

ASX RELEASE | September 4, 2018 | ASX:PLL; NASDAQ:PLLL

PIEDMONT PRODUCES QUARTZ, FELDSPAR AND MICA IN BENCH-SCALE AS BY-PRODUCTS OF SPODUMENE CONCENTRATE

- Quartz, feldspar and mica produced in bench-scale indicate potential saleable by-products
- Concentrate samples sent to potential off-take partners
- Scoping Study update including by-product credits scheduled for completion later this month

Piedmont Lithium Limited ("Piedmont" or "Company") is pleased to report that the Company has completed a bench-scale metallurgical testwork program to produce quartz, feldspar and mica as by-products of spodumene concentrate from the Company's proposed vertically-integrated Piedmont Lithium Project located in North Carolina, USA.

Piedmont has partnered with North Carolina State University's Minerals Research Laboratory ("MRL") to complete bench-scale testwork to produce quartz, feldspar, and mica concentrates from spodumene flotation tailings.

Initial results demonstrate commercial potential for each by-product, and the Company has delivered bench-scale samples of feldspar and mica concentrates to potential offtake partners for further testing. Piedmont has opened confidential discussions with several parties for offtake of all three by-products.

The Company is currently completing a Mineral Resource Estimate for each by-product based on the geological model used to determine the Company's maiden Mineral Resource Estimate announced in June 2018. Announcement of the by-product Mineral Resource Estimates is expected in the coming days.

Piedmont is preparing an updated Scoping Study including by-product concentrates. This update is expected later this month.

Keith D. Phillips, President and Chief Executive Officer, said, "Historically, a significant portion of the revenue from the local lithium mines was derived from by-product quartz, feldspar and mica. The metallurgical results covered in this release demonstrate Piedmont's ability to recover these minerals through flotation, and we expect later this month to be in a position to quantify the impact of these by-products on the economics of our integrated lithium project."

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Examples of quartz, feldspar and mica concentrates from the Piedmont Project

About Piedmont Lithium

Piedmont Lithium Limited (ASX: PLL; Nasdaq: PLLL) holds a 100% interest in the Piedmont Lithium Project ("Project") located within the world-class Carolina Tin-Spodumene Belt ("TSB") and along trend to the Hallman Beam and Kings Mountain mines, historically providing most of the western world's lithium between the 1950s and the 1980s. The TSB has been described as one of the largest lithium provinces in the world and is located approximately 25 miles west of Charlotte, North Carolina. It is a premier location to be developing and integrated lithium business based on its favourable geology, proven metallurgy and easy access to infrastructure, power, R&D centres for lithium and battery storage, major high-tech population centres and downstream lithium processing facilities.

Forward Looking Statements

This announcement may include forward-looking statements. These forward-looking statements are based on Piedmont'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 Piedmont, which could cause actual results to differ materially from such statements. Piedmont 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 herein has been prepared in accordance with the requirements of the securities laws in effect in Australia, which differ from the requirements of United States securities laws. The terms "mineral resource", "measured mineral resource", "indicated mineral resource" and "inferred mineral resource" are Australian mining 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"). Investors are cautioned not to assume that any part or all of the mineral deposits in these categories will ever be converted into reserves. "Inferred mineral resources" have a great amount of uncertainty as to their existence and as to their economic and legal feasibility. It cannot be assumed that all or any part of an inferred mineral resource will ever be upgraded to a higher category. Under Australian rules, estimates of inferred mineral resources may not form the basis of feasibility or pre-feasibility studies, except in rare cases. Investors are cautioned not to assume that all or any part of an inferred mineral resource exists or is economically or legally mineable. Mineral resources that are not mineral reserves do not have demonstrated economic viability. Disclosure of "contained lithium oxide" or "lithium carbonate equivalent in a resource is permitted disclosure under Australian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC standards as in place tonnage and grade without reference to unit measures. 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 Statement

The information in this announcement that relates to Metallurgical Testwork Results is based on, and fairly represents, information compiled or reviewed by Dr. Hamid Akbari, a Competent Person who is a Registered Member of the 'Society for Mining, Metallurgy and Exploration', a 'Recognized Professional Organization' (RPO). Dr. Akbari is a consultant to the Company. Dr. Akbari has sufficient experience that is relevant to the style of mineralization and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Metallurgical Results. Dr. Akbari consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Appendix 1: Summary of By-Products Testwork Results

