

28 November 2018

## **ARGOSY DELIVERS EXCEPTIONAL PEA RESULTS FOR RINCON LITHIUM PROJECT**

### **CAUTIONARY STATEMENTS**

The PEA is a preliminary technical and economic study of the potential viability of the Rincon Lithium Project required to reach a decision to proceed with more definitive studies (equivalent to a JORC Scoping Study). It is based on preliminary/low-level technical and economic assessments that are not sufficient to support the estimation of Ore Reserves or provide certainty that the conclusions/results of the PEA will be realised. Further exploration and evaluation work and appropriate studies are required before Argosy will be in a position to estimate any Ore Reserves or to provide any assurance of an economic development case.

The economic analysis results should be treated as preliminary in nature and caution should be exercised in their use as a basis for assessing project feasibility. The PEA was based on material assumptions including assumptions about the availability of funding. While Argosy considers all of the material assumptions to be based on reasonable grounds, there is no certainty that they will prove to be correct or that the range of outcomes indicated by the PEA will be achieved.

To achieve the range of proposed feasibility studies and potential mine development outcomes indicated in the PEA, additional funding will be required. Investors should note that there is no certainty that Argosy will be able to raise funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Argosy's existing shares. It is also possible that Argosy could pursue other 'value realisation' strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Argosy's proportionate ownership of the project.

100% of material included in the PEA proposed mining schedules for all cases is included within Indicated Mineral Resources.

Process and engineering works for the PEA were developed to support capital and operating estimates (and following AUSIMM Guidelines for this study level), and given the preliminary and confidential nature of the plant information, the capital cost margin of error is  $\pm 50\%$  on the 'factored cases' estimated figures and operating cost is  $\pm 35\%$ . Key assumptions that the PEA are based on are outlined in the body of this announcement. Argosy has concluded it has a reasonable basis for providing the forward-looking statements in this announcement.

The Mineral Resources information in this report is extracted from the report entitled "Argosy Upgrades Lithium Rincon Lithium Project JORC resource" dated 13 November 2018 available at [www.argosyminerals.com.au](http://www.argosyminerals.com.au) and [www.asx.com](http://www.asx.com). Argosy confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. Argosy confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

Given the uncertainties involved, all figures, costs, estimates quoted are approximate values and within the margin of error range expressed in the relevant sections throughout this announcement. Investors should not make any investment decisions based solely on the results of the PEA.

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### HIGHLIGHTS

- ✦ Base case scenario key PEA metrics include:
  - 16.5-year mine life producing ~10,000tpa high value finished Li<sub>2</sub>CO<sub>3</sub>
  - Outstanding economics, with pre-tax NPV of ~US\$399M (~A\$554M) and IRR of ~53%
  - Project development approx. cost of US\$141M (~A\$196M), with 2.1 year payback
  - Average annual pre-tax free cash flow during commercial production of ~US\$74M (~A\$102M) and EBITDA margin of 61%
  - Attractive cash costs among global LCE producers of ~US\$4,645/tonne direct cash cost of production (excluding by-product credits)
  - PEA financials exclude potential to produce approximately 35,000tpa of KCl (potash) and 25,000tpa of magnesium hydroxide as by-products
- ✦ Additional ~15,000tpa over 11-year mine life case scenario tested with potential for lower direct cash costs and a higher NPV and IRR
- ✦ Overall, PEA confirms potential for long-life, sustainable commercial scale operation at Rincon with strong project economics
- ✦ Upcoming milestones include: continued progress on Stage 2 development; offtake arrangements; and continuation of strategic investor considerations

Argosy Minerals Limited (ASX: **AGY**) ("**Argosy**" or "**Company**") is pleased to announce completion of the highly anticipated Preliminary Economic Assessment ("PEA") for the Rincon Lithium Project, located in Salta Province, Argentina.

The PEA, equivalent to a JORC Scoping Study, provides outcomes that are considered outstanding and confirm or surpass the Company's original expectations. Key highlights include approximate pre-tax net present value ("NPV") of US\$399 million (~A\$554 million) using a 10% discount rate, providing an approximate IRR of 53% and EBITDA margin of 61% for the base case scenario ("BCS").

Argosy Managing Director, Jerko Zuvela said "*We are delighted to deliver the Preliminary Economic Assessment conducted on the Rincon Lithium Project, which confirms that our Project is one of the best new lithium development projects worldwide in terms of high investment returns, EBITDA margins and market significance.*"

*The PEA, together with our operational Stage 1 plant, provides Argosy with a convincing investment proposition to secure additional project finance and strategic partnerships to continue our progress to commercial development.*

*The results of the PEA further validate the Company's fast-track development strategy to fully develop the Rincon Lithium Project toward commercial production."*

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### SUMMARY OF KEY PEA PARAMETERS AND OUTCOMES

Two Li<sub>2</sub>CO<sub>3</sub> ("LCE") production scenarios have been considered in the PEA, being: (a) the base case of 10,000 tonnes per annum with a 16.5-year mine life; and (b) an accelerated development case of 15,000 tonnes per annum with an 11-year mine life. Furthermore, two forecast Li<sub>2</sub>CO<sub>3</sub> price cases were overlain to assess the financial metrics of each case, being: (a) US\$13,000/t, based on Benchmark Mineral Intelligence's independently assessed long-term price forecast; and (b) US\$15,500/t, based on recent spot export prices for battery grade LCE from South America (as supplied by Benchmark Mineral Intelligence). In addition, two initial pre-development capital cost figures: ~US\$140.9 million (~A\$195.7 million) – termed 'Argosy case'; and ~US\$215.2 million (~A\$298.9 million) – termed 'factored case', have been used for the 10,000 tonnes per annum production scenario. A single ~US\$274.5 million (~A\$381.3 million) 'factored case' was used for the 15,000 tonnes per annum production scenario. All NPVs were calculated using a 10% discount rate.

The 10,000 tonnes per annum Li<sub>2</sub>CO<sub>3</sub> production rate with a forecast price of US\$13,000/t and initial capital cost of ~US\$140.9 million (~A\$195.7 million) was selected as the Argosy base case scenario ("BCS") for the PEA.

The outstanding PEA outcomes combined with the initial success of the Company's Stage 1 industrial-scale pilot plant confirm the technical and economic robustness of developing an enlarged integrated mining and chemical processing operation to produce high-value battery grade Li<sub>2</sub>CO<sub>3</sub> product in commercial quantities.

Key outcomes and parameters of the PEA are presented in Table 1 and Table 2 below.

Table 1: PEA outcomes (approx. economic analysis summary results)

Production case	Outcomes	Long-term forecast sales price US\$13,000/t	3-month average spot price US\$15,500/t
10,000 tpa (16.5y LOM) (US\$215.2M CAPEX)	Scenario reference (case)	i	ii
	Pre-tax NPV (10% discount rate) (US\$M)	328	502
	Pre-tax IRR (%)	35	49
	EBITDA margin (%)	61	67
15,000 tpa (11y LOM) (US\$274.5M CAPEX)	Scenario reference (case)	iii	iv
	Pre-tax NPV (10% discount rate) (US\$M)	440	654
	Pre-tax IRR (%)	44	61
	EBITDA margin (%)	65	70
10,000 tpa (16.5y LOM) (US\$140.9M CAPEX) <b>(Argosy base case)</b>	Scenario reference (case)	v	vi
	Pre-tax NPV (10% discount rate) (US\$M)	<b>399</b>	574
	Pre-tax IRR (%)	<b>53</b>	71
	EBITDA margin (%)	<b>61</b>	67

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Table 2: PEA Parameters (approx. financial analysis inputs)

Financial analysis input	Parameter (10,000 tpa cases)	Parameter (15,000 tpa cases)
Annual production rate	10,000 tpa	15,000 tpa
Life of mine	16.5-years	11-years
Estimate currency	Fixed US Dollars	
Li <sub>2</sub> CO <sub>3</sub> price	US\$13,000/t or US\$15,500/t <sup>1</sup>	
Pre-development capital expenditure	<u>Cases i and ii:</u> US\$215.2M <sup>2</sup>	<u>Cases iii and iv:</u> US\$274.5M <sup>2</sup>
	<u>Cases v and vi:</u> US\$140.9M	
Sustaining capital (annual)	4.5% of installed equipment value	
Direct operating cost	US\$4,645/t	US\$4,309/t
Working capital	Allowance for three months' operating costs per year	
Plant and equipment salvage value	10% of capital expenditure realised in final year of operation	
Royalties	3% of realised revenue	
NPV discount rate	10%	
Pre-development capital expenditure contingency	Cases i to iv: 17.5% <sup>3</sup> ; and cases v and vi 15% <sup>3</sup>	
Ramp-up – application of costs and revenue	All capital expenditure items for the processing plant and services are assumed to be incurred in production year -1  All capital expenditure for non-process infrastructure is assumed to be incurred in production year 1  Revenue from production and sale of LCE is assumed to commence from production year 1	

Notes: 1. The US\$15,500/t scenario is established as a '3-month average spot price' scenario FOB South America, so price is assumed net of port and insurance costs; but the US\$13,000/t scenario incorporates transport to port and import and insurance costs.

Notes: 2. The US\$215.2 million and US\$274.5 million approximate capital cost estimates are based on initial Argosy estimates, adjusted using a factored cost estimation approach applied to the Cauchari-Olaroz Project and Maricunga Project capital cost values.

Notes: 3. The pre-development capital expenditure contingency figure for cases i to iv is factored based on CAPEX estimates from other projects, whilst the contingency figure for cases v and vi is derived from Argosy's in-house financial modelling estimation works based on current Stage 1 and 2 operational works.

The PEA financial outcomes are based on a 100% ownership structure – Puna Mining S.A. Argosy currently owns a 77.5% interest in Puna Mining S.A. and will ultimately own a 90% interest in Puna Mining S.A. in consideration for funding the capital expenditure for the commercial stage operation.

The PEA was prepared by independent and globally recognized multi-disciplinary engineering firm Primero Group, and supported by AQ2 Pty Ltd – independent water

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resources and hydrogeological consultants, and Benchmark Mineral Intelligence – a price data collection and assessment company specialising in the lithium-ion battery supply chain.

Process and engineering works for the PEA were developed to support capital and operating estimates (and following AUSIMM Guidelines for this study level), and given the preliminary and confidential nature of the plant information, the capital cost margin of error is  $\pm 50\%$  on the 'factored cases' estimated figures, and operating cost is  $\pm 35\%$ .

Argosy provided data input into the approximate capital and operating cost estimated values based on current operational data and actual costs from the Stage 1 industrial-scale pilot plant and Stage 2 evaporation pond construction works currently in progress.

### **RELEVANT INFORMATION CONCERNING PEA PREPARATION**

The PEA referred to in this announcement is based entirely on the Indicated Mineral Resource (as per Argosy ASX announcement on 13 November 2018), which provides the total tonnage underpinning the forecast production target and financial projections. The estimated Indicated Mineral Resource underpinning the production target has been prepared by a Competent Person in accordance with the requirements of the JORC Code. Argosy has concluded that it has reasonable grounds for disclosing the production targets based on the Indicated Mineral Resource estimate.

Economic analysis was prepared for the two production scenarios, using a number of LCE price scenarios, independent information provided by Argosy and other agreed criteria. The economic analysis results should be treated as preliminary in nature and caution should be exercised in their use as a basis for assessing project feasibility.

Due to the commercially sensitive nature of the brine extraction technology and battery grade lithium carbonate production process as developed by Argosy and their technology partners, Argosy has not disclosed the proprietary detailed process flowsheet, process chemistry, mass balance or mechanical equipment list to Primero. For the purposes of this review Argosy has provided high-level cost data and an indicative block flow diagram for the Rincon project.

Primero performed a high-level review of the Argosy supplied cost data for an assessment of the indicative capital expenditure and operating expenditure, and compared this data with two recently published NI43-101 compliant studies on lithium brine projects in the region it deemed relevant: Cauchari-Olaroz Project (Lithium Americas Corp); and Maricunga Project (Lithium Power International Limited).

It is acknowledged that, while the process technology deployed in this project is newly developed – the process is based on traditional chemical processing of lithium brines to produce LCE products. Thus, a benchmarked comparison exercise potentially has limitations but is considered appropriate for this level of study and presently available information.

Forward Looking Statements: Statements regarding plans with respect to the Company's mineral properties are forward looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as expected. There can be no assurance that the Company will be able to confirm the presence of mineral

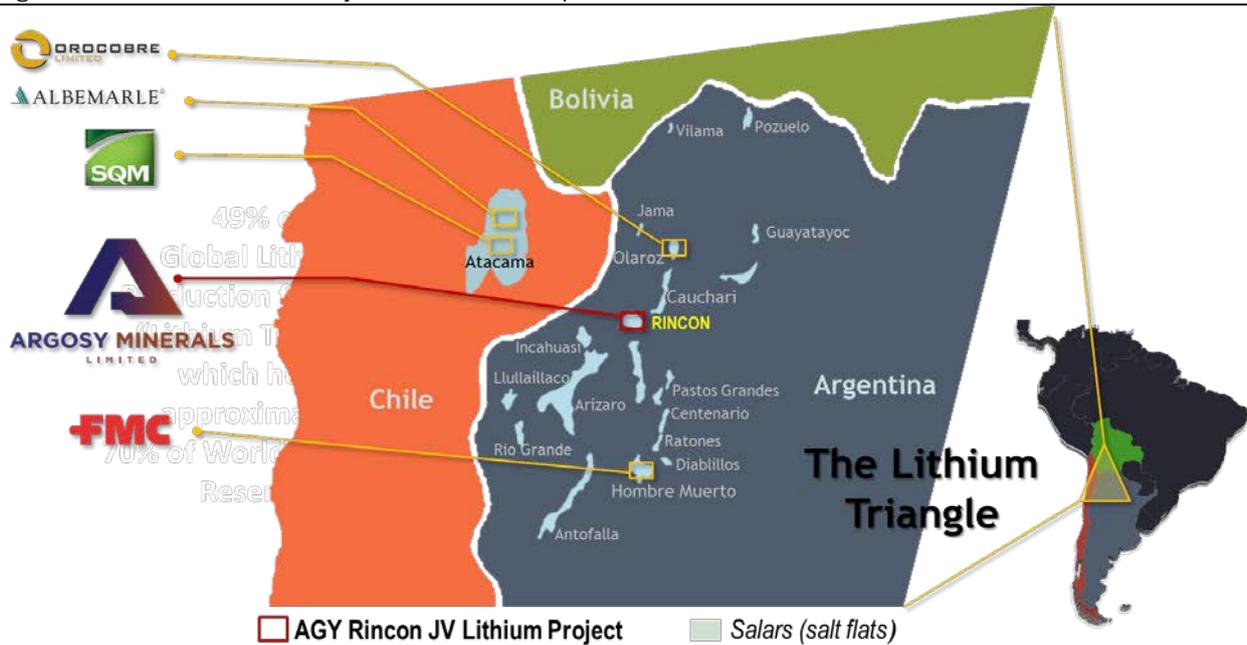
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deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.

Unless otherwise stated, all cashflows are in US Dollars, are undiscounted and are not subject to inflation/escalation factors, and all years are calendar years.

