

15 January 2024

# JORC RESOURCE UPGRADE FOR RINCON LITHIUM PROJECT – SUBSTANTIAL 180% INCREASE

# HIGHLIGHTS

- Upgraded Total Mineral Resource Estimate (MRE) of 686,875 tonnes of Li<sub>2</sub>CO<sub>3</sub> with a weighted mean average lithium concentration of 329mg/L – a 2.8 times increase from previous resource estimate, comprising;
  - An Indicated MRE of 606,313 tonnes Li<sub>2</sub>CO<sub>3</sub> with a weighted mean average lithium concentration of 326mg/L, and
  - An Inferred MRE of 80,562 tonnes Li<sub>2</sub>CO<sub>3</sub> with a weighted mean average lithium concentration of 351mg/L
- Total MRE forms basis for increased sustainable commercial production targets and long-term life of mine modelling
  - Dynamic modelling works being conducted to develop an updated/increased production forecast and optimise brine borefield design
- The substantial increase in the Total MRE provides further support for increased future commercial scale development of the Rincon Lithium Project
- Resource and brine aquifer remain open at depth with excellent scope for resource expansion from additional deeper drilling and tenement acquisitions

Argosy Minerals Limited (ASX: **AGY**) ("**Argosy**" or "**Company**") is pleased to announce a significant upgrade to the JORC Code (2012) compliant Total Mineral Resource Estimate at our Rincon Lithium Project, located in Salta Province, Argentina.

The upgraded Total Mineral Resource Estimate comprises 686,875 tonnes of lithium carbonate with a weighted mean average lithium concentration of 329mg/L, including an Indicated MRE of 606,313 tonnes of  $Li_2CO_3$  with a weighted mean average lithium concentration of 326mg/L. and an Inferred MRE of 80,562 tonnes of  $Li_2CO_3$  with a weighted mean average lithium concentration of 351mg/L.

This Indicated MRE occurs to a depth of 102.5m within the northern project area, to a depth of 350m within the central and southern part of the project area, and to a depth of 210m within the southernmost tenement. The Inferred MRE occurs from a depth of 350m to 400m within the central and southern part of the project area.

Argosy Managing Director, Jerko Zuvela said "We are very pleased to finally deliver our upgraded Total Mineral Resource Estimate, comprising 686,875 tonnes of lithium carbonate – a substantial 180% increase from our previous resource estimate.





With 88% of the Total MRE in the Indicated category, the updated resource will support our future increased production targets and long-term mine life estimates, following completion of current dynamic modelling works.

The significant MRE upgrade further validates Argosy's ambitions and near-term growth phase to fully develop the Rincon Lithium Project."

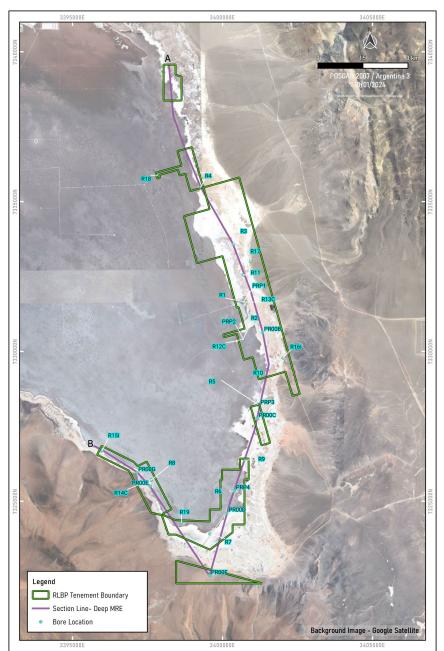


Figure 1. Rincon Lithium Project – Lateral Extent of MRE

The increased Resource Estimate and other ancillary studies completed during the last exploration programme (including deep aquifer pumping tests) will now underpin dynamic modelling. These works are currently being undertaken to develop an upgraded/increased production forecast and optimise brine borefield design. The dynamic modelling will allow quantification of:

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- Density dependant flow and solute transport to simulate life-of-project variability in Li concentration in produced brine.
- Transmissivity and hydraulic conductivity data obtained from BMR logging and pumping tests are being used to simulate spatial hydrogeological variability and allow brine bore borefield design and optimisation.
- > The model is being calibrated against the monitoring data obtained from brine abstraction for the operation of Argosy's pilot brine production plant.

