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EXCEPTIONAL SCOPING STUDY RESULTS Ewoyaa Lithium Project Supports 2.0Mtpa Operation Robust Post-Tax NPV of US\$345M

Confirmation Ewoyaa Lithium Project is an industry-leading asset

IronRidge Resources Limited (AIM: IRR, "IronRidge" or the "Company"), the African focussed minerals exploration company, is pleased to announce landmark news in completion of a Scoping Study on the Ewoyaa Lithium Project (the "Project") in Ghana, West Africa, which confirms it is an industry-leading asset.

HIGHLIGHTS:

- Scoping Study supports business case for 2.0 Million tonnes per annum ("Mtpa") production operation with life of mine ("LOM") revenues exceeding US\$1.55 Billion, with significant potential to extend LOM.
- > Eight (8) year LOM operation, producing an average 295,000tpa of 6% Li₂O spodumene concentrate.
- > Study delivers exceptional financial outcomes:
 - LOM revenues exceeding US\$1.55bn, Post-tax NPV₈ of US\$345M, IRR of 125% over 8 years
 - US\$68M capital cost with industry-leading payback period of <1 year
 - C1 cash operating costs of US\$247 per tonne of 6% lithium spodumene concentrate Free on Board ("FOB") Ghana Port
 - \circ Pre-tax NPV_8 of US\$ 539M and EBITDA of US\$854M for LOM
 - Average EBITDA of US\$105M per annum
- > Preliminary Australian Nuclear Science and Technology Organization ("ANSTO") test-work confirms Ewoyaa concentrate produces high purity, battery-grade Lithium Hydroxide Monohydrate ("LHM").
- > Project provides outstanding asset fundamentals, logistics and access to infrastructure:
 - Conventional open cut mining operation from surface with low stripping ratios
 - Simple processing via conventional dense media separation only ("DMS"), producing a premium coarse crush 6% spodumene concentrate saleable product
 - Excellent geology and metallurgy with significant value-add potential from feldspar credits
 - First quartile cash costs; low capital and operating costs with a low carbon footprint
 - Significant exploration upside potential from the historic Egyasimanku Hill deposit (1.5Mt @ 1.66% Li₂O) and surrounding 684km² portfolio
 - Close proximity to excellent logistics and infrastructure only 110km by road from the deepsea port of Takoradi, adjacent to highway and high voltage ("HV") powerlines, including hydroelectric sources
- Significant potential for resource upgrades; project metrics substantially improve with increased LOM beyond 10 years.



Commenting on the Company's latest progress, Vincent Mascolo, CEO of IronRidge, said:

"Today's landmark update regarding the Company's exceptional Scoping Study confirms that the Ewoyaa Lithium Project is an industry-leading asset and transformational for IronRidge.

"The Study outlines a robust 2.0Mtpa operation which can deliver excellent cash flows, a very quick payback and a pre-tax NPV of over half a billion U.S. dollars from a modest 8-year operation, producing a coarse, premium DMS concentrate product.

"The Project leverages existing infrastructure, including directly adjacent HV power, a major highway within 1km of the site, and the major port of Takoradi less than 2 hours' drive away.

"Few hard-rock lithium projects worldwide can boast the proximity to existing operational infrastructure, lithium grade and a simple DMS-only process route that separates Ewoyaa from its peers.

"With the benefit of adjacent infrastructure and without the need to include expensive milling and flotation circuits, the Project benefits from a very low upfront capital expenditure.

"Our resource continues to grow, and the upside of the Project is clear; further resource drilling is currently underway and, as such, we expect that the Project metrics will improve beyond the current defined Life of Mine.

"Given these fundamentals, we are very excited by the resurgence and exponential growth potential across the lithium supply chain and reaffirm to the market that IronRidge is ideally poised to capture the lithium market going forward."

1. PROJECT SUMMARY

The Scoping Study for the Project proposes a contract mining operation, mobile contract crushing facility and fixed conventional DMS (dense media separation) processing facility, capable of treating 2.0Mtpa of ore over an initial 8-year mine life. The project benefits from easy access to infrastructure, including the major Accra-Takoradi highway within 1km of the site, high voltage power running through the exploration lease area, and ample accommodation in the vicinity of the Project, providing localised benefits for employment of labour, and utilisation of existing service providers and suppliers (refer Figure 1).

IronRidge managed the Scoping Study with various industry expert consulting firms engaged to contribute to key areas. This announcement provides a summary of the key findings of the Study including estimated financial results, capital and operating cost estimates, summary mine design and scheduling, processing plant flowsheet and transport of product.