The MRL performed bench-scale tests to evaluate the production of quartz, feldspar and mica as byproducts from the tailings of spodumene flotation. The standard procedure for by-products recovery includes preparation of the spodumene tailings for mica flotation followed by iron mineral flotation and ending with feldspar flotation leaving quartz concentrate. The standard flowsheet for by-product recovery is shown in Figure 1. Scavenger tailings from spodumene flotation of samples B, G, and F were used as the feed for the by-products evaluation tests.

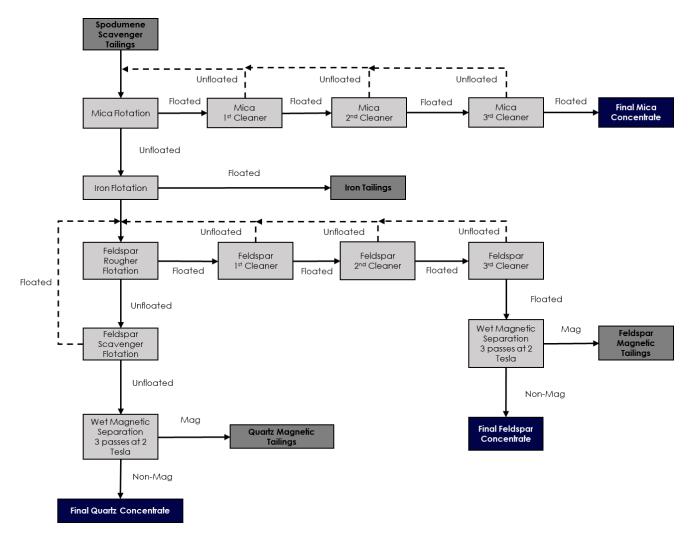


Figure 1 – Bench-Scale By-Product Testwork Diagram (no material was recycled and the dotted lines only show a potential recycling path in a continuous operation)

Feldspar and mica have been historically mined and produced from North Carolina pegmatites including from lithium bearing pegmatites previously mined from the northwest of Kings Mountain, North Carolina (Potter, 2007 Industrial minerals & rocks, 7th ed. ISBN-13 978-0-87335-233-8). Feldspar and mica by-products were recovered after spodumene extraction.

Markets for By-Products

Quartz (also known as silica) is produced commercially from a wide variety of deposits including unconsolidated sand, sandstone, quartzite, granite, aplite and pegmatite. Silica sand and quartz are economical sources of SiO₂ used in glass and ceramics manufacture. Key deleterious elements include Fe and Ti.

Feldspar is produced commercially from rocks of granitic composition such as alaskite, aplite, pegmatites in addition to feldspar quartz sands. Feldspar may be used as a source of Al, Na, K and Si in the manufacture of glass and in ceramics. Feldspar finds application as a functional filler in products such as paint and plastics where its hardness, low quartz content, chemical inertness and low oil absorption are beneficial physical properties.

Mica occurs as several minerals (e.g. biotite, phlogopite or muscovite) depending on geological association and chemistry. Mica has a flakey shape and is flexible, has well-developed cleavage and is inflammable. Muscovite is most commonly sourced from pegmatites and granitic rocks and finds application as an insulator, in fillers, in plastics, paint and drilling mud. Specifications for mica include particle size distribution, colour, mechanical strength and bulk density. As a rule of thumb, milled (ground) mica for oil drilling is coarse (10 mesh); medium to fine powder for welding rods (60 mesh); very fine powder for paint and plastics (325 mesh).

Likely product specifications for the Piedmont deposit are supported by the results of the bulk sampling and metallurgical test work program undertaken by Piedmont Lithium in 2018 at North Carolina State Mineral Research Laboratory.