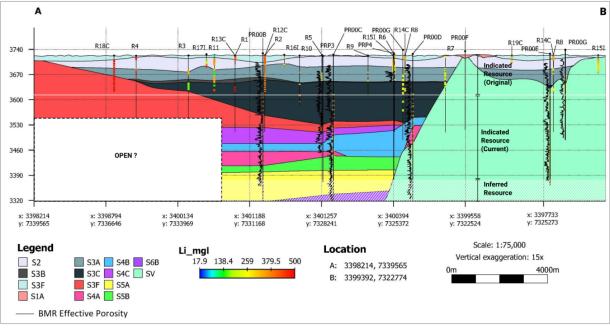


Figure 2. Rincon Lithium Project – Vertical Extent of MRE

# Summary of Mineral Resource Estimate and Reporting Criteria (for further information please refer to Appendix A)

The Company has drilled 29 brine investigation drill holes to depths of up to 415m within the project area. The bores have been drilled into the brine-saturated aquifer underlying the salar. A total of 4,459m of drilling has been completed and drill holes comprise mineral exploration, monitoring and production bores. Average drill hole spacing ranges between 950m and 1,800m for the Indicated Resource and around 3,000m for the Inferred Resource.

The geological modelling package Leapfrog has been used to develop a hydrostratigraphic model and interpolate the associated distribution of lithium concentrations in the brine hosted within the aquifers. The resulting geological volume and lithium grades have been factored by the estimated drainable porosity for each hydrostatic unit to estimate contained lithium brine resources:

An Indicated MRE of 606,313 tonnes of Li<sub>2</sub>CO<sub>3</sub> has been estimated at a weighted mean average lithium concentration of 326mg/L. This occurs to a depth of 102.5m over the northern project area, to a depth of 350m over the central and southern part of the project area, and to a depth 210m in the southernmost tenement.







An Inferred MRE of 80,562 tonnes of Li<sub>2</sub>CO<sub>3</sub> has been estimated at a weighted mean average lithium concentration of 351mg/L. This occurs from 350m to 400m in the central and southern part of the project area.

		A	quifer Characteris	tics			ŀ	Numeric Interpolant			
Unit	Description	Aquifer Volume	Porosity	In-Situ Brine Volume	Drainable Porosity (%)	Drainable Brine Volume (Mm³)	u	Li <sub>z</sub> CO3	Li <sub>2</sub> CO3		
		(Mm³)	(%)	(Mm³)		(MILL)	(mg/L)	(mg/L)	т		
Indicated F	Resource										
S1A	Alluvium	33	21%	7	10%	3	232	1238	4133		
S1F	Fractured Halite	154	21%	32	10%	16	337	1799	28728		
S2	Clay	381	48%	183	3%	11	322	1720	19680		
S3A	Mixed Clastics	515	42%	217	12%	60	318	1701	101675		
S3B	Clay	75	41%	31	1%	0.75	340	1819	1372		
S3C	Black Sand	795	38%	305	13%	105	324	1730	182207		
S3F	Competent Halite	792	13%	106	3%	24	374	2000	47539		
S4A	Mixed Clastics	155	24%	37	12%	19	387	2071	38581		
S4B	Clay Dominant	213	23%	49	5%	11	348	1862	20633		
S4C	Sand Dominant	188	20%	37	12%	23	378	2019	45630		
S5B	Clay Dominant	126	23%	30	3%	3.2	371	1986	6269		
S5A	Mixed Clastics	129	21%	27	10%	15.4	392	2094	32311		
SV	Volcanics	1132	17%	153	5%	56.6	256	1370	77555		
nferred R	esource										
S5A	Mixed Clastics	250	21%	52	10%	30	392	2094	62778		
S6B	Clay Dominant	26	20%	5.2	3%	0.7	283	1515	1016		
SV	Volcanics	245	17%	41	5%	12	256	1370	16767		
	Total	5177		1306		387	332		686875		
				Total Indicated Reso	ource				606313		
				Total Inferred Reso	urce				80562		
			Toa	Mineral Resource	Estimate				686875		

