte schist). Magnetite ore is almost entirely confined within ultramafic rocks, specifically serpentinite and talc-carbonate schist. These ore-bearing ultramafic rocks are exposed in an axial zone above the belt, ranging from about 40 to 100m wide and termed the Main Ore Zone. They also form rare, and much narrower (mostly <20m wide) lenses and layers in the mafic sequence to the west. • Magnetite ore ranges from disseminated to massive, with much of the main Ore Zone comprising massive to semi-massive magnetite form 1994 Thornett report on structural and lithological mapping of North Pit and South Lens.
Drill hole Information	• 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: o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o hole length. • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• The Savage River deposit has been mined for over 55 years and a comprehensive database of 1056 drill holes for over 171,123m* drilling completed between 1957 and 31 December 2023 *Includes diamond, RC and Diamond tail and excludes costean, mapping, percussion, probe, sonic and sludge drilling types. • Drill hole information has been included in Appendix C

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Criteria	*JORC Code explanation*	*Commentary*
Data aggregation methods	• In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. • 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. • The assumptions used for any reporting of metal equivalent values should be clearly stated.	• Davis Tube Recovery ("DTR") analyses were conducted on core and RC chips that had first had an estimated grade determined by magnetic susceptibility (mag-sus). If the mag-sus indicated an estimated grade greater than 15% DTR, the analytical DTR technique was used for assay. • For RC samples, 2m or less composites were used at Savage River and 1m composites were used at Long Plains. In drill core, sample lengths were controlled based on observed geological contacts and generally no more than 2m in length. Sample selection was nominally >=0.75m and <=1.25m. • Short intervals were sampled, where discrete lithologies were present. The compositing routine aggregates these to 1m composites.
Relationship between mineralization widths and intercept lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralization with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., 'down hole length, true width not known').	• No Exploration Results are included in this report. The results pertain to the established Mineral Resource at Savage River and Long Plains. • All intercepts are reported as down hole lengths and the down hole composites are used to inform the ordinary kriged resource estimate. Refer to intercept tables below.
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 locality plan (figure 5) and typical cross sections (figure 6-10) for each deposit area are attached.
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.	• All individual drilling results from diamond, RC (and limited percussion holes in CP resource) have been incorporated into the current resource estimations. In the current NP estimate, the percussion holes were removed. The percussion holes have poor sample quality owing to grouping and segregation errors that RC or drill core samples do not. The percussion holes represented a second population of lower quality data and were not required to complete the estimate. • The most recent CP estimate includes 4% of data sourced from percussion holes.
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;	• The Savage River Mine has been in operation for over 55 years with substantial data collected including geophysical surveys, geological mapping of exposures and metallurgical test work.

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Criteria	*JORC Code explanation*	*Commentary*
	metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	• Waste management plans are based upon acid base accounting analyses of selected representative data from each deposit at Savage River.
Further work	• The nature and scale of planned further work (e.g., 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.	• In 2023 there were 564m (3holes) of diamond drilling completed on surface for the North Pit Underground as geotechnical cover holes. • Planned drill programs (2024) will focus on resource definition drilling underground to improve resource confidence and geotechnical knowledge to reduce the risk in support of underground mining.

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SECTION 3 ESTIMATION & REPORTING OF MINERAL RESOURCES

Criteria	*JORC Code explanation*	*Commentary*
Database integrity	• Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. • Data validation procedures used.	• Transcription errors are limited by having assay data directly merged into the database with key fields on sample ID. • Visual validation in 3D is utilised having sections plotted with block grades, the drill-hole assays and geology intervals displayed. • Validation of the database occurs at distinct stages. • Data entry – Prior to 2019 data was mostly entered into Excel spreadsheets, controlled by lookup lists and ranges of acceptable values. o Before upload to the database – data is cross-checked in Excel. o Before extracting composites – a set of queries are run, checking for data continuity, abnormal values and overlapping ranges. o At all stages spot checks are made on specific areas against raw data or core where available, to check for accuracy and/or correlation. Where applicable, data is plotted out on section or graphically for visual checking. • Since 2019, the data validation process has significantly improved through the introduction of an additional layer of checking brought mainly by the inherent validation functionalities of the new database system as managed by the Geological Database Administrator. Some of the validation features of the new database system utilised include: o a data management tool at the point of collection. o a database structure (MaxGeo data schema, SQL MDS) that fulfils statutory compliant requirements and allows high levels of data transparency and validity. o a disciplined assay management workflow and swift monitoring of quality assurance and control of the assays resulting in better assay quality and integrity.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• Competent person is a Grange employee and has an intimate knowledge of the operation. The technical services team includes senior mining engineers, geologists and environmental scientists that provide specialist advice and analysis to the CP to inform the resource and reserve estimates. • Competent person visits site frequently and has a very close and current understanding of the orebodies.

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Criteria	*JORC Code explanation*	*Commentary*
Geological interpretation	• Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	• Each section was interpreted for magnetite mineralization in a live-3D environment, i.e., the sections were not printed out for interpretation purposes. Grade control outlines and blasthole data as well as visual checks in the field were used to inform the ore/waste contacts and this supports the spatial interpretation using both grade control and wide spaced diamond drilling data. This has improved the confidence of the model especially close to current mining benches. Recent work was completed by Grange staff, assisted by Snowden-Optiro in 2022. The geological interpretation was done in Surpac, then converted to Datamine files for processing by Snowden-Optiro. • Historically, there were three types of mineralization defined (termed sparse, moderate and abundant and given the codes ZS, ZM and ZA respectively). Recent practice has been to amalgamate the ZM and ZA. The mineralized zones were therefore subdivided into moderate and high grade (ZAZM, >35 DTR) and low grade (ZS 15-35 DTR) categories.
	• Nature of the data used and of any assumptions made.	• The geological interpretation has high confidence on a deposit scale, informed by regularly spaced drilling, in-pit mapping, grade control drilling and monthly reconciliations.
	• The effect, if any, of alternative interpretations on Mineral Resource estimation.	• The boudinaged nature of the high-grade lenses does sometimes result in some areas having to be adjusted by on ground mapping and grade control, during mining. • The global resource reconciliation continues to have a very good match with concentrate produced.
	• The use of geology in guiding and controlling Mineral Resource estimation.	• Geology, lithology and structure are used to guide and control the interpretation and wireframing of ore lenses in preparation for resource estimation. Wireframes are validated in section, then in plan (flitch) to enable robust shapes to be developed.
	• The factors affecting continuity both of grade and geology.	• Continuity is greatest down dip owing to the strike-slip deformation at Savage River. Continuity along strike is characterized by discontinuous swarms of boudinaged high grade magnetite lenses surrounded by lower grade magnetite ore hosted in serpentinite gangue. In extrapolated areas down dip, the interpretations of mineralised geometry have been conservative.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	• The Savage River orebodies occur discontinuously over a strike length of 6km with thickness ranging from 40-150m. • All lenses remain open at depth. A summary of the defined extents of individual deposits follows:

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<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Deposit</th><th>Strike Extent (m)</th><th>Width Extent (m)</th><th>Depth Extent (m)</th></tr>
<tr><td>North Pit</td><td>1900</td><td>219</td><td>1089</td></tr>
<tr><td>Centre Pit</td><td>2450</td><td>255</td><td>583</td></tr>
<tr><td>Sprent</td><td>244</td><td>49</td><td>152</td></tr>
<tr><td>South Deposit</td><td>554</td><td>72</td><td>396</td></tr>
<tr><td>Long Plains</td><td>3200</td><td>75</td><td>300</td></tr>
</table>
</td></tr>
<tr><td>Estimation and modelling techniques</td><td>• The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</td><td>
• Estimations up to 2014 been undertaken by Grange staff using recommendations and parameters defined in variography studies completed by Snowden Mining Industry Consultants
• Since 2014, estimations have been undertaken by Snowden Optiro consultants in consultation with Grange staff.
• Mineralized domains were established from high grade and low grade intersects as interpreted in the geological model.
• Ordinary Kriging (OK) was employed to estimate the North Pit resource from 2007 based on the recommendation of a report by Snowden in 2006. Other deposits have progressively moved from inverse distance methods to OK as appropriate.
<table>
<tr><th colspan="2">Estimation Parameters</th><th colspan="3">Ellipsoid Orientation</th><th colspan="2">Anisotropy Ratio s</th><th colspan="3">Search Distance</th></tr>
<tr><th>Pit</th><th>Year</th><th>Major Axis</th><th>Semi-Major Axis</th><th>Minor Axis</th><th>Major/Semi-Major</th><th>Major/Minor</th><th>Pass 1</th><th>Pass 2</th><th>Pass 3</th></tr>
<tr><td>North Pit</td><td>2022</td><td>-50/180</td><td>-40->0</td><td>0->90</td><td>1</td><td>5</td><td>150</td><td>300</td><td>600</td></tr>
<tr><td>Centre Pit</td><td>2023</td><td>0->0</td><td>-90->0</td><td>0->90</td><td>1</td><td>5</td><td>50</td><td>100</td><td>600</td></tr>
<tr><td>South Deposit (East)</td><td>2014</td><td>0->0</td><td>-90->0</td><td>0->90</td><td>1</td><td>5</td><td>50</td><td>90</td><td>180</td></tr>
<tr><td>South Deposit (West)</td><td>2014</td><td>0->0</td><td>-90->0</td><td>0->90</td><td>1</td><td>5</td><td>100</td><td>150</td><td>300</td></tr>
<tr><td>Long Plains</td><td>2014</td><td>-10->358</td><td>-76->45</td><td>-10->270</td><td>1</td><td>2</td><td>210</td><td>210</td><td>420</td></tr>
</table>
• For the 2022 North Pit estimate, a southerly plunge was identified from variography, and Categorical Indicator Kriging (CIK) was used to help refine the domaining of low- and high-grade material. Indicators set at 15% and 35% DTR were used to flag material and domain the low grade, while an indicator set at 35% was used to flag material above this level as High Grade. The flagged drill data was then coded to the relevant domains for use in OK estimation. For the 2023 Centre Pit estimate DTR is estimated directly through ordinary kriging; the attribute is denoted as “dtr_ok” similar to the treatment in North Pit models. The historical accumulation method of calculating dtr; being Dtr= [(density_x_dtr)/density] is retained in the 2023 model and reported as "Dtr_Calc".
</td></tr>
</table>






