AmericanPacific
BORATE & LITHIUM LIMITED

ASX Announcement

ASX Code: ABR

ACN: 615 606 114

15 April 2019

Updated: ABR Completes Process Optimisation Works to Deliver High Purity Boric Acid

HIGHLIGHTS

- **High purity +99.9% pure boric acid crystals produced**
- **Technical specifications have been met with minimal impurities which is expected to attract customers seeking a premium quality borate product**
- **Financing process in-progress with formal financing related engagements targeted to commence in Q2 2019**
- **All substantive permit applications now lodged for Fort Cady Borate Project**
- **Targeting the commencement of construction in Q4 CY2019 on a fully permitted basis subject to financing**

American Pacific Borate and Lithium Limited (ASX:ABR) ("ABR" or the "Company") is very pleased to announce it has delivered a high purity +99.9% pure boric acid crystal with minimal impurities from process optimisation works completed on 10 April 2019. The works were designed to ensure consistent delivery of a technical grade quality boric acid crystal from the Company's Fort Cady Borate Project ("Fort Cady" or "the Project"). Table 1 summarises the outstanding results.

American Pacific Borate and Lithium Ltd, CEO, Michael Schlumpberger commented,

> *"This is another hurdle completed in our aspiration to commence production of borates from our flagship Fort Cady Borate Project and ultimately to become a globally significant producer of high purity borate products.*

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Our focus now turns to the completion of detailed engineering and securing the modest financing for the low capital starter project.

Importantly, we have delivered a very low capital starter project with brilliant financial metrics that sees us on the pathway to becoming a globally significant producer of borates targeting an EBITDA of over US$340m per annum. When you consider borates are a vital input into new world technologies including electric vehicles, clean energy and food security related micro nutrients for optimal plant growth, we are sure the demand for borates will only continue to grow."

Table 1: Fort Cady Boric Acid Assay Results, 8 April 2019

Component	Units	Boric Acid Solids
H_3BO_3 (boric acid)	**%**	**+99.9%**
Na	ppm	<10
K	ppm	<10
Mg	ppm	<10
Li	ppm	<10
Ca	ppm	2.85*
Fe	ppm	5.11*
Si	ppm	<10
F-	ppm	<5
Cl-	ppm	26.8
No_2-	Ppm	32.5
SO_4-2	ppm	6.6*
Br-	Ppm	35.6
NO_3	Ppm	29.4
* Estimated value below linear range		
Chlorine, Nitrite, Nitrate, & Sulfate analysed by IC – Dionex 2100 with AS11-HC Column (4/8/2019)		
Ca, Fe, Na, K, Si, B, & Mg analysed by ICP-OES – Leeman Profile Plus (4/8/2019)		
H_3BO_3 of solids shown as calculated sum of impurities		
Analytical as of 8 April 2019		

Process Optimisation Works

Post the completion of the Definitive Feasibility Study for the Project, the Company has focused on completing process optimisation works to ensure it can consistently deliver a technical grade premium boric acid product. The results of these works have been very encouraging with a final process now designed to ensure a high-grade product with minimal impurities will be consistently delivered by the Project.

The optimisation works included:

1. Treating liquor ("Pregnant Leach Solution" or "PLS") that was retrieved on site from the Fort Cady orebody by solvent extraction ("SX") using isoctanol as the organic extractant;
2. Further treating the resulting liquor in a scrubbing stage (sulfuric acid and ion-exchange) to purify the liquor; and
3. Crystallising the final liquor via a crystalliser manufacturer where the liquor was sent for evaluation and testing of the crystallisation steps of the process.

This testing was successful as shown in the table of assay results above and the photos below.

Figure 1: Photos of Boric Acid Crystals Produced in Process Optimisation Works

Financing and Lodgement of Outstanding Operational Permits

The Company has commenced an informal process to secure funding for Phase 1A of the Fort Cady Borate Project. This process has tested lender appetite to substantially debt finance the initial operation. The Company has been pleased with the responses and is looking to commence a formal engagement process in the current quarter with a view to being full financed by Q4 CY2019 to enable construction to commence.