Figure 3. Rincon Lithium Project – Total Mineral Resource Estimate

Two deep test production bores were drilled to confirm the feasibility of abstracting brine from the deep clastic sediments. Both production bores were drilled to a depth of 350m and completed at 220m and 270m depth respectively. Pumping tests were carried out on the test production bores to confirm the feasibility of brine abstraction from the deep sand/clastic aquifer with average hydraulic conductivity determined to be in the range 0.5m/d to 1m/d. The pumping tests imply the deep aquifers are semi-confined and leaky; leakage is posited to be supported by drainage from the finer grained clay-rich facies as the sand facies depressurise during pumping. The pumping tests and previous dynamic modelling suggest this deep aquifer will remain saturated (and therefore under semi-confined conditions) during operations.

# Appendix A:

The following information and tables are provided to ensure compliance with the JORC Code (2012) requirements for the reporting of Exploration Results and Mineral Resources for the Rincon Lithium Project. Please also refer to JORC Table 1 below.

## Exploration Results - Stage 3

## Deep Aquifer Drilling

Argosy's Stage 3 Deep Aquifer drilling and bore construction programme was conducted between July 2022 and August 2023. A total of six exploration bores and two deep production bores were installed within the project area. Exploration bores were subsequently converted

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to brine monitoring bores once sampling and lithium testing was complete. A total of 2,797.5m was drilled. Drilling was conducted using two techniques: diamond drilling (DDH) combined with mud-rotary drilling (MR) for exploration/monitoring bore installations and MR for production bore installations.

			Northing	Ground	<b>D</b> .	Azimuth	Drilling	Drill Depth	Cased	Casing ND	Assay	No. of	No. of Pumped	No. of	Logged BN (n	
Hole ID	Hole Type	Easting	Northing	Elevation (mASL)	Dip	Azimuth	Method	(mbgl)	Depth (mbgl)	(mm)	Interval (mbgl)	Brine Assays	Brine Assays	Core Samples	From	То
PROOB	Exploration / Monitoring	3401333	7330638	3729	-90	0	DDH	412.5	375	50	112-386	13	-	9	24.82	368.70
PROOC	Exploration / Monitoring	3401158	7327760	3725	-90	0	DDH	423	423	50	112-380	15	-	6	28.88	413.68
PROOD	Exploration / Monitoring	2704972	7323476	3727	-90	0	DDH	427	360	50	110-305.5	16	-	6	28.88	404.04
PRODE	Exploration / Monitoring	2702431	7324427	3727	-90	0	DDH	365.5	330	50	109-365.5	18	-	6	26.00	353.60
PROOF	Exploration / Monitoring	2701988	7324889	3729	-90	0	DDH	219	217.5	50	33-219	15	-	5	29.20	209.80
PROOG	Exploration / Monitoring	2704341	7321403	3738	-90	0	DDH	250.5	246	50	57-171	7	-	4	25.98	244.76
PRP3	Pumping Bore	3401214	7328194	3721	-90	0	MR	350	270	250	-	1	1	-	41.20	268.56
PRP4	Pumping Bore	3400393	7325354	3729	-90	0	MR	350	220	250	-	1	1	-	49.72	79.82

Figure 4. Rincon Lithium Project – Deep Aquifer Exploration Results / Drill Hole Information

The drill hole data summarised above was used in conjunction with data from the 22 drill holes from Stage1 and Stage 2 exploration as previously described in the ASX announcement "Argosy Upgrades Rincon Lithium Project JORC Resource", 13<sup>th</sup> November 2018.

# Geophysical Logging

Each of the drill holes was subject to a comprehensive logging suite. Logging was undertaken by Zelandez. The logging suite included fluid logs - temperature/conductivity, and formation logs - resistivity, spectral gamma, borehole magnetic resonance (for the latter, from which a range of hydrogeological properties can be determined).

Each of the drill holes was subject to a comprehensive logging suite. Logging was undertaken by Zelandez. The logging suite included fluid logs (temperature/conductivity), and formation logs (resistivity, spectral gamma, borehole magnetic resonance (BMR)), where a range of hydrogeological properties can be determined from BMR logging.

