



Sigma Lithium Announces a Positive Feasibility Study with Forecast LOM Net Revenue of US\$1.4 Billion and EBITDA of US\$ 690 Million for the High-Grade, Low-Cost Xuxa Deposit

Positive results confirm an after tax NPV of US\$ 249 million with cash operating costs for the Xuxa deposit of US\$238 per tonne of battery grade 6% lithium oxide concentrate, amongst the lowest costs globally

The positive economics of the bankable Feasibility Study for Xuxa provide a strong platform for Sigma to continue to develop its extensive mineral properties, which include 9 past-producing lithium mines

Sigma will host an investor call on October 7th, 2019 at 11:30 a.m. (EDT).

Webcast Link: <https://sigmalithium.clickmeeting.com/sigma-lithium-resources>

Dial in:

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Dial-in from other locations: <https://account-panel.clickmeeting.com/dialplan>

Sigma will present at the TSX Latam Mining Day on October 2nd, 2019 at 10:30 a.m. (EDT).

**Location: TMX Gallery
130 King Street W - Toronto, ON**

VANCOUVER, British Columbia, Oct. 01, 2019 -- Sigma Lithium Corporation's (the "Company" or "Sigma") (TSX-V: **SGMA**) (OTCQB: **SGMLF**) is pleased to announce the positive results of the independent Feasibility Study ("FS") prepared for the Xuxa deposit ("Xuxa") with the initial development of a 1.5 million tonnes per annum ("Mtpa") open-pit mine and lithium concentrator ("Xuxa Plant") at Sigma's 100% owned Grota do Cirilo Project ("Sigma Project") located in the Vale do Jequitinhonha, State of Minas Gerais, Brazil.

Feasibility Study Highlights

- Forecasts a life-of-mine ("**LOM**") revenue from the Xuxa Plant of US\$1.4 billion and an EBITDA of US\$690 million over an estimated LOM of 9.2 years, at an assumed 2021 nominal arms-length price of US\$ 650 per tonne for 6% lithium oxide ("**Li₂O**") concentrate cost insurance and freight ("**CIF**") at China port.
- The FS envisages an average annual production rate at the Xuxa Plant of ~220,000 tonnes of coarse green and high-quality battery grade 6% lithium oxide concentrate with low impurities ("**lithium concentrate**") at operating costs of US\$ 238 per tonne and total cash cost CIF China of US\$ 342 per tonne, which is amongst the lowest costs globally.
- The estimated initial capital cost ("**capex**") including 10% contingency of US\$ 98.4 million results in an after-tax net present value of US\$249 million at 8% discount rate ("**NPV 8%**") and US\$299 million before-tax. The after-tax internal rate of return ("**IRR**") of 43.2% and project payback period of 3.1 years illustrate the Project's compelling economics.
- The Xuxa Plant will benefit from a unique feed of spodumene ore with large crystals, high grade and low impurities. The average grade of 1.46% over a 9.2 year mine life is amongst the highest globally. Impurities of iron oxide ("**Fe₂O₃**") are below 1% and alkalines (sodium and potassium, respectively "**Na₂O**" and "**K₂O**") are below 0.55% each.
- The Xuxa Mine will produce an "environmentally responsible" lithium concentrate. The Xuxa Plant will be powered by Brazil's clean and low-cost hydroelectricity. More than 90% of the water used in the processing will be recycled and the Xuxa Plant tailings will be managed using dry-stacking technology.

Summary of Key Xuxa Feasibility Study Outcomes

The FS for the Xuxa Mine and Xuxa Plant envisages a 1.5 Mtpa spodumene ore mining and lithium concentrate processing operation. Building the Xuxa Mine and Xuxa Plant constitutes a low-risk execution strategy for the Company. The economics are highlighted by high operating margins generated over an estimated 9.2 years of mine life: life-of-mine (LOM) net revenue of US\$ 1.4 billion and LOM EBITDA of US\$ 690 million.

The FS is only based only on the current open-pit mining plan without contemplating an underground mine plan.

The FS is based on a 2021 arms-length nominal price forecast of US\$ 650 CIF China, and a LOM average price of US\$ 733 CIF China or US\$629 free on board (“**FOB**”) Brazil for 6% lithium concentrate. Sigma contracted Roskill to provide an outlook and overview of the lithium market. Roskill provided a comprehensive updated market study in August 2019 analyzing current and future trends in the market, prices of lithium chemicals such as lithium hydroxide, lithium carbonate, as well as prices of 6% lithium concentrate for vertically integrated and non-integrated chemical producers.

Table 1 summarizes the financial results from the FS.

