GLOBAL GEOSCIENCE

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Initial Rhyolite Ridge Mining Study Confirms Potential for Long Mine Life from Currently Defined South Basin Resource

Highlights

- Initial mining study points towards low-cost open pit mining at Rhyolite Ridge
- Potential for long-life mining operation at rates of 2 million to 4 million tonnes per annum
- Based on only the high-grade (lithium-boron) component of the South Basin Resource
- The Resource is likely to increase substantially with additional drilling outside of the current Resource at both South Basin and North Basin
- Two stage development being considered:
  - A 2Mtpa starter pit (constrained) based on 26Mt Resource that may be eligible for fast-track permitting due to its small footprint
  - A large, unconstrained pit based on 87Mt Resource and sufficient to support 4Mtpa operation
- The mining study provides the basis for estimating the cost of feed to the processing plant and is an integral part of the Preliminary Feasibility Study currently underway
- Together with recently announced favorable heap leach results (12/12/17), the mining study supports the potential for low capital and operating costs for the mining and acid-leaching stages of the project

Tuesday, 19 December 2017 – Australian-based lithium-boron mine developer **Global Geoscience Limited ("Global" or the "Company") (ASX: GSC)** today announced that the initial mining study confirms that the large, shallow Rhyolite Ridge lithium-boron deposit in Nevada, USA is amenable to low-cost open pit mining at rates of 2 to 4 million tonnes per annum ("Mtpa").

Whilst no decision has been made at this stage, the Company is considering production rates in the range of 2 million to 4 million tonnes per annum. By way of illustration, one million tonnes of mineralisation contains approximately 8,700 tonnes of lithium carbonate and 77,200 tonnes of boric acid.

Global Geoscience's Managing Director, Bernard Rowe said: "The initial mining study has shown that the Rhyolite Ridge Resource can readily support a 2Mtpa to 4Mtpa mining operation based solely on the current high-grade lithium-boron Resource at South Basin."

"We are examining an initial starter pit based on a 26Mt pit shell (constrained) that we expect will allow us to stay under the one square mile footprint required to be considered for fast-track permitting under US Federal Government regulations. The initial development could be followed by a much larger development based on the 87Mt pit shell (unconstrained) that would allow an increased production rate of 4Mtpa and above."

It is important to note that mining study has only examined mining parameters and any implied cost estimates only relate to mining and specifically exclude processing and refining costs. In that respect, the mining study is only examining the parameters to mine and supply feed to the processing plant.

The mining study considered two scenarios:

- A smaller constrained starter pit shell:
  - 26 million tonnes at 1,400ppm lithium (equivalent to 0.74% lithium carbonate) and 1.24% boron (equivalent to 7.1% boric acid)
  - Supporting a 2Mtpa operation for more than 10 years
  - Low strip ratio of less than 4:1
  - Small footprint that may be eligible for fast-track permitting
- A larger unconstrained pit shell:
  - 87 million tonnes at 1,635ppm lithium (equivalent to 0.87% lithium carbonate) and 1.35% boron (equivalent to 7.7% boric acid)
  - Supporting a 4Mtpa operation for more than 20 years

A summary of key pit shells is shown in the table below.

Pit Shell		**22 constrained**	**23 unconstrained**
Mining Rate	Mtpa	2	4
Tonnage of Mineralisation	Mt	26	87
Potential Mine Life	Years	13	21
Strip Ratio	t:t	3.9	5.8
Mined Grade – Lithium	ppm	1,400	1,635
Mined Grade – Boron	%	1.24	1.35
Contained Lithium Carbonate	kt	194	757
Contained Boric Acid	kt	1,843	6,718
Portion of Resource as Indicated	%	98	91
Footprint of pit	sq. mile	0.25	2.9

Lithium carbonate and boric acid are planned to be produced at the Rhyolite Ridge mine site and are included in the above table to illustrate the scale of the project. The contained lithium carbonate (Li_2CO_3) is derived by multiplying the mined lithium grade (ppm) by 5.32. The contained boric acid (H_3BO_3) is derived by multiplying the mined boron grade (%) by 5.72.