Figure 1: Rincon Lithium Project location map



**RINCON LITHIUM PROJECT UPCOMING MILESTONES**

Upcoming value-adding milestone works include:

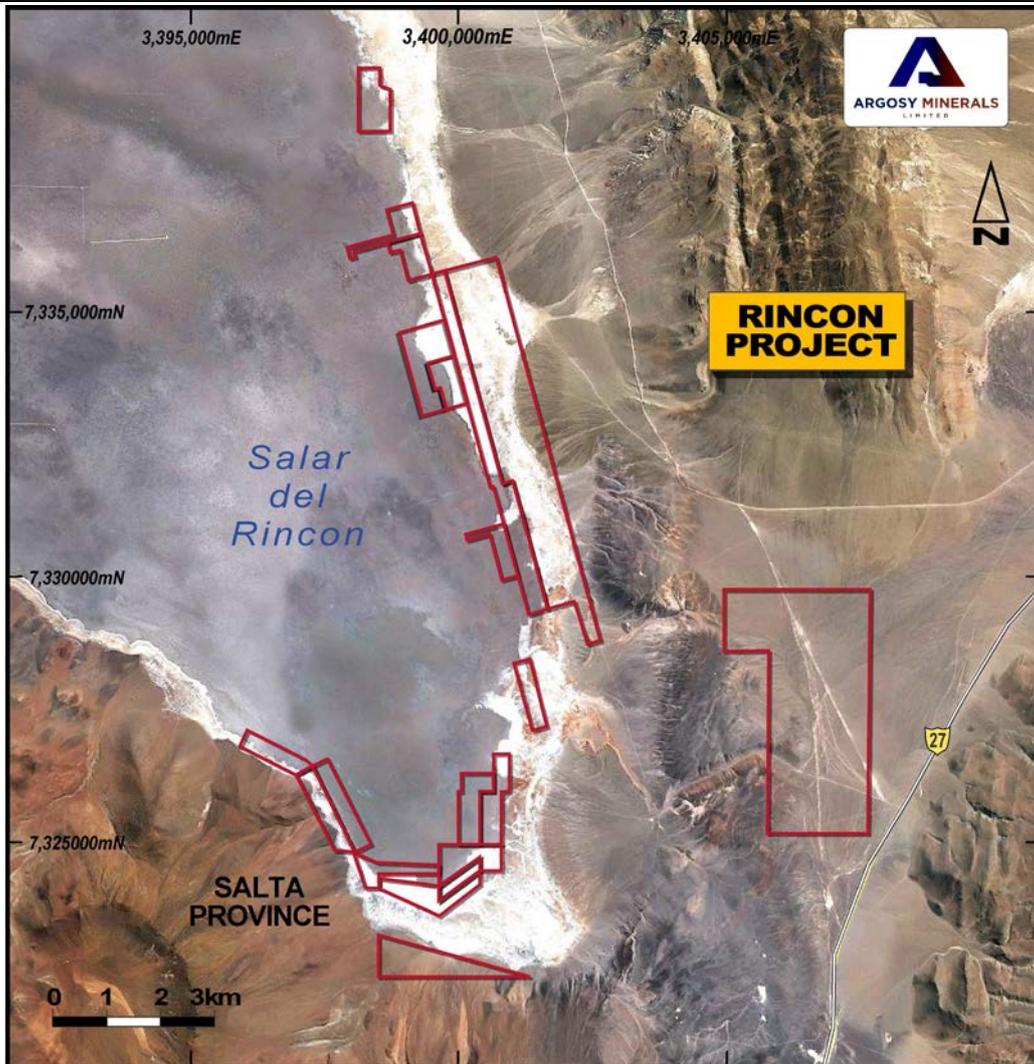
- Stage 1 off-take agreement
- Complete construction of remaining Stage 2 evaporation ponds
- Regulatory permitting works for approval to commence commercial stage construction and operating works
- Ongoing discussions with potential customers
- Advancing discussions with project financiers/strategic partners
- Continue next stage of project development

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Figure 2: Rincon Lithium Project tenement map



DETAILS OF THE PEA

The PEA was prepared for Argosy's Rincon Lithium Project, located in the Salta Province of Argentina, based on multiple case scenarios for production rates of 10,000 and 15,000 tonnes per annum of 'battery quality' lithium carbonate (referred to as "LCE" or " $\text{Li}_2\text{CO}_3$ ").

The cost data basis used for the compilation of the indicative Rincon Lithium Project capital expenditure and operating expenditure require further detail/development in order to improve the confidence level and accuracy of the estimates.

It should be noted that certain critical design input information (bench-scale metallurgical testwork, industrial-scale pilot plant testwork, etc.) was not available for this review due to the proprietary nature of the information relating to the chemical process. The capital expenditure and operating expenditure estimates are based on cost data supplied by Argosy based on its own design works and experience with the Stage 1 industrial-scale pilot plant this far. In the process of preparing the PEA, Primero has compiled and compared the Argosy-provided output data to recently published study information for other lithium brine projects it deemed relevant/comparable.



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Economic analysis was conducted using a number of scenarios to provide indicative range and sensitivity of the Project's potential financial performance. Two production scenarios were evaluated, each at two sale prices for battery grade LCE. Additionally, Primero evaluated the same price cases with Argosy selected capital expenditure estimates (Argosy base case) on the 10,000 tonnes per annum LCE production scenario. Outcomes across all six cases resulted in pre-tax NPV's (10% discount rate) ranging from ~US\$328 million (~A\$455 million) (10,000 tonnes per annum LCE at US\$13,000/t – case i) to ~US\$654 million (~A\$908 million) (15,000 tonnes per annum LCE at US\$15,500/t – case iv). IRR's range from ~35% (10,000 tonnes per annum LCE at US\$13,000/t – case i) to ~71% (15,000 tonnes per annum LCE at US\$15,500/t using Argosy selected capital expenditure estimates – case vi).

Potential by-product revenue from production of KCl (potash) and Mg(OH)<sub>2</sub> (magnesium hydroxide) from the Rincon Lithium Project were excluded from the economic analysis for the PEA.

Key risks associated with the economic analysis compiled include, but are not limited to:

- ◆ The lithium brine extraction process design, as assumed for this review, is limited to the data supplied, at concept level only and pending further metallurgical testwork results requires further development to confirm brine recoveries, processing stages, process flows and equipment sizing.
- ◆ Capital expenditure and operating expenditure estimates are based on outputs provided by Argosy, with no direct verification by Primero.
- ◆ Production ramp-up not considered.
- ◆ Exchange rate fluctuations.

In lieu of metallurgical and pilot plant test-work data being available from current Puna Mining Stage 1 works, a future study/engineering phase can further develop the process design with supporting engineering documentation to develop more detailed project costs and financial assessments. This requires:

- ◆ Hydrogeological model and mine production scenarios updated based on updated JORC resource Process design criteria (including process chemistry assumptions and pilot plant scale-up factors as derived from batch/pilot testwork).
- ◆ Detailed process flow diagrams (outlining each process stage with recycle and bleed streams).
- ◆ Process mass balance (with recycle and bleed streams).
- ◆ Mechanical equipment list (with indication of equipment size, power and other services required).
- ◆ Process equipment datasheets (with nominal and maximum operating data).
- ◆ Electrical load list (developed from mechanical equipment list).
- ◆ Quotations for major equipment and services from multiple vendors.
- ◆ Quotations for reagents and consumables from multiple vendors.
- ◆ Quotations from civil earthwork contractors/vendors for site area cut/fill.
- ◆ Development of site and plant infrastructure requirements and design.
- ◆ Environmental considerations.
- ◆ Product offtake agreements (final pricing and specification).
- ◆ Project permitting, approvals and regulatory considerations.

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Figure 3: Rincon Lithium Project – Stage 1 industrial-scale pilot plant operations



Figures 4-5: Rincon Lithium Project – Stage 1 industrial-scale pilot plant operations



### Economic analysis

Indicative economic analyses were prepared for the Rincon Lithium Project for both 10,000 tonnes per annum LCE and 15,000 tonnes per annum LCE production cases based on available Argosy information, indicative capital expenditure and operating expenditure developed and other assumptions (refer to Table 2). Each case has been evaluated at two different LCE sale prices:

- (i) long-term average price of US\$13,000/t (Benchmark Mineral Intelligence, Lithium Market Outlook, November 2018); and
- (ii) US\$15,500/t (Benchmark Mineral Intelligence, spot price data) based on a 3-month average of spot prices for  $\text{Li}_2\text{CO}_3$ , FOB South America from May 2018 to July 2018.

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By-products produced by standard brine processing flowsheets include potassium chloride (KCl) and magnesium hydroxide (Mg(OH)<sub>2</sub>). Argosy advises that in the 10,000 tonnes per annum LCE production scenarios, their proprietary process has the potential to produce approximately 35,000 tonnes per annum of KCl and 25,000 tonnes per annum of Mg(OH)<sub>2</sub> (and approximately 52,500 tonnes per annum KCl and 37,500 tonnes per annum Mg(OH)<sub>2</sub> for the 15,000 tonnes per annum LCE production scenarios). No consideration has been given to the potential value of these by-products in the economic analysis prepared for the PEA.

The four cases initially subjected to economic evaluation are abbreviated case i to iv as follows:

- (i) 10,000tpa LCE production at US\$13,000/t.
- (ii) 10,000tpa LCE production at US\$15,500/t.
- (iii) 15,000tpa LCE production at US\$13,000/t.
- (iv) 15,000tpa LCE production at US\$15,500/t.

In addition to these four primary cases, two further analyses were conducted using Argosy-selected base case capital expenditure estimates (as per Table 9), under the two LCE pricing scenarios used for cases i to iv (all other material assumptions are similar for all the cases). These are abbreviated cases v and vi as follows:

- (v) 10,000tpa LCE production, Argosy-selected base case capital expenditure at US\$13,000/t.
- (vi) 10,000tpa LCE production, Argosy-selected base case capital expenditure at US\$15,500/t.

Given the limited information used to derive inputs for a financial analysis, the results should be treated as preliminary in nature and caution should be exercised in their use as a basis for assessing project feasibility. The results are a valuable guide for Argosy in terms of managing project risks and opportunities, and directing future works required to further detail the project development to improve the quality of inputs to any subsequent analysis.

It should also be noted that whilst cases v and vi are based on Argosy-selected capital expenditure assumptions (based on current stage (1 and 2) working expenditures), their NPV outcomes are within the range of cases i to iv.

A summary of the approximate outcomes of financial analyses conducted on the six cases is provided in Table 1, showing pre-tax NPV at a 10% discount rate in the range of US\$328M to US\$654M, pre-tax IRR in the range of 35% to 71%, and EBITDA margin in the range of 61% to 70%.

The analysis has been prepared based on Primero standard cash flow modelling, using the input information described in Table 2.

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### Fiscal/taxation

Taxation responsibility in Argentina is distributed between the national government, provinces and local municipalities. Entities undertaking mining activities are generally subject to income tax and VAT.

Taxable income from mining operations is subject to corporate income tax at the rate of 30% from 1 January 2018, reducing to 25% from 1 January 2020. VAT is set at 21%, with some capital items attracting a lower rate of 10.5%. Other taxation benefits include:

- ◆ 30 year tax stabilisation.
- ◆ Depreciation: On all capital expenditure and pre-production costs at an accelerated rate over 3 years.
- ◆ VAT benefits via advanced VAT reimbursement for imported capital assets & services.
- ◆ Deductibility: of project development costs.
- ◆ Any financial loss resulting from mining operations of a licensee in an accounting year may be carried forward and deducted from gross income in the next five accounting years.
- ◆ Import and export duties are 0%.
- ◆ Exemption from minimum presumed income tax (MPIT).

Additionally, Salta province has exempted mining entities from stamp taxes (Law No 6873, Province of Salta) and mineral exports are not subject to gross turnover tax.

Immediately prior to the issue of this report, Argosy management announced (ASX announcement, 4 September 2018) that the Argentine government “will impose a new temporary tax of 3 Pesos per US Dollar of export value on goods shipped internationally ... which is equivalent to approximately 7.9% based on current exchange rates. ... it was noted the tax will only be in place through to the end of 2020”. It is anticipated that full-scale commercial production of lithium carbonate from the Rincon Project is likely to experience limited exposure to this temporary tax due to construction timeframes, and the 11-16.5 year life-of-mine forecast for the Rincon Project.

### Hydrogeology and Mineral Resource estimate

Argosy has drilled 21 brine investigation bores to depths of up to 147 metres in the south east of the Salar Del Rincon. A sum total of 1,662 metres of drilling has been completed. The bores have an average spacing of 950 metres and comprise mineral exploration bores and test-production bores. Pumping tests and laboratory analysis on core have allowed determination of the hydraulic properties of this aquifer.

A conceptual hydrogeological model for the brine aquifer has four hydrostratigraphic units (S1 to S4), comprising an interbedded mix of sand, clay and evaporite. There is an extensive fractured halite aquifer over the surface of the salar with an average thickness of 11m, aquifer transmissivity of 1,200m<sup>2</sup>/d and specific yield of 10%. Within the underlying mix of sand and clay, there are sandy aquifers with an average cumulative thickness of 50 metres, transmissivity of 30m<sup>2</sup>/d and a specific yield between 11% and 14%.

The bores have delineated an aquifer containing hypersaline brine with total dissolved solids ranging between 310,000mg/L and 350,000mg/L; the brine is enriched with respect to

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lithium. The aquifer sequence has a weighted mean average lithium concentration of 325mg/L, with a maximum recorded concentration of 490mg/L.

The aquifer contains hyper-saline brine with water levels essentially at ground surface. It is estimated that the aquifer sequence within the boundaries of the Rincon Lithium Project tenements (to a vertical depth of 102.5 metres), contains an Indicated Mineral Resource estimate of 245,120 tonnes of  $\text{Li}_2\text{CO}_3$ , which is based on specific yield/drainable brine volumes (refer to Table 3). The brine aquifer is bounded in the south and east by colluvial and alluvial deposits formed from the erosional detritus from the surrounding outcrop. Fresh groundwater is likely to be associated with these, particularly the alluvial deposits where recharge may occur following rare stream flow events. The aquifer continues to the west and north across the salar and beyond the project's tenement boundary. Brine aquifer water levels are sustained by a combination of groundwater inflow from the surrounding geology and recharge from surface water runoff; the latter is likely to be small.

Table 3: Indicated Mineral Resource estimate for Argosy Mineral's Rincon Lithium Project

Unit	Description	Aquifer Characteristics				Mineral Resource Characteristics			
		Aquifer Volume	Average Thickness	Porosity	In-Situ Brine Volume	Specific Yield	Drainable Brine Volume	Li	$\text{Li}_2\text{CO}_3$
		( $\text{Mm}^3$ )	(m)	(%)	( $\text{Mm}^3$ )	(%)	( $\text{Mm}^3$ )	(mg/L)	T
S1	Fractured Halite	161	10	21%	33	10.4%	17	333.6	29772
S2	Clay	387	24	48%	185	3.0%	12	320.3	19892
S3A	Mixed Clastics	570	35	42%	240	11.6%	66	312.8	110493
S3B	Clay	76	5	41%	32	1.0%	1	333.1	1361
S3C	Black Sand	360	22	38%	138	13.2%	48	315.6	80442
S3D	Sand and Gravel	1	0	20%	0	10.0%	0	306.6	235
S4	Competent Halite	138	8	3%	4	1.0%	1	397.8	2926
<b>Total</b>		<b>1693</b>	<b>103</b>		<b>632</b>		<b>144</b>	<b>325</b>	<b>245120</b>

Notes: All mineral resource estimates are based on specific yield (i.e. drainable porosity)  
 Indicated MRE is based on Specific Yield/Drainable Brine Volumes  
 Specific yield = "drainable porosity"  
 Drainable Brine volume = total volume of brine contained in "specific yield"  
 Li (mg/L) = weighted mean average concentration per unit as derived from modelling  
 $\text{Li}_2\text{CO}_3$  = tonnes of LCE dissolved in drainable brine volume (at conversion rate of 5.347)

Nine pumping tests were completed at pumping rates ranging between 4L/s and 28L/s, for periods of 24 to 72 hours with water level declines of 1 metre to 9 metres. Pumping tests allowed determination of aquifer transmissivity and associated potential for brine-abstraction. The produced lithium concentration was consistent over the course of each pumping test and ranged between 299mg/L and 437mg/L between bores.

It should be noted that the Indicated Mineral Resource estimate is a static estimate; it represents an estimate of the volume of potentially recoverable brine that is contained within the defined aquifer. To provide a preliminary assessment of modifying factors related to brine abstraction and develop production targets for the PEA, a groundwater flow model has been developed.

Preliminary groundwater flow modelling suggests over 95% of the drainable brine is possible to be abstracted. Recovery would be through pumping from bores targeting both the

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shallow fractured halite aquifer and the deeper sandy aquifers. For the PEA, a constant lithium grade of 325mg/L has been assumed for the life of mine (based on the weighted mean average grade in the Indicated Mineral Resource estimate). Key outcomes for brine production are summarized in Table 4.