The financial metrics of the starter project and broader Project are presented below.

Table 2: Fort Cady Borate Project Financial Metrics (ASX release dated 31 January 2019[1])

Fort Cady Project (Boric Acid and SoP Production)	
Phase 1A Only	
NPV_{10}	US$224.7 million
IRR	58.3%
EBITDA in first full year of production	US$26.7 million
Phase 1A & 1B Only	
NPV_{10}	US$385.3 million
IRR	36.4%
EBITDA in first full year of production	US$60.3 million
Phase 1 & 2 Only	
NPV_{10}	US$853.5 million
IRR	40.0%
EBITDA in first full year of production	US$192.3 million
Full Project (Phases 1, 2, & 3)	
NPV_{10}	**US$1.083 billion**
IRR	**40.5%**
EBITDA in first full year of production	**US$345.4 million**

The Company is also pleased to report that applications have been lodged for all substantive operational permits for the Project. The Company expects all permits to be awarded in a timeframe to enable it to confidently commence construction in Q4 CY2019 and production in Q4 CY2020.

ENDS

[1] ABR confirms all material assumptions underpinning the production target and corresponding financial information continue to apply and have not materially changed as per Listing Rule 5.19.2.

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Competent Persons Statement

Fort Cady

The information in this release that relates to Exploration Targets, Exploration Results and Mineral Resources is based on information prepared by Mr Louis Fourie, P.Geo of Terra Modelling Services. Mr Fourie is a licensed Professional Geoscientist registered with APEGS (Association of Professional Engineers and Geoscientists of Saskatchewan) in the Province of Saskatchewan, Canada and a Professional Natural Scientist (Geological Science) with SACNASP (South African Council for Natural Scientific Professions). APEGS and SACNASP are a Joint Ore Reserves Committee (JORC) Code 'Recognized Professional Organization' (RPO). An RPO is an accredited organization to which the Competent Person (CP) under JORC Code Reporting Standards must belong in order to report Exploration Results, Mineral Resources, or Ore Reserves through the ASX. Mr Fourie has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a CP as defined in the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Fourie consents to the inclusion in the release of the matters based on their information in the form and context in which it appears.

The information in this release that relates to the conversion of Mineral Resources to Ore Reserves has been prepared by Tabetha A. Stirrett of RESPEC Consulting Inc. Mrs. Tabetha A. Stirrett, P. Geo of RESPEC Consulting Inc. is a member in good standing of the Association of Professional Engineers and Geoscientists of Saskatchewan (Member #10699) and a member of the American Institute of Professional Geologists (CPG) (#11581). APEGS and CPG are a Joint Ore Reserves Committee (JORC) 'Recognised Professional Organization' (RPO). Mrs. Stirrett has sufficient Experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a CP as defined in the 2012 Edition of the JORC Australasian Code for Reporting of Exploration Results, Mineral Resource and Ore Reserves. Mrs. Stirrett consents to the inclusion in the release of the matters based on their information in the form and context in which it appears.

This report contains historical exploration results from exploration activities conducted by Duval Corp ("historical estimates"). The historical estimates and are not reported in accordance with the JORC Code. A competent person has not done sufficient work to classify the historical estimates as mineral resources or ore reserves in accordance with the JORC Code. It is uncertain that following evaluation and/or further exploration work that the historical estimates will be able to be reported as mineral resources or ore reserves in accordance with the JORC Code. The Company confirms it is not in possession of any new information or data relating to the historical estimates that materially impacts on the reliability of the historical estimates or the Company's ability to verify the historical estimates.

Process Optimization

The information in this report that relates to the optimization of the mineral processing has been compiled by Mr Michael Rockandel BASCE (Metallurgy). Mr. Rockandel is a Registered Member of the Society for Mining, Metallurgy & Exploration and has sufficient experience with the style of mineralisation, deposit type under consideration and other activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code of Reporting Exploration Results, Mineral Resources and Ore Reserves (The JORC Code)". Mr Rockandel consents to the inclusion in this report of the contained technical information relating to the process optimization in the release and context in which it appears.

