

24<sup>th</sup> November 2017

**Plymouth Minerals  
Limited**

**ACN 147 413 956  
ASX.PLH**

*Developing the world class  
San Jose lithium-tin deposit  
in Europe.*

**Issued Capital:**

151,340,221 ordinary  
shares  
25,000,000 performance  
shares (potash resource  
and FS milestones)  
19,525,000 unlisted options

**Directors:**

**Non-Executive Chairman**

Kevin Tomlinson

**Managing Director**

Adrian Byass

**Non Executive Directors**

Humphrey Hale

Dr Eric Lilford

Christian Cordier

**Company Secretary and  
Chief Financial Officer**

Robert Orr

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## SAN JOSE PROJECT UPDATE

ASX via Electronic Lodgement

### Highlights

- **Robust Scoping Study defines path forward**
- **Positive extension drilling drives updated JORC – due early December**
- **Appointment of Process Engineering for feasibility study is imminent**
- **Increasing offtake discussions with end-users**
- **Consensus lithium demand forecasts increase**
- **Mining licence Application for San Jose lodged – permitting ongoing**

Plymouth Minerals Limited (ASX: PLH) (Plymouth or the Company) is pleased to provide a project update on the San Jose Lithium-Tin Project (San Jose) and pathway forward.

Managing Director Adrian Byass said. "With the publication of a Scoping Study, Plymouth has demonstrated that the San Jose Lithium-Tin Project has the potential to provide decades of battery grade lithium carbonate on site for delivery to the growing EV market."

Enhancing the robust Scoping Study and advancing towards feasibility study in 2018. Plymouth is in the process of providing further resource, process and permit advancements. To drive the feasibility study, Plymouth is currently short-listing highly regarded, and industry experienced engineering groups to lead the feasibility study engineering. The Company expects to be able to announce several advancements in the coming weeks.

### JORC RESOURCE UPDATE

Plymouth completed a second phase of diamond drilling in the second half of 2017 (ASX release 6<sup>th</sup> September 2017) This Phase 2 drilling program complements the previous drilling campaign, completed in the first quarter of 2017 and has delivered further extensive intercepts of lithium mineralisation including 192m at +1.0% Li<sub>2</sub>O confirming that the deposit remains open at depth.

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Diamond drill hole MSJ-DD-0012 is the deepest hole drilled in the deposit to date ending in +1.0% Li<sub>2</sub>O at 420m vertically below the surface highlighting the potential for San Jose, already one of the largest lithium deposits in Europe to be a globally significant lithium deposit. It is expected that this new drilling will increase the size and resource category confidence level of the JORC resource. A new resource statement will be published when complete.

#### FEASIBILITY STUDY

Plymouth is delighted with the outcomes of the San Jose Scoping Study. The Company was able to fast track the work required to complete the Scoping Study within a year of gaining access to the tenements (released to the market on 17<sup>th</sup> October 2017).

Plymouth has now earned a 50% interest in the San Jose Project by spending a minimum of €1.5m on exploration work and submitting a Mining Licence Application (October 10<sup>th</sup> 2017). The next stage for the development of the Project is to conduct a feasibility study. By completing this, Plymouth can earn a further 25% ownership of the project increasing its stake to 75%. At which point, our Spanish partner, Valoriza Minería (subsidiary of major listed Spanish construction and engineering company, Sacyr S.A.) will be a 25% contributing partner in the development of San Jose.

The Company is in discussions with process engineering firms to partner with Plymouth to deliver the process design of the feasibility study. It is expected that Plymouth will complete this process prior to Christmas. A preliminary review of the work required to complete the study has suggested that it is possible for the Company deliver a feasibility study before the end of 2018.

Metric	Value
Initial Life of mine potential (years)	24.1
Potential annual production (tonnes lithium carbonate)	15,000
Pre-Production Capital inc 10% contingency (US\$m)	273
Average C1 cost LOM (US\$/tonne) without credits*	5,004
Average C1 cost year 1-10 (US\$/tonne) without credit*	4,763
Long term lithium carbonate price (US\$/tonne)	10,000
Average gross operating cashflow per annum years 1-10 (US\$m)	74.8
Base case Pre-tax NPV 8% (US\$ million)	401
Project IRR	28%
Payback from commencement of production (years)	2.7
(*) potential tin and boron credits not included in calculations of capital or revenue	
<p><b>Scoping Study – Cautionary Statement</b>  Refer to ASX announcement 16 October 2017. The Scoping Study referred to in this announcement is a preliminary technical and economic investigation of the potential viability of the San Jose Lithium-Tin Project. It is based on low accuracy technical and economic assessments, (+/- 35% accuracy) and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage; or to provide certainty that the conclusions of the Study will be realised. Plymouth confirms that all the material assumptions underpinning the production target, or the forecast financial information derived from the production target, in the initial ASX announcement continue to apply and have not materially changed. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Measured or Indicated Mineral Resources or that the Production Target or preliminary economic assessment will be realised.</p>	

Table 1 Scoping Study summary outcomes

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## OFFTAKE DISCUSSIONS

The Company has moved to the next level of resource development with the publication of the Scoping Study on the San Jose Lithium-Tin Project. This has allowed Plymouth to increase the dialogue with existing lithium offtake contacts in Europe and reach out to additional potential partners around the world including China and South East Asia. Confidential discussions are underway with several end-user groups.