Quartz Results

Table 1: Bench Scale Quartz Concentrate Results					
Parameter	Sample B	Sample F	Sample G		
% SiO2	99.8	99.7	99.7		
% Al ₂ O ₃	0.10	0.10	0.14		
% K ₂ O	0.026	0.022	0.029		
% Na ₂ O	0.05	0.06	0.06		
% CaO	<0.01	<0.01	<0.01		
% Fe ₂ O ₃	0.01	0.01	<0.01		
% Li ₂ O	0.013	0.011	0.013		
% MgO	0.05	0.05	0.03		
% MnO	<0.008	<0.008	<0.008		
% P ₂ O ₅	0.007	0.005	0.007		
% TiO ₂	<0.0010	<0.0010	< 0.0010		

Quartz data in three (3) samples showed results which may be favourable for the glass or optical glass markets (Table 1).

Typical market specifications for quartz of various grades are shown in the tables below for comparative purposes.

Table 2: Specialty Silica Sand and Quartz Specifications by Market ¹						
Specification	SiO₂ Min. %	Other Elements Max %	Other Elements Max ppm			
Clear glass-grade sand	99.5	0.5	5,000			
Semiconductor filler, LCD and optical glass	99.8	0.2	2,000			
"Low Grade" HPQ	99.95	0.05	500			
"Medium Grade" HPQ	99.99	0.01	100			
"High Grade" HPQ	99.997	0.003	30			

¹Source – Modified from Richard Flook and the December 2013 Issue of Industrial Minerals Magazine (p25)

Table 3: Specifications for Silica as Raw Material for Glass and Ceramics by Market ²					
Market SiO2 (%) Al2O3 (%) Fe2O3 (%)					
Flat glass	>99.5	<0.3	<0.04		
Container flint glass	>98.5	<0.5	<0.035		
Insulation fibreglass	>95.5	<2.2	<0.3		
Porcelain	>97.5	<0.55	<0.2		
Enamels	>97.5	<0.55	<0.02		

² Source - Sinton (2006) Raw materials for glass and ceramics - sources, processes and quality control. Wiley, ISBN-13 978-0-471-47942-0



Figure 2 - Example of quartz concentrate from the Piedmont project

Feldspar Results

Feldspar data in three (3) samples are reported in Table 4. These results will be used to support a Byproduct Study for the domestic feldspar market.

Table 4: Bench Scale Feldspar Concentrate Results					
Parameter	Sample B	Sample F	Sample G		
% SiO ₂	68.9	68.8	68.8		
% Al ₂ O ₃	18.5	18.6	18.6		
% K ₂ O	3.99	3.81	3.84		
% Na2O	8.35	8.45	8.49		
Total Na ₂ O+K ₂ O	12.34	12.26	12.33		
% CaO	0.07	0.12	0.08		
% Fe ₂ O ₃	0.02	0.01	0.02		
% Li ₂ O	0.026	0.019	0.047		
% MgO	<0.01	<0.01	<0.01		
% MnO	<0.008	<0.008	<0.008		
% P ₂ O ₅	0.151	0.154	0.150		
% TiO ₂	<0.0010	<0.0010	<0.0010		

Table 5 shows representative feldspar market specifications for reference.

Table 5: Examples of Feldspar Product Chemical Specifications ³							
Product	Source	Al ₂ O ₃	Fe ₂ O ₃	CaO	K ₂ O	Na ₂ O	K ₂ O+Na ₂ O
K-spar	North Carolina	18.0	0.07	0.14	10.1	3.6	13.7
Na-spar	North Carolina	19.0	0.07	1.6	4.0	7.0	11.0

³ Source Harben (2002) Industrial Minerals Handbook. ISBN 1 904333 04 4



Figure 3 - Example of feldspar concentrate from the Piedmont project

Mica Results

Mica quality is measured by its physical properties including bulk density, grit, color/brightness, and particle size.

Bulk Density

The bulk density of mica by-product generated from processing of the individual composite samples are listed in Table 6. The bulk density was in the range of 0.680-0.682 g/cm³.

Table 6: Bulk Density of Mica				
Sample ID Bulk Density (g/cm ³				
F	0.681			
G	0.682			
В	0.682			

<u>Grit</u>

The National Gypsum Grit test is used mostly for minus 100-mesh mica which issued as joint cement compound and textured mica paint. The specification for total grit for mica is 1.0% (Table 7).