Criteria	*JORC Code explanation*	*Commentary*

- The Sprent deposit is comparatively small (<3M tonnes) and considered to be an extension of Centre Pit South. It was developed in 2010 to supplement ore supply.
- Drill hole sample data was flagged as ore in the database within the domain wireframes interpreted for each deposit. Composites extracted from the database for each domain were therefore controlled by the geological interpretation.
- The 2022 North Pit estimate also used CIK as described above to domain some areas of the resource.
- Sample data was generally composited to 1 metre down hole length using a best fit-compositing method.
- Residual samples (those composite intervals for which there was less than 75% of the composite length) were considered biased and hence were not included in the estimate.
- For the 2022 North Pit estimate residuals were eliminated by adjusting the composite interval to be as close to 1 as possible so that there were no residual samples created.

Snowden Optiro have recommended top cuts as tabled below to reduce the impact of significant outliers and positively skewed populations.

Top Cuts	North Pit (2022)				Center Pit 2023				South Deposit		Long Plains	
Domain	MOZ	LG	Waste	LG	CPN_ZAZM	CPN_ZS	CPS_ZAZM	CPS_ZS	East	West	North	South
Al2O3 %					2.40	2.20			1.00	2.00		
CaO%	0.45	0.70		1.70	0.80				0.50			
Ni %	0.18	0.70	0.10			0.50			0.75			
P%	0.03	0.05		0.06	0.10				0.09		0.05	0.05
S %	0.50	0.60	0.50	0.60	1.22				0.21	0.53	0.30	0.30
SiO2%					10.00				7.00			
TiO2%									2.00	2.00		
V %										0.70		

- DTR, Density values and the calculated attribute Density (D) x DTR are all subjected to variography and estimation, with DTR (calc) back calculated from D x DTR in the model. DTR (calc) has been estimated as a comparison to DTR (Kriged DTR).
- Specialist Resource Estimation consultants (Snowden Optiro) have created the block models from wireframes and data supplied by on-site geologists. These model estimations have been run with Surpac software and Snowden Supervisor for variography studies. The most recent CP model (2023) was run in Datamine software, and the model transformed into Surpac model.
- Block models were constructed for:
  - North Pit (2022) using a 5mE by 5mN by 5mRL parent block size with sub-celling to 2.5mE by 2.5mN by 2.5mRL.

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Criteria	*JORC Code explanation*	*Commentary*

- Centre Pit (2023) used a 5mE by 15mN by 5mRL parent block size with sub-celling to 2.5mE by 3.75mN by 2.5mRL.
- Variography studies for each deposit have been completed by specialist resource estimation consultants with recommendations for estimation parameters appropriate for each deposit and the modelling technique employed as tabulated below.

- No top cuts have been applied to the Sprent models.
- DTR(OK) is reported and DTR (calc) is retained and used to validate the estimate based on past practice. DTR (calc) is back calculated from D x DTR in the model.
- Block models were constructed for each deposit as given in the table "Block Model Parameters" table below:

Block Model Parameters		Panel Block			Sub Block			Consultant
Pit	Year	Y	X	Z	Y	X	Z	
North Pit	2022	10	5	5	2.5	2.5	1.25	Optiro
Centre Pit	2023	15	5	5	3.75	2.5	2.5	Optiro
South Deposit (East)	2014	10	10	5	5	5	2.5	Grange
South Deposit (West)	2014	10	10	5	5	5	2.5	Grange
Long Plains	2014	25	10	10	6.25	1.25	2.5	Optiro

- The minimum and maximum number of samples were tested for each deposit using the Kriging Neighbourhood Analysis (KNA). The following table outlines the Number of Samples selected to inform the three estimation passes in each of the block model estimates for the various deposits.

Number of Samples		Pass 1			Pass 2			Pass 3		
Pit	Year	Minimum	Maximum	Max samples per hole	Minimum	Maximum	Max samples per hole	Minimum	Maximum	Max samples per hole
North Pit	2022	12	32	4	6	32	4	6	32	4
Centre Pit	2023	16	32	8	12	32	4	2	32	999
South Deposit (East)	2014	2	32	5	2	32	10	2	32	999
South Deposit (West)	2014	2	32	5	2	32	10	2	32	999
Long Plains	2014	40	60	5	20	60	10	2	60	999

- The estimation was validated by completing visual checks in section and plan and comparing statistics of input composite drillhole sample grades to estimated block grades on both a local and global basis. Local grade variability was also validated by comparing composite and block grades visually in cross section, long section and in plan view.

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Criteria	*JORC Code explanation*	*Commentary*
	• The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.	• New model estimates were compared against previous model estimates by flitch plots, visual inspection of the model around new drill hole data in section and have been reconciled with production data as part of the validation process. • DTR(ok) is checked by DTR(calc). These correlate very closely with an overall difference of 1.7% at a 15% DTR cut-off grade. DTR(ok) is reported.
	• The assumptions made regarding recovery of by-products.	• No by-product recoveries have been considered. The magnetite recovery process targets the magnetic minerals, and no marketable by-products are recovered.
	• Estimation of deleterious elements or other non-grade variables of economic significance (e.g., sulphur for acid mine drainage characterization).	• Concentrate grades and deleterious elements (impurities) have all had variography completed where samples were available and were estimated by Ordinary Kriging with the resource run.
	• In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	• Sample spacing on a 50 x 70m grid is 5-7 times the block size. This sample spacing is supported by the very strong geological continuity (low sample variance). See tables above.
	• Any assumptions behind modelling of selective mining units.	• No assumptions were made behind modelling of selective mining units.
	• Any assumptions about correlation between variables.	• There is a correlation between DTR and density which is described below in the Bulk Density section. This relationship is not used in estimation methods and DTR is directly estimated.
	• Description of how the geological interpretation was used to control the resource estimates.	• Geology, lithology and structure are used to guide and control the interpretation and wire-framing of ore lenses in preparation for resource estimation. Wireframes are validated in section, then in plan (flitch) to enable robust shapes to be developed.

	• Discussion of basis for using or not using grade cutting or capping.	• Top cuts in ore domains were used where outliers were identified by exploration data analysis. Outliers were identified for:
		  ○ Ni, TiO_2 and P in North Pit
		  ○ P in South Deposit
		  ○ AlO3, CaO, Ni, P, V and S in Centre Pit

	• The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available. New model estimates are compared against old model estimates and reconciliations as part of validation.	• Block estimates were cross validated by comparison with printed block sections showing drilling, block values and constraining wireframes. • Swath plots generated show the drill hole and modelled grades compared well across the deposits particularly where there were a large number of drillholes. Kriging Neighbourhood Analysis (KNA) of search distance has been used to validate search pass distances.

