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ASX via Electronic Lodgement

Banio Project - Alpha Target Update
Drilling Continues to Intersect Wide Zones of Potash

- **Drill hole BA003 completed**
- **Multiple wide potash beds intersected**
- **Samples dispatched from site for analysis**

Plymouth Minerals Limited (ASX:PLH) (Plymouth or the Company) is pleased to announce completion of the third Phase 1 drill hole (BA003), on its 100% owned Banio Potash Project in Gabon. The Company is targeting an area within the Gabon section of the Congo Basin, interpreted to be prospective for shallow sylvinite and carnallite.

This latest hole was drilled within the Alpha Target area approximately 2.1km east of BA002 (Appendices Figures 3 and 4). Drill hole BA003 returned broad zones of visually identifiable carnallite (pinkish red) which were also observed (Figure 1 and Figure 2) in exploration hole BA002. Samples are being dispatched for analysis and turn-around is expected to be approximately 4 weeks. Assays results are pending for hole BA002 and expected very shortly.

FIGURE 1: CARNALLITE (PINK-RED) ZONES WITHIN HALITE SALT HORIZONS TYPICAL OF BROADER ZONES INTERSECTED IN BA003.

Plymouth has a very experienced team of geological staff on site with extensive experience in potash mineralisation within the Congo Basin. Initial geological inspection is positive. Higher grade sylvinite is not readily identifiable as it can be either colourless or pink and similar to carnallite. Chemical analysis is required prior to confirmation of sylvinite specie mineralisation.

The Alpha Target is a sylvinite and carnallite exploration target. For full supporting information please see ASX release dated 24 November 2016 in which the Alpha Target and the southern Ndindi Targets were described in detail (Appendices Figure 4).

FIGURE 2: POTASH-RICH CORE IN BA003

Drill hole BA001 (ASX release 11 April 2017) defined a fault zone which is interpreted to be the boundary of potash mineralisation to the immediate south and BA002 (ASX release 18 May 2017) successfully identified broad zones of potash mineralisation. Plymouth is now assessing data available and planning the next stage of exploration at Banio. This will determine if additional drilling is conducted at Alpha or the larger Ndindi South Target is tested next. A comprehensive drilling summary is expected to be released with the arrival of first assays from samples previously dispatched to ALS laboratories (Spain).

For more information, visit www.plymouthminerals.com

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About Plymouth Minerals' Lithium Project

Plymouth has partnered with the large Spanish company Sacyr and its wholly owned subsidiary Valoriza Mineria 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 1;

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

Classification	Tonnes (Mt)	Li (%)	Li_2O (%)	Sn (%)
Indicated	23.9	0.31	0.67	0.02
Inferred	68.3	0.26	0.56	0.02
TOTAL	**92.3**	**0.27**	**0.60**	**0.02**

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 (Li2O) or lithium carbonate (Li2CO3) or Lithium Carbonate Equivalent (LCE)
Lithium Conversion: 1.0% Li = 2.153% Li2O, 1.0%Li = 5.32% Li2CO3

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.

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 and Mamana enjoy good access to infrastructure being located on the coast of Gabon and 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 intends to drill test 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.

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.