2. PROJECT LOCATION

The Project includes the Ewoyaa, Abonko and Kaampakrom deposits and is located in Ghana, West Africa, approximately 100km southwest of the capital of Accra. The Project area is immediately north of Saltpond, in the Central Region, and falls within the Mfantseman Municipality where Saltpond is the district capital (refer Figure 2).

Access to the site from Accra is along the asphalt N1 Accra-Cape Coast-Takoradi highway which runs along the southern boundary of the Project. Several laterite roads extend northwards from the highway and link communities in the Project area. The port of Takoradi is within 110km to the west from the site, and accessible via the same highway.



Figure 1: High voltage power transmission lines, bitumen highway and operational Takoradi port close to Project site.



Figure 2: Project Location on satellite imagery background.





3. GEOLOGICAL SETTING

The Project area lies within the Birimian Supergroup, a Proterozoic volcano-sedimentary basin located in Western Ghana. The Project area is underlain by three forms of metamorphosed schist; mica schist, staurolite schist and garnet schist. Several granitoids intrude the basin metasediments as small plugs. These granitoids range in composition from intermediate granodiorite (often medium grained) to felsic leucogranites (often coarse to pegmatoidal grain size), sometimes in close association with pegmatite veins and bodies.

Pegmatite intrusions generally occur as sub-vertical dykes with two dominant trends: either striking northnortheast (Ewoyaa Main) and dipping sub-vertically to moderately southeast to east-southeast, or striking west-northwest (Abonko, Kaampakrom and Ewoyaa Northeast) dipping sub-vertically northeast. Pegmatite thickness varies across the Project, with thinner mineralised units intersected at Abonko and Kaampakrom between 4m and 12m; and thicker units intersected at Ewoyaa Main between 30m and 60m, and up to 100m at surface.

4. MINERALISATION

The Project area has two clearly defined domains or material types of spodumene bearing lithium mineralisation. IronRidge has termed these material types as Pegmatite Type P1 and Pegmatite Type P2; viz:

- P1: Coarse grained spodumene material, the dominant spodumene bearing pegmatite encountered to date, exhibiting very coarse to pegmatoidal, euhedral to subhedral spodumene crystals composing 20 to 40% of the rock.
- P2: Medium to fine grained spodumene material, where abundant spodumene crystals of a medium crystal size dominates. The spodumene is euhedral to subhedral and can compose up to 50% of the rock. The spodumene can be bi-modal with some larger phenocrysts entrained within the medium grained spodumene bearing matrix. Minor other lithium bearing phases are present.

There are therefore four main geometallurgical domains; course grained type P1 and finer grained type P2 pegmatites and their weathered equivalents. It is noted that metallurgical recoveries differ between the four material types, which is discussed later in this report.

5. MINERAL RESOURCE

A JORC (2012) compliant Mineral Resource estimate was prepared by Ashmore Advisory Pty Ltd ("Ashmore") using ordinary kriging methods for resource estimation with a 0.5% Li₂O cut-off. The JORC (2012) compliant Mineral Resource was released to market in January 2020 and is shown in Table 1.

Drilling at the deposit extends to a vertical depth of approximately 180m and the mineralisation was modelled from surface to a depth of approximately 200m below surface. The estimate is based on good quality reverse circulation ("RC") and diamond core ("DD") drilling data. Drill hole spacing is predominantly 40m by 40m in the well drilled portions of the Project, and up to 80m by 80m to 100m by 100m across the breadth of the known mineralisation.



	Indicated		Inferred			Total			
	Tonnes (Mt)	Li₂O% Grade	Contained Li ₂ O (kt)	Tonnes (Mt)	Li₂O% Grade	Contained Li ₂ O (kt)	Tonnes (Mt)	Li₂O% Grade	Contained Li ₂ O (kt)
Ewoyaa Main	3.7	1.38	52	6.0	1.16	70	9.8	1.24	121
Ewoyaa North				0.4	1.15	5	0.4	1.15	5
Ewoyaa NE				2.5	1.49	38	2.5	1.49	38
Abonko	0.7	1.48	11	0.7	1.32	9	1.4	1.40	20
Kaampakrom				0.3	1.61	5	0.3	1.61	5
TOTAL	4.5	1.39	62	10.0	1.27	126	14.5	1.31	189

Table 1: JORC (2012) Mineral Resource Estimate (0.5% Li₂O Cut-off).

Exploration RC drilling is underway to test seven robust auger defined pegmatite targets at Ewoyaa with an internal exploration target range of 2.5Mt to 7.5Mt, with a view of supporting a plus 10yr mine life.