Table 1. Financial Results Summary of Feasibility Study for the Xuxa Mine and Plant

Item	Unit	Total
Economic Returns		
Net present value (NPV 8%) After-Tax	US\$	249 million
Internal rate of return (IRR) After-Tax	%	43.2%
After-Tax Payback period	years	3.1
Financials		
Life of Mine (LOM)	years	9.2
Net Revenue during LOM	US\$	1.4 billion
EBITDA during LOM	US\$	690 million
Initial Capital Expenditure (Capex) (1)	US\$	98.5 million
Exchange rate BRL/US\$ (2)	BRL/US\$	3.85
Costs		
Cash costs per tonne of lithium concentrate (3)	US\$/t	238
Freight costs to China (3)	US\$/t	104
Total Cash Cost (CIF China)	US\$/t	342
Market Prices Roskill Forecast in FS		
Lithium concentrate CIF China port in 2021	US\$/t	650
Lithium concentrate CIF China port average LOM	US\$/t	733
Lithium concentrate FOB Brazil port average LOM	US\$/t	629

Notes:

1. Initial capital includes pre-production working capital of \$10.96 million and 10% contingency of \$10.47 million.
2. A conservative two-tier exchange rate was used as a base to the feasibility study. BRL 3.85 / USD 1.00 for quotes provided from third party information providers and BRL 4.10 / USD 1.00 for the amounts provided in dollars from Sigma.
3. Cash spodumene concentrate costs include mining, processing, selling, general and administration expenses (SG&A).
4. Freight costs include road transport to Port of Ilheus in Bahia, port storage, loading and shipping to Shanghai Port.

Background of Sigma’s Project Development Strategy

1. Current Feasibility Study for Xuxa Mine and Construction of Xuxa Plant:

- The positive economics of the Xuxa FS provides a strong platform for Sigma to continue to evaluate and develop its extensive 191 km² mineral properties, which include nine past-producing lithium mines and 11 first priority exploration targets.
- Sigma adopted a development strategy with includes low-technical execution risk and low-capital expenditures for the Grota do Cirilo Project. As a result, Sigma decided to conduct its first feasibility analysis exclusively on the Xuxa deposit. The FS contemplates a 1.5 Mtpa open-pit mine and processing plant.
- Xuxa deposit was selected for FS evaluation because it has a unique combination of:
 - (i) A high-average grade of 1.55% Li₂O with low levels of alkaline and iron impurities, enabling ore processing through a lower technical risk dense media separation (“**DMS**”) plant with lower production costs. while achieving economically positive recovery results.
 - (ii) Proven and Probable Mineral Reserves totaling 13.8 Mt grading 1.46% Li₂O
 - (iii) Mineralization with large crystals of spodumene enabling the production of a coarse lithium concentrate, which will have commercial competitive advantages.
- Sigma successfully produced, on a continuous basis using DMS technology, a coarse lithium concentrate grading more than 6% lithium oxide at its pilot plant on site in Brazil.
- Commercially, Sigma’s coarse high-quality lithium concentrate is considered a premium product by customers in the chemical industry as it allows converters to achieve higher margins and operational efficiencies. It is understood that the coarse size of the concentrate has the potential to increase the increased recoveries that can be achieved in the lithium hydroxide and carbonate chemicals production process. Table 2 summarizes the projected Xuxa Mine and Xuxa Plant forecasts at the anticipated 1.5 Mtpa production rate.

Table 2. Xuxa Mining and Concentrate Plant Forecasts at 1.5 Mtpa

Item	Unit	Total
Ore Processed		
Total ore quantity milled (LOM)	tonnes	13.8 million
Annual run of mine (ROM) ore milled	tonnes	1.5 million
Spodumene ore feed grade LOM average	%	1.46
Strip ratio	Ratio :	9.6: 1
Concentrate Produced LOM Average		
Lithium concentrate produced	Tonnes	220,000
Lithium recovery rate	%	60.4
Lithium concentrate grade	% of Li ₂ O	6
Lithium carbonate equivalent (LCE) produced	Tonnes of LCE	33,000
Run of Mine Costs		
Mining costs per waste and ore mined	US\$/t mined	2.12
Processing costs per tonne (ROM)	US\$/t ROM	11.03

2. Subsequent development of Barreiro mine and construction of an additional module to Xuxa Plant

- A Pre-Feasibility Study (“PFS”) has commenced at Barreiro, Sigma’s second deposit slated for development at the Grota do Cirilo Project. The Project NI 43101 mineral resource updated as of January 6, 2019 outlined a measured and indicated mineral resource at Barreiro of 20.5 Mt of spodumene lithium with an average grade of 1.43% Li₂O.
- As under Brazil law a *Plano de Aproveitamento Economico* (“PAE”) was filed with the Brazilian mining regulator (“ANM”, Agencia Nacional de Mineracao), for which approval is still awaited. The PAE is not a NI 43 101 compliant document. The Barreiro-Xuxa PAE envisages an integrated 3.0 Mtpa two-stage development of the Grota do Cirilo Project, beginning with 1.5 Mtpa initial production from Xuxa mine and Plant. The PFS commissioned by Sigma will study the viability for a separate on-surface mining operation at the nearby Barreiro mine, along with the construction of an additional module to the Xuxa Plant to process an additional 1.5 Mtpa from Barreiro mine.
- Xuxa FS and the commissioned Barreiro PFS envisages a sequenced development strategy for Sigma’s Grota do Cirilo Project with a modular, integrated, expanded joint development of Xuxa-Barreiro deposits, aiming to process a total of 3 Mtpa and an envisaged increase in production to around 440,000 tons annually.