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Criteria	*JORC Code explanation*	*Commentary*
		• Grade Control outlines and blasthole data as well as visual checks in the field were used to inform the ore/waste contacts and this supports the spatial interpretation using both GC and wide spaced diamond drilling data. This has improved the confidence of the model especially close to current mining benches. • The Main Ore zone in NP is very predictable and drill spacing is appropriate for the resource estimate. • The main improvement in Centre Pit 2023 was the was improvement of wireframes and resolving the domaining low and high grade within the ore envelope which lowered the grade by ~2.0% within the Centre Pit resource. This resulted in a reduction in overall resource grade in Centre Pit from 48.5 to 46.3%DTR.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	• Tonnages were estimated on a dry basis. All drill holes are dried at the laboratory prior to sample prep and analysis.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	• The cut-off grade of 15%DTR is based on a natural break in the Grade-Tonnage Curve and is supported by economic analysis for the opencut undertaken during 2010. • The grade cut-off parameters were supplied by experienced mining engineers on an appraisal basis. These are the minimum widths and cut-off grades expected to be required to meet economic hurdles for these mining methods. These parameters are not yet based upon analysis as a feasibility level.
Mining factors or assumptions	• Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	• Above the ultimate pit shape, an optimised pit has been designed, based on an iron ore price, mining costs. Below the ultimate opencut profile, a combination of minimum mining width and cut-off grades for three mining methods; (Stoping, SLC and Block Caving) have been used as a preliminary guide to reasonable prospects of eventual economic extraction ahead of further studies. No mining factors (i.e., dilution, ore loss, recoverable resources at selective mining block size) have been applied for an eventual underground operation. • In 2023 for the consideration of Reasonable Prospects of Eventual Economic Extraction (RPEEE), a 100m x 100m grid in long section was analysed to obtain the true width and grade across this grid. If a cell in the grid passed the “Conditions to meet RPEEE” in the table below, then the cell was included in reportable resources.

Pit	Material	Rec_DTR (as% of DTR)	Rec_block_vol (as% of block vol)	Model
NP	Ore	92%	102.1%	Block Model: np202209_planning_2310.mdl
NP	Waste		0.998%	
CP_combined	Ore	85%	100%	Block Model: cp230925_planning_2310.mdl
CP_combined	Waste		100%	

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<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Method</th><th>Minimum Width (m)</th><th>Cut-off Grade (%DTR)</th></tr>
<tr><td>Stoping</td><td>10</td><td>50</td></tr>
<tr><td>SLC</td><td>20</td><td>35</td></tr>
<tr><td>BC</td><td>25</td><td>25</td></tr>
</table>

In addition to this, the Western Lens has had a change is resource classification owing to the introduction of a block cave method, as follows:

13.2Mt of Indicated has been sterilised due to the influence of the block cave.

</td></tr>
<tr><td>Metallurgical factors or assumptions</td><td>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</td><td>DTR has been incorporated into the model as a measure of magnetite recovery in the magnetic separation process. This is based on the performance of DTR at the Savage River mine, where it has been employed as a good measure of delineating ore and waste and in modelling the anticipated recoveries through the magnetic separation process for over 50 years.
Historical records indicate the Metallurgical recovery of magnetite from the magnetic separators has been demonstrated to be 95% of the DTR derived from laboratory DTR process. This factor is not applied to the resource model.</td></tr>
<tr><td>Environmental factors or assumptions</td><td>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</td><td>Waste rock: waste is segregated while mined into one of four waste types based on the rock’s acid-base chemistry. These units are disposed of in encapsulated dumps according to the waste management plan as part of the environmental permit conditions. Tailings are disposed of as sediment beaches in engineered tailing ponds. The tailings management plan is part of the environmental permit conditions.</td></tr>
<tr><td>Bulk density</td><td>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether</td><td>All ‘modern’ (post-2005) diamond drilling samples have measured density values. However, some historic drilling samples do not have density data and it is not possible to measure density for RC samples.</td></tr>
</table>

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Criteria	*JORC Code explanation*	*Commentary*
	wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. • The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit. • Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	• The density of the ore for the RC samples and legacy diamond drilling samples was determined based on the first principles equation, where: $$SG = \left(\frac{DTR}{510} + \frac{100 - DTR}{281}\right)^{-1}$$ • 36% of all bulk density values are measured, 56% are calculated and 7% have null values for density. • The First Principles equation relates density to DTR and provides a reasonable fit to the measured data. • 2019 and later North Pit models removed percussion holes (nearly half of informing data of c. 2011 models - NP1103 model). • Centre Pit retained the use of percussion holes in the resource estimate. As a consequence, there are now much greater proportion of densities having measured values and a smaller portion of density is calculated via regression methods where primary density measurements were absent. • The ore zones at Savage River are very competent and void space is not considered significant to make allowance for in the density determination method.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• During the Mine Life Extension Project in 2006, AMC peer reviewed the NP resource estimation process and parameters for the mine life extension project (MLEP). • The estimation process and parameters are considered to still be valid for this deposit as additional drilling has been infill in nature. Several due diligence studies have reviewed the estimation methodologies as recommended by Snowden and found them to be valid. • AMC conducted a new resource Audit in March 2019-with further review in August 2019 and October 2020. AMC considered that: o the Mineral Resource for Centre and North Pit Deposits were appropriately classified as Measured, Indicated, and inferred resources in accordance with the JORC code. o That the processes to generate the block model for the Resource Estimates have been completed using accepted practice with drill-hole data supported by quality control protocol, known mining history and reconciliation. • AMC cited the following area for improvement: o recommended that a maximum of three samples per drillhole is used in each search pass. Grange currently uses 4 in NP and 8 in CP with the method used has been supported by good reconciliation performance.

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Criteria	*JORC Code explanation*	*Commentary*
		• Reconciliation suggests that the estimation is comparable with grade control data. Global reconciliation is performed on an annual basis and demonstrates good performance between actual produced concentrate and estimated contained concentrate in the resource model. • For the recent resource update for CP by Snowden Optiro, a site visit was not completed. While Snowden Optiro visited the site in 2018, a review of drilling, sampling and mapping procedures was not completed as their role was to refresh the estimate, not audit our processes.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • It is recognized that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• Global reconciliations and bench reconciliations are used to feedback into the resource model. • Regular reconciliations show a good performance of model vs actual. Global reconciliation is performed on an annual basis and show good performance between actual produced concentrate and estimated contained concentrate in the resource model. The current resource model was found to be a better predictor of modelled concentrate due to changes in wireframes in current model. • Bench reconciliations show good agreement and nearly always a positive reconciliation between resource and produced concentrate. Global reconciliation of the current NP model shows an under-prediction of the actual concentrate production within a 5-10% tolerance. Global reconciliation of the current CP model shows it is a good predictor of mined concentrate over a 12mo period when isolated for CP only feed. • Reconciliations are calculated from material survey movement against changes in stockpiles and actual magnetite concentrate production. Global reconciliation of the current model shows an under-prediction of the actual concentrate production within a 5-10% tolerance over several years. • Grange believes that the accuracy and confidence in the Mineral Resources is appropriate and within the accepted error ranges for the Mineral Resource confidence categories (Measured, Indicated and Inferred).

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SECTION 4: ESTIMATION & REPORTING OF ORE RESERVES

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Criteria	*JORC Code explanation*	*Commentary*
Mineral Resource estimate for conversion to Ore Reserves	• Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve. • Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.	• The December 2023 Ore Reserve for Savage River is derived, after application of appropriate modifying factors, from the 2023 Mineral Resources in the North Pit and Central Pit deposits as reported in this release and as outlined in Sections 1-3. • The Mineral Resource is inclusive of the Ore Reserve.
Site visits	• Comment on any site visits undertaken by the Competent Person and the outcome of those visits. • If no site visits have been undertaken indicate why this is the case.	• The Competent Person has more than 25 years of experience in an opencut magnetite mine at senior operational management and technical levels. • Competent person is an employee of the company and regularly visits the site.
Study status	• The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves. • The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.	• The North Pit Opencut Ore Reserve is based on the 2024 Life-of-Mine Plan and Budget approved by the Grange Board. • The Centre Pit Opencut Ore Reserve is based on the 2024 Life-of-Mine Plan and Budget, and the updated feasibility study completed in October 2019. • The North Pit Underground Ore Reserve is based on the NPUG DFS completed in 2023 and supported by the 2024 Life-of-Mine Plan and Budget for ore processing and shared services. • The Stockpile Ore Reserves are based on detailed physical surveys and collected grade control assays. • The life-of-mine planning and budgeting process is undertaken annually which encompasses reviews of conversion of Mineral Resource to Ore Reserve and assessment of current economic and other reconciled modifying factors. • The information used for estimation and reporting of the Ore Reserve is based upon current operational performance reports, feasibility studies and current reconciled modifying factors.
Cut-off parameters	• The basis of the cut-off grade(s) or quality parameters applied.	• Cut-off-grade analysis was undertaken as part of the NPUG DFS and other feasibility studies and is reviewed on an annual basis as part of Grange Resource's life-of-mine planning and budgeting process. • The Cut-off grade is 15% DTR for opencut mining, 28% DTR for the SLC and 23% DTR for the Block Cave to determine the height of draw, with a 30% DTR for the drawpoint shut-off. The high shut-off grade is used to limit the maximum tonnes drawn through a drawpoint to approximately 500kt. This is because the accumulated damage and tonnes extracted through the drawpoint are the key considerations for shutting the drawpoint.