About American Pacific Borate and Lithium Limited

American Pacific Borate and Lithium Limited is focused on advancing its 100% owned Fort Cady Borate Project located in Southern California, USA. Fort Cady is a highly rare and large colemanite deposit and is the largest known contained borate occurrence in the world not owned by the two major borate producers Rio Tinto and Eti Maden. The JORC compliant Mineral Resource Estimate and Reserve is presented below. Importantly, it comprises 13.93Mt of contained boric acid.

In excess of US$60m has been spent at Fort Cady, including resource drilling, metallurgical test works, well injection tests, permitting activities and substantial small-scale commercial operations and test works.

A Definitive Feasibility Study ("DFS") was completed in December 2018 delivering compelling financial metrics including steady state production target of 410ktpa of boric acid and 110ktpa of SOP, delivering an unlevered post tax NPV_{10} of US$1.25bn ($NPV_8$ of US$1.59bn) and an unlevered post tax IRR of 41% *(refer to ASX Release dated 17 December 2018)*.

In January 2019 the DFS was enhanced to include a low capex starter project with an estimated capex of only US$36.8m. This starter project delivers an EBITDA in the first year of operation of US$26.7m and preserves the pathway to an EBITDA of over US$340m in the first year of full production for the broader project *(refer to ASX Release dated 22 January 2019).*

JORC compliant Mineral Resource Estimate and Reserve (ASX release dated 3 December 2018[2])

JORC compliant Mineral Resource Estimate and Reserve						
Reserves	**MMT**	**B_2O_3 %**	**H_3BO3 %**	**Li ppm**	**B_2O_3 MT**	**H_3BO_3 MT**
Proven	27.21	6.70	11.91	379	1.82	3.24
Probable	13.80	6.40	11.36	343	0.88	1.57
Total Reserves	**41.01**	**6.60**	**11.72**	**367**	**2.71**	**4.81**
Resources						
Measured	38.87	6.70	11.91	379	2.61	4.63
Indicated	19.72	6.40	11.36	343	1.26	2.24
Total M&I	**58.59**	**6.60**	**11.72**	**367**	**3.87**	**6.87**
Inferred	61.85	6.43	11.42	322	3.98	7.07
Total M,I&I	**120.44**	**6.51**	**11.57**	**344**	**7.84**	**13.93**

In 1994 the Plan of Operations (mining permit) was authorised along with the Mining and Land Reclamation Plan. These permits are in good standing and contain a full Environmental Impact Report and water rights for initial operations of 82ktpa of boric acid. The Company is currently working through a permitting process to gain three additional permits required to commence operations.

[2] ABR confirms all material assumptions and technical parameters underpinning the Resource Estimate and Reserve continue to apply and have not materially changed as per Listing Rule 5.23.2.

In addition to the flagship Fort Cady Project, the Company also has an earn in agreement to acquire a 100% interest in the Salt Wells North and Salt Wells South Projects in Nevada, USA on the incurrence of US$3m of Project expenditures. The Projects cover an area of 36km^2 and are considered prospective for borates and lithium in the sediments and lithium in the brines within the project area. Surface salt samples from the Salt Wells North project area were assayed in April 2018 and showed elevated levels of both lithium and boron with several results of over 500ppm lithium and over 1% boron.