# Pumping Tests

In addition to the aquifer testing, a pumping test program was undertaken between September and October 2022, which involved a step-rate test (SRT) and constant-rate test (CRT) on productions bores PRP3 and PRP4. At each bore, pumping tests comprised a SRT (3 steps of 120-minute duration), a 3- to 7-day CRT, and recovery measurements following the cessation of pumping. During both tests, measurements were taken from the pumping bore and an observation bore. Pumping rates were measured using an in-line flow meter and water levels were measured with pressure transducers and manual dips. Drawdown and recovery data collected during the pumping tests were analysed using standard curve-fitting methods.

Pumping tests are not directly relevant to the estimation of brine mineral resources. However, it is imperative the brine resources are hosted in aquifers that can support pumping to comply







with the requirement to determine the likelihood of future economic extraction. Pumping tests also provide information on hydraulic boundaries that may limit the brine resource. The pumping tests to date do not show hydraulic boundaries that may affect the brine aquifer. The pumping tests also confirm leakage during pumping, likely to show the lower permeability units draining as the aquifer is depressurised.

### Brine Assays

Brine chemistry analysis was undertaken by Alex Stuart laboratories in Jujuy, Argentina. The assays provide coverage across the entire project area from multiple depths throughout the geological sequence.

Average values of major analytes are simply arithmetic means of all samples from each drill hole and are not weighted to reflect the relative proportion of one sample compared to another. This means they do not necessarily reflect the average brine-concentration that may be produced from each formation under dynamic conditions (i.e., under pumping). Weighted mean values are determined in the resource modelling and produced grade will be forecast during future production target modelling with the dynamic flow model.

The samples indicate that average lithium concentrations range between 236mg/L and 374mg/L across all deep aquifer drill holes.

Drill Hole	Li mg/l	Ca mg/l	Mg mg/l	B mg/l	Na mg/l l	K mg/l	Ba mg/l	Sr mg/l	Fe mg/l	Mn mg/l	Cl mg/l	S04 mg/l	CO3 mg/l	HCO3 mg/l	рН	Mg/Li	B/Li	Ca/Li	S04/Li
PR00B	378	384	2199	535	117142	6569	<0.20	<10.0	<6.0	0	182294	20925	N.C	425	6.8	5.8	1.4	1.0	55.5
PROOC	315	369	1876	488	120010	5962	<0.20	<10.0	17	4	177400	25564	N.C	362	6.8	5.9	1.5	1.2	81.0
PROOD	278	382	2026	343	117957	5261	<0.20	<10.0	9	1	183137	21826	N.C	199	6.6	7.3	1.2	1.4	78.5
PRODE	251	339	2013	313	117524	4857	<0.20	<10.0	<6.0	1	182699	20205	N.C	261	7.0	8.0	1.2	1.3	80.5
PROOF	235	307	1917	292	113907	4717	<0.20	<10.0	<6.0	1	173897	18320	N.C	212	6.7	8.0	1.2	1.3	78.2
PR00G	235	361	1676	288	98575	4529	<0.20	<10.0	<6.0	2	149808	15419	N.C	196	6.9	7.2	1.2	1.6	67.3

Figure 5. Rincon Lithium Project – Stage 3 Drilling Assay Summary

	Total	Hydrostratigraphic Summary								Drill Hole Summary		
Hole NO.	NO. Samples	S3C	S3F	S4C	S4A	S4B	S5A	S5B	S6B	sv	Average Concentration for Drill Hole	Pumped Li Concentration
PR00B	13	400	398	342	332	-	397	-	-	-	374	-
PROOC	15	329	321	324	286	307	239	291	-	-	299	-
PR00D	16	302	-	-	255	279	-	-	-	267	276	-
PR00E	18	-	-	-	-	-	-	-	-	251	251	-
PR00F	15	-	-	-	-	-	-	-	-	236	236	-
PR00G	7	-	-	-	-	-	-	-	-	236	236	-
PRP3												297
PRP4			No samples collected during drilling 617*							617*		
Ave	orage	343	359	333	291	293	318	291	-	248	279	-

Figure 6. Rincon Lithium Project - Stage 3 Drilling Lithium Concentrations

## Assay QA/QC

QA/QC procedures have been incorporated into the assay protocol. These involved the use of standard solutions, blank solutions and duplicate samples.



