

31 January 2018

ASX via Electronic Lodgement

**Plymouth Minerals  
Limited**

**ACN 147 413 956**

**ASX.PLH**

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

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**Non-Executive Chairman**

Kevin Tomlinson

**Managing Director, CEO**

Adrian Byass

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## QUARTERLY ACTIVITIES REPORT

### for the period ending 31 December 2017

During the December Quarter Plymouth delivered a major step change in the San Jose Lithium-Tin Project (San Jose, Valdeflorez, or The Project) by completing Stage 1 (50% JV earn-in) and electing to increase its ownership to 75% through the completion of a Feasibility Study in 2018. With approximately \$6m in cash and no debt, the Company is funded to deliver the Feasibility Study.

The Company has embraced this advancement seeking shareholder approval to change its name from Plymouth Minerals to **Infinity Lithium Corporation** to highlight the increased value and focus of San Jose within the Company.

The Feasibility Study is fully funded and designed to increase confidence in the economic modelling conducted already on San Jose. Previous studies show a robust, long life, low cost lithium carbonate project, which is ideally placed to deliver the battery grade lithium carbonate required to meet Europe's burgeoning demand (Figure 1).



FIGURE 1" ELECTRIC VEHICLES ARE BECOMING AN IMPORTANT PART OF THE STREETScape IN SPAIN AND THROUGHOUT EUROPE

#### HIGHLIGHTS

- **Partnership established with lithium producer, Shandong Ruifu to bolster skill set for Feasibility Study**
- **Mining Licence Application submitted. Completion of Stage 1 Earn-in delivers 50% interest in San Jose to Plymouth**
- **Battery grade lithium carbonate +99.9% delivered using proven flowsheet from San Jose ore**
- **Scoping Study completed, 15ktpa lithium carbonate production for 24 years - robust economics at long term prices**

- **JORC resource upgrade, 21% increase in contained lithium and 140% increase in higher confidence 'Indicated' resources**
- **Placement raising approximately \$6.5m via an institutional Placement – fully funded for the next stage of growth**

### Events during the Quarter

Plymouth Minerals Limited (“Plymouth” or “the Company”), is pleased to provide an update of progress at the San Jose Lithium-Tin Project (San Jose, Valdeflorez, or The Project) in Spain. The Company is fully funded to complete a Feasibility Study and increase its ownership of the Project to 75% in 2018.

Plymouth delivered a strong Scoping Study in Q4 2017 (ASX release 16<sup>th</sup> October 2017) with compelling economic metrics that was based on open pit mining and on-site processing to produce battery grade lithium carbonate. The production of battery grade lithium carbonate has been proven from San Jose material.

A Mining Licence Application was lodged and the Mining Department in October 2017. The Project is now designated locally within the regional government as the Valdeflorez Project, a reference to the historic mining and mineral occurrence on site. Plymouth will use San Jose for public relations and or Valdeflorez for internal official notifications.

Drilling reported in Q3 2017 supported the calculation of a new mineral resource estimate in the December Quarter. The drilling and assay database for San Jose now comprises of 56 holes for approximately 12,120m of drilling including 5,196m of diamond drilling. The revised JORC resource (ASX announcement 5<sup>th</sup> December 2017) is now;

**112.0Mt @ 0.61% Li<sub>2</sub>O (lithium oxide) and 0.02% Sn (tin)**

The combined Indicated and Inferred Mineral Resource at a 0.35% Li cut-off is reported as;