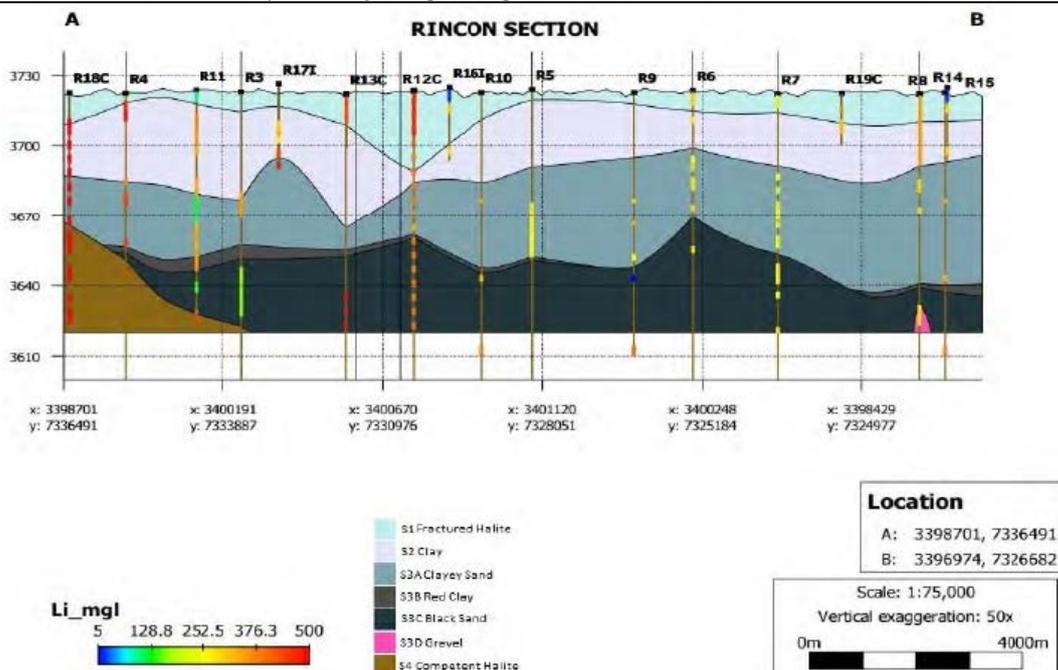
Table 4: Development scenarios (approx) based on Indicated Mineral Resource estimate

Li <sub>2</sub> CO <sub>3</sub> (tpa)	Brine (kL/d)	No. of Bores	Life of	% Drainable Brine Abstracted
10,000	22,850	1 shallow 13 deep	16.5	95
15,000	34,250	1 shallow 28 deep	11	95

The groundwater model suggests changes in groundwater levels as a result of pumping will extend across the salar, beyond the boundary of the Rincon Lithium Project tenements; this is inevitable given the nature of groundwater flow systems. However, in the modelling, the total volume of brine that is abstracted has been restricted to the total volume contained within the Mineral Resource estimate for the Rincon Lithium Project. Conversely, the PEA model takes no account of interference by adjacent brine projects on Argosy operations.

Based on the conceptual hydrogeological model, the groundwater flow model (dynamic model) of the Salar del Rincon aquifer system has been developed. The hydrogeological sequence is discretized into a series of cells and layers; cell size is 50 metres around pumping wells to simulate rapid changes in water table gradient and there are 10 vertical layers comprising aquifers and aquitards. The flow model has been verified against observed water levels and pumping-test responses, and has been used to assess brine production scenarios and the borefield design that would be required to support the abstraction rates noted in Table 6.

Figure 6: Rincon Lithium Project – hydrogeological cross section



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Further drilling and testing are recommended to provide data on the response of the aquifer to operational pumping (such as long-term pumping rates and produced lithium grade). The data from this testing will support the development of a more detailed dynamic model (a numerical groundwater flow model) that will include solute transport and density dependent flow, to optimize life-of-project brine abstraction.

### Production scenarios

The groundwater model was used to predict the response of the brine aquifer to abstraction of sufficient brine to support production of  $\text{Li}_2\text{CO}_3$  at a rate of 10,000 tonnes per annum and 15,000 tonnes per annum.

In estimating brine-demand, the following assumptions were made:

- ✦ Li concentration of 325mg/L (the weighted mean average for the Indicated Mineral Resource Estimate) is sustained over the operating life; and
- ✦ The abstraction and evaporation system operates at 70% efficiency due to losses in the transmission network and seepage losses in the ponds (i.e. 30% of all brine pumped is lost prior to the recovery of evaporated salts).

Based on the assumptions above, the approximate total brine demand is summarised in Table 5.

Table 5:  $\text{Li}_2\text{CO}_3$  production and brine demand

Scenario	Li LOM-grade (mg/L)	Li (tpa)	$\text{Li}_2\text{CO}_3$ (tpa)	Brine Abstraction Rate (kL/d)
10,000 tpa $\text{Li}_2\text{CO}_3$	325	1,880	10,000	22,850
15,000 tpa $\text{Li}_2\text{CO}_3$	325	2,820	15,000	34,250

Pumping tests were reviewed to determine the likely sustainable abstraction rates from shallow and deep production bores. Key points that influence this determination include:

- The transmissivity of the shallow aquifer is high (1,200  $\text{m}^2/\text{d}$ ) but the aquifer is shallow which imposes limits on available drawdown. Additionally, high transmissivity will result in interference effects propagating over a wide area.
- The transmissivity of the deep aquifer is lower than the overlying fractured halite (30  $\text{m}^2/\text{d}$ ). However, the aquifer is deeper with more available drawdown. Additionally, the pumping test data indicates that production from this aquifer may be augmented by leakance from the overlying aquifer units.

In the north of the project area, where the deep sandy aquifers are absent, brine abstraction will be limited to the fractured halite only. Elsewhere, in practice, operational bores are likely to be screened across both aquifer units. The following methodology was used to determine life-of-mine pumping rates:

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- A maximum potential pumping rate was assigned to each aquifer based on the pumping test analysis: 5,000 kL/d for the fractured halite and 750 kL/d for the deep sandy aquifers.
- A maximum allowable drawdown was assigned to each aquifer: this was assigned at 2 m above the base of the fractured halite aquifer (and therefore varied with aquifer thickness) and 75 mbgl for the deep sand aquifers.
- A numerical approximation was then made in the groundwater model to vary pumping rates between the maximum allowable from each aquifer and no-pumping (i.e. zero) as water levels ranged between no-drawdown and the maximum-allowable-drawdown. (The numerical approximation was based on Modflow Surfact's "Fracture Well Package").
- The borefield configuration was varied until assigned pumping rates for all bores could be sustained for the proposed life of mine.

The resulting borefield configurations are summarized in Table 6.

Table 6: Borefield configuration

Scenario	Shallow Bores	Deep Bores	Composite Bores (shallow & deep)	Total Production Bores
10,000 tpa Li <sub>2</sub> CO <sub>3</sub>	1 x 5,000 KL/d	11 x 750 KL/d	2 x 5000 kL/d	14
15,000 tpa Li <sub>2</sub> CO <sub>3</sub>	1 x 5,000 KL/d	26 x 750 KL/d	2 x 5000 kL/d	29

As noted above, the results of life of mine production model predictions suggest that pumping at the assigned rates is sustained over the estimated mine life for both the 10,000tpa and 15,000tpa scenarios. Predicted total brine abstraction, recovered Li<sub>2</sub>CO<sub>3</sub> and percentage drainable brine abstracted are summarized in Table 7. The hydraulic continuity across the salar (i.e. the absence of negative boundaries) results in very high predicted rates of brine abstraction. However, the length of the mine life is limited so as not to exceed the total drainable brine volume within the project area, which calculates the resource estimate. The 10,000tpa scenario mine life is estimated at 16.5 years, while the 15,000tpa scenario mine life is estimated at 11 years.

Table 7: Pumping rates and drainable brine

Scenario	Mine Life (Years)	Total Brine Pumped (KL)	Li <sub>2</sub> CO <sub>3</sub> (Tonnes)	% Drainable Brine Abstracted
10,000 tpa Li <sub>2</sub> CO <sub>3</sub>	16.5	133,421,538	230,844	95
15,000 tpa Li <sub>2</sub> CO <sub>3</sub>	11	137,590,962	238,058	95

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The model predicted water balances for both production rate scenarios suggest that of the total brine volumes abstracted, around 85% of the volumes are derived from aquifer storage, with up to 15% of the volume derived from groundwater inflows (from alluvial channels located to the east of the salar).

### Metallurgy and laboratory works

Aquifer porosity parameters were determined by laboratory analysis on core samples using Relative Brine Release Capacity testing, undertaken by GSA Systems Analysis Inc (Arizona, USA).

Brine chemistry analysis was undertaken by Norlab/Alex Stewart Laboratories (Jujuy, Argentina).

The results of these analyses are contained in Argosy's ASX announcement, 13 November 2018, and in Table 8.

Table 8: Brine chemistry

Hole No	Li (mg/L)	Ca (mg/L)	Mg (mg/L)	B (mg/L)	Na (mg/L)	K (mg/L)	Ba (mg/L)	Sr (mg/L)	Fe (mg/L)	Mn (mg/L)	Cl (mg/L)	SO4 (mg/L)	CO3 (mg/L)	HCO3 (mg/L)	pH	Mg/Li	B/Li	Ca/Li	SO4/Li
R1	487	238	2,081	691	115,886	7,549	<0.2	8	9	<1	180,702	24,695	ND	917	7	4	1	0	51
R2	389	447	2,998	476	113,580	7,659	<0.2	12	5	<1	182,055	19,142	ND	461	7	8	1	1	49
R3	226	361	1,381	477	73,106	4,389	<0.2	7	3	<1	109,880	15,640	ND	1,983	7	6	2	2	69
R4	446	390	3,671	461	115,834	9,065	<0.2	13	5	<1	182,615	24,134	ND	898	7	8	1	1	54
R5	265	421	2,135	360	119,094	5,556	<0.2	11	2	<1	184,642	18,230	ND	415	7	8	1	2	69
R6	277	447	2,731	235	116,337	5,541	<0.2	11	3	<1	183,556	15,379	ND	233	7	10	1	2	56
R7	248	450	3,603	235	115,711	5,039	<0.2	13	15	<1	183,828	16,896	ND	261	7	15	1	2	68
R8	297	496	2,465	240	116,635	6,065	<0.2	13	4	<1	184,222	16,105	ND	220	7	8	1	2	54
R9	273	715	2,886	377	117,573	5,112	-	-	-	-	-	-	-	-	-	-	-	-	-
R10	349	320	2,270	469	118,946	6,549	<0.2	7	2	2	179,952	27,936	ND	351	7	7	1	1	80
R11	288	373	1,499	458	87,683	5,007	<0.2	7	1	2	132,674	19,027	ND	1,080	7	5	2	1	66
R12	437	576	3,491	458	111,425	8,003	<0.2	17	1	<1	182,499	14,219	ND	606	7	8	1	1	33
R13	421	236	1,871	786	116,453	6,776	<0.2	8	2	<1	174,131	29,618	ND	954	7	4	2	1	70
R14	354	621	3,271	210	112,499	7,214	<0.2	18	1	<1	184,842	9,924	ND	238	7	9	1	2	28
R15	307	398	2,523	253	115,379	6,226	<0.2	12	2	<1	179,322	19,264	ND	269	7	8	1	1	63
R16	270	334	1,181	358	80,878	4,408	<0.2	6	1	8	125,085	11,195	ND	527	7	4	1	1	42
R17	314	364	1,439	459	80,686	4,637	<0.2	6	1	4	121,509	17,406	ND	1,072	7	5	1	1	55
R18	479	643	4,069	324	107,677	8,444	<0.2	17	3	1	184,682	10,768	ND	414	7	9	1	1	23
R19	301	479	3,603	191	112,373	5,575	<0.2	13	2	<1	181,530	15,031	ND	263	7	12	1	2	50

**Notes**

Concentration is calculated as an arithmetic average for each drill hole  
Partial analysis on R9 only

### Process design

Argosy has advised Primero that together with their technology partners, they are currently utilising a proprietary brine extraction technology and battery grade lithium carbonate production process for the project. As such, the detailed process flowsheet and design are commercially sensitive and confidential and have not been provided to Primero. Argosy considers that a key strategic component of the principal Stage 1 milestone has been achieved – a successful and scalable chemical process solution to produce a battery grade LCE product, and that this exclusive chemical process technology is effectively proven to be utilised for future development stages at the Rincon Lithium Project.

Argosy further notes that this milestone was achieved through a lengthy process testworks phase, whereby the exclusive and proprietary chemical process solution developed by the Company has proven successful.

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Argosy will continue conducting processing works to ensure plant equipment efficiencies are optimised to ensure consistent and customised ongoing battery grade LCE product for their preferred potential off-take customer(s). Argosy notes it is critical to ensure their LCE product is fit for purpose and tailored to supply their preferred potential off-take parties.

Process description

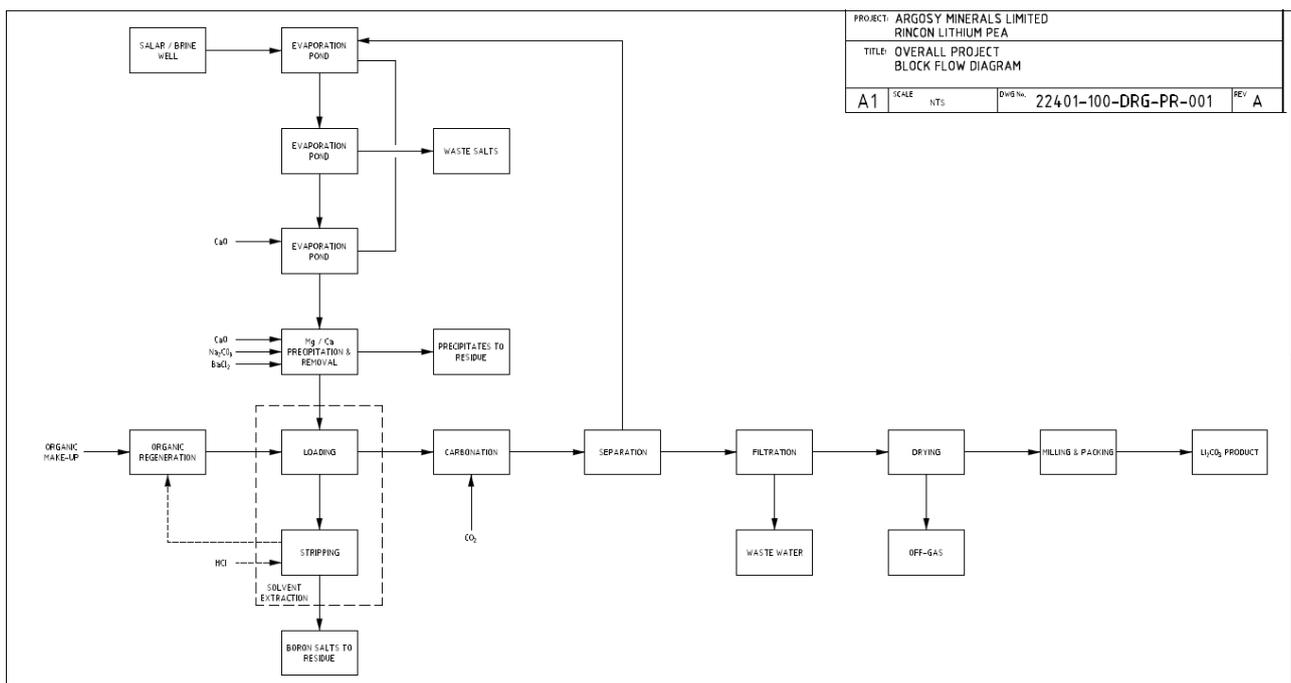
The process is understood to be based on traditional chemical processing of lithium brines to produce LCE products. In light of this, a generic lithium brine flowsheet, typical of the conventional unit processes required for producing lithium carbonate, has been assumed for the Rincon Project and for benchmarking against Argosy supplied information. The process flowsheet for production of lithium carbonate from Rincon Lithium Project brine is summarised in the block flow diagram presented in Figure 7.

The base case lithium carbonate process plant has a nominal design capacity of 10,000 tonnes per annum produced from salar brines and includes the following key areas:

- ◆ Brine well field
- ◆ Solar evaporation ponds
- ◆ Brine concentration and salt removal
- ◆ Processing Plant
- ◆ Boron removal by solvent extraction
- ◆ Brine purification and impurity removal
- ◆ Lithium carbonate crystallisation and drying
- ◆ Lithium carbonate packaging and storage

An additional production rate scenario of 15,000 tonnes per annum has also been evaluated.

Figure 7: Rincon Lithium Project – block flow diagram



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Beyond the scope of this review, it is expected that the process flowsheet will be further developed as more information becomes available from Rincon pilot testwork and data sourced through other investigations.