Mining Study

Global Geoscience engaged RPM Global ("RPM") (formerly Runge) to conduct an initial mining study (strategic analysis) of the Rhyolite Ridge Lithium-Boron Project. The study included pit limit optimisation using Whittle 4X and developing a conceptual mine site layout. Further work to be completed includes pit design and scheduling. Mining cost estimates were provided by RPM.

Mining projects in Nevada with a disturbance footprint (mine, plant, dumps and other infrastructure) of less than one square mile may be considered for expedited approval and permitting. The Company requested RPM to constrain a pit in a manner to provide adequate tonnage (>20Mt) and mine life (10 years) with the smallest possible footprint (surface area).

Two main scenarios were examined in the study:

1) small constrained pit at the northern end of the Resource that could be considered for fast-track permitting if the total mine footprint is under one square mile; and
2) large, unconstrained pit mining most of the high-grade lithium-boron Indicated Resource.

The key inputs to the RPM mining study were:

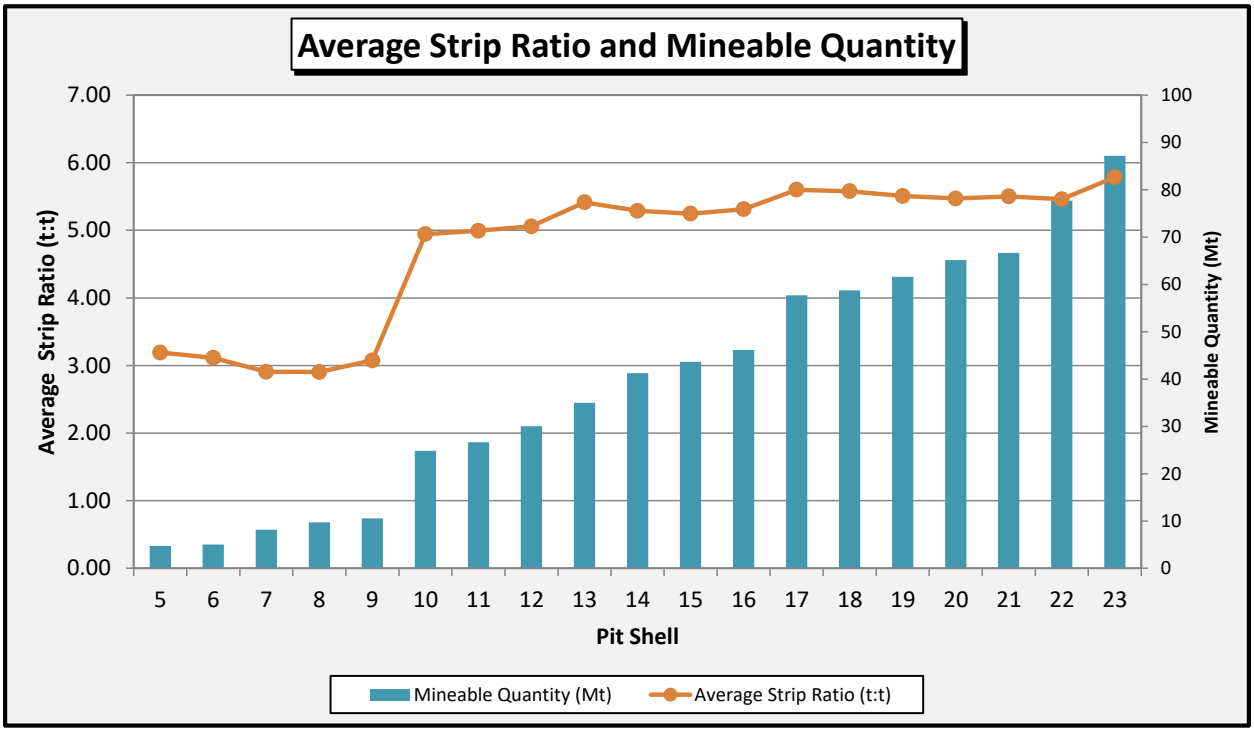
- Rhyolite Ridge Mineral Resource announced 31 October 2017
- Marginal cut-off grade of 1,050ppm Li and 0.5% boron
- Open pit slope angles of 45 degrees
- Mining dilution of 5% (at zero grade) and loss of 5%
- Mining rate of 2Mtpa of lithium-boron mineralization

RPM provided an estimate of mining costs for the project of US$2.81/tonne of waste and US$3.26/tonne of mineralisation.