Sigma Lithium Resources CEO Calvyn Gardner says: *“This successful Feasibility Study demonstrates that Sigma’s strategy to select Xuxa as the first deposit to be developed in the Grota do Cirilo Project has proven to be the right approach. Xuxa’s low-capital intensity creates the financial robustness to support the economics of a standalone Project. The FS shows that Xuxa has one of the lowest production costs of battery grade lithium concentrate globally, which is also a significant commercial competitive advantage, as it ensures the project is profitable even in the current challenging lithium market environment. The high-quality, coarseness and low impurities of Xuxa’s unique battery grade lithium concentrate has the potential to transform Sigma into a leading supplier to the largest global customers in the electric vehicles and battery supply chain. I am very enthusiastic about the results of this feasibility study, as it shows that Xuxa can unlock the door to develop the entire Grota do Cirilo Project and will pave the way for project bank financing.”*

“The Grota do Cirilo Project development strategy is to also bring Barreiro into production potentially using the same Xuxa Plant. Barreiro is a large-sized, high-grade, with a low strip ratio,” adds Mr. Gardner.

Sigma Lithium Resources Chief Strategy Officer Ana Cabral says: *“Sigma recognizes and appreciates the collaboration of the new federal and state governments of Brazil and Minas Gerais, who are lending widespread institutional support for the significant advancement of the Project. The specialty coarse high-grade, low impurities and low-cost lithium concentrate of the Xuxa deposit has the potential to position Brazil as a leading “green lithium” supplier to the electric vehicles’ industry globally. Sigma will use green, environmentally clean energy, powering the Xuxa Mine and Xuxa Plant from a hydroelectric plant and Brazil’s green electricity grid. Financially, Sigma’s proposed plant construction pre-payment agreement with Mitsui, could significantly lower the initial equity capital required and thus, has continued to generate wide-spread interest including memoranda of understanding (MOUs) for low-cost project financing from the commercial banks. Results of the Feasibility Study clearly indicate that the Project offers lowered execution risk by bringing together high-grade low-cost Mineral Reserves at Xuxa with existing infrastructure which includes power, roads, and office building, to create a low-risk brownfield project that is expected to deliver significant value to shareholders and local communities.”* adds Ms. Cabral.

Independent Consultants Preparing the Feasibility Study

Sigma’s Feasibility Study has been completed to the highest standard. The following international consultants were commissioned to prepare the study:

- Geology and Mineral resources – SGS Geological Services Canada (SGS).
- Mining, mine design and Mineral Reserves, pit geotechnical – MCB (Deswick Brazil)/GE21.
- Crushing, processing plant and plant infrastructure – Primero Group Americas Ltd. (Primero).
- Processing plant non-process infrastructure – Worley Parsons.
- Metallurgical test work – SGS Lakefield Canada (SGS).
- Tailings and mine waste storage design – 3S/DF Spain (3S/DF).
- Financial modelling – Primero.
- Market analysis – Roskill Consulting Group, UK (Roskill).

Mining & Mineral Reserves

Sigma commissioned MCB (Deswick Brazil) to complete the mine plan portion of the FS. The proposed mining operations include a conventional open-pit using hydraulic excavators and a fleet of haul trucks. The FS considers contract mining. Two separate pits will be developed, and four waste piles, which will co-store waste rock from the open pits and Xuxa Plant residue will be constructed.

Key parameters used as part of the pit optimization process include (but are not limited to):

- Mining costs derived from submissions received from mining contractors.
- Processing costs provided by Primero.
- Metallurgical recoveries provided by Primero.

Excavated material will be loaded to trucks and hauled to either the ROM pad or the waste piles. Ore excavation and haulage will be monitored by quality-control personnel and details of material movement will be recorded by a radio dispatch system. Weathered material is considered to be free dig with transitional material to be lightly blasted to loosen it for digging. Fresh rock will be typically blasted on 6m benches for ore domain and 12m benches for waste domain. In order to reduce dilution and maximize mine recovery, controlled blasting (pre-splitting) will be used.

The engineered pit designs include the practical geometry that is required for an operational mine such as the haul road to access all the benches, recommended pit slopes with geotechnical berms, proper benching configuration and smoothed pit walls.

Table 3 summarizes the Proven and Probable Mineral Reserves for the Xuxa deposit.