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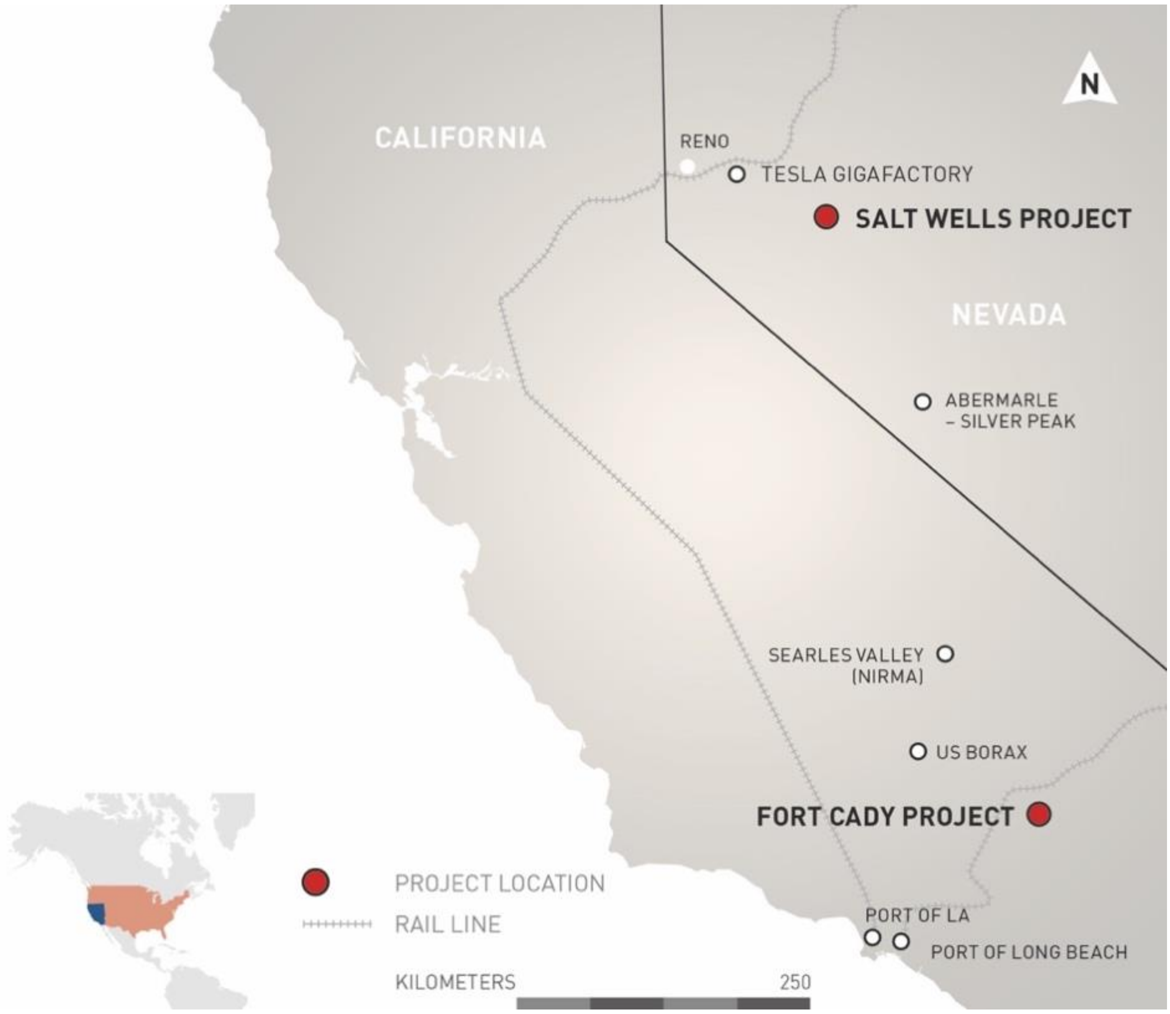

Figure 2: Location of the Fort Cady and Salt Wells Projects in the USA

The JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (e.g. 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.* • *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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.*	• No historic procedures or flow sheets were sighted that explain the historic drilling and sampling processes completed at the Fort Cady project. • Discussions held with Pamela A.K. Wilkinson who was an exploration geologist for Duval at the time of drilling and sampling highlight that drilling through the target zone was completed via HQ diamond drilling techniques and drill core recovery was typically very good (Wilkinson, 2017). • Sampling through the logged evaporate sequence was completed based on logged geology and geophysics. Sample intervals vary from 0.1 ft to 15 ft and sample weights varied accordingly. • Drilling through the overburden material was completed using a rotary air blast (RAB) drilling technique with samples taken from cuttings every 10 ft.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).*	• Drilling through the overburden sequence was completed using rotary air blast (RAB) drilling technique. • Drilling through the evaporate sequence / target zone was completed using HQ diamond core.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Drill core recovery has been reported by Duval geologists to be excellent (95%-100%). • Drill core recovery was not routinely recorded. • Geologists highlighted areas of poor recovery during geological logging by making comment within the geological log at the appropriate drill hole intervals. • A review of the limited amount of drill core that is stored at site indicates drill core recovery was good. Refer to Appendix E for pictures of drill core.

