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ASX via Electronic Lodgement

**Plymouth Minerals  
Limited**

**ACN 147 413 956  
ASX.PLH**

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

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## SAN JOSE LITHIUM-TIN PROJECT UPDATE

### Highlights

- **Feasibility Study Underway**
- **Mining Licence Application progressing**
- **Official presentations to government and stakeholders conducted**
- **Geotechnical and metallurgical drilling to begin in January**
- **Bulk sample for beneficiation testwork received in China**

Plymouth Minerals Limited ("Plymouth" or "the Company"), is pleased to provide an update of immediate activity at the San Jose/Valdeflorez lithium-tin project (San Jose, or The Project) in Spain. After completion of a successful \$6.5 million capital raising (ASX release 13<sup>th</sup> December 2017) which was Jointly Managed by Canaccord Genuity and Hartleys. Plymouth has commenced a Feasibility Study which Plymouth intends to complete during 2018.

To finalise the process of lodging the Mining Licence Application (MLA) which earned Plymouth its initial 50% interest (ASX release 11<sup>th</sup> October 2017) all supporting documentation has been submitted to the relevant authorities in Extremadura, Spain. Plymouth and our JV partner, Valoriza Minería, presented The Project to various government authorities concurrent with this lodgement.

These presentations included explanations of how The Project would provide a major positive impact on the nearby town of Cáceres through the substantial investment proposed and parallel employment generated.

The Joint Venture Company, Tecnologia Extremena del Litio S.L. (Lithium Technology of Extremadura Co.) which is owned 50/50 by Plymouth and our partners Valoriza Minería S.L, has now transferred its registered fiscal address to Cáceres. The field operation office has been located in Cáceres since 2016. This change reflects the increasing level of work being undertaken on site and in Cáceres. As the Project moves towards development The Company is committed to obtaining the optimal outcome through liaison with the regional government and local stakeholder engagement.

The planned technical work for the Feasibility Study 2018 is substantial and will advance San Jose significantly. This will also be matched by a keen focus on permitting and social aspects, which is best conducted from the local area and office in. Cáceres. Engagement with local stakeholders will now increase and the JV's relocation to Cáceres is important in facilitating this. The increase in administrative and permitting activities will lead to the hiring of additional people working in Cáceres going forward.

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As part of the ongoing feasibility study now being led by Plymouth, geotechnical and metallurgical drilling will commence this month. Following the successful resource extension drilling conducted in 2017 and resultant substantial JORC mineral resource upgrade (ASX release 5<sup>th</sup> December 2017) a small (1,500-2,000m) programme is planned.

This geotechnical drilling is designed to provide confirmation of geotechnical data required for final pit design. It is expected that this additional data will allow an increase in the wall angles, leading to a positive impact on strip ratio and project economics.

The metallurgical drilling will deliver representative bulk sample material for larger-scale testwork to produce increased quantities of battery grade lithium carbonate. This programme will deliver representative material planned for the first several years of projected mine life and is important in delivering inputs for Bankable Feasibility studies.

Additional process testwork (beneficiation) is being conducted in parallel to accelerate the completion of the feasibility study. As part of this programme, a bulk sample was recently dispatched to Shandong Ruifu (ASX release 7<sup>th</sup> December) and has now been received in China and beneficiation testwork has commenced. The potential to increase beneficiation efficiency and deliver higher grade product to the processing facility could have significant positive impacts on the already robust project economics. This work is being conducted by highly experienced lithium plant operators (Shandong Ruifu). Plymouth is pleased it has a relationship with Shandong Ruifu and believes that Shandong Ruifu has the ability to be a strong value-adding partner through its extensive lithium processing experience.

The Company is keenly focussed to complete the Feasibility Study for the San Jose lithium-tin deposit – expected Q4 2018.

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## Competent Persons Statement

The information in this report that relates to Exploration Targets 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.

The information in this report that relates to the December 2017 updated Mineral Resources is based on the information compiled by Mr Patrick Adams, FAusIMM CP (Geology). Mr Adams 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. Mr Adams has not visited the project area and has relied on the documented (Peters, May 2017) drilling, logging and sampling techniques used by Plymouth in collection of data used in the preparation of this report. Mr Adams is a Principal Geologist and a Director of Cube Consulting Pty Ltd and consents to be named in this release and the report as it is presented.

The information in this report that relates to Exploration Results 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 JORC Code. 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.

## Disclaimer

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.

## 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%).

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 1;

**TABLE 1 SAN JOSE MINERAL RESOURCE, REPORTED ABOVE 0.1% LI CUT-OFF**

Classification	Tonnes (Mt)	Li (%)	Li <sub>2</sub> O (%)	Sn (%)
Indicated	57.3	0.29	0.63	0.02
Inferred	54.7	0.27	0.59	0.02
<b>TOTAL</b>	<b>112.0</b>	<b>0.28</b>	<b>0.61</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 5 December 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 5<sup>th</sup> December 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 2 ).

**Table 2: 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

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