Table 3. Xuxa Mine Open-Pit Mineral Reserve table:

Mineral Reserve	ROM (Mt)	Li₂O (%)
Proven	10.27	1.45
Probable	3.52	1.47
TOTAL	13.79	1.46

Notes:

1. CIM (2014) definitions were followed for Mineral Reserves.
2. Mineral Reserves have an effective date of 05 June 2019. The Qualified Person for the estimate is Porfirio Cabaleiro Rodriguez, BSc. (MEng), MAIG, an employee of GE21.
3. Mineral Reserves are confined within an optimized pit shell that uses the following parameters: lithium concentrate price: US\$700/t concentrate; mining costs: US\$ 2.15/t mined; processing costs: US\$10.51/t processed; general and administrative costs: US\$3.8 M/a; logistics costs: US\$82/t wet concentrate; process recovery of 60.4%; mining dilution of 9%; pit inter-ramp angles that range from 40.5 – 74.8°.
4. Tonnages and grades have been rounded in accordance with reporting guidelines. Totals may not sum due to rounding.
5. Full Mineral Resource table for Xuxa included in Appendix 1.

Figure 1 shows the anticipated general site layout plan resulting from the FS.

Figure 1 is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/2d23d23f-8b9c-41f5-a638-097c7e7068fe>

Xuxa Plant and Facilities

A three-stage metallurgical test work program was completed by SGS Lakefield.

The Xuxa Plant will be located approximately 1.7 km and 2.3km from the north and south Xuxa mine open-pits, respectively. The DMS plant will use proven and well-established technology, and is designed to produce 220,000 tonnes per annum of minimum 6.0% Li₂O concentrate with an iron content of below 1% Fe₂O₃. The lithium concentrate particle size is anticipated to be between +0.5mm to 9.5mm. Figure 2 shows the planned layout for the in-house crushing system and DMS plant.

Figure 2 is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/c1cc4aca-97b5-4bb8-a4f3-648489af15e8>

The plant throughput capacity is based on 1.5 Mtpa (dry) of ore fed to the crushing circuit. The current Xuxa Plant design also contemplates a modular and integrated expansion option, with the installation of an in-house crushing circuit to potentially increase processing capacity to 3.0 Mtpa.

The Xuxa Plant will include the following:

- A three-stage conventional crushing and screening circuit.
- DMS screening and mica removal via up-flow classification.
- Two-stage DMS circuit for coarse fraction.
- Two-stage DMS circuit for fines fraction with a magnetic separation step.

- Single-stage DMS circuit for ultra-fines fraction.
- Thickening, filtration (belt filter) and dry stacking of hypofines fraction with the waste.
- Optical sorting and / or magnetic separation on the concentrate.
- Tailings from the DMS plant trucked for co-disposal with the waste rock from the open pits.

The simplified process flow diagram for the proposed Xuxa Plant design is provided in Figure 3.

Figure 3 is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/3abd80b6-e0a7-4833-829b-17a755e8fe29>

Financial Evaluation

The positive FS economics demonstrate that Xuxa is a financially positive standalone project. The key factors influencing the study outcome include the mine average high grade of 1.46% Li₂O and the low levels of impurities leading to high levels of process recoveries with a DMS plant. These in turn lead to low capital expenditures and low ongoing operating costs.

1. Capital Expenditures Estimates

The initial FS capital cost estimate to construct a new 1.5 Mtpa plant and infrastructure, including all direct and indirect costs and 10% contingencies, is estimated at US\$98.4 million (with an accuracy of +/- 15%). Costs are summarized in Table 4.

Table 4. Initial Capital Cost Estimate

Capex Item	Initial Capex (US\$ M)	Description
Processing Plant	\$33.2	DMS, Ultrafines DMS, Tails and Concentrate Handling
Site Infrastructure	\$32.8	Earthworks, Infrastructure, Water & Sewage, Buildings
Owner's Costs & Spares	\$5.1	Labor, Admin, Environmental Fees
Mining Pre-Production Cost	\$13.3	Pre-Stripping (Blasting, Drilling, Haulage, Loading)
Plant Pre-Production Costs	\$3.0	Mob/Demob, Process Plant Labor, Pre-Production Admin
Pre-Production Working Capital	\$11.0	Mining and Processing Costs from Commission to Cashflow
Initial Capital Cost	\$98.4	Funded via Creditors and Offtake Agreements

Note: Additional non financeable deferred capex and plant and mine closure costs are estimated at US\$ 15.2 million to be disbursed by year 9, is detailed as follows: (i) Deferred capex of US\$ 5.8 million includes Pit 2 Haul Roads, Balance Pile 1 Excavation, Bridge Between Pit 1 and Pit 2, Waste Piles 3 and 4 Excavation (Clear & Grub, Excavation, Ponds Cuts); (ii) Closure costs for plant and mine closure of US\$ 8 million; (iii) Capex of US\$ 1.5 million to execute various operational recommendations to be implemented in production.

2. Operating Cost Estimates

Operating cost estimates are based on an owner-operated model and have an accuracy of +/- 15%. The operating cost for the mining was provided by MCB. The crushing contracting, substation rental, mobile equipment rental and product transport operating costs were incorporated in the overall operating cost.

The cash operating costs were developed based on third party contract mining and outsourced crushing, as well as on the Xuxa Plant processing cost. The Xuxa Plant is forecasted to have very low operating costs at US\$238 per tonne of concentrate as a result of its high grade, high DMS recoveries, low levels of impurities, low cost of electricity and general low country costs.