Criteria	JORC Code explanation	Commentary
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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* • *The total length and percentage of the relevant intersections logged.*	• Geological logging was completed on every drillhole. • Geological logs for all drill holes have been observed and are held by APBL. • Downhole geophysical logs (Gamma Ray Neutron logs) were completed on each of the Duval exploration drill holes. Calibration procedures are unknown. • Downhole density logs were completed on select drill holes (DHB1, DHB3, DHB7, DHB8)
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* • *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.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Drill core was transported from site to the Duval office in Tucson, Arizona. • Following a review of logging and geophysical data, prospective zones were identified, and drill core was marked for sampling. • Drill core was halved and then one half was halved again. • The procedure used for obtaining a ¼ core sample is currently unknown. A review of limited drill core present on site (DBH16) highlights that the core was cut using a diamond saw. • No evidence to date has been observed that duplicate samples were taken. • The entire ¼ core sample was crushed and split to obtain a sample for analysis. The crushing process, splitting process, size of crushed particles and amount of sample supplied to laboratory for analysis are unknown.
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.* • *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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.*	• Historic analytical procedures and associated quality control and quality assurance completed by Duval are unknown. • Discussions held with Pamela A.K. Wilkinson, who was an exploration geologist for Duval at the time of drilling and sampling, indicate that Duval had internal quality control and quality assurance procedures in place to ensure that assay results were accurate. • More than 3,000 samples were analysed by Duval at either their Tucson, West Texas (Culberson Mine) or New Mexico (Duval Potash mine) laboratories. Elements analysed for were Al, As, Ba, B_2O_3, CO_3, Ca, Fe, K, Li, Pb, Mo, Mg, Na, Rb, S, Si, Sr, Ti, Zn, Zr. • Mineralogy was identified from XRF analysis. XRF results were reportedly checked against logging and assay data (Wilkinson, 2017).

Criteria	JORC Code explanation	Commentary
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Verification of significant intersections by independent or alternative company personnel has not been completed. • Most of drill core has been discarded and verification of results from the remaining drill core is not possible. • Data entry, data verification and data storage processes are unknown. • Hard copy assay reports, geological logs and geophysical logs have been sourced and are stored with APBL.
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• No procedural documentation sighted regarding historic surveying procedure of drillhole collars. Surveying procedure used and associated accuracy is unknown. Checks by PT GMT Indonesia in 2015 on collar coordinates highlighted differences more than 50 ft in easting and northing locations were present for drill holes DBH7, DBH18, DBH20, DBH25, DBH26, DBH31, DBH33 and DBH34. • A total of 21 drill holes do not have surveyed collar elevations (DHB18, DHB19, DHB20, DHB21, DHB22, DHB23, DHB24, DHB25, DHB26, DHB27, DHB28, DHB29, DHB30,DHB31, DHB32, DHB33, DHB34, P2, P3, P4 and P5). These drill holes have been currently assigned an elevation from Google Earth. • No downhole surveys are present for Duval exploration drill holes (DHB series of drill holes). Downhole surveys for some production / injection drill holes were completed (SMT1, SMT2, SMT6, P5, P6 and P7). A review of this data highlights that significant deviation of the drill holes has not occurred, and the end of drill hole position compares favourably (within 10 m) with the drill hole collar location. The exception is drillhole P5 where the end of this planned vertical drill hole is situated approximately 40 m laterally from the drill hole collar position.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Drilling is completed on an 800 ft grid spacing. Drill holes were drilled vertically. • Drilling on an 800 ft spacing is appropriate to define the approximate extents and thickness of the evaporite sequence. Infill drilling will be required to accurately define the true extents, thickness and grade of mineralisation within the deposit. • Mineralised sections of drill core have a similar thickness in adjacent drill holes and significant variability in thickness is not expected on a local scale.