Table 7: Grit Test for Mica					
Sample	F	G	В		
Total Grit (%)	0.70	0.79	0.76		

Color/Brightness Test

Color/brightness is usually determined on minus 100-mesh material. Several instruments are used for this determination including the Hunter meter, Technedyne and the Photovoltmeter. The MRL uses the Photovoltmeter for the determination of color or brightness. The tristimulus values determined from the Photovoltmeter can be converted to Hunter values. The green reflectance is often reported for micas and talcs (Table 8).

Table 8: Color/Brightness Test Results for Mica					
Test Method	Sample ID	В	G	F	
	Amber Reflectance	13.8	13.4	13.5	
Photovoltmeter	Blue reflectance	2.4	2.4	2.3	
	Green Reflectance	11.6	11.2	11.4	
	X tristimulus	11.47	11.15	11.21	
CIE	Y tristimulus	11.60	11.20	11.40	
Z tristimulus		2.83	2.83	2.71	
	L (Luminosity)		39.92	40.25	
Hunter Values ± a Redness(+)Greenness(-)		0.71	1.25	0.27	
± b Yellowness(+)Greenness(-)		45.90	44.77	46.07	
ASTM E-313	Y (Yellowness Index)	100.4	100.4	100.4	

Particle Size Analysis

Particle size analysis of mica is determined on a set of sieves by sifting on a Ro-tap machine. The data are reported as percent weight retained in microns.

Table 9: Particle Size Analysis (PSA) of Mica							
Size	F		(G		В	
(microns)	Wt. (%)	Cum (%) Passing	Wt. (%)	Cum (%) Passing	Wł. (%)	Cum (%) Passing	
425	0.3	99.7	0.3	99.7	0.0	100.0	
300	1.0	98.7	1.3	98.3	1.4	98.6	
250	3.6	95.0	3.6	94.7	4.8	93.9	
212	9.6	85.5	9.9	84.8	9.5	84.4	
180	11.2	74.3	10.9	73.9	10.9	73.5	
150	18.8	55.4	18.5	55.4	18.4	55.1	
125	12.9	42.6	13.2	42.2	12.6	42.5	
106	12.2	30.4	12.9	29.4	11.9	30.6	
75	2.3	28.1	3.3	26.1	3.7	26.9	
53	18.8	9.2	17.5	8.6	17.7	9.2	
45	6.6	2.6	5.9	2.6	5.8	3.4	
20	1.7	1.0	1.3	1.3	2.0	1.4	
-20	1.0		1.3		1.4		



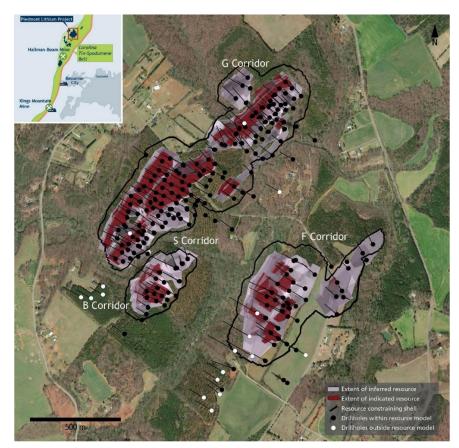
Figure 4 - Example of mica concentrate from the Piedmont project

Mica market specifications are complex and specific to numerous industrial uses. General categories for use are shown in the table below (Table 10).

Table 10: General Markets for Mica ³					
Grade	Size (mesh)	Size (mm)	Typical use		
Coarse flake	6	2.8	Oil drilling		
Fine to coarse flake	16	1.0	Concrete blocks, refractory bricks, gypsum board		
Coarse to fine powder	30	0.5	Metal annealing		
Medium fine powder	60	0.25	Welding electrodes, foundry, lubricants		
Fine powder	100	0.15	Textured paint, acoustical plaster		
Superfine powder	325	0.045	Paints, plastics, rubber		

³Source – Schlanz and Tanner (2006) Industrial minerals & rocks, 7th ed. ISBN-13 978-0-87335-233-8

Sampling Technique



Samples B, F, and G were composites of ½ NQ core from select mineralized zones of the same corresponding names from previously announced Phase 1 and Phase 2 drilling programs. Specifically, the B sample consisted of select mineralized zones from Holes 17-BD-21, 22 and 23. The G sample consisted of select mineralized zones from Holes 17-BD-24, 25, 26, 27, and 28, and the F sample consisted of select mineralized zones from Holes 17-BD-29,30 and 31. For all holes included in the samples above, the original exploration samples averaged 1 m in length but were designed to break on lithologic and textural boundaries. Exploration results for Li₂O have been released in prior Press Releases. The samples were transported to North Carolina State University's Minerals Research Laboratory (MRL) in August 2017 by Piedmont Lithium Geologist.