Table 5 shows the anticipated average operating costs over the LOM. Table 6 presents the forecast revenue and costs on both a total and average LOM basis.

Table 5. Operating Cost Estimate

Cost Category	LOM Average US\$ / t
Mining	\$149
Processing	\$75
Transportation (CIF China)	\$104
Selling, General and Administrative	\$13
Total Cash Cost (CIF China)	\$342

Table 6. Xuxa Estimated Revenue and Operating Costs for 1.5 Mtpa Production

Item	Total US\$ M	LOM Avg. US\$ / t
Gross Revenue		
Lithium Concentrate	\$1,482	\$733
Less: Realization Costs		
Royalties	\$52	\$26
Mitsui Prepay Repayment (50,000t)	\$48	\$24
Freight & Insurance & Storage	\$211	\$104
Total Realization Costs	\$311	\$154
Net Sales Revenue Less Freight & Storage	\$1,171	\$579
Less: Site Operating Costs		
Mining	\$302	\$149
Processing	\$152	\$75
Selling, General & Administration	\$26	\$13
Total Site Operating Costs	\$480	\$238
Net Operating Margin	\$691	\$341
% Net Operating Margin of Net Sales	59%	59%

Sensitivity Analysis

The FS includes sensitivity analysis of Project NPV 8% using variable CIF China price, recovery rate, ore grade, exchange rate, initial capex, discount rate, operating expenses.

Table 7 shows the impact of a +/- 20% variation of these key factors. Table 8 presents the after-tax NPV results of each factor variance.

Table 7. After-Tax Net Present Value Sensitivity Assumptions for Each Scenario +20% and -20%

Input Assumption	Unit	-20%	-10%	Base	+10%	+20%
CIF Spodumene Price LOM Avg	[US\$ / t]	586	660	733	806	879
CIF Spodumene Price 2021	[US\$ / t]	520	585	650	715	780
Recovery Rate	[%]	48%	54%	60%	66%	73%
Total Opex	[US\$ M]	(532)	(599)	(665)	(732)	(798)
Discount Rate	[%]	6.4%	7.2%	8.0%	8.8%	9.6%
Total Capex	[US\$ M]	(91)	(102)	(114)	(125)	(136)
Ore Grade	[%]	1.17%	1.31%	1.46%	1.60%	1.75%
Exchange Rate BRL / US\$	[BRL/US\$]	3.28	3.69	4.10	4.51	4.92

Note: A conservative two-tier exchange rate was used as a base to the feasibility study. BRL 3.85 / USD 1.00 for quotes provided from third party information providers and BRL 4.10 / USD 1.00 for the amounts provided in dollars from Sigma.

Table 8. After-Tax Net Present Value Results for Each Scenario

After Tax NPV (US\$ M)	Unit	-20%	-10%	Base	+10%	+20%
CIF Spodumene Price LOM Avg	[US\$ M]	102	175	249	322	395
Recovery Rate	[US\$ M]	123	186	249	311	374
Total Opex	[US\$ M]	335	292	249	205	161
Discount Rate	[US\$ M]	283	265	249	233	218
Total Capex	[US\$ M]	266	257	249	240	231
Ore Grade	[US\$ M]	233	241	249	256	264
Exchange Rate BRL / US\$	[US\$ M]	235	243	249	253	257

Note: All NPVs calculated using all-in Initial, Sustaining and Deferred Capex of US\$ 113.6 M, which adds to initial capex the non-financeable deferred capex of US\$ 15.2 million.

The positive economics of the economic feasibility of the Project is further demonstrated in Table 9 by the IRR yield of the combined sensitivity analysis of the after-tax NPV to both 6% lithium spodumene concentrate CIF China prices and discount rate.

Table 9. Combined Sensitivity of Xuxa NPV to Prices and Discount Rate

After-Tax NPV (US\$ M)	Spodumene Price CIF US\$ / t				
	586	660	733	806	879
6.4%	123	203	283	363	444

Discount Rate	7.2%	112	188	265	342	419
	8.0%	102	175	249	322	395
	8.8%	93	163	233	303	374
	9.6%	84	151	218	286	353

After-Tax IRR	22.9%	33.2%	43.2%	52.9%	62.7%
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NOTE: All NPVs Calculated using all-in Initial, Sustaining and Deferred Capex of US\$ 113.6 M, which adds to initial Capex the non-financeable deferred capex of US\$15.2 million.

Commercial and Marketing Strategy and Offtake Agreements

As a result of the high quality and low impurities of its planned lithium concentrate Sigma has experienced significant commercial success in negotiating offtake agreements with various customers in the electric vehicle supply chain.

Sigma entered the offtake negotiations undertaking a long-term view for the growth of the market and decided to replicate the longer term (five years) contract structures practiced by the lithium chemicals with their cathode industry and other customers in the supply chain. Sigma negotiated offtake agreements with fixed volumes with a multi-year duration, without a price floor, using CIF China market prices as an annual pricing mechanism. By not requesting a price floor, Sigma managed to preserve potential price upside in its offtake agreements, as these agreements do not include a price cap, fixed prices or prices pegged to cost structures of customers in the lithium chemical industry. The offtakes are indexed to Roskill's published "arm's length market price CIF China" for spodumene concentrate.