Appendices

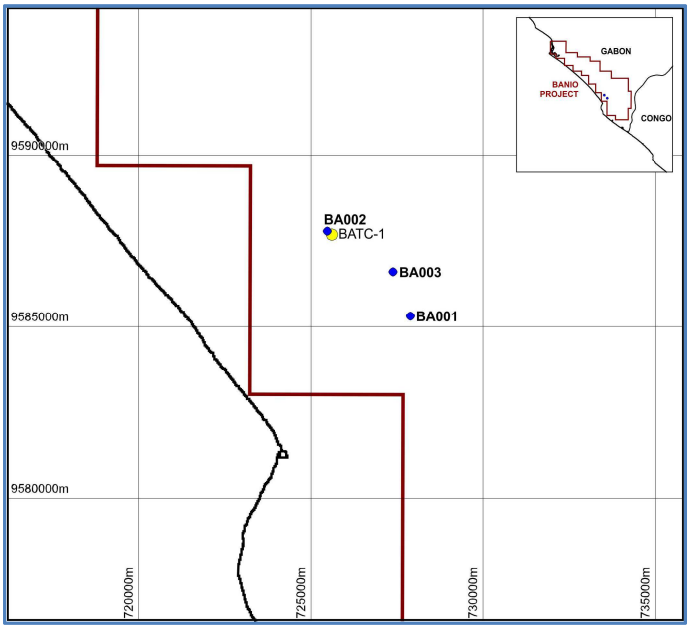

FIGURE 3: DRILLING TO DATE AT ALPHA TARGET

Drill hole Collar Coordinates

BA001 WGS 84 32M , 727,893 E : 9,585,295 S

BA002 WGS 84 32M , 725,483 E : 9,587,774 S

BA003 WGS 84 32M , 727,379 E : 9,586,599 S

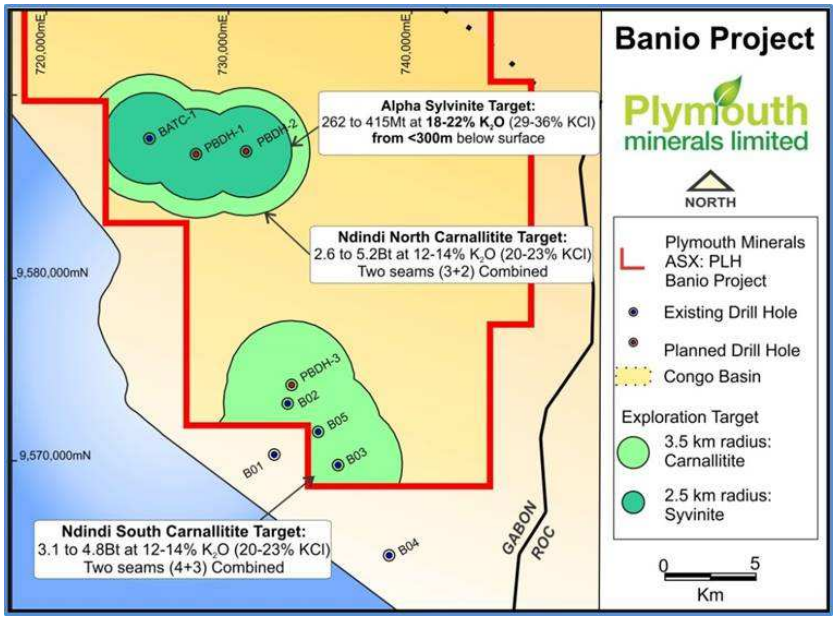

FIGURE 4: INITIAL DRILLING LOCATIONS PLANNED FOR BANIO.

JORC 2012

Table 1 – Banio Project

Criteria	JORC Code explanation	Commentary
Sampling techniques	*Nature and quality of sampling (eg 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.* *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	No sampling until the salt sequence is reached , then half core of PQ and HQ sizes is taken at every potash-bearing sequence of more than 15 cm. The sequence with a length greater than 1m were split into different samples.
	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 (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.	All potash-bearing sequence more than 15 cm length were cut on site using a core-saw, and sent to ALS Laboratory in Seville, Spain for assay. Samples were crushed, dried, and pulverised to produce a representative sub-sample for analysis. The following elements are included in the analysis: K, Mg, Fe, Cl, detrital and impurities as per standard industry practice.
Drilling techniques	*Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).*	Mud Rotation drilling using a 8.75 inch tricone bit for the first 100m then a 7 inch tricone bit until the salt sequence. Diamond core drilling using standard tube diamond drilling of PQ diameter. The core is marked on the rig site.
Drill sample recovery	*Method of recording and assessing core and chip sample recoveries and results assessed.*	For diamond, sample recovery was measured and recorded onto a logging sheet.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	Diamond core had mainly a good recovery, otherwise the mud was adjusted during the drilling to fit the recovery. All cores were checked and measured by a geologist at the rig and rod counts were conducted by drillers.