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Criteria	*JORC Code explanation*	*Commentary*
Mining factors or assumptions	• The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e., either by application of appropriate factors by optimization or by preliminary or detailed design).	• Whittle Optimisations are used to derive opencut economic pit outlines (shells) which are then used as the basis for mine design. The software uses profit maximization algorithms to generate pit shells. The cost inputs used in the Whittle optimiser are based on a combination of historical performance and forecasts of future costs. Parameters are initially determined in feasibility studies and are reviewed as part of the ongoing life-of-mine planning and evaluation process. • The Opencut Ore Reserves are reported within detailed staged pit designs which are based on Whittle opencut optimization. • Underground Ore Reserves are supported by an independently reviewed feasibility study (the NPUG DFS) consisting of detailed mine design and production estimation using PGCA flow and recovery modelling. • Block Cave: o Initial tonnages from individual drawpoints were generated using the final cave shape from the numerical model as a boundary. The PGCA model is based on the drawpoint opening sequence used by the LR4-SF4 model to generate cave shapes. The model uses an 18m draw cone and a drawpoint shut off at 30% DTR. o Cave initiation is from west to east and starts in the centre of the orebody. Caving then progresses North and South concurrently from the centre. The extraction and undercut levels have been sequenced to minimize the undercut leading the drawbells by up to three drawbells. o Drawbell opening rate is two per month and maximum drawpoint tonnage is 10,000t/dp/mo. o A split production rate was used ramping up to 6Mt over 30 months, and then increasing to 7Mt after 72 months. This is a point at which the head grade was expected to begin dropping due to dilution entry. o Three different flow modelling techniques were used to estimate a range for the recovered tonnes and grade from the block cave. This included sensitivity analysis of the width of draw, different scenarios for drawpoint production strategies (drawpoint life) and forecasting with and without the discounting of recovered tonnes from drawpoints due to forecast damage. This range in recovery was used to estimate the likely outcome and the Ore Reserve. • SLC: o The production blasthole rings are sequenced to form a chevron front on a level such that the level below cannot advance to be closer than 45 degrees from the rings above. o The PGCA model was run at an 11m draw width and a cut-off grade of 28% DTR. The residual block model was used as input to the block cave modelling. o The maximum SLC production rate is 1.9Mtpa.

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Criteria	*JORC Code explanation*	*Commentary*
		○ The production front advances from the west to east, with the cave initiating in the generally weaker rock mass in the west.
	• The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.	• Opencut mining is currently undertaken by conventional bulk mining methods utilizing hydraulic face shovels, dump trucks and conventional drill and blast, which is suited to the local terrain. • Over the next five years, at the completion of the current opencut stage, production from the North Pit deposit will transition from opencut to underground mining using a combination of block caving and SLC methods. • A range of alternative mining methods were assessed during conceptual and scoping studies. Block caving and SLC were found to be the most suitable due the geometry of the deposit, the low rock mass strength of ore, and the competent nature of the waste in the east wall for access and infrastructure development. Block caving and SLC methods were focused on during the 2021 Prefeasibility Study (PFS). Following recommendations of the PFS, block caving was the primary focus of the NPUG DFS with a small area of SLC mining adjacent to the North Pit opencut.
	• The assumptions made regarding geotechnical parameters (e.g.: pit slopes, stope sizes, etc), grade control and pre-production drilling.	• The overall opencut pit slopes used for the design and optimisation are based on geotechnical studies undertaken in initial feasibility studies and are reviewed and updated on an annual basis as part of Grange Resource's life-of-mine planning process. The current overall slope parameters are as follows:

Pit	Overall Slope Angle (degrees)			
	East	West	North	South
North Pit	48	27	32	25
Centre Pit	37	28	37	35
South Deposit	40	38	36	42

	• The underground block cave has an offset herringbone layout facing west with drive spacing of 34m x 20m. The undercut level is 15m vertically above the extraction level with 34m drive spacings. An apex level is planned 20m vertically above the undercut level with crosscuts positioned at the major apex pillar. It is planned to develop the first three crosscuts as a contingency measure to assist with establishing undercutting drill and blast practices. • The block cave design includes 22 extraction drives and 204 drawpoints. The undercut level sits between 180m to 220m below the planned North Pit opencut. • The SLC area comprises three levels at 25m vertical spacing. Crosscuts are at 18m spacings to maximise the pillar size between the crosscuts.

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Criteria	*JORC Code explanation*	*Commentary*
		• The block cave will use an advanced undercut to minimize rockmass damage on the extraction level. The undercut leading the drawbells is limited to three drawbells along an extraction drive.
	• The major assumptions made, and Mineral Resource model used for pit and stope optimization (if appropriate).	• The smallest mining unit (SMU) assumed is 5m x 5m x 2.5m in the X, Y and Z direction consistent with the sub-cell resolution in the Mineral Resource model.
	• The mining dilution factors used.	• North Pit Opencut has mining dilution of 8.7% added at zero grade and 94% mining recovery of the diluted tonnes.
	• The mining recovery factors used.	• Centre Pit Opencut has mining dilution of 17.7% added at zero grade and 85% mining recovery of the diluted tonnes.
		• The opencut factors reflect actual historical performance and reconciliation. The underground factors were determined by computer modelling and simulation.
		• Temporal or period reconciliations are run to check the quality of the 3-month plan cycle.
		• North Pit Underground Ore Reserves include 10.67Mt of dilution at zero grade. The Block Cave and SLC recover 70% of the Measured and Indicated Mineral Resource within the cave zone. The mining dilution in the underground block caving operation is low in the early stages but increases over the life of the draw.
		• The mining reserve block model for the opencut mines includes the mining dilution and recovery factors for scheduling and reporting of Ore Reserves.
		• The Underground Reserves use PGCA, a particle-to-particle flow model, to estimate mining dilution and the drawpoint grade over the mine schedule.
	• Any minimum mining widths used.	• Mining widths of 20m are applied to the pit designs based on the current primary load and haul equipment's minimum working requirements. Ore and waste can be mined and segregated to the minimum block size based on the current equipment specification and mining method.
		• The Underground mine design has a minimum mining width of 40m for the SLC and 80m for the block cave with an allowable reduction to 60m for the final extraction drive at each end of the ore body.
	• The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.	• Inferred Mineral Resources are excluded in both opencut and underground mining Ore Reserves
		• Inferred resources are excluded from economic assessment or budget cashflow planning.
		• Inferred Resources are not scheduled.
		• Inferred Resources are only considered to assess the potential for further resource definition and reserve development.
	• The infrastructure requirements of the selected mining methods.	• The mine can conduct remote blast hole drilling and charging to support safe operation utilising the mining method.

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Criteria	*JORC Code explanation*	*Commentary*
		• Mining the Underground Reserves will require a doubling of the electrical power infrastructure at Savage River to power mining equipment, dewatering pumps, ventilation, and the material handling system. This power upgrade has been assessed and included within the NPUG DFS capital costs. • The underground mine will require construction of underground crushers and a conveyor to transport ore to the existing run-of-mine ore stockpile on surface. These have been included in the capital cost estimate. • The underground mine design includes bulk water storage dams which are connected to a dedicated drainage level below the extraction level. In the event of a high intensity rain event, controlled flooding of the drainage level is planned with overflow volumes reporting to the bulk water storage dams. Two pumping stations transfer water out of the mine, with a maximum design rate of 750L/s.
Metallurgical factors or assumptions	• The metallurgical process proposed and the appropriateness of that process to the style of mineralization. • Whether the metallurgical process is well-tested technology or novel in nature. • The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domains applied, and the corresponding metallurgical recovery factors applied. • Any assumptions or allowances made for deleterious elements.	• The Concentrator comprises primary crushing, primary and secondary grinding and magnetic separation. Concentrate is pumped by a slurry pipeline for drying, pelletizing and ship loading at the Port Latta. This process is well proven at Savage River over the last 50 years and is used extensively for magnetite deposits throughout the world. • The concentrator and pellet plant have been have operated continuously by Grange Resources since 2009 and before by Australian Bulk Minerals since 1997. • Metallurgical test work has been undertaken during feasibility studies and as part of subsequent drilling programs. • No adverse metallurgical impact has been identified to occur with the processing of North Pit ore sourced from underground. • Plant recovery factor is 96% of Ore Reserve DTR and accounts for concentrator efficiency. Plant recovery has improved with new rougher magnetic separators and supported by actual historical performance. • The Ore Reserve and the associated mine schedule produce an output on which the sale of pellet is based and includes any deleterious elements that might impact on sales contracts. • Deleterious elements (also referred to as impurities), are identified in product specification and are estimated in the Mineral Resource model.