### Wells and pipelines

The brine from the salar aquifer is pumped from the production wells to a series of solar evaporation ponds. The number of production wells and pump flowrates is presented in Table 6.

### Evaporation ponds

The brine is concentrated by solar evaporation to a suitable concentration such that the brine can be treated in the lithium carbonate production plant. Brine from the Salar aquifer is pumped from production wells to a series of ponds in the pond facility.

As the brine concentrates, salt is precipitated out and this also traps some of the lithium in the brine. Sodium and potassium levels decrease as the brine saturates and these elements precipitate out. Magnesium, sulphate and boron also decrease in concentration as the brine saturates, however a proportion of these elements also carry forward due to higher solubility and higher molecular weight.

Lime is added to the ponds to aid in precipitation and reduce magnesium, sulphate and boron levels in the brine. A small amount of sodium carbonate is also added to precipitate most of the calcium from the lime reactions.

The solar evaporation rate assists in determining the total area requirements for the evaporation pond facility.

### Lithium carbonate plant

A typical lithium carbonate plant includes several refinement stages which are required to achieve or exceed the minimum 99.5%  $\text{Li}_2\text{CO}_3$  concentrate specification targeted for battery grade lithium carbonate. The below information relates to typical processing routes.

The saturated lithium brine from the evaporation ponds requires magnesium, calcium and boron removal stages prior to carbonation.

Magnesium removal will be achieved through the addition of lime for magnesium hydroxide precipitation. Residual calcium in the brine will be precipitated as calcium carbonate with the addition of soda ash. Residual sulphate in the brine solution will be precipitated with barium chloride.

Boron removal will be achieved by solvent extraction and it is envisaged that this will be performed at low pH (acidic conditions) and result in an almost boron free brine. The stripping of boron from the loaded organic phase from the solvent extraction stage, will be achieved by recirculating part of the mother liquor and adding sodium hydroxide. The boron is stripped from the organic phase and the resulting boron enriched mother liquor is recycled to the evaporation pond. The stripped organic phase is re-used in the solvent extraction stage. The boron free brine is pumped to the carbonation stage.

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Lithium carbonate will be precipitated from the brine by temperature control and carbonation initially with soda ash and subsequently with carbon dioxide gas to produce a lithium bicarbonate intermediate before conversion to the higher purity battery grade lithium carbonate product. The re-precipitation of lithium carbonate by the formation of bicarbonate allows for the removal of the majority of contaminants which co precipitate with lithium during the initial carbonation stage.

A thickening and filtration stage is required for the separation of precipitated lithium carbonate. The dewatered lithium carbonate filter cake reports to a dryer, prior to milling and product packaging.

### Reagents

The following reagents are typically required in a conventional lithium brine processing operation:

- ◆ Quicklime (CaO) is required for salt precipitation in the evaporation pond area and magnesium precipitation in the lithium carbonate plant.
- ◆ Soda ash (Na<sub>2</sub>CO<sub>3</sub>) is required for calcium removal and lithium carbonate production in the processing facility.
- ◆ Barium chloride (BaCl<sub>2</sub>) is required for removal of residual sulphate ions prior to carbonation.
- ◆ Hydrochloric acid (HCl) is required as a pH modifier in the solvent extraction stage, for boron removal.
- ◆ Sodium hydroxide (NaOH) is required for stripping the boron from the loaded organic phase in the solvent extraction.
- ◆ Carbon dioxide (CO<sub>2</sub>) is required for the carbonation stage and formation of the intermediate lithium bicarbonate, prior to re-precipitation to battery grade lithium carbonate.
- ◆ Solvent extraction reagents including: extractants, phase modifier and diluent are required for the boron removal stage.

### LCE product specification and testing

The Rincon Project is targeting production of 'battery quality' lithium carbonate, which is generally defined as a dry, free-flowing white powder, typically with minimum 99.5% Li<sub>2</sub>CO<sub>3</sub> by weight.

For future project development phases, further work will be required to define and confirm customer requirements and specifications for lithium carbonate product from the project as a basis to validate expected saleable prices and corresponding project economics.

Regarding product testing, Argosy has made arrangements with a number of international cathode and battery industry participants and provided them (and will continue to provide them) with samples of 'battery quality' LCE material produced from Rincon for their own quality confirmation and testing. This process is currently on-going to ensure full compliance and product customisation with potential off-take customers, as part of their own product manufacturing requirements.

To date, Argosy has relied on its in-house laboratory for analysis product samples prior to finalising samples to provide to potential customers. The process of determining customer

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product specification requirements is very much a back and forth approach to refine the product to suit each potential customer, who have their own individual product specification requirements, and not a one test fits all arrangement. Argosy will continue to refine and modify product quality and impurities and is producing different product specifications to “fit/customise” for each potential customer. Upon final completion of this process, Argosy will arrange independent testing of the LCE product it will produce and provide to potential customers.

The Rincon Project has undergone industrial-scale pilot plant testing in Stage 1 of the project, to demonstrate the effectiveness of the proprietary lithium processing technology developed by Argosy and their technology partners. To date, the pilot plant has successfully produced some 500kg of ‘battery quality’ specification LCE product (Argosy ASX announcement, 31 October 2018).

### Infrastructure and outbound logistics

The Rincon Project area in the Salar del Rincón is in close proximity to existing utility and transportation infrastructure. It is serviced by all-seasons roads, electrical power, a natural gas pipeline terminus, and road and railway access to the Chilean port facilities of Antofagasta.

In addition, site infrastructure for potential next stage commercial operations, Argosy’s Mina Romulo tenement (comprising ~948 hectares) is proposed as the site for the commercial process plant and evaporation ponds. It is estimated the commercial plant and evaporation ponds will require up to ~400 hectares to construct. Mina Romulo provides more than adequate area for these services, and in addition, the natural gas pipeline, high voltage powerline and highway run in the near vicinity of the tenement, providing great access to these infrastructure services. In addition, the railway line to Antofagasta port facility, even though not currently in regular service, is within short distance (~20km) to the Rincon Project.

The LCE product is expected to be produced at the project site, with such product to be packaged into 25kg bags or ~1 tonne bulka-bags, for ease of transport. This product will be freighted via road or rail (if available) in containers to the Antofagasta port facility in Chile, similar to Livent and Orocobre’s current LCE product operations in Argentina, and then shipped to Argosy’s potential customers.

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Figure 8: Existing infrastructure servicing the Salar del Rincón



Capital expenditure

The capital expenditure estimates (cases v and vi) were compiled from capital cost data supplied by Argosy. A summary of indicative capital expenditure for 10,000 tonnes per annum LCE production rate, as provided by Argosy, is presented in Table 9.

Argosy provided data input into the capital cost estimated values based on current operational data and actual costs from the Stage 1 industrial-scale pilot plant and Stage 2 evaporation pond construction works currently in progress.

Table 9: Approx. indicative capital cost estimate (Argosy base case)

Item	US\$ M
Process Equipment	39.9
Installation	20.0
Evaporation Ponds	44.2
Mobile Equipment	4.8
Camps and Buildings	13.6
Contingency (15%)	18.4
<b>TOTAL</b>	<b>140.9</b>

The level of information for the current review does not permit development of a detailed process plant flowsheet and mechanical equipment list with sized and specified and priced process equipment that would derive a capital estimate with better than order of magnitude costs.

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Figure 9: Stage 2 evaporation ponds with ongoing construction works



Figure 10: Stage 2 evaporation ponds with ongoing construction works



On this basis and for benchmarking and comparison purposes, the Rincon (10,000 tpa LCE) project capital items (Table 9) have been tabled alongside the published capital estimates for the Cauchari-Olaroz (25,000 tpa LCE) and Maricunga (20,000 tpa LCE) projects. This is referred to as a factored cost estimation approach (used for cases i to iv) and references a derived number by factoring the CAPEX from a similar project based on production rate.

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Using a factored cost estimation approach (for 10,000 tpa LCE and 15,000 tpa LCE bases) applied to Maricunga and Cauchari-Olaroz project capital cost estimated values, a factored capital cost range for Rincon for both the 10,000 tonnes per annum LCE project and the 15,000 tonnes per annum LCE project have been estimated.

Using a factored cost estimation approach, the approximate capital cost estimate for a 10,000 tonnes per annum LCE lithium brine project using a conventional process flowsheet (similar to the Cauchari-Olaroz project) is in the order of US\$246 million to \$309 million, and the approximate capital cost estimate for a 15,000 tpa LCE project is in the order of US\$313 million to \$394 million.

Argosy have (to date) constructed approximately 27 hectares of evaporation ponds at the project site and as such have recent, actual data for evaporation pond costs that are lower than those derived by the abovementioned factored approach. For the purposes of economic analysis, the value used for evaporation ponds for the 10,000 tonnes per annum evaluation cases was as provided by Argosy at US\$44.2 million, and this value was factored to US\$56.3 million for the 15,000 tonnes per annum evaluation cases.

The approximate factored capital cost estimate values selected for use in the economic analysis cases i to iv are shown in Table 10.

Table 10: Approx. factored capital cost estimate values used for economic analysis

Item	Production Case (tpa)	Production Case (tpa)
	10,000 (USD \$M)	15,000 (USD \$M)
Brine Wells	8.5	10.9
Evaporation Ponds	44.2	56.3
Lithium Carbonate Plant	70.1	89.4
Infrastructure & General Services	39.0	49.8
Indirect Costs	21.3	27.2
Contingency	32.0	40.8
<b>Total</b>	<b>215.2</b>	<b>274.4</b>

The following items are required to improve the accuracy of the Rincon Project capital cost estimate:

- ◆ Process design criteria (with process chemistry assumptions as derived from batch/pilot testwork)
- ◆ Process flow diagrams (outlining each process stage with recycle and bleed streams)
- ◆ Mechanical equipment (with indication of size, power and other services required)
- ◆ Process mass balance (with recycle and bleed streams)
- ◆ Quotations for major equipment and services from multiple vendors
- ◆ Quotations from multiple civil earthwork contractors/vendors for site area cut/fill

Process and engineering works for the PEA were developed to support capital and operating estimates (and following AUSIMM Guidelines for this study level), and given the preliminary and confidential nature of the plant information, the capital cost accuracy is  $\pm 50\%$  on the 'factored cases' estimated figures (cases i to iv).

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For cases v and vi, the values are not factored as the factored CAPEX approach is used where no CAPEX value exists (or can be built up from a process design), whereas the values used for cases v and vi reference scaled-up costs from Argosy's Stage 1 and 2 operational works.

### Operating costs

Process operating cost estimates were compiled from cost data supplied by Argosy. The operating cost data and supporting documents provided for this review do not permit confirmation of the process chemistry, mass balance or verification of the operating costs for the Rincon Lithium Project.

A summary of the approximate process operating costs is provided in Table 11.

Table 11: Approx. indicative process operating cost estimate for 10,000 and 15,000 tpa LCE

Item	ANNUAL OPERATING COSTS (US\$) 10,000 tpa LCE cases			ANNUAL OPERATING COSTS (US\$) 15,000 tpa LCE cases		
	% of Total	US\$/a	US\$/t LCE	% of Total	US\$/a	US\$/t LCE
Labour	5.1	2,379,743	238	3.7	2,379,743	159
Energy	13.2	6,116,776	612	12.8	8,257,647	551
Reagents	65.4	30,374,950	3,037	70.5	45,562,425	3,037
Miscellaneous	2.4	1,134,000	113	2.2	1,417,500	95
Maintenance	6.2	2,874,960	287	5.3	3,449,952	230
G & A	7.7	3,567,912	357	5.5	3,567,912	238
<b>TOTAL</b>	<b>100</b>	<b>46,448,340</b>	<b>4,645</b>	<b>100</b>	<b>64,635,179</b>	<b>4,309</b>

The approximate Rincon process operating cost (US\$4,645 - 4,309/t LCE) is noted to be higher than the operating cost reported for the Cauchari-Olaroz operating cost (US\$2,495/t LCE) and the Maricunga operating cost (US\$3,474/t LCE) projects respectively. More recently, Orocobre has reported annual operating costs for their Salar de Olaroz lithium facility of US\$4,194/t LCE (Orocobre Quarterly Report of Operations for the Period Ended 30 June 2018, ASX/TSX Announcement). Orocobre's operating cost is now considered one of the lower operating cost LCE product projects worldwide, and a more realistic comparison – given its operating nature, than the other operating cost estimates quoted from those non-producing projects.

A review of the total operating cost for the Rincon Project indicates a higher total reagent cost component of US\$3,037/t LCE compared to the Maricunga and Cauchari-Olaroz projects, where published reagent costs range from US\$925/t LCE to US\$991/t LCE.

For the economic analyses conducted for the Rincon Project, the operating cost used for the 15,000 tonnes per annum LCE production scenarios was obtained by linearly scaling the variable portion of operating expenditure items to reflect the new production rate, while retaining the fixed portion. This is viewed as a conservative position, as it is expected that there would be opportunity for price reduction on a per-unit basis for the non-fixed operating cost items – e.g. reagent costs may reduce on a per-mass or per-volume basis for increasing production rates.

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The operating cost estimate exclusions and estimate basis are listed below.

### Operating cost exclusions:

- ◆ Costs not directly associated with the processing facility
- ◆ All import duties, withholding taxes and other in country taxes
- ◆ Any impact of foreign exchange rate fluctuations
- ◆ Any escalation from the date of the estimate
- ◆ Any land or crop compensation costs
- ◆ Any rehabilitation or closure costs
- ◆ Any licence fees
- ◆ Additional tailings storage costs (other than specified) and rehabilitation
- ◆ Government monitoring / compliance costs
- ◆ Water extraction licensing costs

### Estimate basis:

- ◆ Operating costs have been compiled for the processing facilities only
- ◆ Date of estimate: October 2018
- ◆ Accuracy: following AUSIMM Guidelines for this study level, and given the preliminary and confidential nature of the plant information, the operating cost estimate accuracy is  $\pm 35\%$
- ◆ All costs listed have been calculated to a 10,000 tonnes per annum lithium carbonate,  $\text{Li}_2\text{CO}_3$  (LCE) basis
- ◆ Costs for a 15,000 tonnes per annum LCE case have been derived by linearly scaling the variable portion of operating cost items to reflect the greater production rate, while retaining the fixed portion
- ◆ Year 2020 data, as provided by Argosy, has been used for development of the operating costs
- ◆ Reagent costs are based on quantities and price data as provided by Argosy
- ◆ Power cost is based on quantities and pricing data as provided by Argosy
- ◆ Labour costs are based on a staffing schedule and labour rates provided by Argosy
- ◆ Maintenance costs are based on process equipment capital expenditure and maintenance factor as provided by Argosy
- ◆ The operating cost input data has been provided by Argosy as noted, and has not been verified by Primero

### Lithium market and LCE price forecasts

The marketing and price forecast information has been compiled from information supplied by Benchmark Mineral Intelligence, contained in the report "Lithium Market Outlook - Argosy, November 2018". The report was commissioned by Argosy Minerals and supplied to Primero.

The report outlines and analyses the current lithium market, in terms of demand, supply chain and pricing, and provides an outlook on how the market is likely to develop over the proposed life of the mine and out to 2040.

The lithium market is set to grow sharply in the coming years as the mineral is critical for use in battery technologies employed in electric vehicles, grid storage and portable electronic equipment. As such, there is a requirement for new supply to come online over the coming decade and beyond to meet this increased demand. It is expected that by the end of the forecast period, the market will be heavily undersupplied and there will continue to be a

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requirement for new greenfield capacity to be brought online until 2040, and that prices will reflect this over the life of the forecast.

Figures 11 - 13: Rincon Lithium Project – LCE Product from Stage 1 pilot plant operations



Benchmark Mineral Intelligence's supply forecast for lithium is divided into three main phases, which reflect the development of the market over time:

- ◆ Phase 1, 2015-2018: In this phase the supply-demand balance is very tight, with demand growing faster than new capacity expansions. New supply is largely from development of brownfield sites at operating producers.
- ◆ Phase 2, 2019-2025: Phase two sees new supply start to come online from greenfield projects, as well as continued expansions of existing producers. The market moves in a period of relative oversupply by the end of the period.
- ◆ Phase 3, 2025-2040: Towards the latter part of the forecast period there is a marked requirement for further as yet announced lithium capacity to come on-stream to meet rising demand. We expect that prices will remain in a range needed to stimulate this new investment, given that geological constraints are not an issue.

