

## SEPTEMBER 2018 QUARTERLY REPORT

Piedmont Lithium Limited (ASX: PLL; NASDAQ: PLLL) ("Piedmont" or "Company") is pleased to present its September 2018 quarterly report.

Highlights during and subsequent to the quarter were:

- Completed an updated Scoping Study for the Company's Piedmont Lithium Project ("Project"), located within the Carolina Tin-Spodumene Belt ("TSB") in the United States, which delivered outstanding results including:
  - compelling economics due to attractive capital and operating costs, significant by-product credits, short transportation distances, minimal royalties and low corporate income taxes;
  - a chemical plant producing 22,700tpa of lithium hydroxide supported by an open pit mine and concentrator producing 170,000tpa of 6% spodumene concentrate; and
  - by-product quartz (99,000tpa), feldspar (125,000tpa), and mica (15,500tpa) providing credits to the cost of lithium production;
- Completed bench-scale metallurgical testwork program to produce consistent high-grade spodumene concentrates (Li<sub>2</sub>O>6.0%) with low iron content (Fe<sub>2</sub>O<sub>3</sub><1%);
- Completed Mineral Resource estimates and bench-scale metallurgical testwork for by-product quartz, feldspar and mica as by-products of spodumene concentrate from the Project;
- Commenced permitting on the Project for all federal, state and local permits, which is targeted for completion in 2019;
- Completed initial exploratory drilling on the Company's new Sunnyside and Central properties in the TSB, which returned encouraging results, including the Project's widest intercept to-date.

## **Next steps:**

- Piedmont will now move forward with a Pre-Feasibility Study ("PFS") on the Project, targeted for completion during 2019;
- Additional drilling is planned on the core property to potentially extend the mine life by converting the new Exploration Target into a Mineral Resource;
- Further metallurgical studies, including evaluating the potential for a Dense Medium Separation ("DMS") before the flotation circuit, to further enhance operating costs in the concentrator;
- Complete permit applications and secure the necessary permits to commence mining and processing operations at the Project; and
- Continued expansion of the Company's land position in the Carolina Tin-Spodumene Belt ("TSB") with a focus on areas of high mineral prospectivity.

For further information, contact:

Keith D. Phillips President & CEO T: +1 973 809 0505

E: keith@piedmontlithium.com

Anastasios (Taso) Arima

Executive Director T: +1 347 899 1522

E: taso@piedmontlithium.com

ABN 50 002 664 4953

## **Project Overview**

Piedmont Lithium Limited (ASX: PLL; Nasdaq: PLLL) holds a 100% interest in the Piedmont Lithium Project located within the TSB and along trend to the Hallman Beam and Kings Mountain mines, which historically provided most of the western world's lithium between the 1950s and the 1980s. The TSB has been described as one of the largest lithium regions in the world and is located approximately 25 miles west of Charlotte, North Carolina.

The Project was originally explored by Lithium Corporation of America which was eventually acquired by FMC Corporation ("FMC"). A Canadian exploration company, North Arrow Minerals, completed a 19-drill hole, 2,544 metre exploration drill program on the property in 2009-2010.

The Company has completed three drill campaigns on the Project totalling over 35,000 metres of drilling.

Piedmont, through its 100% owned U.S. subsidiary, Piedmont Lithium Inc., has entered into exclusive option agreements and land acquisition agreements with local landowners, which upon exercise, allow the Company to purchase (or in some cases long-term lease) approximately 1,200 acres of surface property and the associated mineral rights. The Company also controls a 60-acre parcel in Kings Mountain, North Carolina for the site of the Company's planned Chemical Plant.

