

## NEW DRILL RESULTS FROM BANDEIRA

# Bandeira Drilling Increases Resource Confidence & Growth Potential

**OUR TAKE:** This morning Lithium Ionic announced results of 14 new drill holes from the Bandeira deposit at its Itinga Project in Minas Gerais, Brazil. The latest results from the 50,000m ongoing drill program include **multiple intercepts of material widths above resource grade, which has positive implications for the planned MRE update and Feasibility Study (FS) due in early 2024.** LTH has drilled a total of 34 holes since the data cut-off in August that supported the October MRE update (204 holes) on the project, which outlined almost 1 million tonnes LCE (29.5Mt grading 1.37% Li<sub>2</sub>O). Current drilling is focused on resource expansion and upgrading at Bandeira ahead of the planned Feasibility Study (FS). With more than 53% of the current MRE sitting in the 'inferred' category, **today's results contain significant in-fill drilling data that should help to increase the confidence level in the resource calculation and support significant further conversion of resources from 'Inferred' to the 'Measured' & 'Indicated' categories, which will maximize the potential for the Feasibility Study to reinforce, or improve upon, the PEA mining concept and economics.** Recall that less than 2-weeks ago ([Haywood note, Oct. 19<sup>th</sup>](#)), LTH published a **Bandeira resource update and Preliminary Economic Assessment (PEA)** showing significant resource growth (**+78% contained LCE, all-categories**) and **very robust economics**, with low OPEX of just US\$349/t SC5.5 vs an average selling price of assumption of US\$1,859/t suggesting excellent operating margins, and a **post-tax NPV of US\$1.6 billion.**

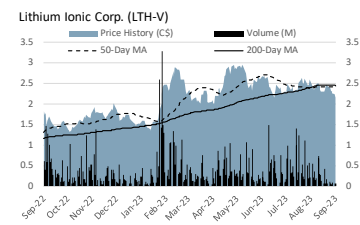
## KEY HIGHLIGHTS

- ◆ **New Bandeira Drill Results Include Multiple Intercepts of Material Width, Above Resource Grade (Figure 1, 2):**
  - ◆ **hole ITDD-23-163:** 2.11% Li<sub>2</sub>O over 9.87m from 425m down hole, 1.57% Li<sub>2</sub>O over 8.47m from 469m down hole and 1.62% Li<sub>2</sub>O over 6.57m from 511m down hole
  - ◆ **hole ITDD-23-164:** 1.73% Li<sub>2</sub>O over 10.36m from 89.7m down hole and 1.40% Li<sub>2</sub>O over 8.94m from 434.6m down hole
  - ◆ **hole ITDD-23-167:** 1.68% Li<sub>2</sub>O over 10.04m from 228.5m down hole and 1.86% Li<sub>2</sub>O over 5.72m from 345.6m down hole
  - ◆ **hole ITDD-23-165:** 1.88% Li<sub>2</sub>O over 7.99m from 195m down hole
  - ◆ **hole ITDD-23-161:** 2.57% Li<sub>2</sub>O over 3.00m from 174.6m down hole
  - ◆ **hole ITDD-23-154:** 1.57% Li<sub>2</sub>O over 4.90m from 108.5m down hole, 1.82% Li<sub>2</sub>O over 3.67m from 359.9m down hole and 1.71% Li<sub>2</sub>O over 3.59m from 302.7m down hole
  - ◆ **hole ITDD-23-157:** 1.53% Li<sub>2</sub>O over 5.00m from 354.4m down hole
- ◆ **October Bandeira Resource and PEA Highlights (Figure 3, 4, 5):**
  - ◆ **Bandeira Resource Update:** The Bandeira resource grew 78% overall in contained LCE (all-categories), with a 209% increase in contained LCE in the Measured & Indicated categories, now approaching 1.0Bt LCE (all-categories), based on 204 holes (+84 holes vs June MRE).
  - ◆ **Bandeira PEA:** outlined very robust potential economics at Bandeira, with low OPEX of just US\$349/t of 5.5% Li<sub>2</sub>O spodumene concentrate equivalent (SC5.5) vs average selling price of assumptions of US\$1,859/t SC5.5 and US\$865/t SC3 suggesting excellent operating margins. The up-front CAPEX hurdle for this 20-year underground mining concept of US\$233M compares favourably to the projected average annual Revenue and Free Cash Flow of US\$337M and US\$243M, respectively, delivering a quick 14-month projected payback on the project.
- ◆ **Permitting Update & Next Steps:** LTH reports that NEO Agroambiental Ltda is completing the RCA (Environmental Control Report) and PCA (Environmental Control Plan) to support the **application of a Concomitant Environmental and Installation License (LAC) for Bandeira, expected to be completed in Q4/23.** LTH continues to rapidly advance the project and will deliver a MRE update and Feasibility study in early 2024.