Sigma secured non-binding MOUs to supply 100% of its projected production of 220,000 tpa from Xuxa Plant for a five-year period, commencing in 2021.

Sigma has entered into a binding heads of agreement (the Agreement) for an offtake, funding and strategic partnership with Mitsui & Co., Ltd. of Japan (Mitsui) for a significant portion of the funding required for the capital expenditures and construction of the Xuxa Mine.

Pursuant to the Agreement, Mitsui and Sigma have agreed terms on:

- Production pre-payment to Sigma of US\$30,000,000 for battery-grade lithium concentrate supply of up to 55,000 tonnes annually over six years, extendable for five years.
- Offtake rights of a supplementary 25,000 tonnes of products over a period of six years, extendable for five years.
- Advancement of deposit for long-lead items in support of meeting Sigma's Project construction schedule.
- Strategic collaboration to leverage Mitsui's considerable global logistics and battery materials marketing expertise as well as an agreement to continue discussions regarding additional funding for further exploration and development of Sigma's vast mineral properties.
- Mitsui's right to participate in Sigma's future capital expenditure financings and offtake rights for production expansion with other deposits conditional to concluding a feasibility study and Mineral Reserve estimates.
- Selling price is based on quarterly published arms-length price for chemical spodumene concentrate.

Sigma is currently in negotiations with the other potential off-take customers to sign binding heads of agreement for the 160,000 tpa balance of its annual production.

Lithium Price Forecast and Lithium Chemical Supply Dynamics

Sigma contracted Roskill to provide an outlook and overview of the lithium market.

1. Forecast Prices in Feasibility Study

Roskill provided price forecasts through to 2032 for spodumene concentrate prices for the three categories of 6% spodumene lithium concentrate pricing structures, as described below. This distinction is critical, as the world's largest spodumene concentrate producer Talison Lithium in Australia practices inter-company pricing (as that company is 51% owned by Tianqi and 49% owned by Albemarle). The three-tier pricing forecast published by Roskill is based on the tracking of following shipments:

- **Inter-company priced:** Talison Lithium to Tianqi Lithium and Albemarle; and, NA Lithium to CATL.
- **Related-party priced:** Reed Industrial Minerals to Ganfeng Lithium; Pilbara Minerals to Ganfeng Lithium and General Lithium; and, Altura Mining to Optimum Nano and Lionergy.
- **Arms-length priced:** Galaxy Lithium to Blossom Lithium, Shandong Ruifu and General Lithium; AMG to General Lithium; and, Altura to Burwill Holdings.

Prices for all contracts peaked in 2018, within a range of US\$560-1,050 / tonne reflecting Talison to Tianqi/Albemarle inter-company shipments at the lower end and Galaxy to third party customers at arm's length at the high end.

Related-party contracts fell in the middle of these two end-members and remain the benchmark average to 2032. Related-party contracts are expected to fall to US\$600/t by 2021 before steadily increasing into the late-2020s.

Arms-length sales are expected to show a premium to related-party sales of around US\$100/t, with inter-company contracts at

a US\$100/t discount. However, if lithium carbonate and hydroxide prices increase at a greater rate going forward, the chemical-grade spodumene price could increase towards the high case scenario, and vice versa.

Spodumene concentrate pricing inputs for the FS as provided by Roskill in August 2019 are illustrated in Figure 4.

Figure 4 is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/2c3a1bf3-aef7-447f-bc62-211cb5db49ea>

2. Key Market Trends Driving Dynamics of Spodumene Lithium Concentrate Supply to Lithium Chemical Industry:

Demand for lithium rose by 20% in 2018 to reach over 261,100t LCE. The rechargeable battery market, led by the automotive sector increased its consumption of lithium by 30,000t LCE in 2018, representing 93% of the overall increase in lithium consumption.

The short-, medium- and long-term lithium demand outlook appear strong. Consumption of lithium will continue to be driven by the rechargeable battery sector, which is forecast to register 19.9%pa growth through to 2033, reaching around 1.8Mt LCE in Roskill's base-case scenario. The automotive and energy storage system applications are expected to underpin both battery and overall lithium consumption growth

As a result of the electric vehicle battery demand becoming the main growth driver for lithium chemical demand, the dominance of brine operations in global lithium production has been gradually falling.

As the electric vehicle original equipment manufacturers (OEMs) demand more energy efficient batteries with increased range, the cathode industry increasingly migrates to using lithium hydroxide as the preferred chemical raw material, instead of lithium carbonate. Lithium carbonate is the main product produced and consumed in the lithium market, although lithium hydroxide use is growing at a faster rate. Battery-grade lithium carbonate accounted for around 70% of carbonate use in 2018.