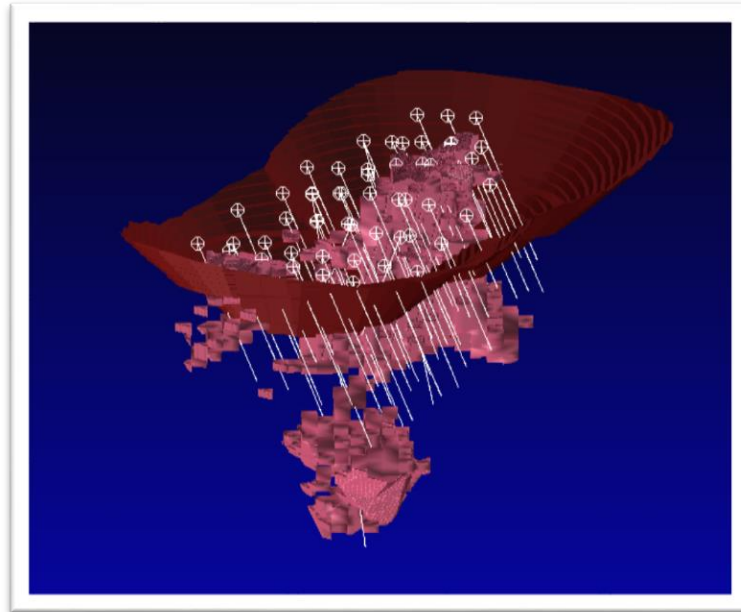
**25.2Mt @ 0.9% Li<sub>2</sub>O (lithium oxide) and 0.03% Sn (tin)**

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*

The deposit is shown in relation to proposed open-pit and drilling in Figure 2.



**FIGURE 2: MINERALISATION (1.0% LI<sub>2</sub>O OR GREATER) SHOWN AGAINST DRILLING AND OPEN PIT OPTIMISATION FROM THE OCTOBER 2017 SCOPING STUDY.**

This lithium-tin resource established San Jose as one of the largest lithium deposits in Europe. Work in 2018 will be focussed on delivering a Feasibility Study and enhancing economic metrics even though the deposit remains open and with considerable exploration upside.

In order to produce a Feasibility Study a small amount of additional drilling is required. This drilling has commenced to collect the necessary geotechnical and metallurgical data. This is a relatively small programme of approximately 1,500 meters. An ASX announcement highlighting the benefits which could be delivered from this work and the enhancements to the project economics was released 24<sup>th</sup> January 2018.

The Company completed a capital raising of approximately \$6.5 million at an issue price of \$0.18 per share ("Placement"). The Placement attracted strong interest from new and existing domestic, and international institutional investors, the shares issued under the Placement were issued within the Company's 15% placement capacity under ASX LR 7.1 and additional 10% placement capacity under ASX LR7.1A. A total of 34,587,771 securities were issued under the Placement. A total of 19,453,749 shares pursuant to Listing Rule 7.1 and 15,134,022 shares pursuant to Listing Rule 7.1A on 20 December 2017.

As part of the Placement, the Company will issue one free attaching option with every three Placement shares ("Option"). The Options will be exercisable at \$0.29 with an expiry date of 30 September 2018 and will be listed on ASX if there are more than 50 holders and all ASX requirements are met. The allotment of Options is subject to shareholder approval at a general meeting of the Company scheduled to take place 28 February 2018.

The Board of Directors of Plymouth intend to participate in the Placement for approximately \$300,000. In respect of any allocation to Directors, the Company will seek shareholder approval at a general meeting of the Company scheduled to take place 28 February 2018.

Hartleys Limited and Canaccord Genuity (Australia) Limited acted as Joint Lead Managers to the Placement.

The Company issued 3,250,000 fully paid shares following the exercise of options on 24 December 2017 raising \$455,000. Managing Director Mr Adrian Byass exercised 2,000,000 options and increased his shareholding by this number.

The Company held its Annual General Meeting of Shareholders on 23rd November 2017 and all resolutions put forward in the meeting were passed unanimously by a show of hands.

### **Events subsequent to the Quarter**

Plymouth announced it will seek shareholder approval to change its name to Infinity Lithium Corporation. This is to better reflect the focus of the Company on the San Jose lithium-tin project in Spain which Plymouth has successfully earned an initial, 50% interest. Potash assets held within Plymouth are now open for divestment.