The range of operating costs for lithium production range from US\$3,500 to US\$8,000 per LCE tonne, over the forecast period up to 2040, with brine resources typically occupying the lowest cost portion of the cost-curve. The majority of new capacity coming online in the forecast period will be producing at a cost in the middle of the curve, around US\$4,000 - 5,000 per LCE tonne. Argosy's Rincon project estimated operating cost is well within this cost curve range.

Benchmark Mineral Intelligence expects that rapid price growth will lose momentum post 2018 as new capacity becomes available and market tightness eases. Nevertheless, it expects that prices in the period 2019-2022 will be higher than current market levels. By 2022

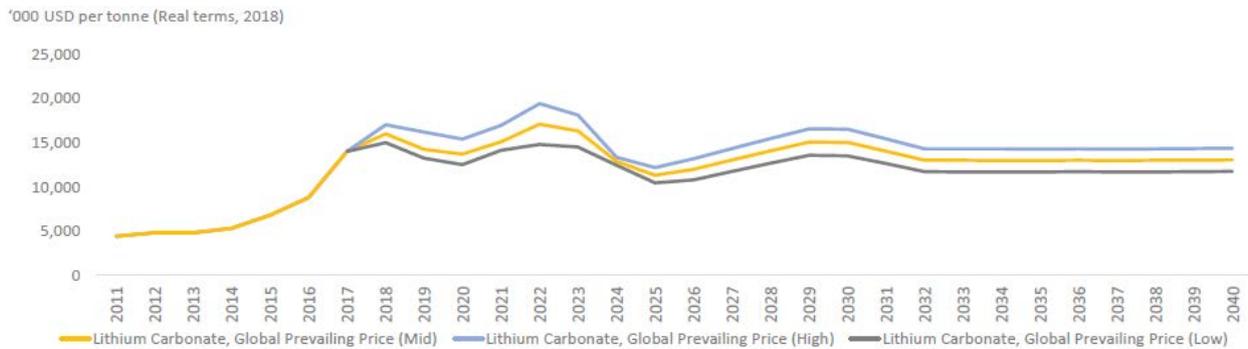
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the market may be in over-supply, with a forecast that a minor price correction will begin at this point.

Benchmark Mineral Intelligence anticipates that the lithium market will begin to tighten again in the period to 2030, and that prices will rise in this period. It further expects that a pipeline of new currently unannounced projects will begin to come through over the coming decade to meet the demand however, and that ultimately prices will settle into long term average of US\$13,000 per tonne for lithium carbonate, a price sufficient to stimulate needed investment in greenfield capacity over the life of the forecast.

Throughout the entire forecast period Benchmark Mineral Intelligence expects prices to remain above 2011-2016 levels due to the requirement to stimulate increased supply growth.

Figure 14: Lithium Carbonate, Global prevailing price forecast, 2011-2040 (Real terms, USD 2018)



### Sensitivity analysis

Sensitivity analysis has been conducted for each financial assessment (cases i to vi), evaluating the effect on NPV (at a 10% discount rate) and IRR for changes in a number of parameters, using the same approach for all cases. These parameters and their associated ranges are described in Table 12:

Table 12: Sensitivity parameters and ranges

	NPV/IRR LOWER VALUE		NPV/IRR UPPER VALUE	
	10,000 tpa cases	15,000 tpa cases	10,000 tpa cases	15,000 tpa cases
<b>Initial Capital Cost</b>	Factored CAPEX value US\$ 308.6M	Factored CAPEX value US\$ 393.6M	Argosy "Base Case" value US\$ 140.9M	Factored Argosy "Base Case" value US\$179.7M
<b>Product price</b>	US\$ 10,000 /t LCE		US\$ 20,000 /t LCE	
<b>Processing cost</b>	Argosy OPEX US\$4,288/t LCE (excl. G&A)	Argosy OPEX US\$4,071/t LCE (excl. G&A)	Cauchari-Olaroz OPEX value US\$2,495/t LCE	
<b>Tax rate*</b>	40% (Base 30%)		27% (Base 30%)	
<b>Royalty rate</b>	5% (Base 3%)		1.5% (Base 3%)	
<b>Contingency</b>	30%		15%	
<b>Administration cost</b>	+30% of Base value		-30% of Base value	

\*For post-tax NPV and IRR sensitivity analysis

A summary of the sensitivity results is shown in Table 13 and Figure 15.

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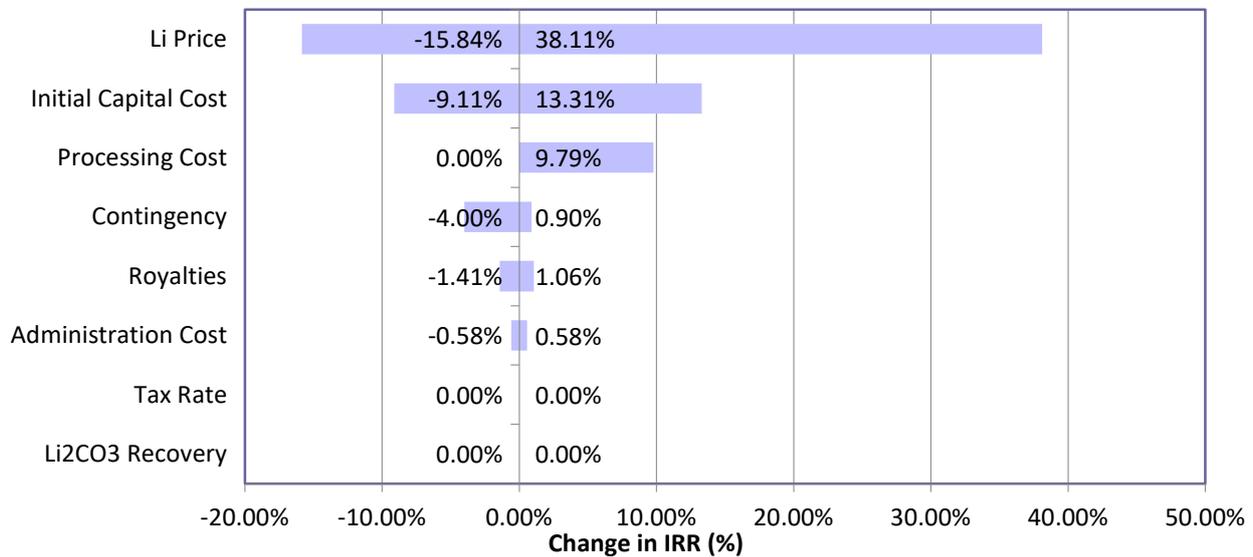
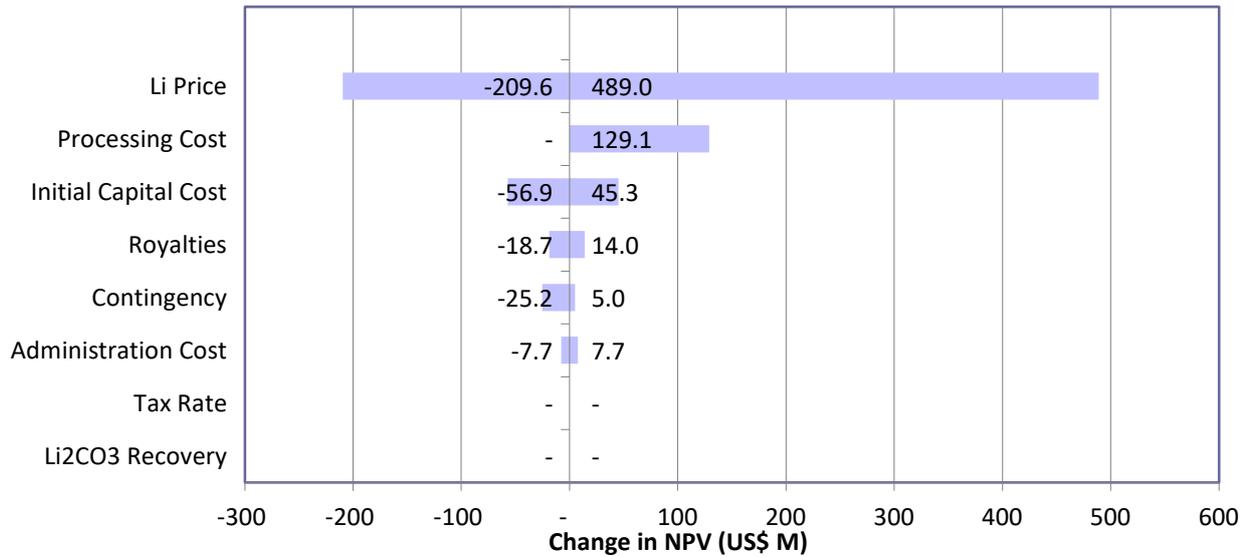
Table 13: Sensitivity analysis summary pre-tax values: NPV (10% discount rate) and IRR cases i to vi

	Case i (10,000 tpa LCE, US\$13,000/t)							Case ii (10,000 tpa LCE, US\$15,500/t)							Case iii (15,000 tpa LCE, US\$13,000/t)						
	Value			NPV (US\$ M)		IRR		Value			NPV (US\$ M)		IRR		Value			NPV (US\$ M)		IRR	
	Lower	Base	Upper	Lower	Upper	Lower	Upper	Lower	Base	Upper	Lower	Upper	Lower	Upper	Lower	Base	Upper	Lower	Upper	Lower	Upper
<b>Initial Capital Cost</b> US\$ M	308.6	215.2	140.9	270.6	372.8	26.3%	48.7%	308.6	215.2	140.9	445.3	547.5	36.2%	67.8%	393.6	274.5	179.7	369.6	495.4	32.4%	62.1%
<b>Product price</b> US\$/t LCE	10,000	13,000	20,000	118.0	816.6	19.6%	73.5%	10,000	15,500	20,000	118.0	816.6	19.6%	73.5%	10,000	13,000	20,000	181.9	1,041.0	24.8%	90.8%
<b>Processing cost</b> US\$/t LCE	4,288	4,288	2,495	327.5	456.7	35.4%	45.2%	4,288	4,288	2,495	502.2	631.3	48.7%	58.7%	4,071	4,071	2,495	439.7	579.3	44.4%	54.9%
<b>Tax rate</b> %	40.0%	30.0%	27.0%	327.5	327.5	35.4%	35.4%	40.0%	30.0%	27.0%	502.2	502.2	48.7%	48.7%	40.0%	30.0%	27.0%	439.7	439.7	44.4%	44.4%
<b>Royalty rate</b> %	5.0%	3.0%	1.5%	308.8	341.6	34.0%	36.5%	5.0%	3.0%	1.5%	479.9	518.9	47.0%	50.0%	5.0%	3.0%	1.5%	416.6	456.9	42.6%	45.7%
<b>Contingency</b> %	30.0%	17.5%	15.0%	302.3	332.5	31.4%	36.3%	30.0%	17.5%	15.0%	477.0	507.2	43.4%	49.9%	30.0%	17.5%	15.0%	409.6	445.6	39.2%	45.5%
<b>Administration cost</b> US\$/t LCE	464	357	250	319.8	335.3	34.8%	36.0%	464	357	250	494.5	509.9	48.1%	49.3%	309	238	167	433.3	446.0	43.9%	44.8%
<b>Pre-tax NPV (10%)</b> US\$ M		327.54							502.20						439.66						
<b>Pre-tax IRR</b>		35.4%							48.7%						44.4%						
	Case iv (15,000 tpa LCE, US\$15,500/t)							Case v (Argosy "Base Case" Capex, 10,000 tpa LCE, US\$13,000/t)							Case vi (Argosy "Base Case" Capex, 10,000 tpa LCE, US\$15,500/t)						
	Value			NPV (US\$ M)		IRR		Value			NPV (US\$ M)		IRR		Value			NPV (US\$ M)		IRR	
	Lower	Base	Upper	Lower	Upper	Lower	Upper	Lower	Base	Upper	Lower	Upper	Lower	Upper	Lower	Base	Upper	Lower	Upper	Lower	Upper
<b>Initial Capital Cost</b> US\$ M	393.6	274.5	179.7	584.4	710.2	44.5%	85.7%	308.6	140.9	140.9	269.5	399.0	25.1%	52.5%	308.6	140.9	140.9	444.2	573.6	34.1%	70.9%
<b>Product price</b> US\$/t LCE	10,000	15,500	20,000	181.9	1,041.0	24.8%	90.8%	10,000	13,000	20,000	189.4	888.0	30.8%	104.8%	10,000	15,500	20,000	189.4	888.0	30.8%	104.8%
<b>Processing cost</b> US\$/t LCE	4,071	4,071	2,495	654.4	794.0	60.7%	71.4%	4,288	4,288	2,495	399.0	528.1	52.5%	66.1%	4,288	4,288	2,495	573.6	702.8	70.9%	84.7%
<b>Tax rate</b> %	40.0%	30.0%	27.0%	654.4	654.4	60.7%	60.7%	40.0%	30.0%	27.0%	399.0	399.0	52.5%	52.5%	40.0%	30.0%	27.0%	573.6	573.6	70.9%	70.9%
<b>Royalty rate</b> %	5.0%	3.0%	1.5%	627.0	675.0	58.6%	62.2%	5.0%	3.0%	1.5%	380.2	413.0	50.6%	54.0%	5.0%	3.0%	1.5%	551.3	590.4	68.6%	72.7%
<b>Contingency</b> %	30.0%	17.5%	15.0%	624.4	660.4	53.9%	62.2%	30.0%	15.0%	15.0%	377.4	399.0	46.0%	52.5%	30.0%	15.0%	15.0%	552.1	573.6	62.2%	70.9%
<b>Administration cost</b> US\$/t LCE	309	238	167	648.1	660.8	60.2%	61.1%	464	357	250	391.3	406.7	51.7%	53.4%	464	357	250	565.9	581.3	70.1%	71.7%
<b>Pre-tax NPV (10%)</b> US\$ M		654.44							398.97						573.63						
<b>Pre-tax IRR</b>		60.7%							52.5%						70.9%						

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Figure 15: Sensitivity analysis summary pre-tax values: NPV (10% discount rate) and IRR cases i to vi (please refer to Table 13 for upper and lower values for each case scenario and each sensitivity range shown in the below graphs)