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Criteria	*JORC Code explanation*	*Commentary*
	• The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the orebody as a whole.	• The Mineral Resource model appropriately addresses the chemical criteria and the emergent physical properties to meet a high-quality iron ore product. • Magnetite concentrates and hematite pellets are sold on a market specification. • The Davis Tube Recovery (DTR) technique is the fundamental unit of measurement of ore grade at a magnetite mine. DTR is a measure of the "recoverable" magnetite as determined by equipment which seeks to mimic the process occurring in the concentrator. • DTR can be used to predict the concentrate contained within the ore, which is far more relevant than an analysis for total iron in the ore. • The DTR is a physical test, dependent on the actual liberation of the magnetite from its gangue elements. • The liberation at the laboratory scale needs to mimic the liberation at a plant scale. This liberation is directly related to the grind distribution the method has been designed as appropriate for the Savage River deposit. The recoverable magnetite from the Davis Tube is called Davis Tube Concentrate (DTC) and is weighed to determine what proportion of the original sample was recovered. • The concentrate recovered from the DTC is analysed by X-ray fluorescence (XRF) methods to assess the quality of the DTC, i.e., the grade of iron, silica, sulphur etc in the concentrate. • X-ray fluorescence utilizes a spectrometer, an x-ray instrument used for non-destructive chemical analyses of rocks, minerals, sediments, and fluids. • All elemental quality data presented in the Ore Reserves is for the estimated DTR.
	• For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?	• Magnetite concentrates and hematite pellets are sold on a market specification.
Environmental	• The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.	• The mining and exploration tenements held by the Company contain environmental requirements and conditions that the entities must comply with during normal operations. • Conditions and regulations cover the management of the storage of hazardous materials and rehabilitation of mine sites. The Company obtained approvals to operate in 1996 and 1997 under Tasmania's Land Use Planning and Approvals Act (LUPA) and the Environmental Management and Pollution Control Act (EMPCA) as well as the Goldamere Act and Mineral Resources Development Act. The land use permit conditions for Savage River and Port Latta are contained in Environmental Protection Notices 248/2 and 302/2 respectively.

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Criteria	*JORC Code explanation*	*Commentary*
		• The currently approved Environmental Management Plans were submitted for Savage River and Port Latta on 21 December 2010. The extension of the project's life was approved by the Department of Tourism, Arts and the Environment on 12 March 2007 and together with the Goldamere Act and the Environmental Protection Notices, is the basis for the management of all environmental aspects of the mining leases. • The Goldamere Act limits the Company's liability under Tasmanian law for remediation of contamination to that caused by the Company's operation and indemnifies the Company for certain environmental liabilities arising from past operations. Where pollution is caused or might be caused by previous operations, and this may be impacting on Grange's operations or discharges. Grange is indemnified against any associated emissions. • Grange is required to operate to Best Practice Environmental Management (BPEM). • The Goldamere Act provides overriding legislation against all other Tasmanian legislation. • The main mining lease 2M/2001 on which both North Pit and Centre pit are allocated and is granted for a 30-year term due for renewal in 2031. There is reasonable grounds for renewal of the lease to enable the full recovery of the Ore Reserve. Grange has current approvals to mine in place. The waste rock is to be segregated into potential acid forming and non-acid forming waste in the pit and then disposed of in the Broderick Creek waste rock dump complex or other dumps as approved by the Tasmania EPA and Mineral Resource Tasmania which have sufficient capacity for the current life of the mine. The potentially acid forming waste is encapsulated with layers of clay and alkaline rocks to prevent the formation of acid rock drainage. • Process residue from the concentration of ore (tailings) is stored in the Main Creek Tailings Dam and the South Deposit Tailings Storage Facility. There is sufficient capacity to store tailings from North Pit, and Centre Pit until 2040. Approval for the South Deposit Tailing Storage Facility was granted by the Department of Environment and the Waratah-Wynyard Council and was commissioned in November 2018
Infrastructure	• The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.	• Current operation take place in the North Pit and Centre Pit deposits and one previously mined pit (South Deposit) which is not planned to be mined as part of the current 2024 life-of-mine plan. • There are two primary crushers and conveyors, concentrator, pipeline and pellet processing plant with process water sourced on-site and dedicated power transmission lines. • Townsite hosts a workforce of 250 persons. • Concentrate is transported by slurry pipeline to the Grange-owned Port Latta pellet plant and dedicated ship loading facility for export. • Storage of tails in the Main Creek Tails Storage Dam (facility) was completed in December 2022. Main Creek tailings dam is now undergoing closure and rehabilitation activities. Tails deposition is currently to

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Criteria	*JORC Code explanation*	*Commentary*
		the South Deposit Tails Storage Facility. The South Deposit TSF has sufficient capacity to support the life-of-mine operation.
Costs	• The derivation of, or assumptions made, regarding projected capital costs in the study.	• The life-of-mine plan is updated annually. All assumptions regarding capital costs are reviewed monthly and as part of the annual budgeting process. Capital costs are well documented, managed and understood for the operation. • The capital costs to establish and support the Underground Ore Reserve were estimated as part of the NPUG DFS. The costs were estimated by engineering consultants in accordance with AACE Class 3 guidelines and are considered appropriate for DFS studies. • The costs for the conveyor system have been estimated in accordance with AACE Class 4 guidelines.
	• The methodology used to estimate operating costs.	• The operating cost to support the Opencut Ore Reserves are calculated by a bottom-up budget process on an annual basis. The opencut, the concentrator and the pellet plant have operated continuously by Grange Resources since 2009 and before by Australian Bulk Minerals since 1997. The operating and capital costs are based upon actual operating historical data. • The operating cost to support the Underground Ore Reserve was calculated on time and usage rates obtained from quotations, engineering estimation and historical costs incurred during the construction of the exploration decline. The costs have been assessed at a level of accuracy of ±15%.
	• Allowances made for the content of deleterious elements.	• Allowances are made for the various deleterious elements and adjustments are made to the iron content.
	• The source of exchange rates used in the study.	• The exchange rate is sourced from specialist matter experts, with periodic forecast updates.
	• Derivation of transportation charges	• Magnetite product freight costs are estimated based on the Drewry fright model and index sourced from subject matter experts and updated annually. • Revenues are calculated based on Free-on-Board (FOB) from Port Latta. Individual shipments are sold on either an FOB basis from Port Latta or on a CFR basis.
	• The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.	• Forecasting of treatment and refining charges including penalties in concentrate are completed annually using the scheduled annual feed grade (including impurities). With forecast reports provided by subject matter experts
	• The allowances made for royalties payable, both Government and private.	• Royalties are used in the Whittle Optimization using the Tasmanian State charges and government royalties are calculated based on the 2024 Life-of-Mine Plan
Revenue factors	• The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.	• Revenue is derived from a combination of the 62% and 65% Iron Ore Fines Index and the Blast Pellet Premium. • Grange's Pellets quality exceed +65% Fe on average.

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Criteria	*JORC Code explanation*	*Commentary*
	• The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.	• The commodity pricing is sourced from specialist matter experts in the market analysis for mining and metals.
Market assessment	• The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future. • A customer and competitor analysis along with the identification of likely market windows for the product. • Price and volume forecasts and the basis for these forecasts. • For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.	• The mine and concentrator have operated continuously by Grange Resources since 2009 and before by Australian Bulk Minerals since 1997, and various parties since 1967. • Product is presently sold as concentrate and pellet into the Asian and Australian markets. • There are long-term contracts in place, and a strong spot market. • Prices are negotiated based on market indices.
Economic	• The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc. • NPV ranges and sensitivity to variations in the significant assumptions and inputs.	• Financial modelling of the costs and revenue associated with exploiting the Ore Reserves at the Savage River operation, including the Underground Ore Reserve, indicates a strong NPV. • The NPV is most sensitive to product price and exchange rate.
Land Tenure	• Land use	• The North Pit, Centre Pit, and South deposits and the associated waste dumps, tails storage facility, concentrator, accommodation, and pellet plant all lie wholly within ML 2M/2001 and ML 11M/2008. There are no restrictions placed on the operation by these leases which materially restrict its operation.
Social	• The status of agreements with key stakeholders and matters leading to social licence to operate.	• The Mine is relatively isolated, being situated 45km off the Murchison Highway, which links the north-west and western coasts of Tasmania (Figure 12). The nearest localities are Corinna (population 6), 24km to the south-west and Waratah (population 380), 38km to the north-east. The nearest major town by road is Burnie (population ~20,000), located on the north-west coast, about 100 km distant. • Grange also works with the Tasmanian Government in the Savage River Rehabilitation Project. This work has seen water quality in the Savage River improve from where it was significantly degraded by acid rock drainage in 1997 to where modified ecosystem targets are being met and pelagic aquatic species are re-populating the middle reaches of the river. On the back of this work, Grange has community support for the ongoing operation of the mine.
Other	• To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:	• Grange's project at Savage River is an active and ongoing operation.