It is estimated that every additional year of production will add c. US\$40M in NPV per annum.

6. CARBON FOOTPRINT

The EV industry supply chain is committed to a net zero carbon target and the EU in particular has proposed new regulations on carbon limits. From 1 January 2026, lithium-ion batteries will have to bear a carbon intensity performance class label and from 1 July 2027, must comply with maximum carbon footprint thresholds.

The Ewoyaa project has an advantage over other spodumene projects in terms of:

- Power generation this will be sourced from existing operational hydroelectric plants in the region.
- Shipping distance close proximity to both Europe and the US compared to many peers.
- Product haulage only 110km from the major port of Takoradi.

As the mine develops, the intention is to also take full advantage of ongoing developments in alternative fuel sources for mine vehicles.

7. MINING STUDIES

The Ewoyaa Lithium Project is a hard-rock, pegmatite (spodumene rich) hosted system with mineralisation beginning near surface and extending to depths exceeding 200m. The width of the pegmatite veins varies from greater than 100m to less than a metre and have a strike length exceeding 20km of continuous structure. In the more continuous sections of the Ewoyaa Main Zone the pegmatite thickness is typically 30m to 60m.

These pegmatite veins have been assessed for open pit mining and processing via a crushing circuit and Dense Media Separation ('DMS') process to produce a coarse spodumene concentrate. On this basis, a preliminary review of open pit mining was completed by Mining Focus Consultants Pty Ltd ('MFC') utilising the 'Whittle Four-X' software.

The WHITTLE[™] pit optimisations were conducted for the Study by MFC based on Mineral Resources estimated by Ashmore. Pit Optimisation Parameters are summarised in Table 2 and pit shells depicted in Figure 3.



Table 2: Assumptions for 2.0Mtpa throughput Option (all dollars in US\$).

Parameter	Unit	2.0Mtpa
DMS Plant throughput	tpa	2,000,000
Mineral Resources	JORC (2012) Non-JORC	Indicated & Inferred Historical deposit
Concentrate grade (6% Li ₂ O)	%	6.0
Spodumene (6% Li ₂ O) price (FOB Ghana)	\$/t	650
Product moisture content	%	3.0
Processing recovery		
P1 Fresh Material	%	72%
P1 Transition Material	%	68%
P2 All Material	%	51%
Operating Costs		
Mining cost	\$/t mined	\$3.28
Processing cost	\$/t processed	\$11.49
General and administration	\$/t processed	\$2.48
Stockpile rehandling	\$/t processed	\$0.54
Road Freight - Spodumene	\$/t	\$15.80
Sea Freight - Spodumene	\$/t	Not applicable (FOB)
Sustaining Capital	\$/t mined	\$0.44
Closure Costs	\$/t mined	\$0.64
Capital cost estimate	\$M	\$68.1M
Discount rate	%	8.0
Dilution	%	Nil
Mining recovery	%	100
Slope angle	degrees	47
Royalties		
Government	%	5
Local JV Partners	%	1.5
Marketing and insurance	% of sales	3
Corporate tax rate	%	35





Figure 3: Delineation of resources, Project pit shells and waste dumps; view looking south.

A summary of open pit optimisations for each of the cases is indicated in the Figures 4 and 5 below.



Figure 4: Pit Optimisation Results – Ewoyaa.







The optimisation results show that a mining operation could be developed at the Project at the throughput case examined. Further study of capital and operating costs to generate project cash flows was warranted, including the development of mine production schedules which was the next step in the mining study process.

Scheduling Results

The scheduling results are summarised in the tables and figures below, and indicate that:

- Plant throughput targets had been achieved for the 2.0Mtpa production rate.
- Processing of Inferred resources had been deferred to the back end of the production schedule.
- Material movement appeared achievable for all cases and mining would be completed in advance of processing.
- Bench turnovers are considered to be within acceptable limits, however detailed analysis has not been conducted given the early study phase of the Project.
- The release of pits and pit stages is dictated by both value and Project logistics.