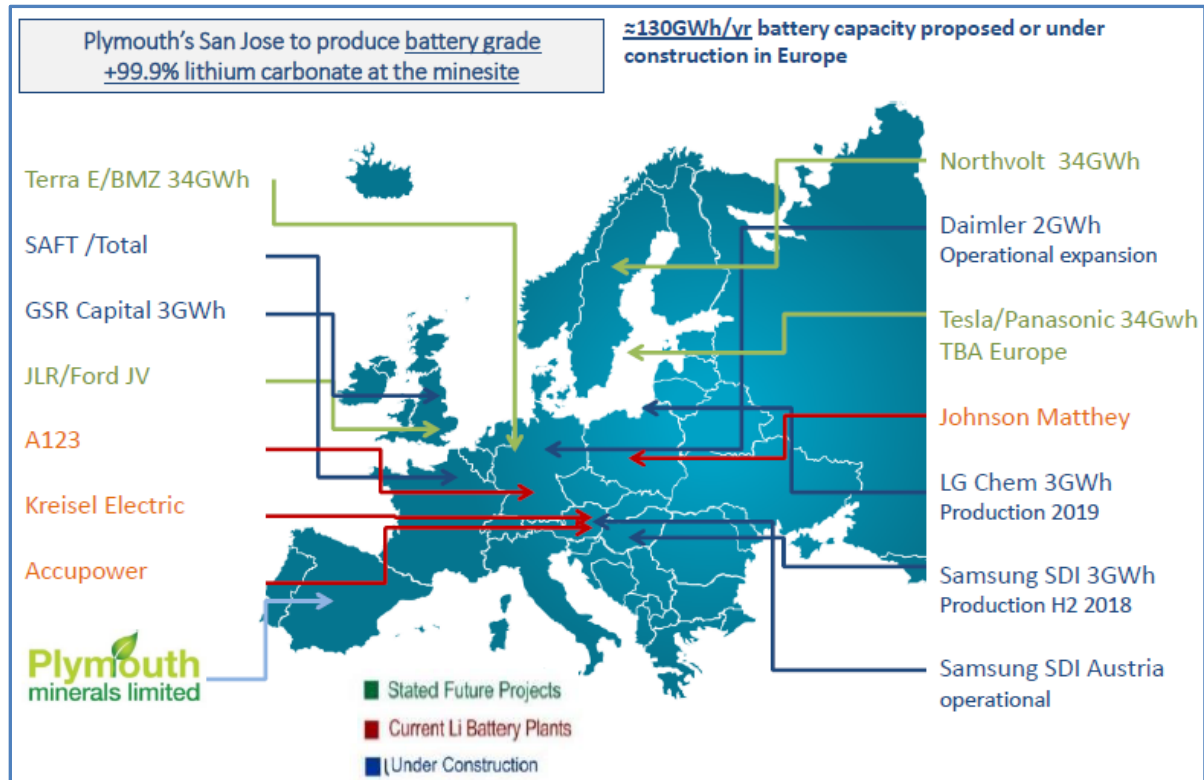


Figure 1 Lithium Ion Battery plants in Europe.

Plymouth has also visited several lithium production plants in China which are designed to produce lithium carbonate sourced from both mica and spodumene feedstock. The Company was pleased to enter into an MoA with Shandong Ruifu (released ASX 4<sup>th</sup> October 2017). Shandong Ruifu is a large Chinese lithium producer. Shandong Ruifu have recently built and commissioned 20ktpa of new lithium carbonate production with an additional 10ktpa of Lithium hydroxide capacity that is due to be commissioned in Q2 next year. Shandong has expertise in producing battery grade lithium from mica and spodumene feedstocks and makes a great partner in the lithium industry. Plymouth and Shandong Ruifu plan to work together on plant and process design.

The Company is also in discussions with the European gigafactory developers. It is Plymouth's aim to attract a strategic industry partner to assist in the development of the project.

## LITHIUM DEMAND

The global demand for lithium carbonate equivalent (LCE) is projected by Argus Media to range up to 14% compound annual growth to 2025. The base consensus annual compound growth of 11% requires world production to increase by an additional 350,000tpa of LCE. To fill this requirement the world needs to have the equivalent of 24 NEW San Jose Lithium-Tin projects in production by 2025.