	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.	No relationship between sample recovery and grade has been established.

Logging	*Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	Core samples have been geologically and geotechnically logged to a level of detail to support a Mineral Resource estimation.
	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	The logging completed until the salt sequence is qualitative. A small sample from each one metre sample has been kept in a plastic chip tray and photographed. The diamond logging is both qualitative and semi-quantitative in nature. All drill core was clean and photographed before the cutting.
	The total length and percentage of the relevant intersections logged.	All drill holes have been logged in full.
Sub-sampling techniques and sample preparation	*If core, whether cut or sawn and whether quarter, half or all core taken.*	All core samples were half-core and were cut with a core saw.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	The chips were taken directly out of the drilling mix with the mud. No cleaning has been done.
Sub-sampling techniques and sample preparation	*For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	Standard industry practice.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	Internationally certified standards, blanks and laboratory cross checking are implemented.
	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.	Standard industry practice.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	The sample sizes are considered to be appropriate to correctly represent the sought after mineralisation style.

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.*	Standard industry practice
	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. *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	Laboratory results pending.
Verification of sampling and assaying	*The verification of significant intersections by either independent or alternative company personnel.*	Laboratory results pending.
	The use of twinned holes.	BA002 was drilled to twin and confirm historical drilling at BATC-1
Verification of sampling and assaying	*Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	Primary logging data was entered into an Excel spreadsheet and stored in an Access database. Drill chips are stored in chip trays and photographed for record.
	Discuss any adjustment to assay data.	There are no known adjustments made to the assay data.
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.*	Drill hole collar locations have been recorded using a Garmin hand held GPS which has an accuracy of <8m.
	Specification of the grid system used.	WGS 84 / Gabon TM
	Quality and adequacy of topographic control.	Topographic information has been sourced from a publically available database
Data spacing	*Data spacing for reporting of Exploration*	The completed drill holes have not been drilled

and distribution	*Results.*	in a grid pattern and thus have irregular 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.	The data spacing and distribution is not sufficient to establish a degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedures.
	Whether sample compositing has been applied.	No sample compositing has been applied.
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 vertical orientation of the drilling is approximately perpendicular to the tabular mineralisation and therefore should not be biased.
	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.	There are no known biases caused by the orientation of the drill holes.
Sample security	*The measures taken to ensure sample security.*	Samples have been overseen by Plymouth personnel from the drill rig to storage on site, to freight to ALS Labs. Whilst in storage, samples are kept in a locked building.
Audits or reviews	*The results of any audits or reviews of sampling techniques and data.*	No audits or reviews have been carried out at this time.

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.* *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.*	The Banio Project is located 450km south of Libreville in Gabon. The Banio Project is held within Investigation Permit 100% owned by Plymouth Minerals. The project is located at the inland 5km buffer zone limit from the Marine National Park.
Exploration done by other parties	*Acknowledgment and appraisal of exploration by other parties.*	Banio was historically drilled for oil and gas exploration in the 1980s with 2D seismic by Elf Gabon. During the drilling broad zones of "potash salts" were described.
Geology	*Deposit type, geological setting and style of mineralisation.*	The potash-bearing beds were formed through evaporation of sea water in ancient inland oceans. They occurs between salt-bearing evaporite units. The Banio deposit is part of the Congo Basin which has a tabular flat potash "Canadian style".
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.*	Refer to text.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	*In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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.*	Standard industry practices.
Relationship between mineralisation widths and intercept lengths	*These relationships are particularly important in the reporting of Exploration Results.* *If the geometry of the mineralisation 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 (eg 'down hole length, true width not known').*	Drill holes are vertical which should intercept close to perpendicular the tabular mineralisation giving a true thickness of the mineralisation.
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.*	Refer to Figure in text.
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 results have been reported.
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; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	Extensive seismic survey data and oil exploration drilling.
Further work	*The nature and scale of planned further work (eg 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.*	After assessment the Company will formulate the next stage of exploration.