**BOTTOM LINE:** Lithium Ionic continues to rapidly advance its Itinga Project, with further de-risking milestones on the horizon, including a DFS on Bandeira early next year, with the October PEA showing world class low-cost operating costs, a manageable CAPEX hurdle and robust economics. The PEA is just the tip of the iceberg for LTH, covering just one of its evolving projects within its growing portfolio. We expect LTH to continue to identify, define and grow resources at Itinga and across its portfolio and systematically de-risk these assets with similar efficiency we have witnessed at Bandeira. We also expect further drill results from the exploration drill programs at both Itira and Salinas, where initial results look promising as LTH develops the projects within its growing portfolio. With the company trading at an EV of US\$162M vs the PEA NPV<sub>8%</sub> of Bandeira alone at US\$1.6B (0.10x), the company appears highly attractive at current levels. LTH is trading at 0.29x consensus NAV vs hard rock peers which average 0.53x, suggesting excellent re-rating potential as LTH systematically expands and de-risks its portfolio of projects (Figure 6).

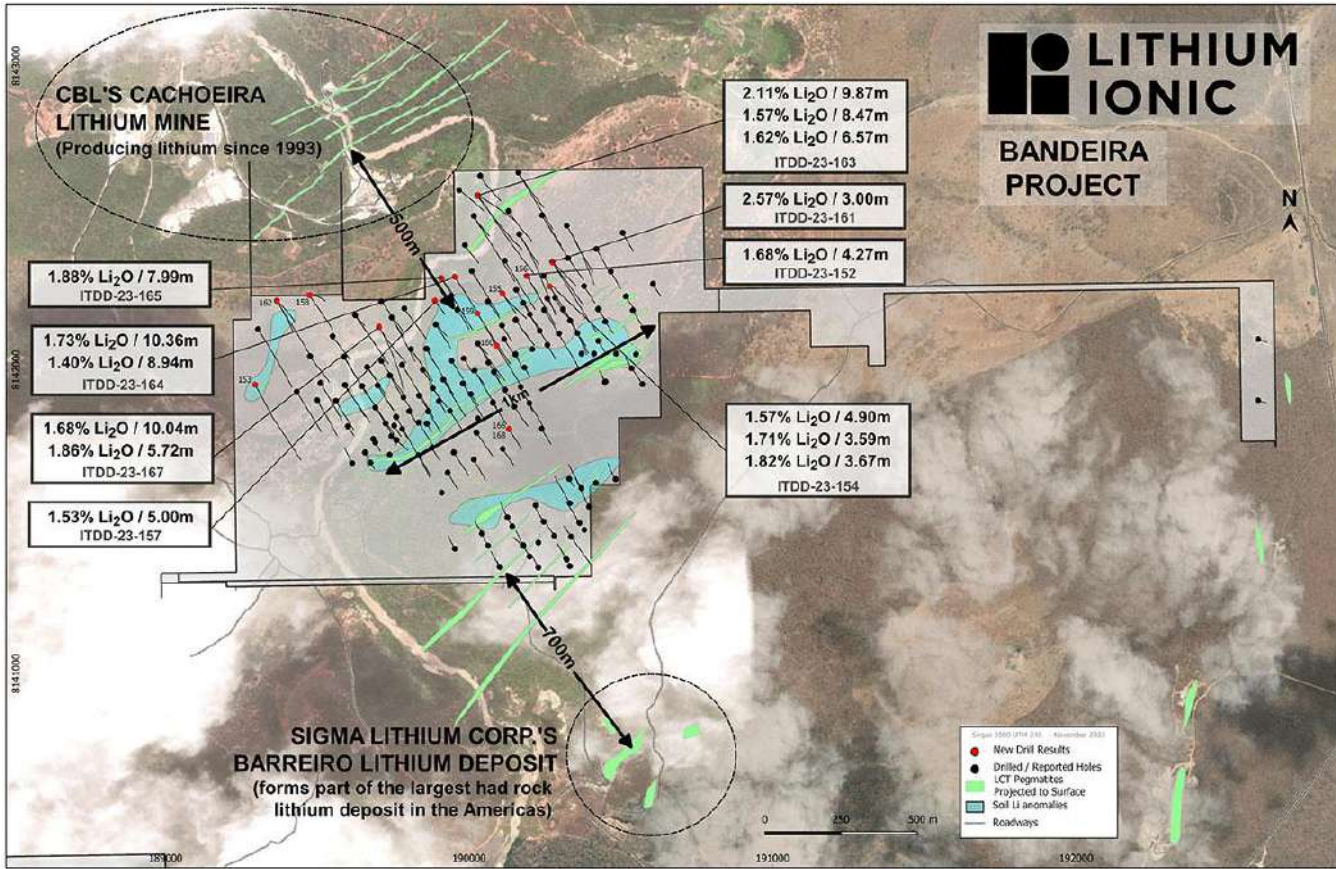
## KEY STATISTICS AND METRICS

52-Week High/Low	\$2.95 / \$1.35	Debt	\$ 0.0 M
YTD Performance	4.9%	Enterprise Value	\$ 204.9 M
Dividend Yield	NA	Daily Volume (30 days)	378,527
Shares O/S	138.2 M	Currency	C\$ unless noted
Market Capitalization	\$ 234.9 M	Website	www.lithiumionic.com
Cash	\$ 30.0 M	CEO	Blake Hylands



Source: Capital IQ, and Haywood Securities

Figure 1: Bandeira Project Drill Map and Results Highlights



Source: Lithium Ionic Corp.

Figure 2: Bandeira Latest Drill Results – Details

Hole ID	Az	Dip	From	To	Metres	Li2O (%)					