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Criteria	*JORC Code explanation*	*Commentary*
	• Any identified material naturally occurring risks.	• Asbestos group of minerals have been identified at Savage River. The asbesti-form materials are handled according to the fibrous materials policy at Grange, whereby risks from respirable particles are monitored and controlled.
	• The status of material legal agreements and marketing arrangements.	• A long-term contract for supply of magnetite pellet to various customers exists.
	• The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.	• The Goldamere Act provides Tasmanian legislation to support the Savage River Operation. • Final approval for the SDTSF was received in 2014 and construction commenced in Q3 2014 • Final approval from the Tasmania EPA for complete mining at CP was received in April 2022.
Classification	• The basis for the classification of the Ore Reserves into varying confidence categories.	• For the Opencut, Measured Resources have been converted to Proved Reserves and Indicated Resources have been converted to Probable Reserves. • In cases where there is lower confidence in major modifying factors, Measured Resources are converted to a Probable Reserve. • There is an element of uncertainty regarding forecast recovery from underground caving, which is reflected in the reporting of the Ore Reserve as Probable and not Proved.
	• Whether the result appropriately reflects the Competent Person's view of the deposit.	• The result reflects the Competent persons view of the deposit.
	• The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).	• A total of 53.1Mt equal to 71% of the total Probable Ore Reserves has been derived from Measured Resources. • The Underground Reserve has been derived from: 53.1Mt of Measured Mineral Resources, 0.7Mt of Indicated Mineral Resources and dilution of approximetaly10.6Mt of unclassified/waste material.
Audits or reviews	• The results of any audits or reviews of Ore Reserve estimates.	• The feasibility study completed in September 2006 had been peer reviewed by Australian Mining Consultants (AMC) for the NP reserve for the mine life extension project (MLEP). • The Central Pit opencut feasibility was reviewed by AMC Consultants Pty Ltd (AMC) in September 2019. AMC concluded that the feasibility study supported the reported Ore Reserve and the requirements of the JORC Code. • The North Pit underground PFS was independently reviewed by Enthalpy.

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Criteria	*JORC Code explanation*	*Commentary*
		• The NPUG DFS was independently reviewed by AMC.
Discussion of relative accuracy/ confidence	• Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate. • The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used. • Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage. • It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	• Global reconciliations and bench reconciliations are used to feedback into the Mineral Resource model. Regular reconciliations show a good performance of model vs actual. The global Reserve reconciliation for 2022 demonstrates actual concentrate produced plus net change in stockpiles at end of the year was less than 2% and within the 10% tolerance range of model prediction. • Reconciliations are calculated from material survey movement against changes in stockpiles and actual magnetite concentrate production. • Grange believes that the relative accuracy and confidence in the Mineral Resources is appropriate for the generally- accepted error ranges understood by the resource confidence categories which have been allocated. • Historically model predictions are normally within ±10% of actual production. • Many modifying factors apply globally these include processing and metallurgical factors, processing costs revenue factors, and sales product quality estimates. • Some factors are applied locally, the Ore Reserves for North Pit opencut, Centre Pit opencut and North Pit underground have different geotechnical and mining dilution and recovery modifying factors applied. The reserves for each area of the mine have been tabulated separately. • All modifying factors are reviewed annually. • Modifying Factors are reviewed periodically with reconciliations to evaluate accuracy and confidence of the estimates. • Relative accuracy of the modifying factors compares well with production data which is compared on a monthly and annual basis.

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APPENDIX B – PLANS & SECTIONS