The selected pit shells target the high-grade lithium-boron mineralisation in the Indicated Resource of 103 million tonnes at 1,700 ppm lithium (equivalent to 0.9% lithium carbonate) and 1.31% boron (equivalent to 7.5% boric acid) at a 1,050ppm lithium and 0.5% boron cut-off. This shallow, high-grade lithium-boron mineralisation outcrops along the northwest and west sides of the South Basin Mineral Resource.

The lithium-only mineralisation in the Mineral Resource is excluded from the study as it is likely to require different processing. Testwork on the lithium-only mineralisation has not yet been completed, but it is reasonable to assume this mineralisation may be stockpiled for potential future processing.

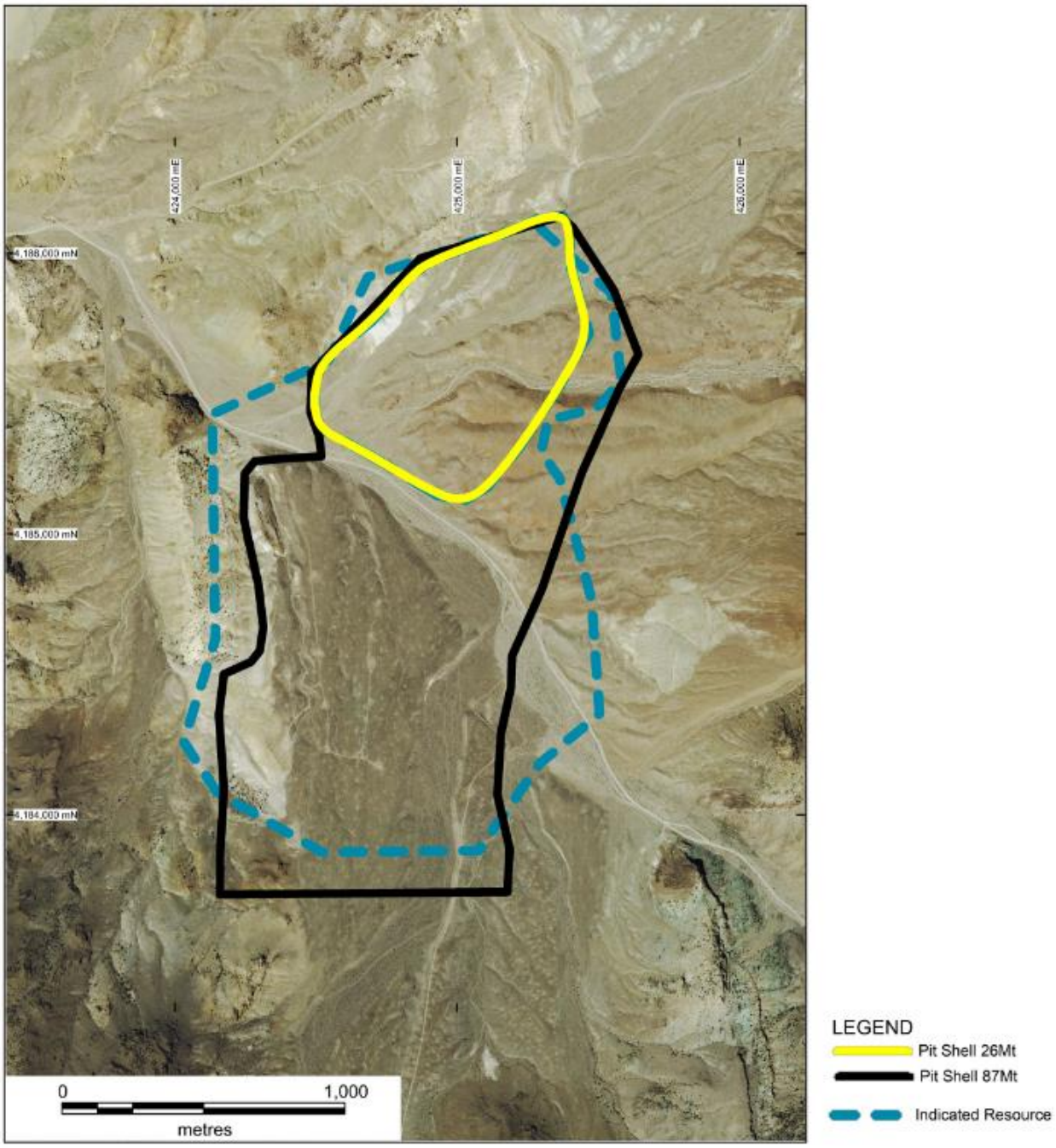
The chart below shows the unconstrained mineable quantity above the marginal cut-off grade, that is, that material likely to be processed, and the associated average strip ratio as the Whittle pit shells become larger (limited only by the size of the Resource).