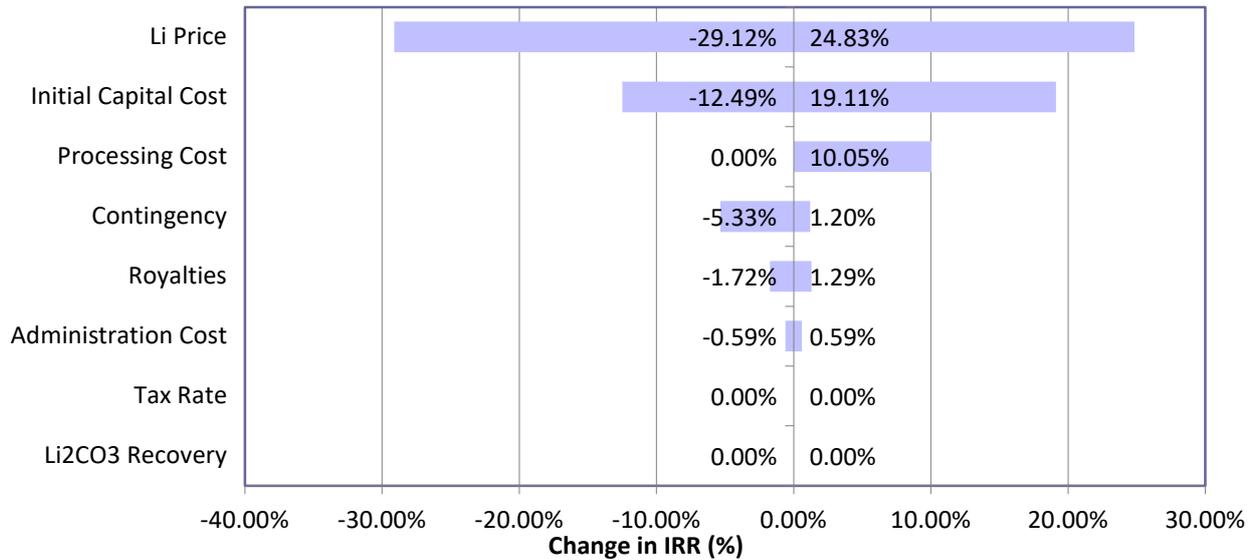
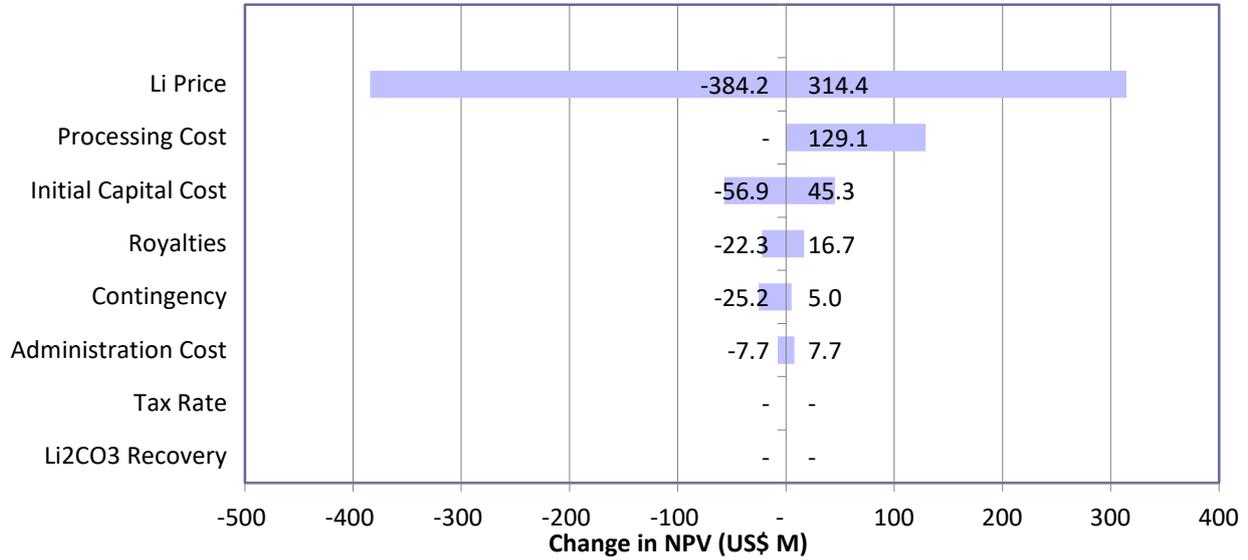
**Case i (10,000 tpa LCE, US\$13,000/t)**



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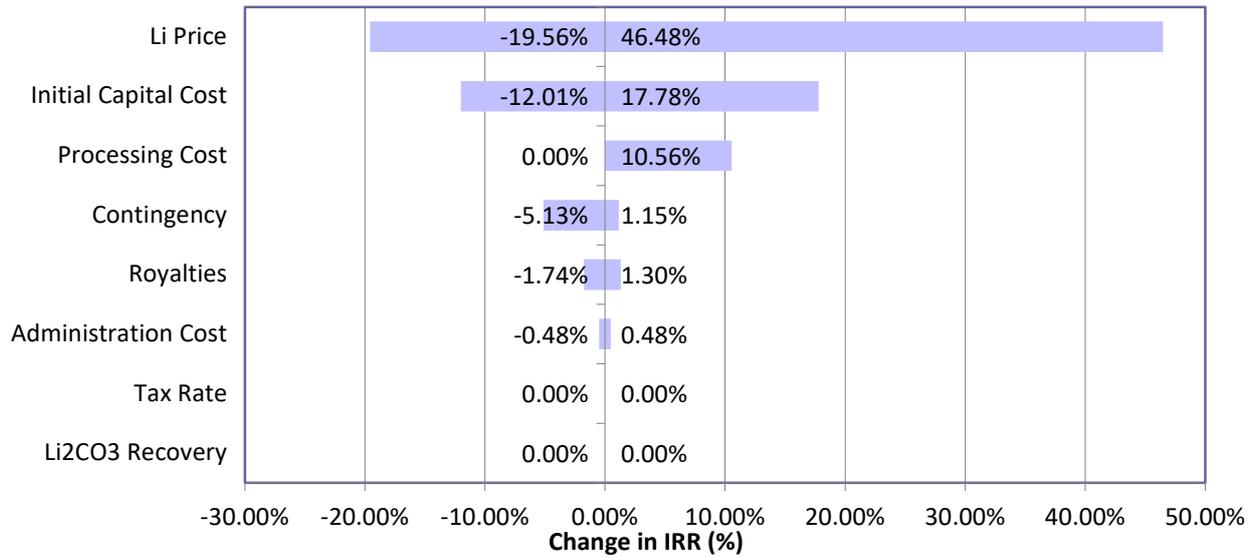
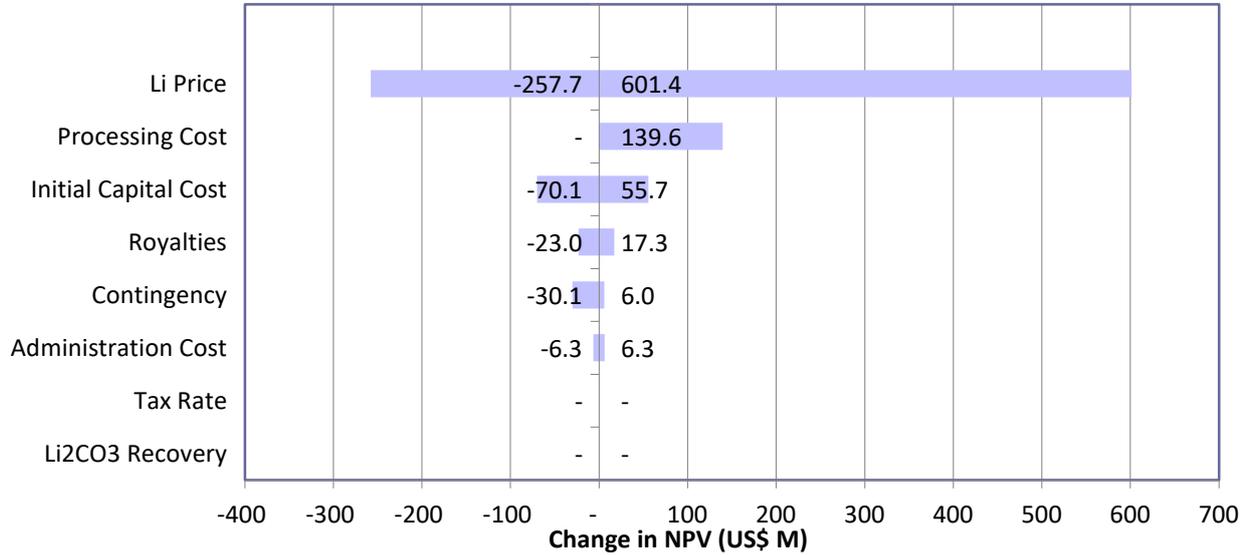
Case ii (10,000 tpa LCE, US\$15,500/t)



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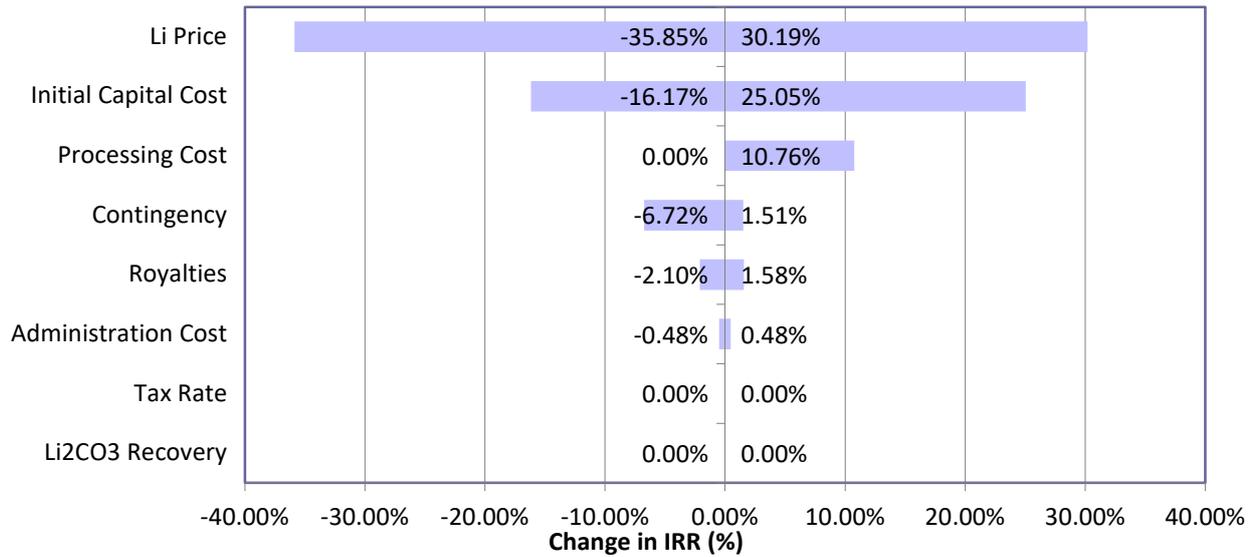
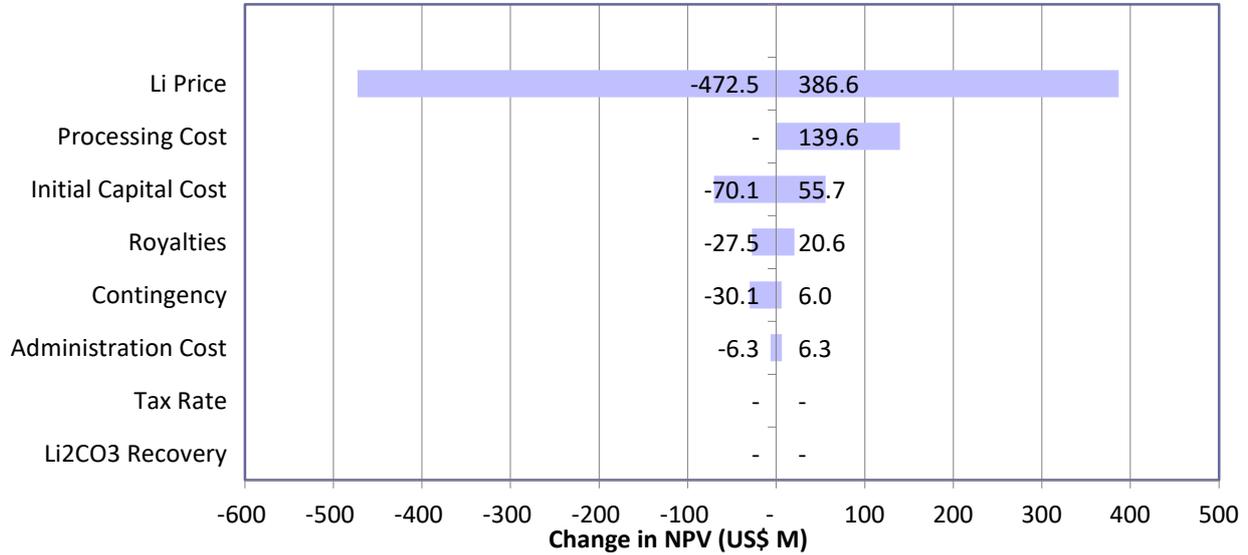
Case iii (15,000 tpa LCE, US\$13,000/t)



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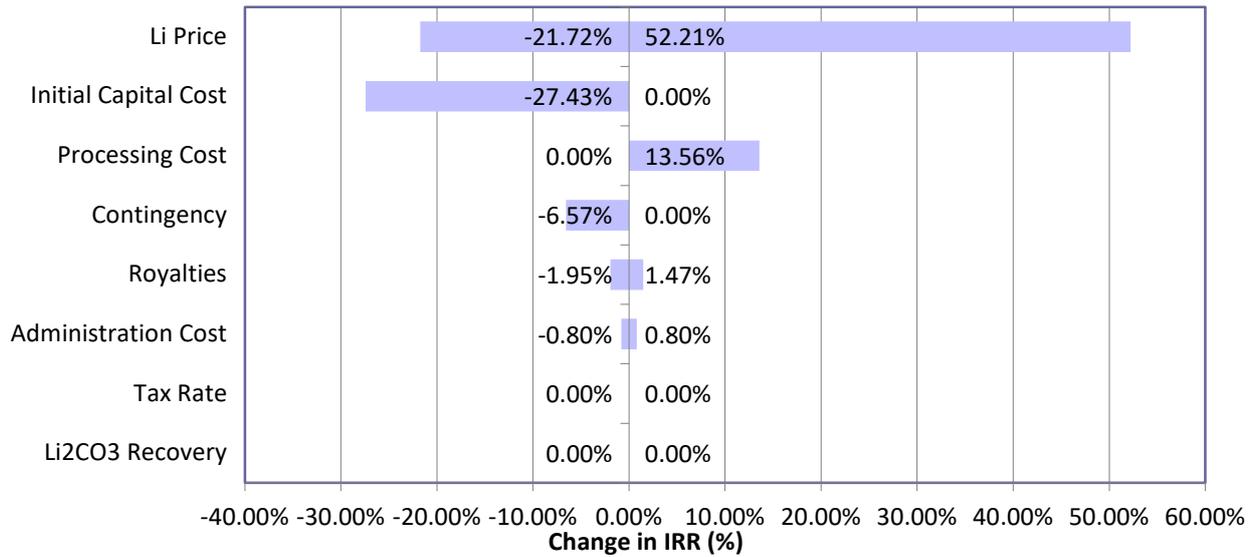
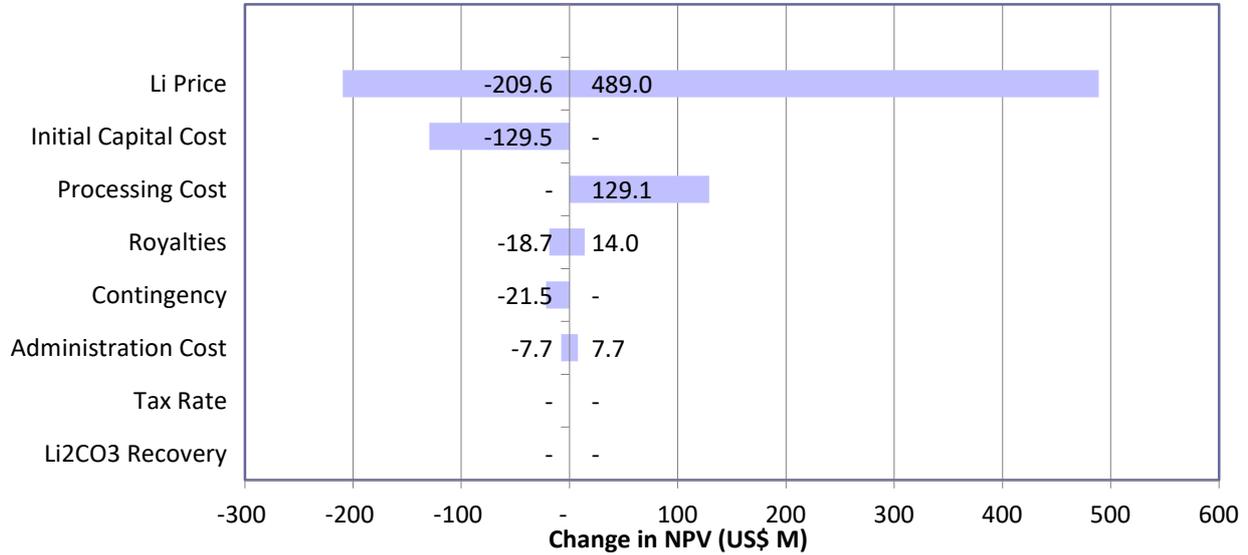
Case iv (15,000 tpa LCE, US\$15,500/t)