Appendix 2: JORC Table 1 Checklist of Assessment and Reporting Criteria

Section 1 Sampling Techniques and Data

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 downhole 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. 	Metallurgical samples: Bench-scale quartz, feldspar and mica concentration testwork was completed on the final tailings obtained from the spodumene scavenger flotation of samples B, F, and G. The results of the spodumene flotation testwork program on these samples have previously been reported. Samples B, F, and G were composites of ½ NQ core from select mineralized zones from Phase 1 and Phase 2 drilling programs. Specifically, the B sample consisted of select mineralized zones from Holes 17-BD-24, 25 and 23, the G sample consisted of select mineralized zones from Holes 17-BD-24, 25, 26, 27, and 28, and the F sample consisted of select mineralized zones from Holes 17-BD-24, 25, 26, 27, and 28, and the F sample consisted of select mineralized zones from Holes 17-BD-24, 25, 26, 27, and 28, and the F sample consisted of select mineralized zones from Holes 17-BD-24, 30 and 31. For all holes included in the samples above, the original exploration samples averaged 1 m in length but were designed to break on lithologic and textural boundaries. Exploration results for Li ₂ O have been released in prior Press Releases. The samples were transported to North Carolina State University's Minerals Research Laboratory (MRL) in August 2017 by Piedmont Lithium Geologist. First, spodumene flotation was conducted on the samples (the results have previously been reported). The final tailings of spodumene flotation testwork obtained from spodumene scavenger flotation were used as the feed to produce quartz, feldspar and mica concentrates. Mica conditioning and flotation was first performed. The mica product was cleaned three times to produce the final flotation was performed and the feldspar product was cleaned three times to produce the final flotation was performed and the feldspar scavenger flotation was conducted to further clean the final quartz concentrate left at the end of the bench-scale testwork program.
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.).	All drilling on the property has been diamond drill core, the holes were collared with HQ and were transitioned to NQ once non-weathered and unoxidized bedrock was encountered. Drill core was recovered from surface. All samples for metallurgical testing are from 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. 	 The core was transported from the drill site to the logging facility in covered boxes with the utmost care. Once at the logging facility, the following procedures were carried out on the core: Re-aligning the broken core in its original position as closely as possible. The length of recovered core was measured, and meter marks clearly placed on the core to indicate depth to the nearest centimetre. The length of core recovered was used to determine the core recovery, which is the length of core recovered divided by the interval drilled (as indicated by the footage marks which was converted to meter marks), expressed as a percentage. This data was recorded in the database. The core was photographed wet before logged. The core was photographed again immediately before sampling with the sample numbers visible. Sample recovery was consistently good except for zones within the oxidized clay and saprolite zones. These zones were generally within the top 20m of the hole. No relationship is recognized between recovery and grade. The drill holes were designed to intersect the targeted pegmatite below the oxidized zone.
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. 	Geologically, data was collected in detail, sufficient to aid in Mineral Resource estimation. Core logging consisted of marking the core, describing lithologies, geologic features, percentage of spodumene and structural features measured to core axis. The core was photographed wet before logging and again immediately before sampling with the sample numbers visible. All the core from the forty-one holes reported was logged.
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. 	Metallurgical Samples: Theses samples were composites of sawn ½ NQ core from select mineralized zones from Phase 1 and Phase 2 drilling programs Bench-scale metallurgical tests reported in this release were conducted on the final tailings obtained from the spodumene scavenger flotation of subsamples of Corridor B, Corridor G, and Corridor F composite samples. The samples were transported to North