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## Conceptual Hydrogeological Model

The conceptual hydrogeological model is summarised as an aquifer hosted in sediments that infill the Salar del Rincon and comprises an interbedded mix of sand, clay and evaporite. The sediments are flanked by a sub-cropping, steeply dipping volcanic unit on the southern end of the salar. There is an extensive fractured halite aquifer over the salar surface to depths of between 1.5m and 36.6m. This aquifer is highly permeable and has an estimated hydraulic conductivity of 125m/d and an average transmissivity of 1,200m<sup>2</sup>/d. The specific yield of the fractured halite aquifer is estimated to be 10%.

There is a lower-productivity aquifer comprising sand interbedded with clay underlying the fractured halite to depths of up to 400m in parts of the project area. The hydraulic conductivity of this aquifer is estimated to range between 0.5m/d and 1m/d. The cumulative transmissivity across all productive units is around 300m<sup>2</sup>/d. The drainable porosity is estimated to be between 10% and 12% for the main aquifer units and 2% and 5% for the interbedded units with lower hydraulic conductivity.

The brine aquifer is bounded by colluvial and alluvial deposits in the east and south and continuous with the broader salar to the west and north. Groundwater levels are essentially at the salar surface and brine aquifer water levels are sustained by a combination of groundwater inflow from the surrounding geology and recharge from surface water runoff. Brine mineralisation and groundwater discharge occurs through evaporation over the surface of the salar. The brine is hyper-saline with TDS in the order of 310,000 to 350,000 mg/L. The brine is enriched with respect to lithium, with concentrations in the range 226mg/L to 487mg/L.

Based on pumping tests and estimated aquifer parameters, the aquifer sequence has the potential to support brine-abstraction from a series of bores. Total abstraction will be mediated by a combination of direct abstraction from zones of high hydraulic conductivity and slower drainage from zones of low hydraulic conductivity. The upper 70m of the aquifer may be dewatered over the life of the project. Operational water levels are unlikely to fall below this, and the deep aquifers will remain saturated and semi-confined (i.e. under piezometric conditions) with abstraction sustained by flushing of mobile brine contained in the interconnected (drainable) porosity.

## Basis for Mineral Resource Estimate

# Hydrogeological Model

The MRE is based on the conceptual hydrogeological model described above. There are seven hydrogeological units (with associated sub-units):

Hydrostratigraphic Unit 1 contains sub-units S1A (mixed clastics), being a surficial alluvial/colluvial unit; and S1F (Halite) - being a fractured halite with dissolution-voids.

Hydrostratigraphic Unit 2 comprises S2 (Clay), being a green-grey clay with some minor finegrained sand throughout and competent halite (interbedded) at the base of the unit.

Hydrostratigraphic Unit 3 comprises S3A (Sand and Clay), being an interbedded sequence of fine-grained black sand and clay; S3B (Clay), being a red-brown clay; S3C (Black Sand),







being a fine grained, black volcanic sand, with some interbedded red clay and competent halite; and S3F (Competent Halite), being a massive competent halite.

Hydrostratigraphic Unit 4 contains S4A (Sand and Clay), being an Interbedded sequence of sand, clay and evaporitic material; S4B (Clay), being a red-brown clay; and S4C (Sand), being a sand with clay, silt and halite.

Hydrostratigraphic Unit 5 contains S5B (Clay), being a red-brown clay comprised predominantly of laminated clay-rich material, with minor interbeds of sand and evaporitic material; and S5A (Sand Clay), being an interbedded sequence of red laminated/plastic clays and black sand, with inclusions of carbonate material.

Hydrostratigraphic Unit 6 comprises S6B (Clay), being a red plastic clay.

Hydrostratigraphic Unit 7 contains SV (Volcanics), being a volcanic unit of massive andesite with varying degrees of fracturing and conglomerates/breccias with blocks of andesite/dacite.