Pit Name	Total Material	Waste	Strip Ratio	Plant Feed	Li₂O Grade	Conc. 6%	P1 Ore	P2 Ore
	[kt]	[kt]	[w:o]	[kt]	[%]	[kt]	[kt]	[kt]
Ewoyaa Main - Starter	13,857	8,408	1.5	5,449	1.41	889	11,463	653
Ewoyaa Main - Final	25,835	21,212	4.7	4,489	1.16	559	2,756	1,733
Ewoyaa South 1	5,480	4,637	5.5	843	0.92	88	747	96
Ewoyaa South 2	6,849	5,608	4.5	1,241	1.31	175	777	464
Abonko Main	13,228	12,012	9.9	1,215	1.44	209	1,215	0
Abonko North	1,521	1,257	4.8	264	1.64	52	264	0
Abonko East	137	107	3.3	32	0.80	3	32	0
Ewoyaa NE	19,332	16,785	6.6	2,548	1.53	375	827	1,721
Kaampakrom Main	2,124	1,927	9.8	197	1.65	39	197	0
Kaampakrom East	131	121	13.0	9	1.82	1	9	0
TOTAL	88,495	72,075	4.4	16,288	1.34	2,390	18,287	4,668

 Table 3:
 Mine Schedule Material Breakdown by Pit – 2.0Mtpa (projected).

8. PROCESSING/METALLURGY

Metallurgical test work supervision, interpretation and flow sheet development work to support the Study was managed by Trinol Pty Ltd ('Trinol') and all beneficiation testing performed by NAGROM Laboratories ('NAGROM') in Perth, Western Australia.

Drill core from a total of seventeen composites, obtained from the Ewoyaa lithium deposit in late 2018, was sent to NAGROM for preliminary metallurgical assessment. Geometallurgically, the mineralisation was identified as coarse P1 and fine P2 types with fresh and transitional zones within each type as noted above:

- P1: Coarse grained spodumene ore, the dominant spodumene bearing pegmatite encountered.
- P2: Medium to fine grained spodumene ore, where abundant spodumene crystals of a medium crystal size dominates.

The metallurgical test work was conducted from March to July 2019 to measure key physical properties, to gauge initial response to gravity separation using heavy liquid separation ('HLS') testing and to characterize crystal phases using X-ray diffraction ('XRD').

Follow up testwork was conducted at a larger scale using P1 Fresh ore in a 100mm DMS cyclone to generate bulk sample for preliminary conversion tests at Australia's Nuclear Science and Technology Organisation ('ANSTO') in Sydney and to investigate the effect of re-crushing DMS middlings on overall product recovery and yield of P1 and P2 ores.

Physical Parameters

Before core composites were crushed, key physical parameters were measured as recorded in Table 4. The Uniaxial Compressive Strength ('UCS') and Crusher Work Index ('CWi') values indicate that Ewoyaa mineralisation is slightly harder than other pegmatites and this is reflected in the lower production of fines after crushing in the laboratory.



Table 4: Physical Properties.

Parameter	Unit	P1 Ore Type	P2 Ore Type
Density	t/m3	2.67 – 2.79	2.64 - 2.80
UCS	MPa	150-200	>200
CWi	kWh/t	20.83	17.3

DSO Potential

Size by size analysis after crushing from 10mm to 6.3mm indicated the lithium was fairly evenly distributed through the size fractions which suggested the mineralisation was not amenable to simple beneficiation for the production of DSO (direct ship ore).

Gravity Processing

The overall results obtained from HLS and DMS100 testing are summarised in the tables below:

Table 5:	Summary of	f test-work results	on P1	mineralisation	at 6.3mm	crush size.
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Mineral Type	Test	Head grade	Conc Grade	Conc Mass	Recovery
		% Li ₂ O	% Li₂O	% Overall	% Overall
P1 Fresh	DMS -no re-crush	1.68	6	21	69
	DMS -with re-crush	1.68	6	22	72
P1 Transitional	DMS -no re-crush	1.37	6	15	63
	DMS -with re-crush	1.37	6	16	68

Table 6: Summary of test-work results on P2 mineralisation at 6.3mm crush size.

Mineral Type	Test	Head grade	Conc Grade	Conc Mass	Recovery
		% Li ₂ O	% Li₂O	% Overall	% Overall
P2 Fresh	HLS -no re-crush	1.00	5.5	7	42
	HLS -with re-crush	1.00	5.5	8	46*
P2 Transitional	HLS -no re-crush	1.23	5.6	13	55
	HLS -with re-crush	1.23	5.6	14	61*

* Average of 51% overall recovery was adopted for the Study.

These results demonstrated that both ore types responded well to gravity processing, with up to 72% recovery for the P1 Fresh and an average of 51% for the P2 Fresh after re-crushing the gravity middlings. Further geological work is planned to better delineate the zones of P1 and P2 ore types within the resource to allow a blending regime to be developed to optimise annual plant recovery.