ITDD-23-152			53.78	58.31	4.53	0.85					
and	150	-90	272.95	274.60	1.65	1.52					
and			291.26	295.53	4.27	1.68					
ITDD-23-153	150	-50	r/sv								
ITDD-23-154			108.52	113.42	4.90	1.57					
and			119.76	121.15	1.39	1.46					
and	150	-65	296.12	298.14	2.02	1.58					
and			302.70	306.29	3.59	1.71					
and			332.07	335.08	3.01	1.80					
and			359.89	363.56	3.67	1.82					
ITDD-23-157			87.20	89.20	2.00	0.93					
and			190.25	193.25	3.00	0.65					
and	150	-85	203.54	205.60	2.06	1.78					
and			291.46	293.46	2.00	1.66					
and			354.35	359.35	5.00	1.53					
ITDD-23-159	150	-50	287.50	289.55	2.05	1.28					
ITDD-23-160	150	-50	234.27	237.37	3.10	1.18					
ITDD-23-161			128.59	132.12	3.53	1.38					
and	150	-50	174.56	177.56	3.00	2.57					
and			313.74	315.43	1.69	2.10					
and			351.41	354.37	2.96	1.16					
ITDD-23-162			53.69	56.49	2.80	1.10					
and	150	-79	395.57	399.80	4.23	1.18					
and			458.62	462.24	3.62	1.22					
ITDD-23-163			355.35	358.35	3.00	0.97					
and			382.72	385.73	3.01	1.03					
and	150	-55	392.27	397.65	5.38	1.04					
and			406.30	409.30	3.00	1.07					
and			425.03	434.90	9.87	2.11					
and			469.10	477.57	8.47	1.57					
and			511.31	517.88	6.57	1.62					
ITDD-23-164			81.29	83.39	2.10	1.61					
and			89.70	100.06	10.36	1.73					
and			170.48	173.30	2.82	1.73					
and	150	-50	325.78	330.68	4.90	0.82					
and			415.18	416.80	1.62	1.56					
and			434.58	443.52	8.94	1.40					
ITDD-23-165			195.00	202.99	7.99	1.88					
and	150	-60	338.94	342.77	3.83	1.42					
ITDD-23-166	150	-50	97.55	99.71	2.16	2.03					
ITDD-23-167	150	-79	228.46	238.50	10.04	1.68					
and			345.55	351.27	5.72	1.86					
ITDD-23-168	0	-90	116.69	119.69	3.00	1.02					

\*Hole ITDD-23-155 released on Sept 13, 2023, and holes ITDD-23-156 and ITDD-23-158 released on Sept. 27, 2023.