Criteria	JORC Code explanation	Commentary
	For all sample types, the nature, quality and appropriateness of the sample preparation	Carolina State University's Minerals Research Laboratory (MRL) in August 2017 by Piedmont Lithium Geologist.
	 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. 	Three samples named B, G, and F graded at 1.62%, 1.32%, 1.22% and 1.38% Li ₂ O respectively (Head grades have a reporting accuracy of $\pm 0.1\%$) were first used in the spodumene flotation testwork program which has previously been reported. The final tailings remained from the spodumene scavenger flotation were further processed to produce quartz, feldspar and mica as the by-products.
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 	The focus of the bench-scale testwork program undertaken by NC State University's Minerals Research Laboratory (MRL) was to produce quartz, feldspar, and mica from the final tailings obtained from the spodumene flotation testwork. The results of the spodumene flotation testwork program have previously been reported. The final tailings used as the feed in this testwork includes the tailings of spodumene scavenger flotation in the reported spodumene flotation testwork.
	including instrument make and model, reading	The bench-scale results reported in this release represent the final results of the bench- scale flotation testwork program. Bench-scale tests were performed as follows:
	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.	For each flotation test, a 0.8-1-kg subsample of spodumene scavenger flotation tailings was used as the feed. The sample was first conditioned in a beaker before floating mica. The mica float was cleaned three times to produce the final mica concentrate. The unfloated product was then conditioned before iron removal.
		Feldspar conditioning and flotation was conducted after iron removal. Feldspar product was cleaned three times to produce the final feldspar concentrate. Feldspar scavenger flotation was performed on the unfloated material to further clean the final quartz product.
		The final flotation conditions were as follows:
		 Mica flotation: pH=2.6, ArrMaz Custamine 8032, Iron removal: pH=2.6, HM-70 Petroleum sulfonate, Feldspar flotation: pH= 2.6, HF and ArrMaz Custamine 8032,
		The magnetic separation conditions were as follows:
		 Feldspar concentrate: 3 passes at 20,000 Gauss Quartz concentrate: 3 passes at 20,000 Gauss
		All feldspar and quartz samples were collected, dried, weighed, and shipped to Hazen Research, Inc. in Golden, Colorado for assay. Quartz (not high purity) and Feldspar samples were pulverized to passing 150 mesh Tyler in ceramic ring and puck mills to ensure sample homogeneity and appropriate particle size for analysis. The pulverized samples were fused in platinum crucibles with a lithium metaborate/lithium tetraborate flux at 1000 deg C and the melt poured into a glass mold and the resulting disc analyzed by XRF. Quantitative multi-elemental analysis of the discs was performed using wavelength dispersive Bruker S8 Tiger X-ray fluorescence instrumentation (XRF) and the elements calculated and reported as oxides. Loss on ignition (LOI) was also performed at 1000 deg C and the data taken into account for reporting by the XRF software. Lithium content was determined post four acid digestion by flame atomic absorption spectroscopy (FAAS) and titanium content was determined post carbonate/peroxide fusion by inductively coupled plasma-optical emission spectroscopy (ICP-OES). Silicon was calculated as the difference of the analyzed elements subtracted from 100% and also verified by the XRF silicon data. All elements reported were verified by alternate dissolution and instrumental methods, primarily FAAS and ICP-OES.
		Mica samples were analyzed at the MRL. A photovoltmeter with green, blue, and amber filters was used to determine CIE (International Commission on Illumination) tristimulus values (X,Y,Z) of mica samples. These tristimulus values were used in conjunction with Hunter's equations to determine values (L, a, b) and the yellowness index (YI). The L value indicates the level of light or dark, the a value redness or greenness, and the b value yellowness or blueness. The yellowness index indicates the degree of departure of an object color from colorless or from a preferred white, toward yellow. The particle size of a mica sample was determined on a set of sieves by sifting on a Ro-tap machine for twenty minutes. After Ro-tapping the material remaining on each screen was removed and weighed. A mica sample of minus 100 mesh (149 microns) material was passed through a volumeter to fill one cubic inch. This material was weighed and used to calculate bulk density. A grit test was performed utilizing an elutriation procedure. A predetermined weight of mica was placed in a beaker of water and the contents were decanted. After re-filling the beaker with water the procedure was repeated multiple times until the water became clear of mica. The remaining material was dried and weighed.