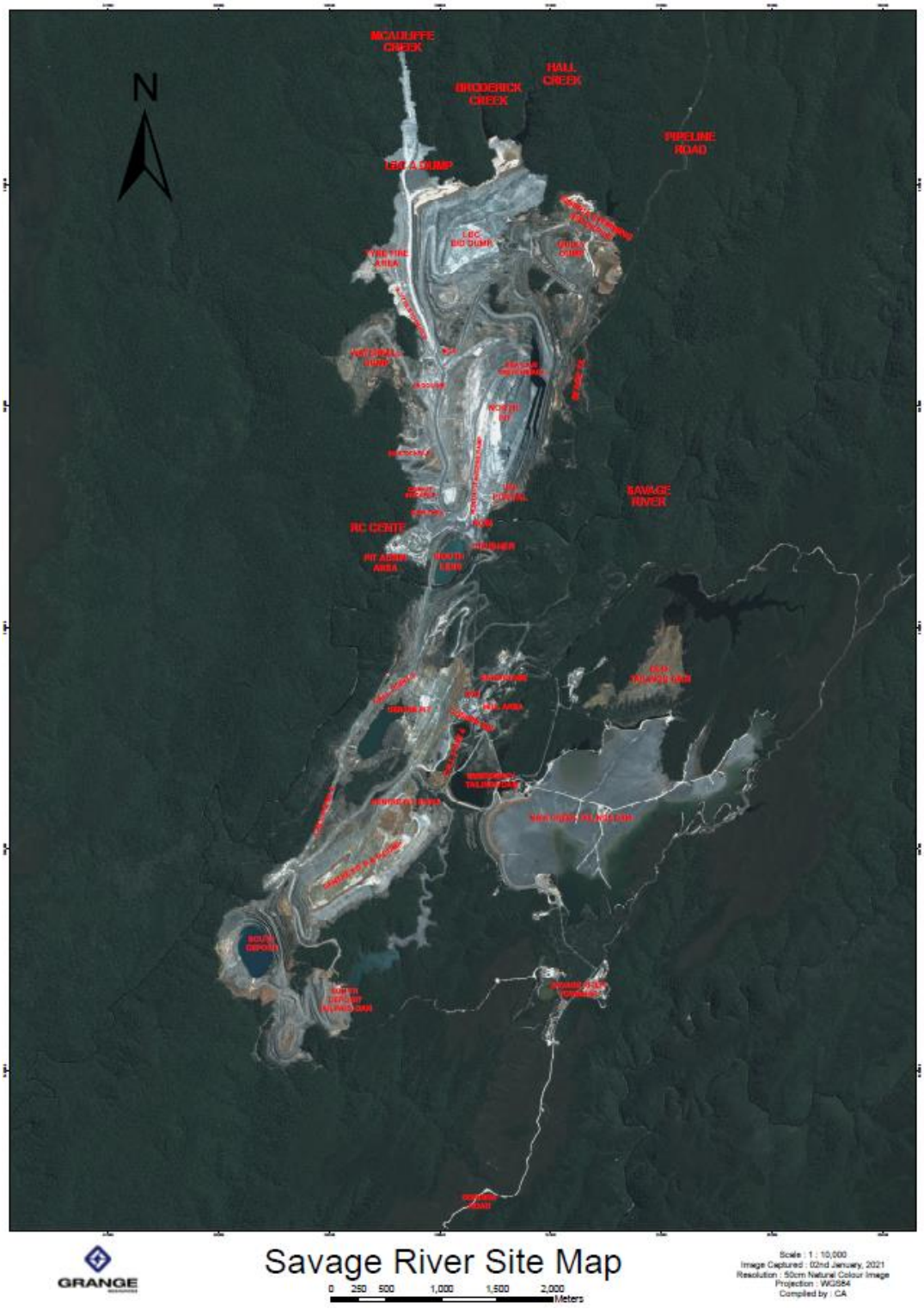


Figure 6: Image of Savage River Site Infrastructure, Jan 2021



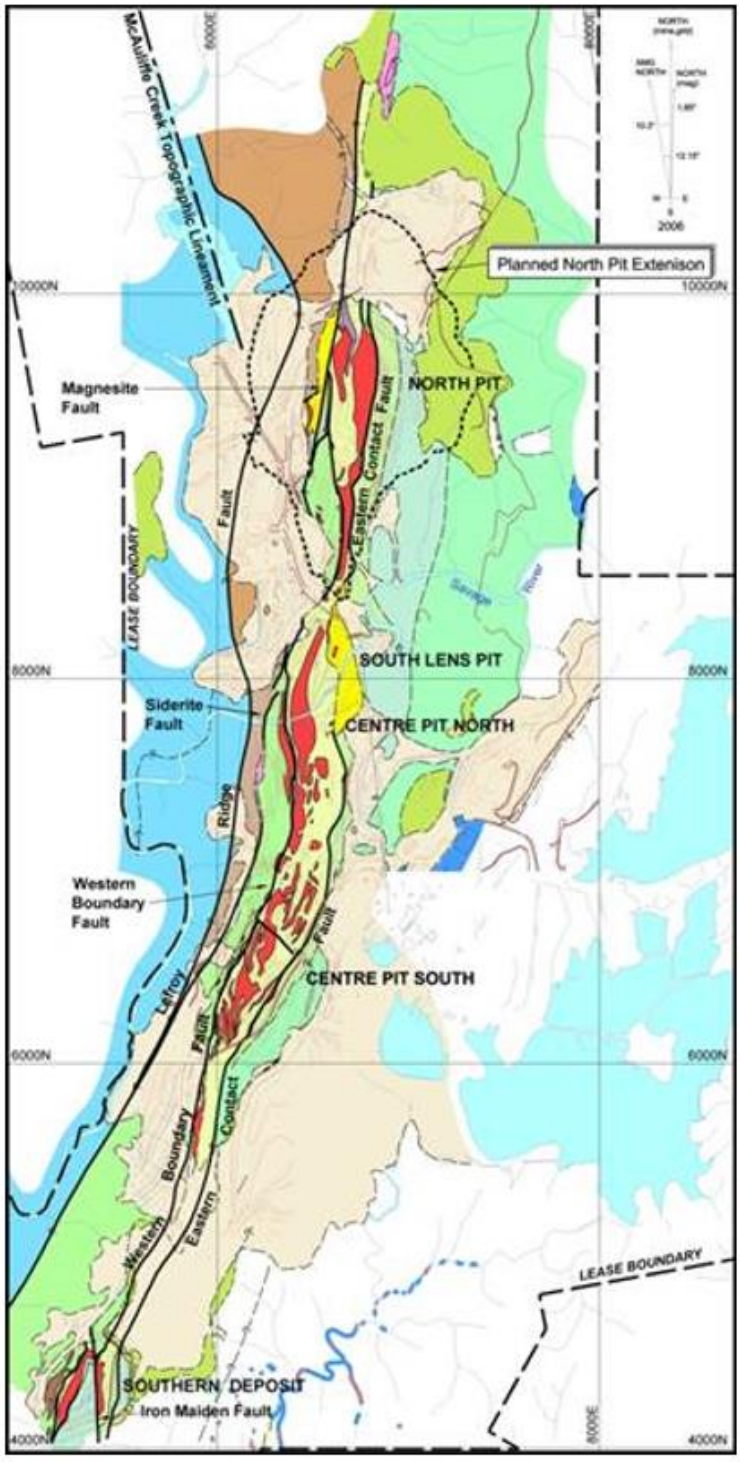


Figure 7 Regional Geology (2008)

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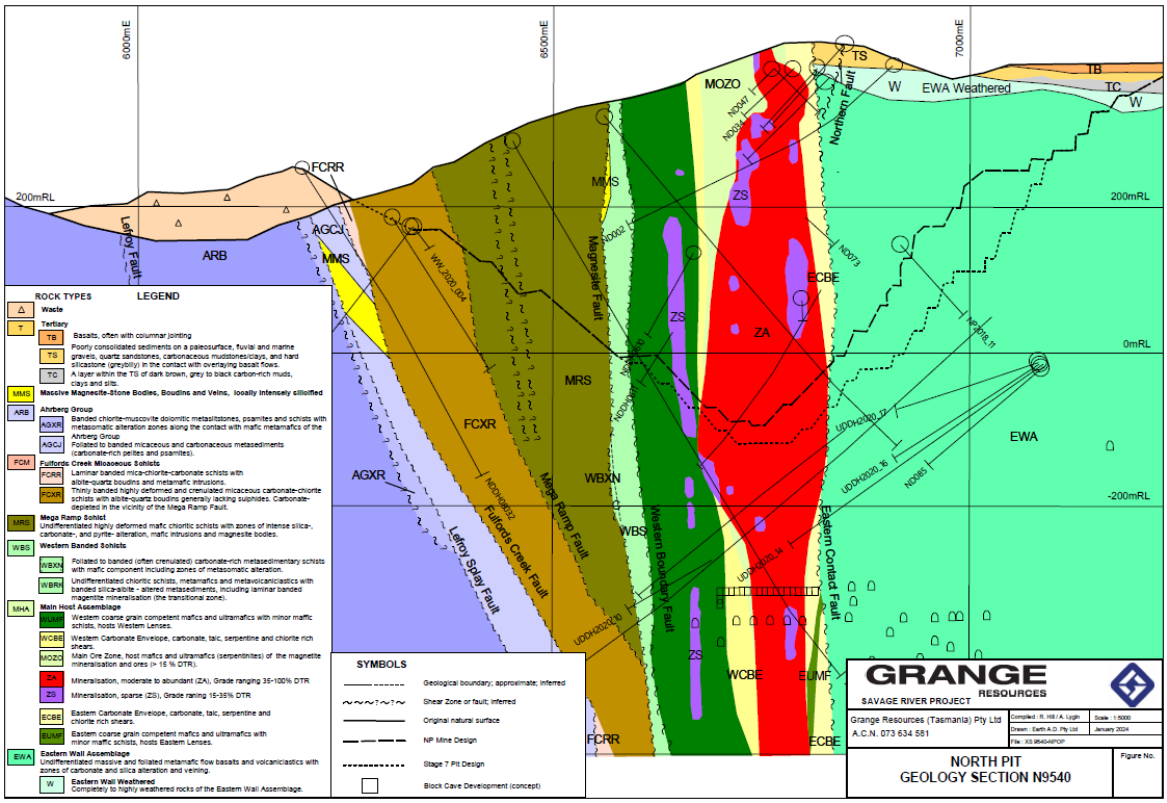