The largest shell contains material above the marginal cut-off grade of 87 million tonnes at an average grade of 1,635 ppm lithium (equivalent to 0.87% lithium carbonate) and 1.35% boron (equivalent to 7.7% boric acid). Within this unconstrained shell, 91% is Indicated Resource and 9% is Inferred Resource. At an average strip ratio of 5.8:1 the total quantity of below cut-off grade material is approximately 505 Mt.

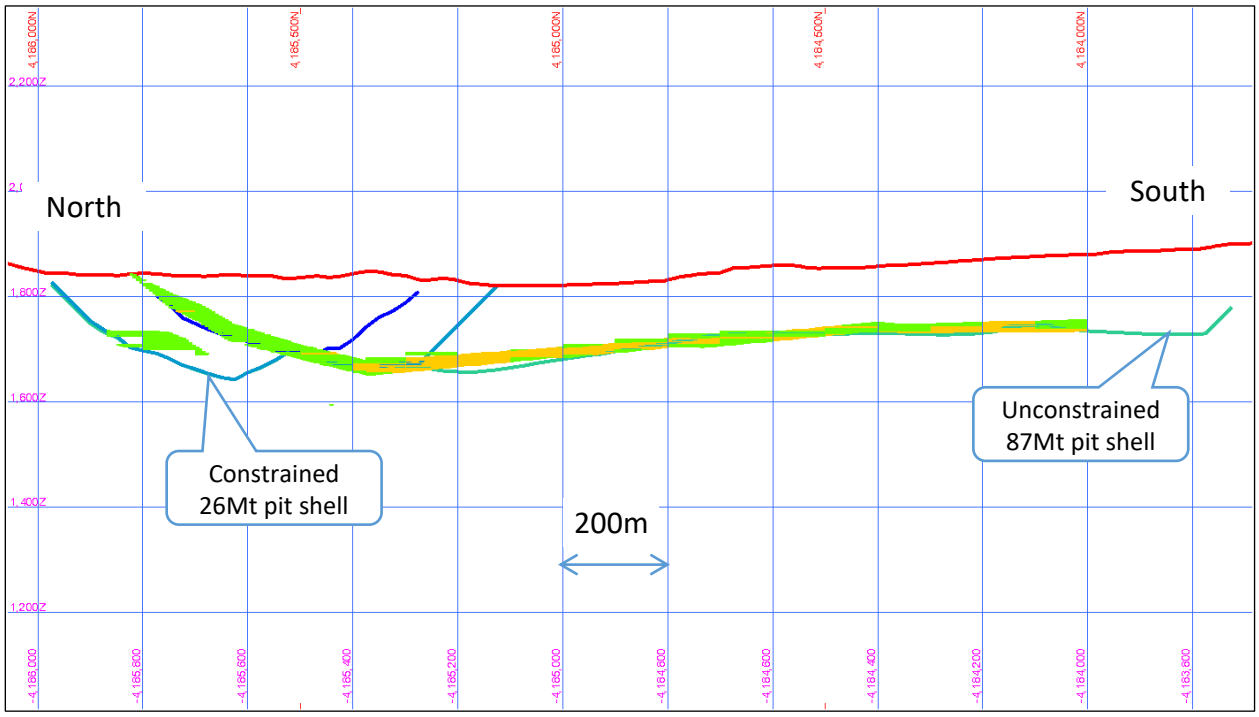
There is a low level of geological confidence associated with Inferred Resources and there is no certainty that further exploration work will result in the determination of Indicated Resources or that the production target itself will be realised.