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. 	Metallurgical Sample: Multiple representatives of Piedmont Lithium, Inc. have inspected the testwork. Dr. Hamid Akbari (North Carolina State University's Mineral Research Laboratory) directed the testwork program. Dr. Akbari reviewed and provided comments on how to improve the analytical methods used by Hazen Research and these have been addressed. No adjustments or calibrations were made to the primary analytical data reported for metallurgical testwork results for the purpose of reporting assay grades or mineralized intervals
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. 	Drill collars were located with the Trimble Geo 7 which resulted in accuracies <1m. All coordinates were collected in State Plane and re-projected to Nad83 zone17 in which they are reported. Drill hole surveying was performed on each hole using a REFLEX EZ-Trac multi-shot instrument. Readings were taken approx. every 15 meters (50 feet) and recorded depth, azimuth, and inclination.
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. 	N/A
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. 	N/A
Sample security	 The measures taken to ensure sample security. 	Metallurgical samples – all metallurgical samples were transported to North Carolina State University's Minerals Research Laboratory by Piedmont Lithium Geologist.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	Metallurgical samples: Dr. Hamid Akbari (North Carolina State University's Mineral Research Laboratory (MRL)) directed the testwork program. Dr. Akbari reviewed and provided comments on how to improve the analytical methods used by Hazen Research and these have been addressed. Piedmont representatives have visited the MRL and reviewed all results.

Section 2 Reporting of Exploration Results

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. 	Piedmont, through its 100% owned subsidiary, Piedmont Lithium, Inc., has entered into exclusive option agreements with local landowners, which upon exercise, allows the Company to purchase (or long term lease) approximately 1200 acres of surface property and the associated mineral rights from the local landowners. There are no known historical sites, wilderness or national parks located within the Project area and there are no known impediments to obtaining a licence to operate in this area.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	The Project is focused over an area that has been explored for lithium dating back to the 1950's where it was originally explored by Lithium Corporation of America which was subsequently acquired by FMC Corporation. Most recently, North Arrow explored the Project in 2009 and 2010. North Arrow conducted surface sampling, field mapping, a ground magnetic survey and two diamond drilling programs for a total of 19 holes. Piedmont Lithium, Inc. has obtained North Arrow's exploration data.
Geology	 Deposit type, geological setting and style of mineralisation. 	Spodumene pegmatites, located near the litho tectonic boundary between the inner Piedmont and Kings Mountain belt. The mineralization is thought to be concurrent and cross-cutting dike swarms extending from the Cherryville granite, as the dikes progressed further from their sources, they became increasingly enriched in incompatible elements such as Li, tin (Sn). The dikes are considered to be unzoned.
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. 	N/A
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. 	Metallurgical samples: Bench-scale quartz, feldspar and mica concentration testwork was completed on the final tailings obtained from the spodumene scavenger flotation of samples B, F, and G. The results of the spodumene flotation testwork program on these samples have previously been reported. Samples B, F, and G were composites of ½ NQ core from select mineralized zones from Phase 1 and Phase 2 drilling programs. Specifically, the B sample consisted of select mineralized zones from Holes 17-BD-21, 22 and 23, the G sample consisted of select mineralized zones from Holes 17-BD-24, 25, 26, 27, and 28, and the F sample consisted of select mineralized zones from Holes 17-BD-29, 30 and 31. For all holes included in the samples above, the original exploration samples averaged 1 m in length but were designed to break on lithologic and textural boundaries. Exploration results for Li ₂ O have been released in prior Press Releases.
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'). 	N/A

Criteria	JORC Code explanation	Commentary
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.	N/A
Balanced	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.	Metallurgical Sample:
reporting		Data reported represents the range of most recent results obtained from the bench-scale testwork. These tests were performed on the basis of the following test conditions:
		The final flotation conditions were as follows:
		 Mica flotation: pH=2.6, ArrMaz Custamine 8032, Iron removal: pH=2.6, HM-70 Petroleum sulfonate, Feldspar flotation: pH= 2.6, HF and ArrMaz Custamine 8032,
		The magnetic separation conditions were as follows:
		 Feldspar concentrate: 3 passes at 20,000 Gauss Quartz concentrate: 3 passes at 20,000 Gauss
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.	N/A
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).	Pilot plant-scale testwork will be planned and conducted based on the bench-scale tests to produce quartz, feldspar and mica from spodumene flotation tailings.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	