Source: Lithium Ionic Corp.



Figure 3: Bandeira October 2023 Resource Update vs June 2023 Maiden MRE

Jun-23				Oct-23				% Change tonnage	% Change Contained LCE
Category	tonnes	% Li <sub>2</sub> O	LCE t	Category	tonnes	% Li <sub>2</sub> O	LCE t		
M&I	4,599,102	1.35%	153,798	M&I	13,720,000	1.40%	475,014	198%	209%
inf	11,444,782	1.43%	405,814	inf	15,790,000	1.34%	523,252	38%	29%
	16,043,884	1.41%	559,612		29,510,000	1.37%	998,266	84%	78%

\*Haywood Calculations

Source: Lithium Ionic Corp.

Figure 4: Bandeira PEA Financial Highlights (US\$)

Project Economics	
Post - Tax NPV <sub>B</sub>	\$1.6 billion
Post - Tax IRR	121%
Pre - Tax NPV <sub>B</sub>	\$2.3 billion
Pre - Tax IRR	163%
Annual Revenue – Average	\$337 million
Annual Free Cash Flow	\$243 million
Payback	14 months
Economic Assumptions & Parameters	
SPO 5.5% Li <sub>2</sub> O Price, CIF China	\$1,859/t
SPO 3.0% Li <sub>2</sub> O Price, CIF China	\$865/t
Exchange rate	US\$5.00 /R\$
Discount Rate	8%

Source: Lithium Ionic Corp.

Figure 5: Bandeira PEA Operating Concept

Production Profile	
Total Project Life (LOM)	20 years
Total LOM production (ore mined)	22.9 Mt
Nominal Plant Capacity	1.3 Mtpa
Average plant throughput	1.26 Mtpa
Run-of-Mine grade, Li <sub>2</sub> O (ore diluted)	1.23%
Run-of-Mine underground mine dilution	16.8%
Waste generation Average	439 ktpa
SPO Annual Production @ 5.5% Li <sub>2</sub> O	187 ktpa
SPO Annual Production @ 3.0% Li <sub>2</sub> O	56 ktpa
SPO Annual Production @ 5.5% Li <sub>2</sub> O Equivalent	218 ktpa
SPO 5.5% Li <sub>2</sub> O metallurgical recovery	67.0%
SPO 3.0% Li <sub>2</sub> O metallurgical recovery	10.7%
SPO 5.5% Li <sub>2</sub> O mass recovery	15.2%
SPO 3.0% Li <sub>2</sub> O mass recovery	4.5%
Project Capital Costs	
Mine (Development + Equipment's + Pre-Production)	\$72.5 million
Plant	\$80.5 million
Environmental	\$2.9 million
Engineering Services	\$20.0 million
General Infrastructure & Others	\$10.3 million
Contingency (25%)	\$46.6 million
Total Capital Cost Estimate	\$232.8 million
SUDENE Incentive tax benefit over first 10 years	75%
Operating Costs (OPEX)	
Operating costs (based on ore processed)	\$61/t ore
Mining	\$45/ t ore
Processing + Tailings handling	\$12/ t ore
SG&A	\$4/t ore
Operating costs (based on SPO 5.5 concentrate produced)	\$349/t SPO 5.5E
Mining	\$258/t SPO 5.5E
Processing + Tailings handling	\$68/t SPO 5.5E
SG&A	\$23/t SPO 5.5E
Transportation costs to customer destination (Mine in Itinga - Araçuaí to Shanghai Port, China)	\$120/t SPO

Source: Lithium Ionic Corp.





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<b>UR (Hold)</b>	0.0%	0	0.0%
<b>UR (Sell)</b>	0.0%	0	0.0%
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