The strip ratios for the smaller pit shells are significantly lower, particularly for the pit shells containing less than 10 million tonnes (shells 9 and below).



Plan showing outlines of two pit shells in relation to the current Mineral Resource and outcrop. The Resource remains open to the north, south and east. UTM Zone 11 (NAD27).

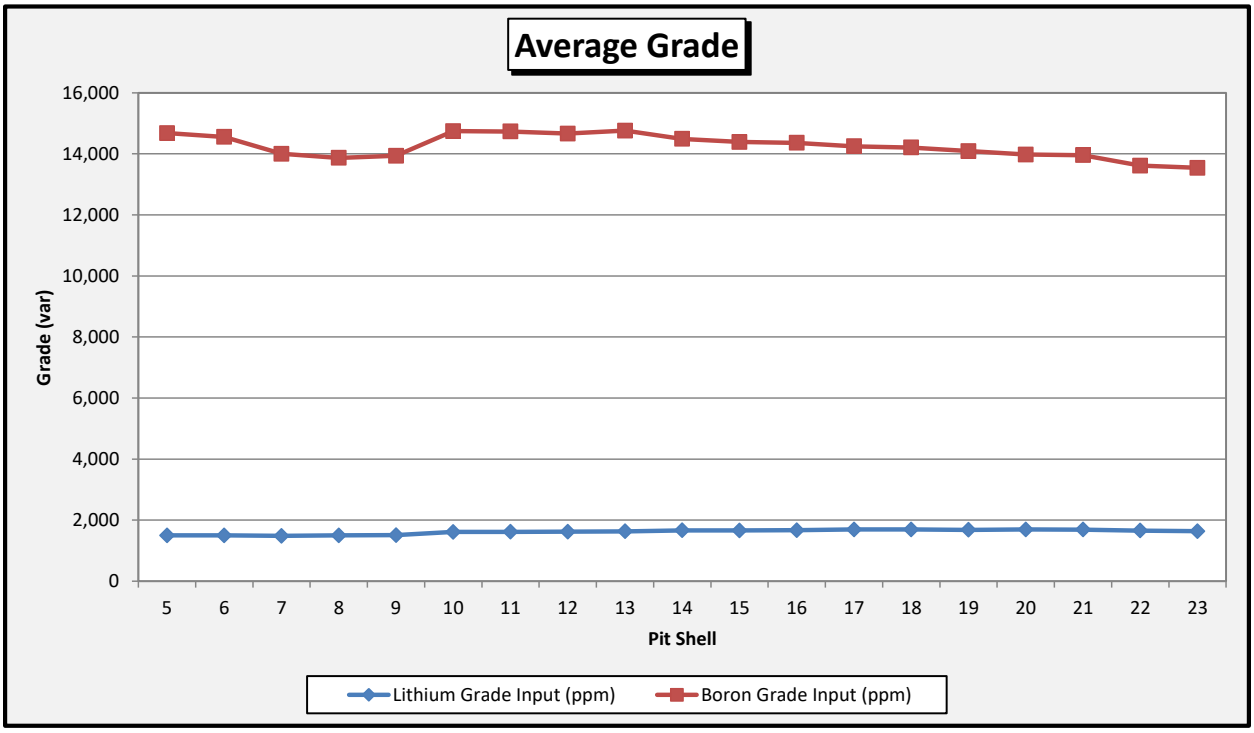
The long-section below shows the progression of pit shells from north to south across the deposit with the lithium-boron mineralisation shown in green and yellow.



Long section showing constrained and unconstrained shells. The figure depicts the flat nature of the mineralisation, which means a relatively constant low strip ratio. Mineralisation is thickest in the north where mining is planned to commence.

The deposit depth is the key driver of how the Whittle pit shells develop as the mineralisation is very consistent laterally. The nested shells start in the north of the deposit and generally grow towards the deeper areas to the south.