Feedback from our potential customers indicate that the conversion of 6% battery grade spodumene concentrate to lithium hydroxide is the most efficient method of producing it. Moreover, spodumene concentrate with low impurities is less expensive to process ('clean') into hydroxide chemicals, increasing operational efficiencies at the chemical producer, thus becoming a competitive advantage.

Battery grade lithium carbonate produced from brine must be converted into lithium hydroxide for use in the cathode industry. Feedback from our potential customers indicate that such conversion has a similar cost to converting to lithium hydroxide the 6% lithium concentrate produced from hard rock ore. Therefore, brine producers of lithium carbonate have been increasingly stripped of a relative competitive advantage over hard rock producers of lithium.

Sigma's commercial success competing against brines can be examined in the current bear market and current downturn in lithium prices. The lowest 'arm's length' selling price for competing lithium carbonate raw material from brines to be used by a lithium hydroxide plant is assumed to be the technical grade carbonate from domestic Chinese market, currently priced at \$5500/tonne to \$6000/tonne. In order to be competitive with these prices, a hard rock producer needs to have the ability to profitably supply 6% spodumene lithium concentrate at a maximum range of \$680 - \$750 / tonne, the equivalent of \$6000 / 8 (it takes 8 parts of spodumene concentrate to produce one part of hydroxide chemical). These price levels are compatible with Sigma's cost curve and profitability as demonstrated in the FS.

Figure 5 shows the lithium consumption actuals and forecasts for the period 2014 to 2033.

Figure 5 is available at <https://www.globenewswire.com/NewsRoom/AttachmentNg/0fc66b65-38e9-44b6-8c48-abd7b8478532>

Environmental Licenses

In compliance with CONAMA Resolution 09/90, the environmental licensing of mining projects is always subject to the following study progression. The first stage is an Environmental Impact Study (EIS), which is followed by an Environmental Impact Report (EIR), which supports the technical and environmental feasibility stage of the project and the granting of a Preliminary License (*Licença Prévia* or LP) and/or a concurrent Preliminary Licence with an Installation License (*Licença de Instalação* or LI), collectively referred to as the (LP+LI).

The licensing process in Minas Gerais was developed in accordance with COPAM Regulatory Deliberation N° 217, dated December 6, 2017, which sets out the criteria that must be addressed based on the size of a planned mine, and its likelihood of generating environmental damage. Sigma has successfully obtained an environmental license for open-pit mining activities in respect of metallic minerals except iron ore, with the following parameters:

- A gross production of 240,000 tpa.
- 40 ha for tailings/waste piles.
- Dry and wet mineral processing plants with a capacity of 1.5 Mtpa.

A water usage license for the project of 150 m³ per hour has already been granted.

Recommendations and Execution

The next phase is for Sigma to commence the detailed engineering work. The first phase of the detailed engineering will take 4

months after which plant construction can commence. Construction is planned for March 2020 and a 12 to 14-month program is envisaged to build the facility and to commission.

About Sigma Lithium Corp.

Sigma Lithium Corporation is a Canadian mining company focused on advancing its principal lithium deposits at its Grota do Cirilo Project in Brazil. Sigma commissioned its pilot plant and has commenced the production of battery-grade spodumene concentrate from its high-quality deposits. Sigma's corporate mission is to execute its strategy while embracing environmental, social, safety and governance principles. The company is on track to become an ultra-high-quality lithium concentrate supplier to the electrical vehicle and energy storage battery industry worldwide.

Sigma shareholders include some of the largest ESG- (environmental, sustainability, governance) focused institutional investors in the world. Sigma plans to start construction of a commercial-scale lithium concentration plant in 2020, becoming a fully operational sustainable lithium producer in 2021. Sigma, through its subsidiaries, has 27 mineral rights in four properties spread over 191 km² which includes nine historical lithium mines. The Grota do Cirilo property, Sigma's primary focus, includes 10 mining concessions (mining production authorizations).

Sigma has a NI 43-101 technical report on the Grota do Cirilo property prepared by SGS, which includes estimated Measured and Indicated Mineral Resource of approximately 46 million tonnes at an average grade of 1.42% Li₂O. The technical report also includes estimated Inferred Resources of 6.64 million tonnes at an average grade of 1.46% Li₂O and further notes the potential for significant resource expansion.

Qualified Persons

The technical and scientific information in this press release has been reviewed and approved by Marc Antoine Laporte, P.Geo., M. Sc., of SGS Canada Inc. Mr. Laporte is a Qualified Person as defined by National Instrument 43-101 and is independent of Sigma.

The technical and scientific information in this press release has been reviewed and approved by Ara Erzingatzian, P.Eng, of Primero Group Americas Inc. Mr. Erzingatzian is a Qualified Person as defined by National Instrument 43-101 and is independent of Sigma.

The technical and scientific information in this press release has been reviewed and approved by Porfirio Cabaleiro Rodriguez, Mining Engineer of GE21 Consultoria Mineral Brazil. Mr. Rodriguez is a Qualified Person as defined by National Instrument 43-101 and is independent of Sigma.