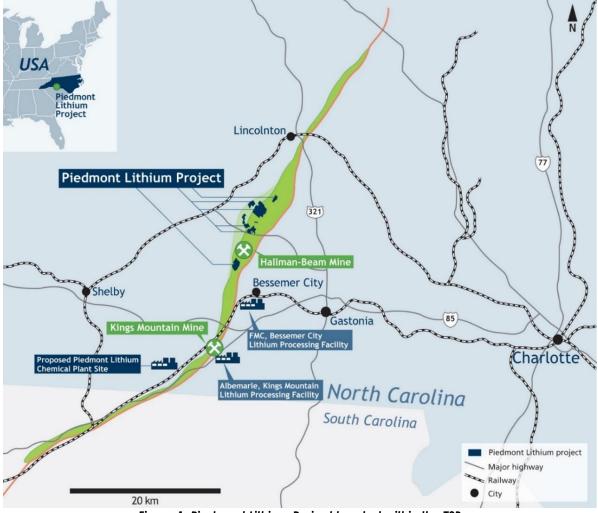


Figure 1: Piedmont Lithium Project located within the TSB

## **Scoping Study Results**

During the quarter, the Company announced the results of a Scoping Study for its vertically integrated lithium hydroxide chemical project located in the TSB in North Carolina, USA.

The Scoping Study includes a chemical plant ("Chemical Plant") producing 22,700 tonnes per year of lithium hydroxide supported by an open pit mine and concentrator ("Mine/Concentrator") producing 170,000 tonnes per year of 6% Li<sub>2</sub>O spodumene concentrate. By-products quartz (99,000 tpy), feldspar (125,000 tpy), and mica (15,500 tpy) will provide credits to the cost of lithium production.

The Scoping Study is based on the maiden Mineral Resource Estimate for the Piedmont Lithium Project reported in June 2018, comprising 16.2Mt grading at 1.12% Li<sub>2</sub>O.

The Scoping Study demonstrates the compelling economics of the prospective integrated Project, highlighted by low operating costs, high after-tax margins and strong free cash flow. Highlights of the Scoping Study are as follows:

- Integrated project to produce 22,700 tonnes per year of lithium hydroxide
- Initial 13-year mine life with 2 years of spodumene concentrate sales and 11 years of integrated operations
- Staged development to minimise up-front capital requirements and equity dilution
  - Stage 1 initial capex of US\$109 million for the Mine/Concentrator and by-product circuits (excluding contingency)
  - o Stage 2 capex for Chemical Plant funded largely by internal cash flow
- Estimated 1st quartile spodumene concentrate costs of US\$193 per tonne and lithium hydroxide costs of US\$3,112 per tonne, both net of by-product credits and inclusive of royalties
- Conventional technology selection in all project aspects
- Steady-state annual EBITDA of US\$225-\$245 million and after-tax cash flow of US\$180-\$190 million
- Estimated NPV8% of US\$888 million and after-tax IRR of 46% with  $\sim$ 2-year payback
- Potential mine and project life extension provide the opportunity for further economic upside



## **First-Quartile Operating Costs**

The integrated Piedmont project is projected to have an average life of project cash operating cost of approximately US\$3,112 per tonne including royalties and net of by-product credits, positioning Piedmont as one of the industry's lowest-cost producer as reflected in the 2023 lithium hydroxide cost curve (Figure 2).

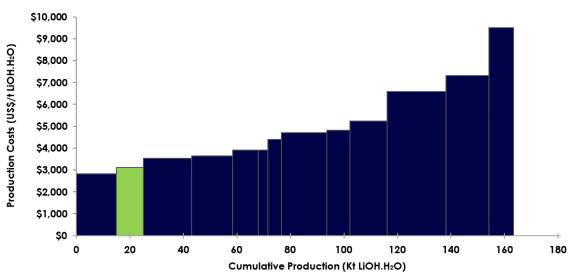


Figure 2: Lithium hydroxide 2023 cost curve (Source - Roskill)

## Attractive After-Tax Margins and Free Cash Flow

Low operating costs, low royalties, and low corporate tax rates potentially allow Piedmont to achieve after-tax margins approaching US\$9,500 per tonne, or approximately 68%. The Project generates an estimated US\$9,270 per tonne of free cash flow during life-of-mine operations after construction of the Chemical Plant.