Concentrate Quality

A feature of the metallurgical test work was the consistently good quality of concentrates produced. The iron content of the concentrates, as expressed by % Fe₂O₃, was below 1% and combined alkalis, % Na₂O & K₂O, less than 3%. Coupled with the coarse size of the concentrates and the very favourable project logistics, these are very desirable properties for off-takers.

Fines Processing

Around 15-20% of the contained lithium is in the -0.5mm fines fraction that is screened out before gravity processing in the DMS circuit, as gravity processing below this size is challenging. A number of mines utilise flotation to recover value from this fraction and a preliminary series of tests were done on P2 Fresh mineralisation to gauge the amenability of Ewoyaa spodumene to standard flotation techniques. The results were encouraging with 6% concentrates being produced at a recovery of 49% and a mass yield of 11%. This



demonstrated the potential to improve overall recovery by capturing lithium loss due to fines generation during crushing, and so expand the economic lithium inventory of the deposit. The flotation option will be studied in more detail in the next phase of study work, however, is not contemplated in this current phase given the DMS recoveries experienced, and the higher demand for premium coarse product.

Conversion to Hydroxide

Ewoyaa concentrate was tested by ANSTO in November 2019 to demonstrate that it could be converted to lithium hydroxide using a conventional conversion process based on the preparation of lithium carbonate followed by conversion to hydroxide.

The report concluded that "*lithium carbonate could be produced which was amenable to conversion to high quality lithium hydroxide via metathesis with high purity lime, followed by evaporation and crystallisation.*"

Lithium carbonate of 99.92% purity was produced from which high purity 56.5% lithium hydroxide monohydrate (LHM) was made.

Processing Plant Concept and Layout

The cost of the plant and infrastructure has been based on similar gravity DMS installations that are operating in Western Australia. The following key parameters and assumptions were made and varied only as the throughput rate demands. A conceptual flow sheet design and layout are shown in Figure 6 and Figure 7.

- Three stage crushing which was assumed to be sufficient to meet the target crush size for liberation of spodumene; circa 6.3mm. Contract crushing provision was assumed and quotations were solicited from a reputable Ghanaian contractor.
- Conventional two stage dense medial separation ("DMS") processing plant; screening of fines at 0.5mm via dewatering and desliming cyclones in conjunction with a vibrating screen; allowance for re-crushing of secondary DMS middlings. At this stage of study, a flotation circuit was not included, with the Company focus being on low capital cost and ease of operation solution via DMS only.
- Product and rejects from the DMS circuit would be stockpiled and removed by truck and digger. The final concentrate product would be stockpiled for similar removal and assumed to be loaded onto 35 tonne tipper trucks. There was no capital cost allowance for the trucks, and it was assumed that a transport contractor could provide this service, from loading of concentrate right through to port storage and loadout. A separate quotation from an experienced freight forwarder was solicited and included in the operating costs.
- All equipment was assumed to be new, excepting contractor provided equipment i.e., crushing and freight equipment.



Figure 6: Preliminary Process Flow Sheet.



Figure 7: – Conceptual Site Layout.





By-Product Potential

Gravity test work on the Ewoyaa material using bench scale HLS highlighted the potential to produce a feldspar product in the light 2.6 SG fractions. Results are summarised in Table 7. Feldspar is generally defined as material containing a combined content of $Na_2O + K_2O$ in excess of 10%. Such a product would be attractive to the domestic ceramics industry in Ghana as well as the main target market of the European ceramics industry.

				SG 2.6	Floats		
		% K ₂ O	% Na₂O	Total Alkalis %	%Total Mass	% Fe_2O_3	% TiO ₂
P1 Transitional		5.3	2.9	8.2	25.2	0.03	0.009
P1 Fresh	Hi	9.6	3.6	13.2	12.7	0.09	0.008
	Lo	4.4	6.4	10.8	13.1	0.07	0.005
P2 Transitional		7.1	4.5	11.6	23.9	0.09	0.001
P2 fresh	Hi	9.2	3.5	12.7	34.2	0.11	0.001
	Lo	3.0	7.7	10.7	6.8	0.19	0.009

Table 7: Feldspar potential from light gravity fraction.

These results indicate that on average, around 15-20% of the material fed to the DMS plant could be recovered as a feldspar product. This translates to some 300,000tpa based on a plant throughput of 2.0Mtpa.

IronRidge Resources commissioned a preliminary marketing study from a recognised UK industrial minerals authority, First Test Minerals Ltd, and it demonstrated that because of the high alkali content, consistently low iron content and negligible titania content, this by-product would be attractive to the European tiles and sanitaryware industries. Selling prices of US\$ 25-100/t FOB Ghana port were indicated, which could amount to additional revenue ranging from US\$ 5-20 million per annum. This additional income was considered to be significant in terms of the overall project viability and the production of feldspar product will be examined in more detail in the next study phase.