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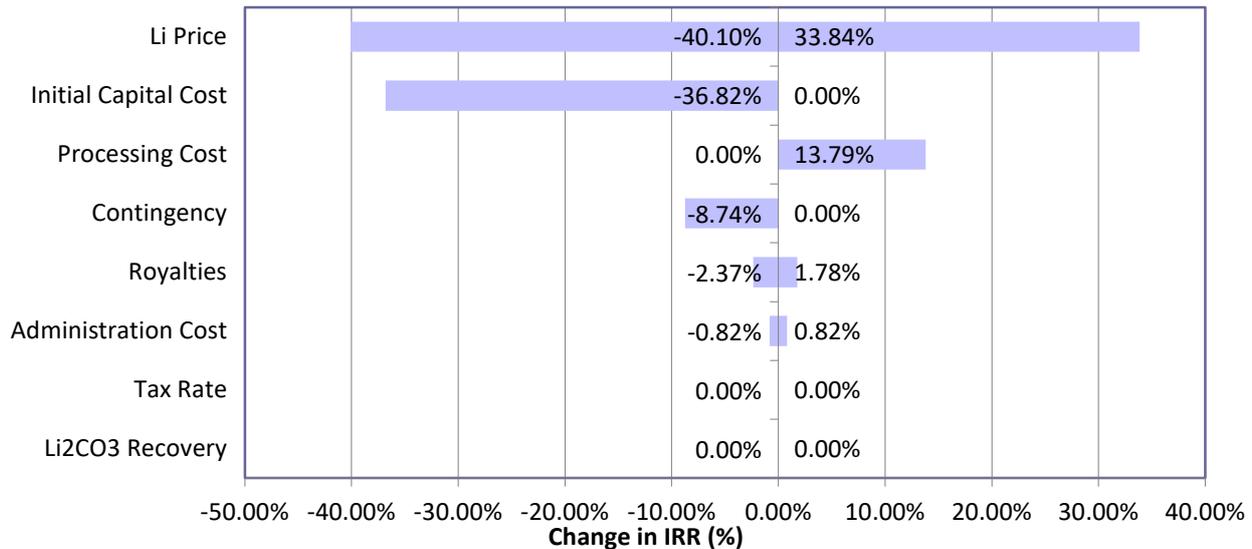
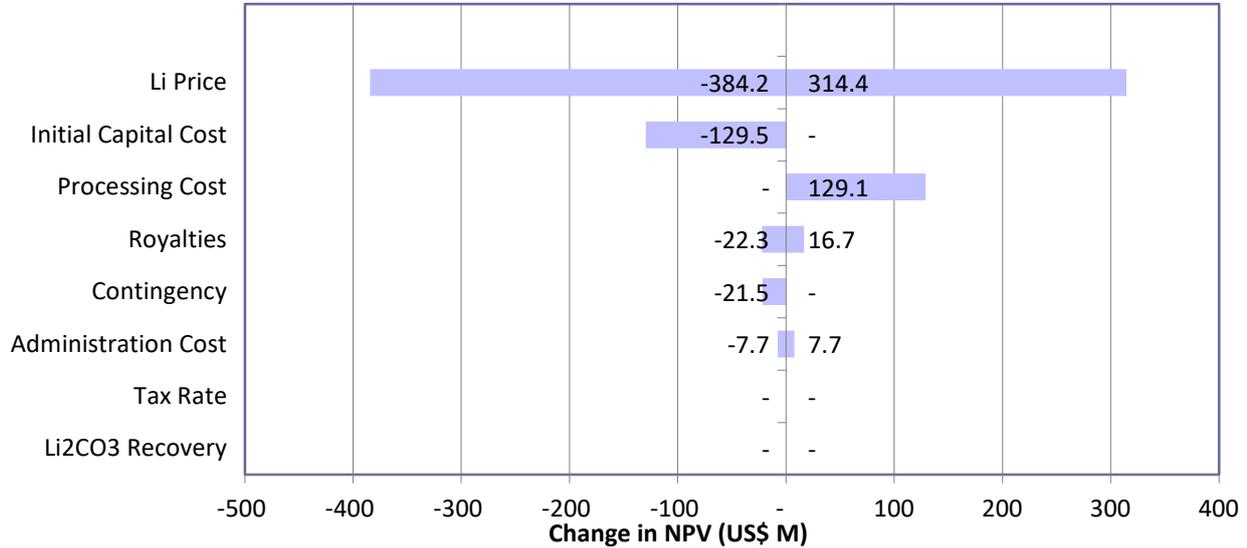
Case v (Argosy "Base Case" CAPEX, 10,000 tpa LCE, US\$13,000/t)



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Case vi (Argosy "Base Case" CAPEX, 10,000 tpa LCE, US\$15,500/t)



Project development funding

The Company has funding in place to continue Stage 1 industrial-scale pilot plant operations and complete the remaining Stage 2 evaporation pond construction works. This includes 'cash at bank' of \$4.951 million as per the September 2018 quarterly cashflow report. The Company is confident that sufficient funding is in place to conduct these works.

The Company believes that there are "reasonable grounds" to assume that future funding will be available for commencing the next stage of project development works – primarily involving the commencement of an initial commercial-scale lithium processing plant. Alternatively, the Company will look to secure the necessary funding for the full-scale commercial stage development, as envisaged by the "base case scenario" stated in this announcement. For either strategy, the Company is confident on the following basis;

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- ◆ AGY's Board has a financing track record and experience in developing projects.

Alex Molyneux, Non-Executive Chairman of the Company has over 20 years' corporate and operational experience in corporate finance and developing projects into operation. Mr Molyneux has raised in excess of \$10 billion in debt and equity over his 20-year career in mining, both a specialist mining investment banker and as an executive/director of various mining companies. In terms of pre-development project funding, the amount totals approximately \$2 billion in the forms of public equity, private equity, sovereign wealth funding, off-take funding and traditional debt.

Director Mal Randall has been active in capital markets for over 40 years and has been involved in project funding during his directorship of several resource companies. Mr Randall's experience with capital raisings over the past 30 years has included senior debt raising for project CAPEX with both with international and domestic banks for numerous companies, and also includes mezzanine and bridging finance, in addition to the multitude of capital raising through placements, SPP's and rights issues.

- ◆ The Company is confident that it can continue the development strategy at the Rincon Project, based on its current progress to date and exceptional results obtained from the PEA. The Company is based in Australia, with significant sources of equity and debt capital and very active resource focused capital markets.
- ◆ The current Li<sub>2</sub>CO<sub>3</sub> FOB South America average price is currently US\$14,375/t (source: Benchmark Mineral Intelligence, October 2018), whilst Argus quoted on 13 November 2018, that import prices for 99.5% grade lithium carbonate were holding at a range of US\$13,500 -16,000/t (CIF China). Benchmark Mineral Intelligence has provided a long-term forecast average price of US\$13,000/t for lithium carbonate.

The improvements to the lithium price and market conditions over the previous three years, and very encouraging future outlook for demand for lithium related products, enhances the Company's view of securing successful funding for the project. The Company is also able to consider other methods of value realisation to assist funding the project, such as a partial sale of the asset, long term offtake and joint venture arrangements.

- ◆ The strong production and economic outcomes delivered by the PEA are considered by the Board to be sufficiently robust to provide confidence in the Company's ability to fund pre-production capital through conventional debt and equity financing. The Company has been active in seeking out partners in key markets such as Japan, Korea and China. The Company is in on-going discussions with several international groups for strategic investment and off-take arrangements. The Company notes that no off-take arrangements have been executed currently.

To achieve the range of proposed feasibility studies and potential mine development outcomes indicated in the PEA, additional funding will be required. Investors should note that there is no certainty that Argosy will be able to raise funding when needed. It is also possible that such funding may only be available on terms that may be dilutive to or otherwise affect the value of Argosy's existing shares, or include debt funding (and consequent gearing). It is also possible that Argosy could pursue other 'value realisation'

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strategies such as a sale, partial sale or joint venture of the project. If it does, this could materially reduce Argosy's proportionate ownership of the project.

### Development timeline

The following preliminary schedule of the next steps is subject to available funding for the commercial stage development capital cost, favourable timelines for permitting, procurement of plant and equipment, provision and availability of labour, and specialty chemicals accessibility, and also ensuring a stable and supportive regulatory regime;

- ◆ Environmental permits approved - Q1 2019
- ◆ Major contracts awarded - Q2 2019
- ◆ Construction begins - Q3 2019
- ◆ First LCE product from commercial operations – Q1 2021

### Competent Person's Statement – Rincon Lithium Project

The information contained in this ASX release relating to Exploration Results and Mineral Resource Estimates has been prepared by Mr Duncan Storey. Mr Storey is a Hydrogeologist, a Chartered Geologist and Fellow of the Geological Society of London (an RPO under JORC 2012). Mr Storey 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.

Duncan Storey is an employee of AQ2 Pty Ltd and an independent consultant to Argosy Minerals Ltd. Mr Storey consents to the inclusion in this announcement of this information in the form and context in which it appears. The information in this announcement is an accurate representation of the available data from exploration at the Rincon Lithium Project.

### JORC Table 1

## Reporting of Exploration Results – JORC (2012) Requirements

### Section 1: Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
<i>Sampling techniques</i>	<ul style="list-style-type: none"> <li>• <i>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li>• <i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li>• <i>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 (eg 'reverse circulation drilling was</i></li> </ul>	<ul style="list-style-type: none"> <li>• Drilling is conducted using HQ diameter core and 200mm diameter mud rotary. Brine is sampled from discrete horizons during diamond drilling and as pumped samples from test production bores.</li> <li>• HQ drill core in the holes was recovered in 1.5m length core runs directly in the core barrel, without the use of internal tubes. Consequently the cores recovered were subject to handling that contributed to some disaggregation of the core. In some holes polycarbonate tubes were used in the place of triple tubes to collect samples for laboratory testing. Cores selected for porosity laboratory sampling were sub-sampled</li> </ul>

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Criteria	JORC Code Explanation	Commentary
	<p><i>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.</i></p>	<p>into soft plastic tubes/bags (where not collected in polycarbonate tubes), labelled with permanent marker and wrapped extensively in transparent tape over the sample labelling, to preserve this being rubbed off during transportation. When core was collected in polycarbonate tubes 15cm lengths were cut from the bottom of the tubes and sealed with end caps and tape, to maintain sample humidity.</p> <ul style="list-style-type: none"> <li>• Drilling core was undertaken to obtain representative samples of the sediments that host brine. However, it is noted that core recoveries are relatively low in these soft sediments.</li> <li>• Brine samples were collected at discrete depths during the drilling. This was done using a double packer device with a sample interval of 1m between the packers in a straddle packer arrangement or by pulling back the drill rods and bailing a sample from the lower meter of drill hole (after the hole was purged of drilling fluid). In some cases a down hole bailing tube (bailer) was used to take samples, where it was not possible with the packer equipment.</li> <li>• A limited number of the holes were geophysically logged with simple resistivity and SP logs, to provide information on the lithology, in particular identifying units of halite (salt).</li> <li>• The brine samples were collected in clean plastic 500ml bottles and filled to the top to minimize air space within the bottle. Each bottle was marked with the time and re-labelled with a sample number before sending the sample to the laboratory.</li> <li>• Brine samples were taken using a packer device however there were difficulties using this equipment and hence complete systematic sampling was not completed throughout the hole (due to a lack of brine recovery in some – typically clay dominated intervals or concerns related to collapse of sandy intervals).</li> <li>• Packer sampling was undertaken on a nominal 3 or 6m separation, but it must be noted that the distance between the inflated packers for sampling is only 1 m, due to restrictions with the length of the packer, available equipment and the height of the drill rig mast. Sampling was generally not possible in the clay intervals, due to the low flows and inability to purge the hole of sufficient brine to take a sample with confidence.</li> <li>• Disturbed geological samples are collected at 1m intervals during mud-rotary drilling, after which casing and slotted screen is installed in the bore</li> </ul>

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Criteria	JORC Code Explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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.).</li> </ul>	<p>and test pumping carried out. During pumping, samples of the discharging brine are collected at specific points in time.</p> <ul style="list-style-type: none"> <li>HQ Diamond core was used for 1390m (83%) of drilling. The drilling produced cores with variable and often poor core recovery, associated with unconsolidated sandy material in the holes. Recovery of these more friable sediments is more difficult with diamond drilling, as this material can be washed from the core barrel during drilling.</li> <li>Mud rotary drilling with a tri-cone bit was used to construct test production bores; either to enlarge diamond holes or as the only drilling method. Mud rotary was the only drilling method for 271m (16%) of drilling. Test production bores with pvc casing and screen are installed in the mud-rotary drill holes.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond drill core was recovered in 1.5m length intervals. Appropriate additives were used for hole stability to maximize core recovery. The core recoveries were measured from the cores and compared to the length of core runs to calculate the recovery. Core recoveries are poor overall, and this creates some uncertainty with respect to the thickness of lithologies in the holes.</li> <li>Brine samples were nominally collected at discrete depths every 3 or 6 meters (over a 1m interval, dictated by the length of the packer and height of the drill rig mast) during the drilling using a double packer (to isolate intervals of the sediments and obtain samples from airlifting brine from the sediments).</li> <li>The brine samples are taken by purging a volume of water corresponding to at least one well volume from the drill hole, with greater brine volumes purged in the more permeable salt and sand sediment units.</li> <li>As the lithium brine (mineralisation) samples are taken from inflows of the brine to the hole (and not from the drill core – which has variable recovery) they are largely independent of the quality (recovery) of the core samples. However, the permeability of the lithologies where samples are taken is related to the flow rate of the sediments and potentially lithium grade of brine inflows.</li> </ul>
<b>Logging</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>Diamond holes are logged by a geologist who also supervised taking of brine samples. Samples for laboratory porosity analysis were taken by a consultant geologist.</li> <li>Logging is both qualitative and quantitative in nature. The relative proportions of different lithologies which have a direct bearing on the overall porosity, contained and potentially extractable brine are noted, as are more qualitative characteristics such as the sedimentary facies and their relationships. Cores are</li> </ul>



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Criteria	JORC Code Explanation	Commentary
		<p>photographed when laid out for geological logging.</p> <ul style="list-style-type: none"> <li>Core recoveries are measured for the entire core recovered.</li> <li>Samples from mud-rotary drilling are logged by a geologist on site for the proportion of sand, clay and halite in each 1m sample.</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul style="list-style-type: none"> <li>Core samples are semi-systematically sub-sampled for laboratory analysis, cutting or selecting the lower 15cm of core in core runs. This sampling was semi-systematic (rather than systematic) as due to disaggregation of core during drilling and core handling, it was not possible to take samples every 3m as previously planned.</li> <li>Sub-samples have been sent to an experienced porosity laboratory in the USA for testing.</li> <li>The intention of systematic sampling is, to minimize any sampling bias. This is an appropriate sampling technique to obtain representative samples, although core recovery is noted to be variable, influencing the samples that could be taken from core runs.</li> <li>Duplicate samples of sediments are to be prepared in the laboratory for analysis of porosity characteristics. Characteristics of porosity sub-samples are compared statistically with the sample descriptions for each sub-sample.</li> <li>Brine samples were collected during drilling of the diamond holes and at multiple points in time during pumping tests.</li> <li>The brine samples were collected in new unused 500ml sample bottles which were filled with brine from the packer discharge tube or pump discharge. Each bottle was marked with the drill-hole number and details of the sample. Prior to sending samples to the laboratory they were assigned unique sequential numbers.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul style="list-style-type: none"> <li>The Norlab/Alex Stuart laboratory in Jujuy, Argentina is used as the primary laboratory to conduct the assaying of the brine samples collected as part of the drilling program. The laboratory is a commercially accredited laboratory specialized in the chemical analysis of brines and inorganic salts.</li> <li>QA/QC check samples were sent to both the Norlab/Alex Stuart laboratory separately, and to the Puna Mining in-house laboratory.</li> <li>The quality control and analytical procedures used at the Norlab laboratory are of high quality and the laboratory is affiliated with the Alex Stuart international group of laboratories.</li> <li>Duplicates, blank and field standard samples were included.</li> <li>Relative errors between samples have a mean and median error of less than 5% and 1% respectively.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul style="list-style-type: none"> <li>Accuracy, the closeness of measurements to the “true” or accepted value, was monitored by the insertion of field standards.</li> <li>Duplicate samples and blanks were included in the laboratory batch.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul style="list-style-type: none"> <li>The hole locations provided are the field locations measured with a hand-held GPS device. Horizontal accuracy is +/- 5m which is adequate for flat bedded expansive geology.</li> <li>The location is in zone 3 of the Argentine Gauss Kruger coordinate system, using the Argentine POSGAR datum.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul style="list-style-type: none"> <li>Lithological data was collected throughout the drilling, subject to core recovery, to build the geological model.</li> <li>The mean spacing between drill holes is ~950m.</li> <li>Brine samples were collected from discrete horizons during diamond drilling.</li> <li>Brine samples from pumped bores represent a composite sample from the screened aquifers. Where only aquifer is screened, then a sample collected during the first minute of pumping is considered to represent the grade throughout that specific aquifer. Where multiple aquifers are screened, then the sample has not been used in development of the static Resource model as the components of grade within each aquifer cannot be determined.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>The salar deposits that host lithium-bearing brines consist of sub-horizontal beds and lenses of halite, clay and sand. The vertical holes are essentially perpendicular to these units, intersecting their true thickness.</li> <li>Brine saturates the geological sequence below the water table (~ 1mbgl).</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<ul style="list-style-type: none"> <li>Samples were transported to the laboratory for chemical analysis in sealed rigid plastic bottles with sample numbers clearly identified.</li> <li>The samples were moved from the drill site to secure storage at the camp on a daily basis. All brine sample bottles are marked with a unique label.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul style="list-style-type: none"> <li>No audits or reviews have been conducted at this point in time.</li> </ul>

### Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>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.</li> <li>The security of the tenure held at the time of</li> </ul>	<ul style="list-style-type: none"> <li>The Rincon properties are in the south of the Rincon Salar, adjacent to properties owned by the Enirgi Group Corp. The properties are mining licenses that are owned directly by Puna Mining S.A. or under purchase agreements by Argosy Minerals Ltd and Puna Mining. S.A. (with whom Argosy has a JV over these properties). The</li> </ul>

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Criteria	JORC Code Explanation	Commentary
	<p><i>reporting along with any known impediments to obtaining a license to operate in the area.</i></p>	<p>properties are in the province of Salta in northern Argentina at an elevation of approximately 3740masl.</p> <ul style="list-style-type: none"> <li>The Project comprises up to 2,794ha of mineral properties in Salta province in Argentina, within, around and outside the southern edge of the Rincon Salar. Exploration activities have begun in the eastern properties.</li> <li>The properties are believed to be in good standing, with payments made to relevant government departments.</li> </ul>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li><i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>Exploration has been carried out in adjacent properties by the Canadian company Enirgi Group Corp. who have conducted a feasibility study and defined an extensive Resource and Reserve on their adjacent properties (see announcement July 7, 2016).</li> <li>The properties owned by the JV have been previously explored or exploited for borates.</li> </ul>
<b>Geology</b>	<ul style="list-style-type: none"> <li><i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>The sediments within the salar consist of halite, clay and sand which have accumulated in the salar from terrestrial sedimentation and evaporation of brines within the salar. These units are interpreted to be essentially flat lying, with semi-confined aquifer conditions close to surface and confined conditions at depth.</li> <li>Brines within the salar are formed by solar concentration, with mineralized brines saturating the entire sedimentary sequence from approximately 1mbgl.</li> <li>The sedimentary units have varying aquifer transmissivities: and only fractured halite and sandy-aquifers may support direct abstraction while clay-dominant and massive halite units may drain slowly under depressurisation.</li> </ul>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li><i>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:</i> <ul style="list-style-type: none"> <li><i>easting and northing of the drill hole collar</i></li> <li><i>elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</i></li> <li><i>dip and azimuth of the hole</i></li> <li><i>down hole length and interception depth</i></li> <li><i>hole length.</i></li> </ul> </li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Lithological data was collected from the holes as they were drilled, and cores were retrieved. Detailed geological logging of cores has been completed and cores selected for laboratory porosity analysis.</li> <li>Brine samples were collected from the packer and bailer sampling and sent for analysis to the Norlab laboratory, together with quality control/quality assurance samples.</li> <li>All drill holes are vertical, (dip 90, azimuth 0 degrees). Depths ranged between 21m (fractured halite aquifer) and 147m (black sand aquifer). Installation of monitoring wells and test production wells in the drill holes has been completed.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>Brine samples taken from the holes was averaged (arithmetic average) without weighting across the number of samples in each hole in the lithium brine zone.</li> <li>Lithium concentrations have been multiplied by 5.347 to calculate LCE.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</li> </ul>	<ul style="list-style-type: none"> <li>The lithium-bearing brines are interpreted to begin from surface in the holes, although samples are not available near surface in many of the holes. However, brine is encountered in pits within 1m of surface. The sediments hosting brine are interpreted to be essentially flat lying.</li> <li>The lengths reported for mineralisation is from the first sample in the depth interval of 0-6m to the final sample in the depth interval to 147m. Note that packer samples were noted as occurring over 3 m intervals in the field, however the actual sampling interval of the packer is only over the central metre of this interval.</li> <li>Brine samples are representative of the width over which the sample was collected: a 3m interval from diamond drilled holes and the screened interval from production bores. However the entire sedimentary sequence is saturated and mineralized brine exists in a continuum between sampled intervals.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>A diagram and table are provided in Argosy's announcement, "Argosy Upgrades Lithium Rincon Lithium Project JORC resource" (13 November 2018) showing the location of the properties and drill holes. A summary geological cross-section is provided showing the encountered hydrostratigraphy and brine sampling intervals and grades.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>This announcement presents representative data from drilling and sampling, such as lithological descriptions, brine concentrations and information on the thickness of mineralisation.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Nine pumping tests have been completed on test production bores targeting both the shallow and deep aquifer sequence. These tests allow determination of aquifer properties and provide brine samples under dynamic conditions.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>Long-term pumping tests are planned to provide more data on the dynamic behaviour of the aquifer.</li> <li>Additional estimates of specific yield and transmissivity are planned from long term pumping tests and from in-situ BMR logging.</li> <li>Additional investigations are planned to confirm</li> </ul>

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Criteria	JORC Code Explanation	Commentary
		interaction between the mineral resource and proximal colluvial sediments under dynamic conditions.

### Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes. Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>Dropdown menus were used for digital data capture using standardised codes in the project database.</li> <li>Data is captured non-electronically by field personnel. This information is then consolidated into a spreadsheet by field personnel. This information is then subject to external review by consulting geologists and the CP and consolidated into the project database.</li> <li>Drill hole data points are plotted in MAPINFO to check location.</li> <li>Database extracts for resource modelling work and GIS compilation work checked for accuracy.</li> </ul>
<b>Site Visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>A site visit by the CP is planned but has not been completed at this stage.</li> <li>On site QA/QC has been undertaken during site visits by other experienced independent geologists consulting to Argosy and in close liaison with the CP.</li> <li>Outcomes from site visits have been improved sample collection and QA/QC review of the lithological logging.</li> </ul>
<b>Geological Interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<ul style="list-style-type: none"> <li>Confidence in the geological interpretation is strong as the brine resource is contained within extensive, relatively flat lying, Quaternary age sediments infilling an intermontane basin. Drill hole spacing averages ~1km.</li> <li>No alternative geological interpretations have been generated.</li> <li>Geological interpretation based on the logging of the various regolith units identified in the core and published data from geologically contiguous adjacent properties, to control Mineral Resource estimation.</li> <li>The interbedded nature of the deposit may result in hydrogeological compartmentalisation affecting brine recoverability between zones of high permeability and low permeability.</li> <li>The interdigitation of marginal sediments with different water quality may affect continuity of brine grade and mixing under pumping conditions.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</li> </ul>	<ul style="list-style-type: none"> <li>The Indicated Resource has been calculated for a portion of the Salar Del Rincon within tenements owned by Argosy Resources Ltd; the Resource covers an area of 1650ha.</li> <li>Brine occurs 0 and 1m below the surface of the salar and so the upper surface of the Indicated Resource is assigned as 0.5mbgl over the tenement area.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>• Drilling has occurred to 100 – 107m depth in 11 drill holes and so the Indicated Resource is modelled to 102.5m depth. In some areas, a competent halite is encountered within this depth range which effectively marks a lower limit to the Indicated Resource. However, 1 drill hole has reached 147m and was still in aquifer material so, over much of the area, the Resource remains open at this depth.</li> <li>• The Indicated Resource has been modelled for the entire aquifer sequence over this depth range; variations in specific yield (between 1% and 13%) are used to account for variations in recoverable brine.</li> <li>• The western and northern resource/hydrogeological boundary is contiguous with the broader salar and is formed by the property limit. The eastern/southern resource/hydrogeological boundary is formed by interdigitating alluvial sediments with different brine quality; these add uncertainty to long-term production grades from some areas of the Resource. The eastern and southern boundary for the Indicated Resource is defined by the edge of the salar.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
<b>Estimation and Modelling Techniques</b>	<ul style="list-style-type: none"> <li>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</li> <li>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</li> <li>The assumptions made regarding recovery of by-products.</li> <li>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation).</li> <li>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</li> <li>Any assumptions behind modelling of selective mining units.</li> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> </ul> <p>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</p>	<ul style="list-style-type: none"> <li>Modelling has been undertaken with ARANZ Leapfrog Geo modelling software. The model provides an estimate of the potentially drainable brine within the Rincon Lithium Brine Project (RLBP). The model is a static model and takes no account of pumping / brine recovery (other than by the application of specific yield rather than porosity).</li> <li>The model comprises 4 geological units – S1 to S4; with unit S3 having 3 further subdivisions. All lithologies encountered during drilling were assigned to one of these 4 hydrogeological groups. The modelled sequence comprises a mix of interbedded clay, sand and halite.</li> <li>Geological surfaces were modelled with priority given to drill-hole data.</li> <li>Surfaces were modelled with a spatial resolution of 75m. Interpolations were undertaken with Leapfrog’s Linear Interpolation Function.</li> <li>The distribution of lithium grade through the aquifer was determined from the model by interpolating between each sample from each drill hole; samples collected after more than 1 minute of pumping or samples collected from pumping wells screened across multiple aquifers, were discounted.</li> <li>The interpolation was done using Leapfrog’s linear interpolation function with a 75m resolution and grade increments of 25mg/L between 250mg/L (minimum) and 450mg/L (maximum). The interpolation was done for each hydrostratigraphic unit (S1 to S4). However, as groundwater exists in a continuum, the model drew on all data (including from other hydrostratigraphic units) in guiding the interpolation.</li> <li>The modelled volumes were multiplied by Specific Yield for each hydrostratigraphic unit to determine the potentially recoverable brine (Indicated Resource volume).</li> <li>The effective Specific Yield was determined from the laboratory core analysis and was based on the relative proportions of clay and sand and halite in each hydrostratigraphic unit.</li> <li>The combined unit volume and lithium grade distribution was used to determine and the Indicated Resource and a weighted mean average grade for each hydrostratigraphic unit.</li> <li>The Resource output was validated by comparing total sediment volumes with those estimated from analytical calculations and scaling the Resource estimates produce by Enirgi for differential surface-area and depth.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<ul style="list-style-type: none"> <li>Not Applicable to estimated tonnages for brine resources.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<ul style="list-style-type: none"> <li>No cut-off grades applied as it is not yet clear what the processing costs will be for brine</li> </ul>

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Criteria	JORC Code Explanation	Commentary
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<p>extraction nor the produced grade under dynamic (pumping) conditions.</p> <ul style="list-style-type: none"> <li>Potential brine abstraction process is envisaged to involve pumping brine via a series of bores and/or trenches targeting the S1 - fracture halite and interbedded sands in the S3A and S3C units.</li> <li>Pumping tests indicate the S1 fractured halite has a high hydraulic conductivity and will support direct brine abstraction.</li> <li>Pumping tests indicate the S3A and S3C units have a lower hydraulic conductivity but will support direct brine abstraction.</li> <li>It is envisaged the pumping from the S3A and S3C interbedded sands will reduce hydrostatic pressure and induce leakage from the interbedded clay and halite within units S2, S3A, S3B and S3C.</li> <li>For a PEA, mining factors have been simulated with a 3D numerical brine flow model that has been used to simulate brine abstraction from up to 29 pumping bores for the life of mine. The model is developed in the MODHDMS version of Modflow. The model is based on the geological model developed in Leapfrog and is extended over a wider area to avoid boundary effects. Adopted aquifer parameters are consistent with field data and the model has been verified against pumping -test responses and steady-state conditions. Pumping requirements were calculated assuming a constant Li concentration of 325 mg/L based on the weighted mean average of the Indicated Resource and 70% efficiency in delivering brine to evaporation ponds. Pumping the resulting brine volumes from a series of bores was simulated with the model. The PEA model does not include density-dependent flow or simulate grade-change over time (which may occur due to mixing or recharge).</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<ul style="list-style-type: none"> <li>Brine processing at the RLBP pilot plant has demonstrated Lithium enrichment to 99.6% with the production of Li<sub>2</sub>CO<sub>3</sub>.</li> </ul>
<b>Environmental factors or assumptions</b>	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be</li> </ul>	<ul style="list-style-type: none"> <li>Freshwater aquifers may exist on the eastern margin of the salar in interdigitating alluvial sediments. This resource may be affected by brine development, it may also form a process water supply.</li> <li>The brine evaporation process will result in waste salts.</li> <li>Environmental approval has not yet been granted.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
<b>Bulk density</b>	<p><i>reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></p> <ul style="list-style-type: none"> <li>• Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>• The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</li> <li>• Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<ul style="list-style-type: none"> <li>• Bulk density determination is not relevant for brine resource calculations as the porosity, or more applicably, the drainable porosity or specific yield, of the aquifer material is relevant for brine resource calculations. The volume of the sediments containing the brine and the specific yield combine for brine resource calculation.</li> <li>• The specific yield was estimated from laboratory analysis on 93 core samples covering all hydrostratigraphic units.</li> </ul>
<b>Classification</b>	<ul style="list-style-type: none"> <li>• The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>• Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>• Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li>• Exploration data with an average drill hole spacing of 950m, brine analysis and core analysis from all hydrostratigraphic units, pumping test results confirming brine extractability and composite lithium grade under dynamic conditions, provide confidence determining an Indicated Resource for the RLBP (to a depth of 102.5m).</li> <li>• Appropriate account for brine resource reporting has been taken of all relevant factors.</li> <li>• The Classification result appropriately reflects the Competent Person's view of the deposit.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>• The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>• The modelling and the Indicated Resource estimates have been subject to internal peer review by Argosy and AQ2.</li> </ul>
<b>Discussion of relative accuracy/confidence</b>	<ul style="list-style-type: none"> <li>• Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>• The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>• These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>• The Indicated Resource is based on weighted mean average specific yield for the major hydrogeological units and the interpolated distribution of those units and of lithium brine within those units.</li> <li>• The average specific yields are derived from 93 core samples and the results are broadly consistent with those published by Enirgi for the adjacent tenements. The relative proportions of clay and sand in each unit is important in determining effective specific yield and this has been affected by variable core recovery. This uncertainty affects the entire Resource.</li> <li>• It is not possible to quantify the accuracy or extent of the above uncertainties.</li> <li>• The Indicated Resource takes no account of modifying factors such as the design of any bore field (or other pumping scheme), which will affect both the proportion of the Indicated Resource that is ultimately recovered and changes in grade associated with mixing between each aquifer unit, which will occur once pumping starts. Such uncertainties are inherent in groundwater modelling where factors vary in both space and time. Given these uncertainties inherent in the ultimate concentration of produced brine, the level of confidence in the modelling to date is considered satisfactory.</li> </ul>



**ARGOSY MINERALS**  
LIMITED

## ASX ANNOUNCEMENT

ENDS

For more information on Argosy Minerals Limited and to subscribe for regular updates, please visit our website at [www.argosyminerals.com.au](http://www.argosyminerals.com.au) or contact us via [admin@argosyminerals.com.au](mailto:admin@argosyminerals.com.au) or Twitter @ArgosyMinerals.

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**Forward Looking Statements:** Statements regarding plans with respect to the Company's mineral properties are forward looking statements. There can be no assurance that the Company's plans for development of its mineral properties will proceed as expected. There can be no assurance that the Company will be able to confirm the presence of mineral deposits, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of the Company's mineral properties.

### ABOUT ARGOSY MINERALS LIMITED

Argosy Minerals Limited (ASX: AGY) is an Australian company with a current 77.5% interest in the Rincon Lithium Project in Salta Province, Argentina.

The Company is focused on its flagship Rincon Lithium Project – potentially a game-changing proposition given its location within the world renowned “Lithium Triangle” – host to the world's largest lithium resources, and its fast-track development strategy toward production of LCE product.

Argosy is committed to building a sustainable lithium production company, highly leveraged to the forecast growth in the lithium-ion battery sector.

### Appendix 1: AGY's Argentina Project Location Map