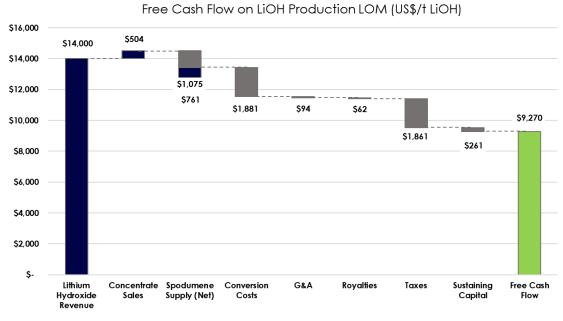


Figure 3: After tax free cash flow on lithium hydroxide sales during life-of-mine operations

## **Summary of Scoping Study Results**

Piedmont Lithium Project – Life of Mine ("LOM") Integrated Project	Unit	Estimated Value
PHYSICAL - MINE/CONCENTRATOR		
Mine life	years	13
Steady-state annual spodumene concentrate production	tpy	170,000
LOM spodumene concentrate production	t	1,950,000
LOM quartz by-product production	†	1,188,000
LOM feldspar by-product production	†	1,500,000
LOM mica by-product production	t	185,000
LOM feed grade (excluding dilution)	%	1.12
LOM average concentrate grade	%	6.0
LOM average process recovery	%	85
LOM average strip ratio	waste:ore	8.2:1
PHYSICAL - LITHIUM CHEMICAL PLANT		
Steady-state annual lithium hydroxide production	tpy	22,700
LOM lithium hydroxide production	t	206,000
LOM concentrate supplied from mining operations	t	1,300,000
Chemical Plant life	years	11
Commencement of lithium hydroxide chemical production	year	3
OPERATING AND CAPITAL COSTS - INTEGRATED PROJECT		
Average LiOH production cash costs using self-supplied concentrate	US\$/t	\$3,112
Mine/Concentrator – Direct development capital	US\$mm	\$61.0
Mine/Concentrator – By-Product direct development capital	US\$mm	\$17.7
Mine/Concentrator – Owner's costs	US\$mm	\$11.0
Mine/Concentrator – Land acquisition costs	US\$mm	\$18.9
Mine/Concentrator – Contingency	US\$mm	\$21.7
Mine/Concentrator – Sustaining and deferred capital	US\$mm	\$19.6
Chemical Plant - Direct development capital	US\$mm	\$252.6
Chemical Plant – Owner's costs	US\$mm	\$12.1
Chemical Plant - Contingency <sup>1</sup>	US\$mm	\$79.4
Chemical Plant – Sustaining and deferred capital	US\$mm	\$37.9
FINANCIAL PERFORMANCE – INTEGRATED PROJECT – LIFE OF PROJECT		
Annual steady state EBITDA	U\$\$mmpy	\$225-\$245
Annual steady state after-tax cash flow	US\$mmpy	\$180-\$190
Net operating cash flow after tax	US\$mm	\$2,220
Free cash flow after capital costs	US\$mm	\$1,700
After tax Internal Rate of Return (IRR)	%	46
After tax Net Present Value (NPV) @ 8% discount rate	US\$mm	\$888

#### Notes:

(1) Contingency was applied to all direct and indirect costs at a rate of 20% (Mine/Concentrator) and 30% (Chemical Plant).

#### **Metallurgical Testwork Program**

During the quarter, Piedmont completed a bench-scale metallurgical testwork program to produce spodumene concentrate from ore samples from the Company's proposed vertically-integrated Piedmont Lithium Project located in North Carolina, USA.

Piedmont partnered with North Carolina State University's Minerals Research Laboratory (MRL) to complete bench-scale testwork including spodumene flotation optimization, magnetic separation to remove iron from spodumene concentrate and Heavy Liquid Separation (HLS) to evaluate the potential for a Dense Medium Separation (DMS) circuit.

The completed testwork program confirms the interim flotation and magnetic separation results which the Company published in April 2018 with additional testwork on four composited samples collected from multiple exploration corridors within the Project's core property.

Spodumene direct flotation tests followed by magnetic separation tests were conducted on four samples of Piedmont ore. The flotation results showed that spodumene concentrates with grade of greater than 6.0% Li<sub>2</sub>O were achievable with two-stage magnetic separation tests reducing iron content to less than 1.0% Fe<sub>2</sub>O<sub>3</sub>.