9. FINANCIAL

Operating Costs

Operating costs were developed from first principles, utilising a combination of database information from similar projects (both in Ghana and other lithium projects) and from project specific budgetary quotations from experienced suppliers/contractors active in the region; refer Table 8.

Operating Cost Assumptions

- Operating cost target accuracy, ±25%.
- Operating costs are reported in US\$, all costs and exchange rates are as at 1Q2021, with the following forex rates used: US\$ 1.00 = A\$1.52, ZAR13.
- Power costs have been based on grid supply; electricity cost US\$0.16/kWh assumed.
- Maintenance costs have been factored from the capital cost estimate supply cost.
- Corporate costs and associated company overheads are excluded.
- Ghana administration office costs are excluded.
- Corporate Tax and VAT are addressed separately in the cash flow model; other taxes or duties are excluded.
- Project financing costs and sunk costs are excluded.



- Escalation and fluctuations in foreign exchange rates are excluded.
- Subsidies to local communities are excluded.
- Overtime allowance/loading for local Ghana labour set at 10%.

 Table 8:
 Operating Cost Estimate Summary.

	2.0Mtpa		
Cost Element	US\$/t Feed	US\$/t Li₂O SC6	
Contract Crushing	6.08	41.44	
Processing	5.41	36.90	
General & Administration	2.48	16.90	
Mining Management	0.72	4.91	
Contract Mining	17.22	117.37	
Sustaining Capital	1.56	10.65	
Project Closure	0.69	4.69	
Con. Transport in Country	2.29	15.80	
Shipping of Concentrate	0	0	
Total Operating Cost	36.55	246.17	

Capital Costs

The capital costs for the Project were estimated based on recent cost data from similar sized projects, as summarised in Table 9.

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Area	US\$
1. Construction P&Gs	3,183,603
2. Plant & Services	25,647,369
3. Infrastructure	11,626,909
4. Mining	1,462,185
5. Management Costs	6,446,281
6. Owners Cost	8,858,551
7. Working Capital	1,961,379
Sub Total	59,186,276
8. Contingency	8,877,941
Grand Total	68,064,217



Capital Cost Exclusions

The capital cost estimate did not include for the following:

- Corporate costs and associated company overheads.
- Costs for potential future upgrades.
- Project financing costs.
- GST, VAT, or other taxes or duties.
- Sunk costs.

Financial modelling

A high-level preliminary financial model was developed for the purpose of evaluating the economics of the Project. Summary results from the financial model outputs are presented in tables within this section, including financial analysis, cash flow projections and sensitivities.

All costs are presented in current US Dollars ("US\$").

The funding for the Project has been included on the premise that all project development requirements will be funded via equity.

Revenue was based on a fixed lithium selling price of US\$650/t for a 6% concentrate, Free on Board ("FOB") Ghana port of Takoradi.

Operating costs for processing and administration were derived from estimates generated by budget quotations or benchmarking from similar operations and first principle estimates based on typical operating data. Mining costs have been provided by MFC based on contractor mining. No funding for exploration work during operations was included.

Depreciation and amortisation have been expensed at the rates applicable for tax deductibility under the Ghana fiscal regime for mining companies.

The Project would be subject to standard Ghana corporate taxation arrangements for exploitation companies. The model provided for the inclusion of a corporate tax rate of 35% and royalties paid to the Government based on a percentage of the return from production.

A 5% royalty is payable to the Ghanaian Government on sale of lithium concentrate. Additional royalties for the concessions are payable to one joint venture partner; 1% for LOM to the Ewoyaa, Abonko and Kaampakrom deposit JV partner, but capped at US\$2M.

Cash flow models were prepared, and the results of the financial analysis are summarised in Tables 10-12 following.



 Table 10:
 Cash Flow Model Inputs Summary.

LOM Variable	Units	2.0Mtpa
Mine Schedule Resources		Total Resource
Life of Mine	yrs	8.1
Waste Mined	kt	72,073
Ore Mined	kt	16,288
Strip Ratio, LOM	W:O	4.42
LOM Average Resource Grade (Li ₂ O)	%	1.31%
LOM Average Resource Recovery	%	65.6%
% of P1 Material	%	70.9%
6% Spodumene Production, LOM	Kt	2,390
LOM Average Product	ktpa	295
Annual estimated power draw	MW	16,244
Capex	US\$M	68.1

Table 11 provides a summary of the operating cash costs contained within the cash flow model.