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The supply story in Europe is equally tight with 130gigawatt hours of new battery supply suggested before 2028. San Jose is well located in Spain to fill this demand.

A major advantage enjoyed by the Company is that Plymouth will produce battery grade lithium carbonate onsite in Spain.

#### COMPANY CREATING INCREASED EXPOSURE

Plymouth Minerals is increasing its attendance at conferences in Australia and overseas, capitalizing on the recent developments at San Jose. The Low Emission & Technology Minerals Conference was held last week in Perth, featuring many of the upcoming and developed resources companies dealing with all minerals associated with clean energy.

The demand is well understood and publicized and the weakness in satisfying burgeoning demand is the source. San Jose is ideally located to fill this supply gap with a locally produced, battery grade lithium carbonate product.

Mr. Hale was also recently interviewed by David Tasker from Hot Copper about the San Jose Project. The presentation is available from the Plymouth Minerals website.

Plymouth is attending the 121 conference in London on the 26<sup>th</sup> and 27<sup>th</sup> November to showcase the San Jose project to a London audience.

For further inquiries please contact;

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## About Plymouth Minerals' Lithium Project

Plymouth has partnered with the large Spanish company Sacyr and its wholly owned subsidiary Valoriza Minería in an earn-in JV over a large, lithium-tin project (San Jose) in central Spain. Plymouth can earn up to 75% of San Jose by completing a Feasibility Study within 4 years (approximately A\$6 million in spend in staged increments of 50% and 75%). Plymouth also retains an 80% interest in the Morille tungsten project in Spain which was extensively explored by Plymouth in 2013-2015.

San Jose is a highly advanced lithium project which is hosted in lithium-mica that hosts of JORC of lithium carbonate equivalent (LCE). A feasibility study completed in 1991 defined an open pit mining operation and a process flow sheet which produced lithium carbonate through acid-leach or sulphate calcine processing. This drilling, mining and processing study work highlights the advanced status and inherent advantages enjoyed by San Jose in relation to many other hardrock deposits. The resource estimate for San Jose is shown below in Table 2;

**TABLE 2 SAN JOSE MINERAL RESOURCE, REPORTED ABOVE 0.1% LI CUT-OFF**

Classification	Tonnes (Mt)	Li (%)	Li <sub>2</sub> O (%)	Sn (%)
Indicated	23.9	0.31	0.67	0.02
Inferred	68.3	0.26	0.56	0.02
<b>TOTAL</b>	<b>92.3</b>	<b>0.27</b>	<b>0.60</b>	<b>0.02</b>

*Estimated using Ordinary Kriging methodology. Note: Small discrepancies may occur due to rounding*

Snowden Mining estimated the total Mineral Resource for the San Jose lithium deposit using Ordinary Kriging interpolation methods and reported above a 0.1% Li cut-off grade. Full details of block modelling and estimation are contained in the ASX announcement dated 25 May 2017.

Lithium (Li) mineralisation is commonly expressed as either lithium oxide (Li<sub>2</sub>O) or lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) or Lithium Carbonate Equivalent (LCE). Lithium Conversion: 1.0% Li = 2.153% Li<sub>2</sub>O, 1.0%Li = 5.32% Li<sub>2</sub>CO<sub>3</sub>

The Resource was announced to the ASX on 25<sup>th</sup> May 2017. Plymouth is not aware of any new information or data that materially affects the information included in this ASX release, and Plymouth confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the resource estimates in this release continue to apply and have not materially changed.

### San Jose Lithium-Tin Project (100 basis, no by-product credits included)

NPV (8) @ US\$10,000/t LC	US\$401m	IRR 28%
NPV (8) @ US\$12,000/t LC	US\$634m	IRR 37%
Capex	US\$273m inc 10% contingency	
Grade – Lithium Carbonate LOM	1.7%	
Potential annual production (tonnes lithium carbonate)	15,000tpa LC +99.5%	
Average C1 cost year 1-10 (US\$/tonne) without credit*	\$4,763/t	
Average gross operating cashflow p.a. years 1-10	US\$ 74.8m	

### Scoping Study – Cautionary Statement

Refer to ASX announcement 18th October 2017. The Scoping Study referred to in this announcement is a preliminary technical and economic investigation of the potential viability of the San Jose Lithium-Tin Project. It is based on low accuracy technical and economic assessments, (+/- 35% accuracy) and is insufficient to support estimation of Ore Reserves or to provide assurance of an economic development case at this stage; or to provide certainty that the conclusions of the Study will be realised. Plymouth confirms that all the material assumptions underpinning the production target, or the forecast financial information derived from the production target, in the initial ASX announcement continue to apply and have not materially changed. There is a low level of geological confidence associated with Inferred Mineral Resources and there is no certainty that further exploration work will result in the determination of Measured or Indicated Mineral Resources or that the Production Target or preliminary economic assessment will be realised.