Bulk sample has been received in China by Shandong Ruifu. The experience of Shandong Ruifu in lithium mica and production of lithium carbonate from mica and spodumene is valuable to Plymouth. A lithium mica plant built by the owner of Shandong Ruifu and being expanded by the owners, was visited by Plymouth (Figure 3).



**FIGURE 3: PLYMOUTH STAFF INSPECTING EXPANSION CONSTRUCTION ON A LITHIUM MICA PLANT IN CHINA**

Within the ongoing permitting and related work for San Jose, Plymouth and our local partner have begun meetings and presentations with stakeholders in Extremadura. These meetings are an opportunity for the JV to provide information regarding the considerable economic benefits which are related to project development and long-term, high-value job creation. It is also an opportunity to ensure the JV is aware of any local concerns, listen to feedback from stakeholders and to ensure the best options are selected going forward to cater for all parties.

A limited programme of geotechnical and metallurgical drilling was begun and this provides higher confidence data to be incorporated into the ongoing Feasibility Study. Some assumptions in the Scoping Study (specifically overall pit wall angles) could be overly conservative as a result of limited information being available at the time and this additional work may allow steeper wall angles to be implemented for example. Steeper wall angles improve project economics due to reduced area of disturbance in mining and reduction of waste material being mined.

Research note update has been delivered by Hartleys. This note shows a high valuation based on long term prices and assumptions in line with Scoping Study results. This is available on our web site [www.plymouthminerals.com](http://www.plymouthminerals.com)

The Company released a Notice of Meeting calling a shareholders meeting to be held at 11.00am on 28 February 2018.

### **Going Forward**

The key focus of the Company is now to complete the Feasibility Study for the San Jose Lithium-Tin deposit which will enhance the value of the Project and deliver Plymouth an increased stake from 50% to 75%. To achieve and build on this advancement a priority is streamlining the Company through divestment of potash, reorganising the Board to reflect the requirements of a development company and secure offtake and/or strategic partner investment into the Company or Project.

The Company believes that it has excellent opportunities to secure strategic partner investment and offtake for lithium carbonate from San Jose during the Feasibility Study period.

Ongoing technical work such as the geotechnical drilling, metallurgical testwork and related studies specific to the Feasibility Study will continue. Plymouth will aim to update to the Scoping Study prior to the delivery of the Feasibility Study later in 2018.

A divestment process has been initiated to facilitate the sale of the 100% owned potash assets in Gabon. Work conducted by Plymouth has shown well-drilled, shallow, high-grade potash over a very large area. This supports a world-class exploration target. Plymouth will seek to divest the assets with maximum leverage to shareholders.

For further inquiries please contact;

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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**

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Indicated	57.3	0.29	0.63	0.02
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<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



## **Tenement Schedule in accordance with Listing Rule 5.3.3**

as at the end of the September quarter:

### **Tungsten Projects, Spain**

Morille Project Permits (100% owned by Morille Mining S.L.) of which Plymouth has an 80% beneficial interest.

- P.I. Tin 9, nº 6.250-21
- P.I. Estaño de Salamanca Fracción Segunda 2, nº 6.250-30
- P.I. Morille, nº 6.634-20
- P.I. Rozados, nº 6.634-30
- P.I. Areasrozados, nº 6.634-40

### **Lithium Project Spain**

Plymouth has a 50% beneficial interest in the San Jose Lithium Project (Application) from Valoriza Minería (effective 10 October 2017)

San Jose tenement

Valdeflórez: 10343-00

Ampliación a Valdeflórez: 10359-00

### **Potash Projects, Gabon**

Plymouth, through its 100% owned subsidiary Mayumba Potasse SARL, owns a 100% interest in two tenements (granted and application).

#### **Tenements:**

Banio - Exploration License No 161 (granted)

Mamana – Application Number DGPEM No 651 (application)