In developing the hydrostratigraphic framework, Rincon drill holes were used for geological control. Qualitative QA/QC has been undertaken by comparing logged lithology with downhole geophysical logging results. Drill holes were surveyed with hand-held GPS.

A 3D geological model of the host aquifers was prepared to estimate the volumes of each hydrogeological unit within the project area. Modelling was undertaken with ARANZ Leapfrog Geo software that uses the "Fast Radial Basis Function" interpolation method. The modelling was based on all the hydrostratigraphic units. In the model, interpolation between drill holes has a 75m resolution to ensure appropriate modelling of observed variations in relatively thin units.

## Contained Brine Resources

Estimates of aquifer properties are derived from pumping tests, RBRC laboratory analysis of core and BMR logging. The adopted measures of drainable porosity are a combination of the lowest measured value of specific yield (across all methods of estimation) for the poorly draining sediments (clay rich and massive halite), and the average of BMR-derived Sy and RBRC-derived Sy, with the proviso that no estimates will be higher than those previously adopted for the same unit (during Argosy's original resource evaluation). The RBRC estimates of Sy were generally higher than the BMR estimates and so an additional constraint was used, that no adopted drainable porosity would exceed the BMR-derived estimated of interconnected or effective porosity (Pe).

The concepts of drainable porosity have been applied. None of the resource estimates are based on total porosity or total in-situ brine because a portion of this is irrecoverable.

## Spatial Extent

For the MRE, the brine aquifer extent has been defined by the edge of the salar and/or the edge of the project area (where the aquifer continues beyond tenement boundaries). The Resource has been calculated to a maximum depth of 400m. This depth is based on the density and depth of current drilling and the Resource remains open over much of the project area.





## Lithium Distribution

The distribution of lithium concentration within the aquifer has also been estimated using 3D modelling software. The interpolation used the sampled intervals from all drill holes. 3D brine concentrations have been interpolated for each hydrostratigraphic unit.

Spacing between drill holes ranges between 400m to 3,000m, with an average of around 2000m (albeit to varying depths). A spacing of 2,000m falls within the spacing that is suggested Houston et al (2011) for Indicated Resource determination. Variograms were developed for the available data and show that there is correlation between existing bores (i.e. lithium brine distribution is interpolated rather than extrapolated).

The reduced drilling density and increase in effective spacing for the aquifer below 350m supports the reduced confidence in this horizon and the adoption of an Inferred classification.

 $Li_2CO_3$  potential has been estimated from the observed lithium concentrations using a conversion factor of 5.347.

No cut-off grade has been applied to the MRE. The lowest grade observed within the model domain is 169mg/L (in the area of drill hole PROOG on the eastern margins of the model, in volcanics).

#### Mineral Resource Estimate

The Indicated MRE is a static estimate; it represents the volume of potentially recoverable brine that is contained within the defined aquifer. It takes no account of modifying factors such as the design of a borefield (or other pumping scheme), which will affect both the proportion of the Resource that is ultimately recovered and changes in grade associated with mixing between each aquifer unit and the surrounding geology, which will occur once pumping starts. The Indicated MRE also takes no account of recharge to the upper-most aquifer, which is a modifying factor that may increase brine-recovery from this unit and may affect long-term grade.

#### ENDS

This announcement has been authorised by Jerko Zuvela, the Company's Managing Director

For more information on Argosy Minerals Limited and to subscribe for regular updates, please visit our website at <u>www.argosyminerals.com.au</u> or contact us via <u>admin@argosyminerals.com.au</u> 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.

**Cautionary Statements:** 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.

#### ASX Listing Rules Compliance

Argosy advises references to the Company's current target of producing 2,000tpa of battery quality lithium carbonate product at the Rincon Lithium Project should be read subject to and clarified by the Company's current intention that, subject to feasibility, finance, market conditions and completion of development works at the Rincon Lithium Project, the 2,000tpa production target is intended to form a modular part of the 10,000tpa operation from its commencement.

Argosy further advises that references in this ASX release in relation to the 10,000tpa production target are extracted from the report entitled "Argosy delivers exceptional PEA results for Rincon Project" dated 28 November 2018, available at <u>www.argosyminerals.com.au</u> and <u>www.asx.com</u>. Argosy confirms that it is not aware of any new information or data that materially affects the information included in the Announcement and, in the case of the Production Target, Mineral Resources or Ore Reserves contained in the Announcement, that all material assumptions and technical parameters underpinning the estimates in the PEA 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 PEA announcement.