 Table 11:
 Operating Cash Costs Summary.

LOM Variable	Units	2.0Mtpa
Mining Costs Total	US\$M	280.5
Processing Costs Total	US\$M	187.2
General & Admin Costs Total	US\$M	52.1
Freight & Selling Costs Total	US\$M	38.9
GET Fund Contribution	US\$M	4.5
Sub Total Operating Expenditure	US\$M	563.2
Royalties (Government & NSR)	US\$M	77.7
Rehabilitation Provision	US\$M	11.2
Land Taxes & Fees	US\$M	0.9
Marketing Costs	US\$M	29.8
Corporate taxes paid	US\$M	264.7
Sustaining Capital Costs	US\$M	25.5
Net Operating Costs	US\$M	973.0

Table 12 provides the results of pre- and post-tax cash flows, NPV's and Internal Rate of Returns ("IRR") for the base case, using a constant lithium concentrate selling price of US\$650/t FOB Ghana port.



Table 12: Cash Flow Model Key Results.

LOM Variable	Units	2.0Mtpa
Revenue	US\$M	1,553
IRR, Post Tax,	%	125
C1 Cash Cost	US\$/t	246.65
NPV (8%) Pre-Tax	US\$M	539.0
NPV (8%) Post Tax	US\$M	344.8
EBITDA	US\$M	853.8
Payback	Years	< 1
NPAT, LOM	US\$M	491.6
NPAT / year average	US\$M	60.5
Surplus Cashflow, Post Tax	US\$M	495.6

Cash Flow Sensitivities

The post-tax Net Present Value ("NPV") sensitivity results are represented in Figure 7.

Project cash flows were most sensitive to changes in concentrate selling price where a 5% drop in price resulted in a greater than 20% change to the post-tax NPV. This was closely followed by the sensitivity to changes in recovery or grade.

Sensitivity adjustments of project expenses demonstrated that mining costs, which made up the largest portion of operating expenditure, result in the most significant movements in project NPV followed by processing, concentrate transport and capital costs.



Figure 7: Sensitivities Graph.



10. STUDY TEAM

The main consultants engaged on the Study, including area of contribution, were:

Resource Modelling	Ashmore Advisory Pty Ltd	ASHMORE A D V 1 S O R Y
Pit Optimisation and Mine Scheduling	Mining Focus Consultants Pty Ltd	Mining Focus Consultants Pty Ltd
Beneficiation Test Work	NAGROM	NAGRAD PROCESSOR
Conversion Test Work	ANSTO	
Process Interpretation and Design	Trinol Pty Ltd	TRINOL Mining Project Advisors Process Consultants
Operating and Capital Costs	Zivvo Pty Ltd and Trinol	Zivvo Pty Ltd
Cash Flow modelling	Zivvo Pty Ltd	
Site Layouts	Primero Ltd	PRIMERO
Industrial Mineral Marketing	First Test Minerals Ltd	FIRST TEST MINERALS LTD

IronRidge Ghana field team:





Competent Person Statement

Information in this announcement relating to the exploration results is based on data reviewed by Mr Lennard Kolff (MEcon. Geol., BSc. Hons ARSM), Chief Geologist of the Company. Mr Kolff is a Member of the Australian Institute of Geoscientists who has in excess of 20 years' experience in mineral exploration and is a Qualified Person under the AIM Rules. Mr Kolff consents to the inclusion of the information in the form and context in which it appears.

Information in this report relating to Mineral Resources was compiled by Shaun Searle, a Member of the Australian Institute of Geoscientists. Mr Searle has sufficient experience that is relevant to the style of mineralisation 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 Exploration Results, Mineral Resources and Ore Reserves'. Mr Searle is a director of Ashmore. Ashmore and the Competent Person are independent of the Company and other than being paid fees for services in compiling this report, neither has any financial interest (direct or contingent) in the Company.

The information in this release that relates to metallurgy and metallurgical test work has been reviewed by Mr Noel O'Brien, FAusIMM, MBA, B. Met Eng. Mr O'Brien is not an employee of the company but is employed as a contract consultant. Mr O'Brien is a Fellow of the Australasian Institute of Mining and Metallurgy, he has sufficient experience with the style of processing response and type of deposit under consideration, and to the activities undertaken, to qualify as a competent person as defined in the 2012 edition of the "Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves" (The JORC Code). Mr O'Brien consents to the inclusion in this report of the contained technical information in the form and context as it appears.