Figure 8 North Pit Typical Cross Section

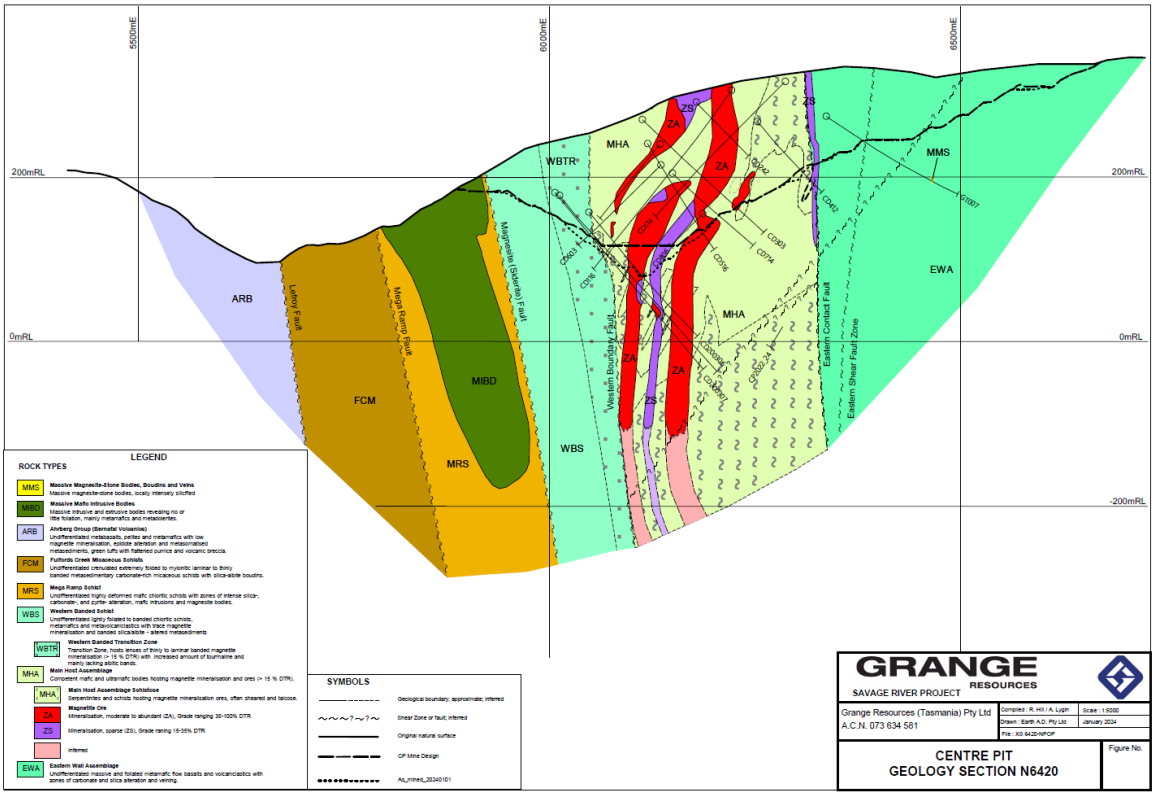


Figure 9 Centre Pit Typical Cross Section

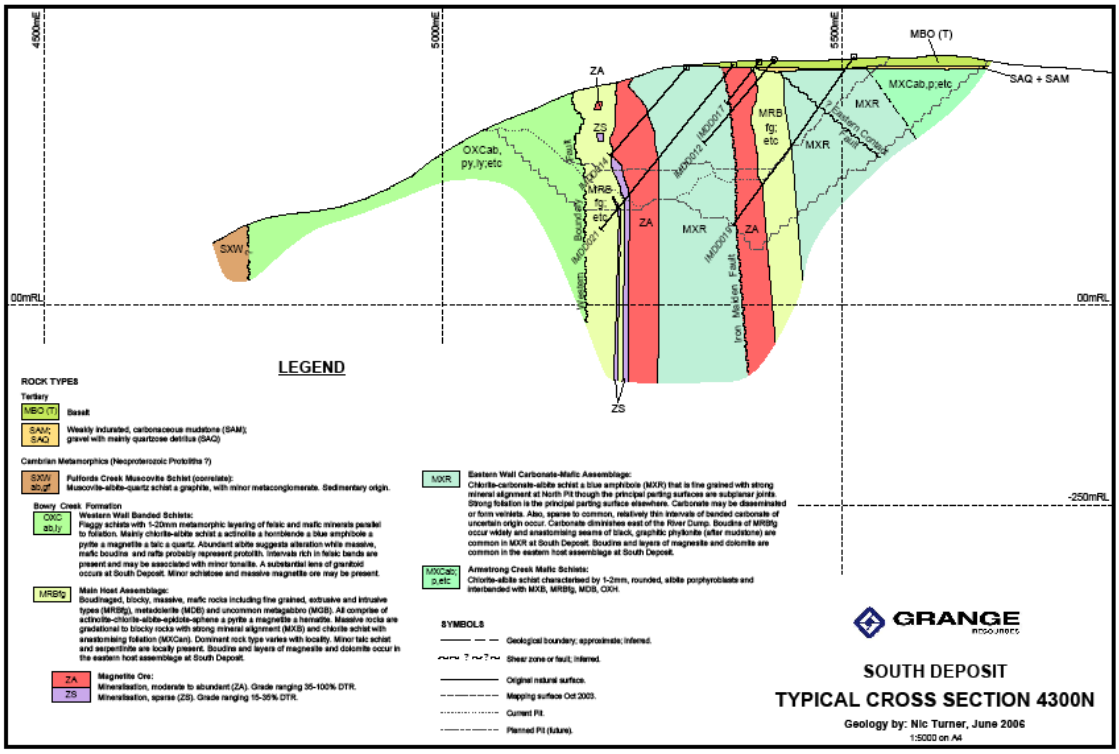


Figure 10 South Deposit Typical Cross section

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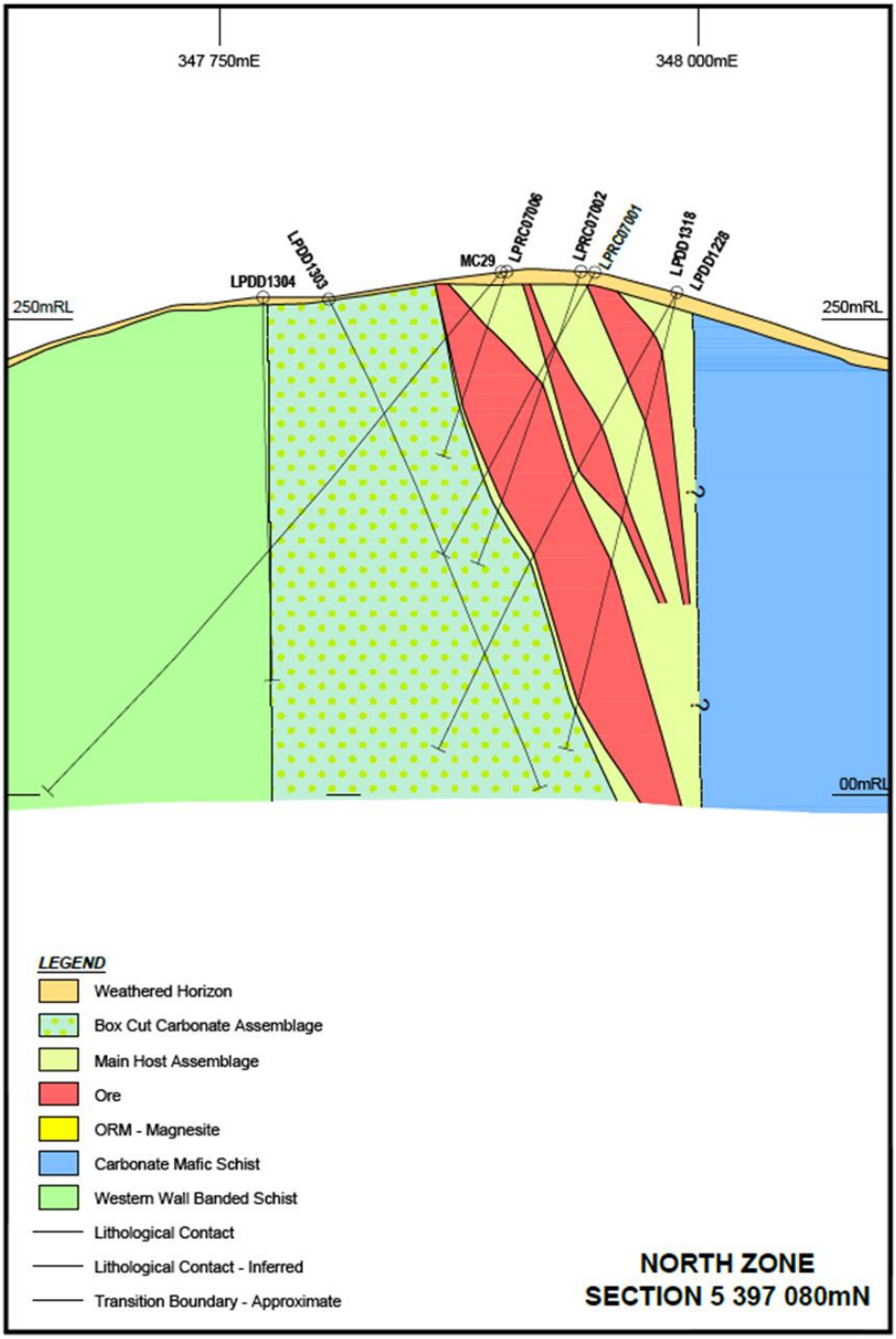


Figure 11 Long Plains Typical Cross Section

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APPENDIX C - DRILL HOLE DATA

Pursuant to the guidelines established in the JORC Code (2012 Edition), the following tables represents the new drill hole intercepts which support the Mineral Resource and Ore Reserve estimates for Savage River. Six new holes were added for the calendar year 2022 and a new resource estimate for Centre Pit was completed in 2023. For previous intersections please refer to the 31-March-2022 ASX release.

Table 17 Added Centre Pit Drill-hole Intersections as at 31 December 2023

Hole ID	X	Y	Z	Dip	Azimuth	Depth From	Depth To	Max Depth
CP2022_02	5735.31	5890.85	207.31	-50.01	90.22	256.7	261.5	387.6
CP2022_02	5735.31	5890.85	207.31	-50.01	90.22	263.5	266.4	387.6
CP2022_02	5735.31	5890.85	207.31	-50.01	90.22	279.1	283.7	387.6
CP2022_03	5887.87	6038.38	221.21	-49.77	89.58	142.1	144.0	386.2
CP2022_03	5887.87	6038.38	221.21	-49.77	89.58	200.0	214.3	386.2
CP2022_03	5887.87	6038.38	221.21	-49.77	89.58	88.7	97.1	386.2
CP2022_03	5887.87	6038.38	221.21	-49.77	89.58	100.4	131.5	386.2
CP2022_03	5887.87	6038.38	221.21	-49.77	89.58	158.8	184.6	386.2
CP2022_03	5887.87	6038.38	221.21	-49.77	89.58	97.1	100.4	386.2
CP2022_04	5794.24	6171.09	204.87	-50.11	89.53	346.2	353.1	392.4
CP2022_04	5794.24	6171.09	204.87	-50.11	89.53	297.9	325.0	392.4
CP2022_04	5794.24	6171.09	204.87	-50.11	89.53	278.0	284.8	392.4
CP2022_04	5794.24	6171.09	204.87	-50.11	89.53	267.8	273.7	392.4
CP2022_04	5794.24	6171.09	204.87	-50.11	89.53	361.7	363.5	392.4
CP2022_04	5794.24	6171.09	204.87	-50.11	89.53	335.5	343.5	392.4
CP2022_07	5913.45	6524.04	176.31	-50.42	90.64	300.9	309.1	357.3
CP2022_15	6276.09	6699.38	139.48	-49.51	90.19	59.0	67.0	122.1
CP2022_15	6276.09	6699.38	139.48	-49.51	90.19	28.7	39.3	122.1
CP2022_15	6276.09	6699.38	139.48	-49.51	90.19	84.5	91.8	122.1
CP2022_16	6303.38	6769.06	139.76	-50.18	89.78	39.5	48.4	161.9
CP2022_16	6303.38	6769.06	139.76	-50.18	89.78	8.0	34.0	161.9
CP2022_16	6303.38	6769.06	139.76	-50.18	89.78	72.6	76.4	161.9
CP2022_16	6303.38	6769.06	139.76	-50.18	89.78	98.3	111.0	161.9
CP2022_17	6328.56	6898.97	143.18	-49.83	90.12	48.8	77.0	153.3
CP2022_17	6328.56	6898.97	143.18	-49.83	90.12	12.9	15.4	153.3
CP2022_18	6414.38	6963.11	154.81	-49.94	88.95	128.9	136.4	163.4
CP2022_18	6414.38	6963.11	154.81	-49.94	88.95	51.1	68.7	163.4
CP2022_18	6414.38	6963.11	154.81	-49.94	88.95	100.2	104.0	163.4