The chart below shows the average lithium and boron grades for each pit shell for the constrained scenario.



The average boron grade decreases slightly with the larger tonnage pit shells in the constrained scenario. The lithium grades are very consistent across all shells.

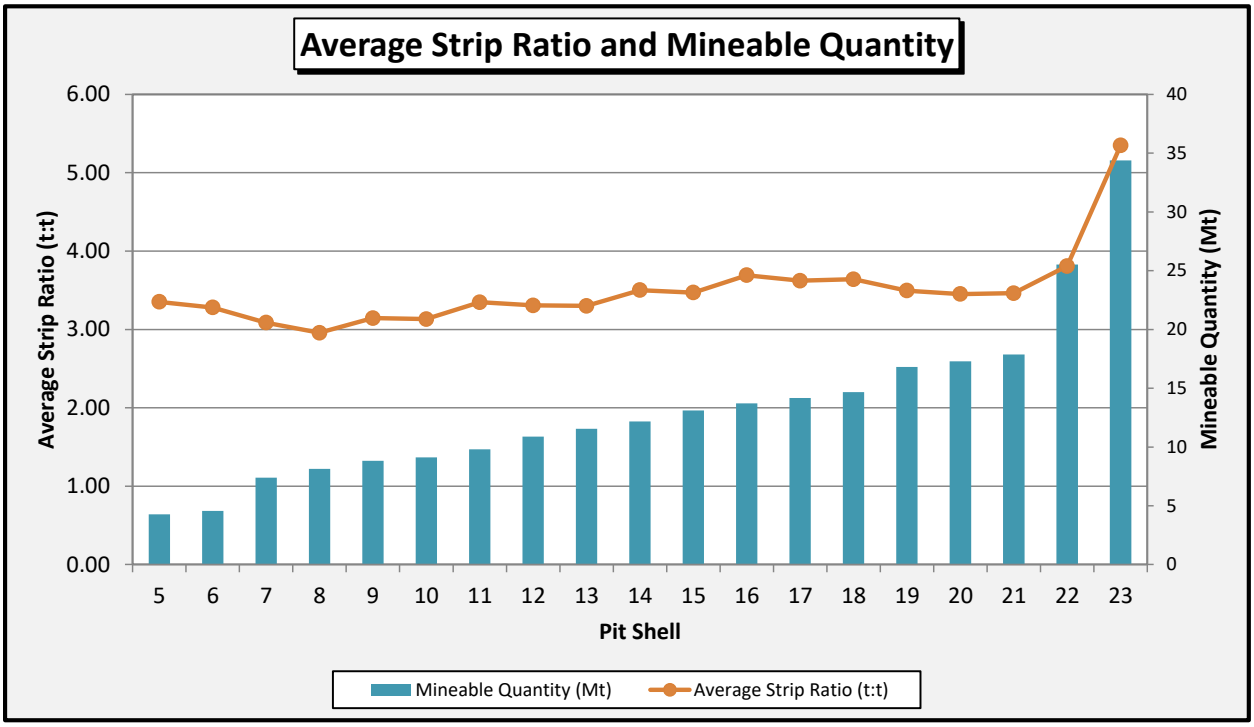
Constrained Pit

In order to work towards the base case mine plan in the PFS, the Company required a pit shell that:

- provides 2 Mtpa of lithium-boron mineralisation for a minimum of ten years; and
- minimise the surface impact (footprint) of the selected pit shell and associated works.

A small, constrained pit could be considered for fast-track permitting if the total mine footprint is under one square mile.

The chart below summarises the constrained mineable quantity above the marginal cut-off grade, that is, that material likely to be processed, and the associated strip ratio, for the various pit shells based on these constraints.



The pit that best satisfies the constraints is Pit 22 with a mineable quantity of 26Mt, an average strip ratio of 3.9 and a footprint of 0.25 square mile (0.61 km^2).

As detailed in table below, for material above the marginal cut-off grade, Pit 22 contains 26 million tonnes at 1,400ppm lithium (equivalent to 0.74% lithium carbonate) and 1.24% boron (equivalent to 7.1% boric acid).