Certain information contained in this announcement would have been deemed inside information for the purposes of Article 7 of Regulation (EU) No 596/2014 until the release of this announcement.

For any further information please contact:

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Notes to Editors:

IronRidge Resources is an AIM-listed, Africa focussed minerals exploration company with a lithium pegmatite discovery in Ghana, extensive grassroots gold portfolio in Côte d'Ivoire and a potential new gold province discovery in Chad. The Company holds legacy iron ore assets in Gabon and a bauxite resource in Australia. IronRidge's strategy is to create and sustain shareholder value through the discovery and development of significant and globally demanded commodities.

Côte d'Ivoire

The Company entered into conditional earn-in arrangements in Côte d'Ivoire, West Africa; securing access rights to highly prospective gold mineralised structures and pegmatite occurrences covering a combined 3,584km² and 1,172km² area respectively. The projects are well located within access of an extensive bitumen road network and along strike from multi-million-ounce gold projects and mines. The Company's most advanced project is the Zaranou gold project which includes high-grade gold drilling intersections along 8km strike including 6m at 6.44g/t gold from 132m, 6m at 15.11g/t gold from 26m, 4m at 5.16g/t gold from 110m and 22m at 3.39g/t gold from 8m within a broader 47km long gold anomalous structure.

Ghana

The Cape Coast Lithium portfolio covers some 684km² and includes the newly discovered Ewoyaa Lithium Project with a maiden Mineral Resource estimate of 14.5Mt at 1.31% Li₂O in the inferred and indicated category including 4.5Mt at 1.39% Li₂O in the indicated category (reported in accordance with the JORC Code). The Company entered into earn-in arrangements with Obotan Minerals Limited, Merlink Resources Limited, Barari Developments Limited and Joy Transporters Limited of Ghana, West Africa, securing the first access rights to acquire the historical Egyasimanku Hill spodumene rich lithium deposit, estimated to be in the order of 1.48Mt at 1.67% Li₂O and surrounding tenements. The tenure package is also prospective for tin, tantalum, niobium, caesium and gold, which occur as accessory minerals within the pegmatites and host formations.

Chad

The Company entered into an agreement with Tekton Minerals Pte Ltd of Singapore concerning its portfolio covering 746km² of highly prospective gold and other mineral projects in Chad, Central Africa. IronRidge acquired 100% of Tekton including its projects and team to advance the Dorothe, Echbara, Am Ouchar, Nabagay and Kalaka licenses, which host multiple, large scale gold projects. Trenching results at Dorothe, including 84m at 1.66g/t Au (including 6m at 5.49g/t & 8m at 6.23g/t), 4m at 18.77g/t Au (including 2m at 36.2g/t), 32m at 2.02g/t Au (including 18m at 3.22g/t), 24m at 2.53g/t Au (including 6m at 4.1g/t (including 2m at 6.2g/t) and 2m at 6.14g/t), 14.12g/t Au over 4m, 34.1g/t over 2m and 63.2g/t over 1m, have defined significant gold mineralised quartz veining zones over a 3km by 1km area including the steep dipping 'Main Vein' and shallow dipping 'Sheeted Vein' zones.

Australia

Monogorilby is prospective for province scale titanium and bauxite, with an initial maiden resource of 54.9MT of premium DSO bauxite. Monogorilby is located in central Queensland, within a short trucking distance of the rail system leading north to the Port of Bundaberg. It is also located within close proximity of the active Queensland Rail network heading south towards the Port of Brisbane.

Gabon

Tchibanga is located in south-western Gabon, in the Nyanga Province, within 10-60km of the Atlantic coastline. This project comprises two exploration licenses, Tchibanga and Tchibanga Nord, which cover a combined area of 3,396km² and include over 90km of prospective lithologies and the historic Mont Pele iron occurrence.

Belinga Sud is Located in the north east of Gabon in the Ogooue-Ivindo Province, approximately 400km east of the capital city of Libreville. IRR's licence lies between the main Belinga Iron Ore Deposit, believed to be one of the world's largest untapped reserves of iron ore with an estimated 1bt of iron ore at a grade >60% Fe,



and the route of the Trans Gabonese railway, which currently carries manganese ore and timber from Franceville to the Port of Owendo in Libreville.

Corporate

IronRidge made its AIM debut in February 2015, successfully securing strategic alliances with three international companies; Assore Limited of South Africa, Sumitomo Corporation of Japan and DGR Global Limited of Australia. Assore is a high-grade iron, chrome and manganese mining specialist. Sumitomo Corporation is a global resources, mining marketing and trading conglomerate. DGR Global is a project generation and exploration specialist.