The FS source document for the information presented in this press release has been reviewed and approved by the following Qualified Persons as defined by National Instrument 43-101 and who are independent of Sigma:

- Frederic Claridge, M.S., P.Eng., Senior Technical Director, Advisian Americas, a division of WorleyParsons Canada Services Ltd.
- Lucas Duarte, P.Eng., MSc, PMP.
- Kiedock Kim, P.Eng. Lead Process Engineer, Primero Group Americas Inc.

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Forward-Looking Statements

This news release contains forward-looking statements relating to the objectives of the Corporation, the potential for increased resources, concentration plant construction, achieving sustainable production and other statements that are not historical facts. Readers are cautioned not to place undue reliance on forward-looking statements, as there can be no assurance that the plans, intentions or expectations upon which they are based will occur. By their nature, forward-looking statements involve numerous assumptions, known and unknown risks and uncertainties, both general and specific, that contribute to the possibility that the predictions, forecasts, projections and other forward-looking statements will not occur, which may cause actual performance and results in future periods to differ materially from any estimates or projections of future performance or results expressed or implied by such forward-looking statements. These assumptions, risks and uncertainties include, among other things: the state of the economy in general and capital markets in particular, and investor interest in the business and future prospects of Sigma. Forward statements include but not limited to lithium prices, lithium demand and supply, costs and exchange rates.

The forward-looking statements contained in this news release are made as of the date of this news release. Except as required by law, Sigma disclaims any intention and assumes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by applicable securities law. Additionally, Sigma undertakes no obligation to comment on the expectations of, or statements made, by third parties in respect of the matters discussed above. The key risks and uncertainties that could cause actual results or the material factors and assumptions applied in preparing forward-looking information to differ materially from predictions, forecasts, projections, expectations or conclusions are discussed in the "Risk Factors" section of Sigma's Filing Statement dated April 25, 2018. We caution that the foregoing list is not exhaustive of all possible factors.

For more information on the risks, uncertainties and assumptions that could cause our actual results to differ from current expectations, please refer to our public filings available at www.sedar.com. Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news release.

Appendix 1

Appendix Table 1. Mineral Resource Table for Xuxa

Appendix Table – Xuxa Deposit Mineral Resource Estimate

CUT-OFF GRADE Li₂O (%)	CATEGORY	TONNAGE (t)	AVERAGE GRADE Li₂O (%)
0.5	Measured	10,193,000	1.59
0.5	Indicated	7,221,000	1.49
0.5	Measured + Indicated	17,414,000	1.55
0.5	Inferred	3,802,000	1.58

Notes:

1. Mineral Resources have an effective date of January 10, 2019 and have been classified using the 2014 CIM Definition Standards. The Qualified Person for the estimate is Mr. Marc-Antoine Laporte, P.Geo., an SGS employee.
2. Mineral Resources are reported assuming open pit mining methods, and the following assumptions: lithium concentrate (6% Li₂O) price of US\$1,000/t, mining costs of US\$2/t for mineralization and waste, US\$1.2/t for overburden, crushing and processing costs of US\$12/t, general and administrative (G&A) costs of US\$4/t, concentrate recovery of 85%, 2% royalty payment, pit slope angles of 55°, and an overall cut-off grade of 0.5% Li₂O.
3. Tonnages and grades have been rounded in accordance with reporting guidelines. Totals may not sum due to rounding.
4. Mineral Resources are reported inclusive of those Mineral Resources converted to Mineral Reserves. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
5. Long-term Li₂O price of \$1,000/tonne assumes processing cost of US\$12 and metallurgical recovery of 85%.

Appendix Table 2. Mineral Resource Table for Barreiro

Appendix Table 2 - Barreiro Deposit Mineral Resource Estimate

CUT-OFF GRADE Li₂O (%)	CATEGORY	TONNAGE (t)	AVERAGE GRADE Li₂O (%)
0.5	Measured	10,313,000	1.40
0.5	Indicated	10,172,000	1.46
0.5	Measured + Indicated	20,485,000	1.43
0.5	Inferred	1,909,000	1.44

Notes:

1. Mineral Resources have an effective date of January 10, 2019 and have been classified using the 2014 CIM Definition Standards. The Qualified Person for the estimate is Mr. Marc-Antoine Laporte, P.Geo., an SGS employee.
2. Mineral Resources are reported assuming open pit mining methods, and the following assumptions: lithium concentrate (6% Li₂O) price of US\$1,000/t, mining costs of US\$2/t for mineralization and waste, US\$1.2/t for overburden, crushing and processing costs of US\$12/t, general and administrative (G&A) costs of US\$4/t, concentrate recovery of 85%, 2% royalty payment, pit slope angles of 55°, and an overall cut-off grade of 0.5% Li₂O.
3. Tonnages and grades have been rounded in accordance with reporting guidelines. Totals may not sum due to rounding.
4. Mineral Resources that are not Mineral Reserves do not have demonstrated economic viability.
5. Long-term Li₂O price of \$1,000/tonne assumes processing cost of US\$12 and metallurgical recovery of 85%.