Nearly all (98%) of the lithium-boron mineralisation contained in Pit 22 is within the Indicated Resource, and hence is a suitable basis for mine planning in the PFS. The remaining 2% of the mineralisation is Inferred.

Whittle Optimisation Results for the Constrained Case

Pit Number	Mineable Quantity (Mt)	Waste Quantity (Mt)	Total Pit Quantity (Mt)	Average Strip Ratio (t:t)	Lithium Grade (ppm)	Boron Grade (ppm)	Li_2CO_3 Grade (%)	H_3BO_3 Grade (%)	K_2SO_4 Grade (%)
5	4.3	14.3	18.6	3.4	1,476	14,790	0.79	8.46	1.96
6	4.6	15.0	19.6	3.3	1,475	14,675	0.78	8.39	1.96
7	7.4	22.8	30.2	3.1	1,454	14,129	0.77	8.08	1.93
8	8.1	24.1	32.2	3.0	1,454	13,956	0.77	7.98	1.92
9	8.8	27.7	36.5	3.1	1,457	14,031	0.78	8.03	1.91
10	9.1	28.6	37.7	3.1	1,458	13,982	0.78	8.00	1.91
11	10	33	43	3.3	1,460	14,044	0.78	8.03	1.90
12	11	36	47	3.3	1,475	13,830	0.78	7.91	1.88
13	12	38	50	3.3	1,470	13,730	0.78	7.85	1.86
14	12	43	55	3.5	1,468	13,794	0.78	7.89	1.85
15	13	45	58	3.4	1,462	13,617	0.78	7.79	1.84
16	14	51	64	3.7	1,465	13,740	0.78	7.86	1.84
17	14	51	66	3.6	1,460	13,596	0.78	7.78	1.83
18	15	55	70	3.7	1,458	13,551	0.78	7.75	1.82
19	17	59	76	3.5	1,448	13,152	0.77	7.52	1.79
20	17	60	77	3.5	1,442	13,059	0.77	7.47	1.78
21	18	62	80	3.5	1,440	13,003	0.77	7.44	1.78
22	**26**	**101**	**127**	**3.9**	**1,400**	**12,433**	**0.74**	**7.11**	**1.65**
23	34	185	219	5.4	1,406	12,697	0.75	7.26	1.61

The nested shells grow outwards from the centre of the pit, so a phased mining approach with staged cut-backs is recommended. Pit 11 in the table provides an indication of the mineralisation that would be mined in the first five years of a 2 Mtpa operation. This smaller pit has an average strip ratio of 3.3 and contains 10 million tonnes at 1,460ppm lithium (equivalent to 0.78% lithium carbonate) and 1.40% boron (equivalent to 8.0% boric acid).

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About Global Geoscience

Global Geoscience Limited (ASX:GSC) is an Australian-based mineral explorer and developer focused on its 100%-owned Rhyolite Ridge Lithium-Boron Project in Nevada, USA. Rhyolite Ridge is a large, shallow lithium-boron deposit located close to existing infrastructure. It is a unique sedimentary deposit that has many advantages over the brine and pegmatite (spodumene) deposits that currently provide the world's lithium. The Rhyolite Ridge Pre-Feasibility Study is well under way.

Global Geoscience is aiming to capitalise on the growing global demand for lithium and boron. Lithium has a wide variety of applications, including pharmaceuticals, lubricants and its main growth market, batteries. Boron is used in glass and ceramics, semiconductors and agriculture. Global Geoscience aims to develop the Rhyolite Ridge Lithium-Boron Project into a strategic, long-life, low-cost supplier of lithium carbonate and boric acid. To learn more please visit: www.globalgeo.com.au.

About RPM

RPMGlobal Holdings Limited (ASX:RUL) (formerly Runge) is a global leader in the provision and development of advisory services, mining software solutions, and professional development. The RPMGlobal team has over 45 years of experience in the mining industry and are the largest group of independent technical experts in the world. RPM's approach to the business of mining is strongly grounded in economic principles. Together with software, advisory and professional development businesses, RPMGlobal delivers completely integrated and tailored solutions for mining houses and investors across the globe.