Criteria	JORC Code explanation	Commentary
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.* • *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.*	• Exploration drilling was completed on an 800 ft grid spacing. Drill holes were drilled vertically and intersect the relative flat lying deposit close to perpendicular to the dip of the deposit. The southwest margin of the deposit is quite sharp and is considered fault controlled.
Sample security	• *The measures taken to ensure sample security.*	• Sample security measures during transport and sample preparation are unknown.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No details sighted on any previous sampling reviews or audits.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

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 APBL project area consists of approximately 4,409 acres of which 240 acres are patented lands owned by Fort Cady (California) Corporation; 269 acres of patented property with surface rights held by Fort Cady (California) Corporation and mineral rights held by the State of California; 2,380 acres of unpatented mining claims held by Fort Cady (California) Corporation; and 1,520 acres of unpatented mining claims leased by Fort Cady (California) Corporation from Elementis Specialties Inc., owner and operator of the Hector Mine, an adjoining industrial mineral facility. In addition, 100 acres of unpatented mill claims are held by the Company which is designated for water wells. APBL intend to increase its land tenure by 464 acres via negotiations with Southern California Edison. The below table lists the land titles which cover the APBL's Fort Cady project and surrounding exploration regions:

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>
<table>
<tr><th>Land Title Type</th><th>Land Titles</th></tr>
<tr><td>Private (Patented) Property with surface and mineral rights in Fee Simple Title owned by FCCC</td><td>Parcels 0529-251-01; 0529-251-03</td></tr>
<tr><td>Private (Patented) Property with surface rights in Fee Simple Title owned by FCCC; Mineral rights owned by State of California</td><td>Parcel 0529-251-04</td></tr>
<tr><td>Unpatented Placer Mining Claims held under Lease to FCCC (from Elementis)</td><td>Company 1 Group; Company 4; Litigation 1 Group; Litigation 2; Litigation 3; Litigation 4 Group; Litigation 5 Group; Litigation 6; Litigation 11; Geyser View 1</td></tr>
<tr><td>Unpatented Lode Mining Claims held under Lease to FCCC (from Elementis)</td><td>HEC 124 - 127; HEC 129; HEC 131; HEC 343; HEC 344; HEC 365; HEC 369; HEC 371; HEC 372; HEC 374 - 376</td></tr>
<tr><td>Unpatented Placer Mining Claims Recorded and Located by FCCC</td><td>HEC #19; HEC #21; HEC# 23; HEC#25; HEC #34 - #41; HEC #43 - #67; HEC #70 - #82; HEC #85 - #93; HEC #182; HEC #184; HEC #288; HEC #290; HEC #292; HEC #294; HEC #296 - #297; HEC #299 - #350</td></tr>
</table>
</td></tr>
<tr><td>Exploration done by other parties</td><td>Acknowledgment and appraisal of exploration by other parties.</td><td>Commencement of exploration activities in the Hector Basin occurred in the early 1960’s, when exploration companies realised that the Hector Basin had a similar geological setting to the Kramer Basin to the northwest that hosted the massive Boron deposit. Discovery of the Fort Cady borate deposit occurred in 1964 when Congdon and Carey Minerals Exploration Company found several zones of colemanite, at depths of 400 m to 500 m below surface.
During the late 1970’s the Duval Corporation became interested in the project and started land acquisition in 1978 with drilling commencing in February 1979. The first drillhole (DBH1) intersected a 27 m thick sequence of colemanite-rich material at 369 m grading better than 7% B_2O_3. Exploration drilling, sampling, and assaying continued for a further two years through to February 1981 with a total of 33 exploration drill holes (DBH series of holes) totalling more than 18,200 m being drilled. Approximately 5,800 m of diamond drill core was obtained. Geological</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
		and geophysical logging of each hole was completed. Following a review of logging and geophysical data, prospective zones were ¼ core sampled for chemical analysis. More than 3,000 samples were analysed at Duval's laboratories in either Tucson, West Texas (Culberson Mine) or in New Mexico (Duval Potash mine). Elements analysed for were Al, As, Ba, B_2O_3, CO_3, Ca, Fe, K, Li, Pb, Mo, Mg, Na, Rb, S, Si, Sr, Ti, Zn, Zr. • In February 1981, the first solution mine test hole was drilled and by late 1981 a small-scale pilot plant was operational to test in-situ solution mining of the colemanite deposit. Significant processing test work was then completed by Duval with the aim of optimising the in-situ solution mining process and process design. In 1995 the Fort Cady Minerals Corp received all final approvals and permits to operate a 90,000 stpy pilot borate production facility. The pilot plant began operations in 1996, it remained on site, was modified and used for limited commercial production of calcium borate (marketed as Cady Cal 100) until 2001 when operations ceased due to owner cash flow problems. A total production tonnage of 1,942 tonnes of CadyCal 100 was reported to have been produced.