Additionally, it was demonstrated that the ultimate tailings streams of the bench-scale flowsheet had low Li2O losses.

The bench-scale testwork results underpinned the spodumene concentrator process design in the Scoping Study that was released in July 2018. Additionally, the bench-scale results will be used to guide future pilot-scale testwork programs.

## **Exploratory Drilling at Central and Sunnyside Properties**

Subsequent to the end of the quarter, the Company received assay results from its initial exploratory drilling on its new Sunnyside and Central properties in the Carolina Tin-Spodumene Belt ("TSB") in North Carolina, United States.

This maiden drill program comprised 10 holes, 7 from Sunnyside and 3 from Central, totalling 1,411 meters. Both properties yielded significant intercepts of high-grade lithium mineralisation, including:

- 34.0m @ 1.04% Li<sub>2</sub>O of continuous mineralization across one pegmatite in Hole 18-CT-002; and
- 20.9m @ 1.42% Li<sub>2</sub>O of continuous mineralization across one pegmatite in Hole 18-SS-00.

Piedmont is encouraged by the initial drill results from Central and Sunnyside properties and is designing follow up drill campaigns for both. In addition, over 650 soil samples have been collected and over 33-line kilometres of walking magnetometer geophysical surveys have been undertaken on the properties. Soil assays are still pending and will be paired with the geophysical data to produce drill targets for the properties.

## **Exploration Interests**

As at September 30, 2018, the Company owns or has entered into exclusive option agreements or land acquisition agreements with local landowners, which upon exercise, allow the Company to purchase (or in some cases long-term lease) approximately 1,232 acres of surface property and the associated mineral rights from the private landowners. During the quarter, the Company entered into exclusive option agreements and/or land acquisition agreements with local landowners for an additional approximately 33 acres of surface property and the associated mineral rights from the private landowners.

## **Forward Looking Statements**

This announcement may include forward-looking statements. These forward-looking statements are based on the Company's expectations and beliefs concerning future events. Forward looking statements are necessarily subject to risks, uncertainties and other factors, many of which are outside the control of the Company, which could cause actual results to differ materially from such statements. The Company makes no undertaking to subsequently update or revise the forward-looking statements made in this announcement, to reflect the circumstances or events after the date of that announcement.

#### Cautionary Note to United States Investors Concerning Estimates of Measured, Indicated and Inferred Resources

The information contained in this presentation has been prepared in accordance with the requirements of the securities laws in effect in Australia, which differ from the requirements of U.S. securities laws. The terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are Australian terms defined in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). However, these terms are not defined in Industry Guide 7 ("SEC Industry Guide 7") under the U.S. Securities Act of 1933, as amended (the "U.S. Securities Act"), and are normally not permitted to be used in reports and filings with the U.S. Securities and Exchange Commission ("SEC"). Accordingly, information contained herein that describes Piedmont's mineral deposits may not be comparable to similar information made public by U.S. companies subject to reporting and disclosure requirements under the U.S. federal securities laws and the rules and regulations thereunder. U.S. investors are urged to consider closely the disclosure in Piedmont's Form 20-F, a copy of which may be obtained from Piedmont or from the EDGAR system on the SEC's website at http://www.sec.gov/.

#### **Competent Persons Statements**

The information in this presentation that relates to Exploration Results is extracted from the Company's ASX announcements dated August 23, 2018, July 19, 2018, June 14, 2018, June 7, 2018, May 17, 2018, May 10, 2018, April 9, 2018, 4 April 2018, 15 March 2018, 1 December 2017, 2 November 2017, 27 September 2017, 23 May 2017, 3 April 2017, and 18 October 2016 which are available to view on the Company's website at <a href="https://www.piedmontlithium.com">www.piedmontlithium.com</a>.

The information in this presentation that relates to Exploration Targets and Mineral Resources is extracted from the Company's ASX announcement dated June 14, 2018 which is available to view on the Company's website at <a href="https://www.piedmontlithium.com">www.piedmontlithium.com</a>.