Competent Persons Statement

The information in this report that relates to Exploration Results is based on information compiled by Bernard Rowe, a Competent Person who is a Member of the Australian Institute of Geoscientists. Bernard Rowe is a shareholder, employee and Managing Director of Global Geoscience Ltd. Mr Rowe has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Bernard Rowe consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

In respect of Mineral Resources referred to in this presentation and previously reported by the Company in accordance with JORC Code 2012, the Company confirms that it is not aware of any new information or data that materially affects the information included in the public report titled "Global Geoscience Doubles High-Grade Lithium-Boron Mineral Resource" dated 31 October 2017 and released on ASX. Further information regarding the Mineral Resource estimate can be found in that report. All material assumptions and technical parameters underpinning the estimates in the report continue to apply and have not materially changed.

Forward Looking Statements

Various statements in this report constitute statements relating to intentions, future acts and events which are generally classified as "forward looking statements". These forward looking statements are not guarantees or predictions of future performance and involve known and unknown risks, uncertainties and other important factors (many of which are beyond the Company's control) that could cause those future

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For example, future resources described in this presentation may be based, in part, on market prices that may vary significantly from current levels. These variations may materially affect the timing or feasibility of particular developments.

Words such as “anticipates”, “expects”, “intends”, “plans”, “believes”, “seeks”, “estimates”, “potential” and similar expressions are intended to identify forward-looking statements.

Global cautions security holders and prospective security holders to not place undue reliance on these forward-looking statements, which reflect the view of Global only as of the date of this presentation. The forward-looking statements made in this presentation relate only to events as of the date on which the statements are made. Except as required by applicable regulations or by law, Global does not undertake any obligation to publicly update or review any forward-looking statements, whether as a result of new information or future events. Past performance cannot be relied on as a guide to future performance.

Appendix - Resource Estimate

The Indicated and Inferred Resource estimate for the South Basin is 460 million tonnes at 1,700ppm lithium (equivalent to 0.9% lithium carbonate) and 0.46% boron (equivalent to 2.6% boric acid) at a 1,050ppm lithium cut-off.

October 2017 Mineral Resource Estimate (1,050ppm Li Cut-off)

Group	Classification	Tonnage	Li	B	Li_2CO_3	H_3BO_3	K_2SO_4	Contained		
		Mt	ppm	ppm	%	%	%	Li_2CO_3 kt	Boric Acid kt	Potassium kt
Upper &	Indicated	273.7	1,700	5,700	0.9	3.3	1.7	2,440	8,950	4,630
Lower	Inferred	185.8	1,700	2,900	0.9	1.6	1.6	1,620	2,960	3,020
Zone	**Grand Total**	**459.5**	**1,700**	**4,600**	**0.9**	**2.6**	**1.7**	**4,060**	**11,910**	**7,650**

The Resource includes a high-grade lithium-boron zone totaling 137 million tonnes at 1,800 ppm lithium (equivalent to 0.9% lithium carbonate) and 1.26% boron (equivalent to 7.2% boric acid) at a 1050ppm lithium and 0.5% boron cut-off. The Indicated category comprises 75% of the high-grade lithium-boron Resource.

October 2017 Mineral Resource Estimate (1,050ppm Li Cut-off and 0.5% B Cut-off)

Group	Classification	Tonnage	Li	B	Li_2CO_3	H_3BO_3	K_2SO_4	Contained		
		Mt	ppm	ppm	%	%	%	Li_2CO_3 kt	Boric Acid kt	Potassium kt
Upper &	Indicated	103.1	1,700	13,100	0.9	7.5	1.9	920	7,740	1,970
Lower	Inferred	34.0	2,000	11,100	1.0	6.3	2.2	350	2,160	740
Zone	**Grand Total**	**137.1**	**1,800**	**12,600**	**0.9**	**7.2**	**2.0**	**1,280**	**9,900**	**2,710**

The Resource remains open to the north, south and east and has significant potential to expand with further drilling of the South Basin. None of the known lithium-boron mineralisation at North Basin is included in the Mineral Resource estimate.

For further information regarding the resource estimate, refer to the announcement titled “Global Geoscience Doubles High-Grade Lithium-Boron Mineral Resource” dated 31 October 2017.