## About Plymouth Minerals' Potash Projects

Plymouth owns 100% of the Banio and Mamana Potash Projects, which are drill proven, high-grade, shallow potash deposits. Both Banio and Mamana enjoy good access to infrastructure being located on the coast of Gabon or on major transport river ways (barge) with direct access to export ports. Banio has a multi-billion tonne Exploration Target of carnallite and sylvinite based on historical seismic and drilling data. Plymouth is drill testing this Exploration Target.

Brazil is a major consumer of potash and South America is the largest consumer of sea-borne potash (MOP) in the world. The West African coast and potash deposits there enjoy a significant shipping advantage over other major potash producing regions.

Exploration Targets for potash mineralisation at its 100% owned Banio Project in Gabon (Table 3 and Figure 4).

**Table 3: Exploration Target, Banio Project (Alpha and Ndindi Prospects)**

Prospect	Potash Mineralogy	Depth to Potash (m)	Tonnage Range (Mt)	Grade Range (K <sub>2</sub> O%)	Grade Range (KCl%)
<b>Alpha</b>	Sylvinite	290	262-415	18 - 22	28.5 - 34.8
<b>Ndindi Northern</b>	Carnallite	360	2,600-5,200	12 - 14	19.0 - 22.2
<b>Ndindi Southern</b>	Carnallite	500	3,100-4,800	12 - 14	19.0 - 22.2
<b>Combined</b>			6,000-10,400	12.3-14.4	19.4-22.7

\*Disclaimer: The potential quantity and grade of the Banio Exploration Target is conceptual in nature. There has been insufficient exploration completed to date to estimate a Mineral Resource in accordance with the JORC 2012 Edition Guidelines. It is uncertain if further exploration will result in the delineation of a Mineral Resource. The Exploration Target was announced to the ASX on 24 November 2016. Plymouth is not aware of any new information or data that materially affects the information included in this ASX release, and Plymouth confirms that, to the best of its knowledge, all material assumptions and technical parameters underpinning the exploration target in this release continue to apply and have not materially changed.

Grade expressed as either units (%) K<sub>2</sub>O or KCl. Ratio K<sub>2</sub>O x 1.58 = KCl

### Competent Persons Statement

The information in this report that relates to Exploration Results, Exploration Targets, Mineral Resources or Ore Reserves is based on the information compiled or reviewed by Mr Adrian Byass, B.Sc Hons (Geol), B.Econ, FSEG, MAIG and an employee of Plymouth Minerals Limited. Mr Byass has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Byass consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

The information in this report that relates to Exploration Targets and Mineral Resources for the San Jose project is based on the information compiled by Mr Jeremy Peters, FAusIMM CP (Mining, Geology). Mr Peters has sufficient relevant professional experience with open pit and underground mining, exploration and development of mineral deposits similar to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of JORC Code He has visited the project area and observed drilling, logging and sampling techniques used by Plymouth in collection of data used in the preparation of this report. Mr Peters is an employee of Snowden Mining industry Consultants and consents to be named in this release and the report as it is presented.

**Disclaimer:**

This announcement contains certain statements that may constitute "forward looking statement". Such statements are only predictions and are subject to inherent risks and uncertainties, which could cause actual values, results, performance achievements to differ materially from those expressed, implied or projected in any forward looking statements.

Forward-looking statements are statements that are not historical facts. Words such as "expect(s)", "feel(s)", "believe(s)", "will", "may", "anticipate(s)" and similar expressions are intended to identify forward-looking statements. These statements include, but are not limited to statements regarding future production, resources or reserves and exploration results. All of such statements are subject to certain risks and uncertainties, many of which are difficult to predict and generally beyond the control of the Company, that could cause actual results to differ materially from those expressed in, or implied or projected by, the forward-looking information and statements. These risks and uncertainties include, but are not limited to: (i) those relating to the interpretation of drill results, the geology, grade and continuity of mineral deposits and conclusions of economic evaluations, (ii) risks relating to possible variations in reserves, grade, planned mining dilution and ore loss, or recovery rates and changes in project parameters as plans continue to be refined, (iii) the potential for delays in exploration or development activities or the completion of feasibility studies, (iv) risks related to commodity price and foreign exchange rate fluctuations, (v) risks related to failure to obtain adequate financing on a timely basis and on acceptable terms or delays in obtaining governmental approvals or in the completion of development or construction activities, and (vi) other risks and uncertainties related to the Company's prospects, properties and business strategy. Our audience is cautioned not to place undue reliance on these forward-looking statements that speak only as of the date hereof, and we do not undertake any obligation to revise and disseminate forward-looking statements to reflect events or circumstances after the date hereof, or to reflect the occurrence of or non-occurrence of any events.

The Company believes that it has a reasonable basis for making the forward looking Statements in the announcement, based on the information contained in this and previous ASX announcements.

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