Criteria	JORC Code explanation	Commentary
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The project area comprises the west central portion of a Pliocene age dry lake basin (Hector Basin) which has been partially dissected by wrench and block faulting related to the San Andreas system. The Hector Basin is believed to have once been part of a much larger evaporite basin or perhaps a chain of basins in what has been termed the Barstow – Bristol Trough. • The main borate deposit area lies between 350 m to 450 m below the current surface. The deposit comprises a sequence of mudstone and tuff. The borate mineralisation occurs primarily as colemanite ($2CaO$ $3B_2O_3$ $5H_2O$) in thinly laminated silt, clay and gypsum beds. • In plain view, the concentration of boron-rich evaporites is roughly ellipsoidal with the long axis trending N40-50W. A zone of >5% B_2O_3 mineralisation, ranging in thickness from 20 m to 68 m (70 ft to 225 ft), is approximately 600 m wide and 2,500 m long (Figure 4.3). The boron is believed to have been sourced from thermal waters that flowed from hot springs in the region during times of active volcanism. These hot springs vented into the Hector Basin that contained a large desert lake. Borates were precipitated as the thermal waters entered the lake and cooled or as the lake waters evaporated and became saturated with boron.

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:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• Refer to Appendix B in Independent Geologist's Report of the May 2017 Prospectus for drill hole listing.
		• Refer to Appendix D for drill hole location map in Independent Geologist's Report of the May 2017 Prospectus.
		• A total of 21 drill holes do not have surveyed collar elevations (DHB18, DHB19, DHB20, DHB21, DHB22, DHB23, DHB24, DHB25, DHB26, DHB27, DHB28, DHB29, DHB30, DHB31, DHB32, DHB33, DHB34, P2, P3, P4 and P5). These drill holes have been currently assigned an elevation from Google Earth. The error in assigned elevations is estimated to be no greater than 15 m vertically. Survey pickup of all drill hole collars is planned.

Criteria	JORC Code explanation	Commentary
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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.*	• Drill hole data was composited to 10 ft lengths for statistical analysis and used in the PT GMT Indonesia 2015 resource estimate. No density weighting was applied in the compositing process. • No cutting of high grade values was completed. • Statistical analysis of the dataset highlights the distribution is positively skewed.
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 (e.g. 'down hole length, true width not known').*	• Exploration drilling was completed on an 800 ft grid spacing. Drill holes were drilled vertically and intersect the relative flat lying deposit close to perpendicular to the dip of the deposit. The southwest margin of the deposit is quite sharp and is considered fault controlled.
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 1 for drill hole collar location map. • Refer also to Figures 4.4, 4.5 and 4.6 within Independent Geologists Report in APBL's May 2017 prospectus.
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.*	• Refer to Appendix C within the Independent Geologists Report in APBL's May 2017 prospectus for listing of significant intercepts. • Refer to Table 4.1, Figure 4.6 and Figure 4.7 within the Independent Geologists Report in APBL's May 2017 prospectus for examples of drill holes that show grade variability throughout the mineralised evaporite sequence.
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.*	• Several historic studies have been completed by a variety of companies on the Fort Cady project. • Duval corporation completed the 33 exploration drill holes and associated metallurgical and solution mining test work. • Refer to bibliography for listing of references.
Further work	• *The nature and scale of planned further work (e.g. 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.*	• APBL has prepared a two-year exploration programme to assess the prospects over its exploration areas, Fort Cady and Hector.