The information in this presentation that relates to Metallurgical Testwork Results is extracted from the Company's ASX announcements dated September 4, 2018 and July 17, 2018 which are available to view on the Company's website at <a href="https://www.piedmontlithium.com">www.piedmontlithium.com</a>.

The information in this presentation that relates to Process Design, Process Plant Capital Costs, and Process Plant Operating Costs is extracted from the Company's ASX announcements dated September 13, 2018 and July 19, 2018 which are available to view on the Company's website at <a href="https://www.piedmontlithium.com">www.piedmontlithium.com</a>.

The information in this presentation that relates to Mining Engineering and Mine Schedule is extracted from the Company's ASX announcements dated September 13, 2018 and July 19, 2018 which are available to view on the Company's website at <a href="https://www.piedmontlithium.com">www.piedmontlithium.com</a>.

Piedmont confirms that: a) it is not aware of any new information or data that materially affects the information included in the original ASX announcements; b) all material assumptions and technical parameters underpinning Mineral Resources, Exploration Targets, Production Targets, and related forecast financial information derived from Production Targets included in the original ASX announcements continue to apply and have not materially changed; and c) the form and context in which the relevant Competent Persons' findings are presented in this report have not been materially modified from the original ASX announcements.

+Rule 5.5

# Appendix 5B

# Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

## Name of entity

Piedmont Lithium Limited	
ABN Quarter ended ("current quarter")	
50 002 664 495	September 30, 2018

Con	solidated statement of cash flows	Current quarter US\$000	Year to date (3 months) US\$000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(1,816)	(1,816)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(697)	(697)
	(e) administration and corporate costs	(300)	(300)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	32	32
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (provide details if material):		
	(a) business development & investor relations	(365)	(365)
1.9	Net cash from / (used in) operating activities	(3,146)	(3,146)

2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	(328)	(328)
	(c) investments	-	-
	(d) other non-current assets	-	-

1 September 2016

Page 1

<sup>+</sup> See chapter 19 for defined terms

Cons	olidated statement of cash flows	Current quarter US\$000	Year to date (3 months) US\$000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	(328)	(328)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	(4)	(4)
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	(4)	(4)

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	7,238	7,238
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(3,146)	(3,146)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(328)	(328)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	(4)	(4)
4.5	Effect of movement in exchange rates on cash held	(35)	(35)
4.6	Cash and cash equivalents at end of period	3,725	3,725

Page 2

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter US\$000	Previous quarter US\$000
5.1	Bank balances	1,708	3,673
5.2	Call deposits	2,017	6,121
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,725	9,794

6.	Payments to directors of the entity and their associates	Current quarter US\$000
6.1	Aggregate amount of payments to these parties included in item 1.2	(244)
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Payments include directors' fees, superannuation, executive remuneration, company secretarial services and provision of a fully serviced office.

7.	Payments to related entities of the entity and their associates	Current quarter US\$000
7.1	Aggregate amount of payments to these parties included in item 1.2	-
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

Not applicable.

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end US\$000	Amount drawn at quarter end US\$000
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other (please specify)	-	-

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

Not	an	nlıa	าวท	ΙО
IVOL	av	$\boldsymbol{\omega}$	Jau	IC.

1 September 2016

<sup>+</sup> See chapter 19 for defined terms

9.	Estimated cash outflows for next quarter	US\$000
9.1	Exploration and evaluation	600
9.2	Development	-
9.3	Production	-
9.4	Staff costs	800
9.5	Administration and corporate costs	400
9.6	Other (provide details if material)	-
9.7	Total estimated cash outflows	1,800

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-	-	-	-
10.2	Interests in mining tenements and petroleum tenements acquired or increased		Freehold land and/or options to purchase or lease surface property and associated mineral rights from private landowners	100% (1,199 acres)	100% (1,232 acres)

<sup>+</sup> See chapter 19 for defined terms 1 September 2016

Page 5

## **Compliance statement**

- 1 This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

	/0	
Sign here:	/	Date: October 31, 2018

(Director/Company secretary)

Print name: Gregory Swan

#### **Notes**

- The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

1 September 2016

<sup>+</sup> See chapter 19 for defined terms