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

The information contained in this ASX release relating to Exploration Targets, 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.

The information contained in this ASX release relating to Exploration Results has been prepared by Mr Jerko Zuvela. Mr Zuvela is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Zuvela is the Managing Director of Argosy Minerals Ltd and 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.

Chemical Engineer's Statement: The information in this announcement that relates to lithium carbonate processing and testworks is based on information compiled and/or reviewed by Mr Pablo Alurralde. Mr Alurralde is a chemical engineer with a degree in Chemical Engineering from Salta National University in Argentina. Mr Alurralde has sufficient experience which is relevant to the lithium carbonate processing and testing undertaken to evaluate the data presented.

#### Reference to Previous ASX Releases:

This document refers to the following previous ASX releases: 19<sup>th</sup> June 2018 – Rincon Lithium Project Maiden JORC Mineral Resource 13<sup>th</sup> Nov 2018 - Argosy Upgrades Rincon Lithium Project JORC Resource

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ASX.



28<sup>th</sup> Nov 2018 - Argosy delivers exceptional PEA results for Rincon Project 11<sup>th</sup> Jan 2021 - Rincon Project JORC Exploration Target 8<sup>th</sup> Feb 2021 - \$30M Placement to Fund 2,000tpa Production 10<sup>th</sup> Feb 2021 - Clarifying Announcement

### ABOUT ARGOSY MINERALS LIMITED

Argosy Minerals Limited (ASX: AGY) is an Australian company with a current 77.5% (and ultimate 90%) interest in the Rincon Lithium Project in Salta Province, Argentina and a 100% interest in the Tonopah Lithium Project in Nevada, USA.

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: Rincon Lithium Project Location Map



# JORC Table 1 Reporting of Exploration Results – JORC (2012) Requirements

Section 1: Sampling Techniques and Data

Commentary
<ul> <li>eeology has been sampled using HQ diamond rilling and mud-rotary drilling techniques (at 00mm diameter).</li> <li>rine samples have been recovered from specific itervals using packers with airlift and / or bailed ecovery.</li> <li>Q drill core in the holes was recovered in 1.5m ength core runs directly in the core barrel, without he use of internal tubes. Consequently, the cores ecovered were subject to handling that ontributed to some disaggregation of the core. In ome holes, polycarbonate tubes were used in the lace of triple tubes to collect samples for aboratory testing. Cores selected for porosity aboratory sampling were sub-sampled into soft lastic tubes / bags (where not collected in olycarbonate tubes), labelled with permanent tharker and wrapped extensively in transparent ape over the sample labelling, to preserve this eing rubbed off during transportation. When core as collected in polycarbonate tubes, 30cm engths were cut from the bottom of the tubes and ealed with end caps and tape to maintain sample umidity. Core drilling was undertaken to obtain epresentative samples of the sediments that host rine.</li> <li>Brine samples were collected at discrete depths during diamond drilling. This was done using a packer device after pulling back the rods. The sample interval varied between 1.5m and 7m, with an average interval 4.5m. 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>The brine samples were collected in clean plastic 500ml bottles and filled to the top to minimise air space within the bottle. Each bottle was marked with the time and relabelled 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 completed throughout the hole (due to a lack of brine recovery is or unstable conditions in the drill hole.</li> <li>Packer sampling was undertaken on a nominal 12m separation b</li></ul>



	ASX ANNOUNCEM	
Criteria	JORC Code Explanation	Commentary
		of the formation. Fluid logs were temperature and conductivity; lithological logs were short and long simple resistivity, spectral gamma; and petrophysical logs were borehole magnetic resonance (to allow determination of porosity, specific yield and hydraulic conductivity).
Drilling techniques	• Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>Four drill holes were pre-collared with mud rotary drilling through the existing Mineral Resource, and then HQ diamond drilled from 100m to full depth. Two drill holes were drilled with diamond from surface to full depth.</li> <li>HQ diamond core was used for 1584m (76%) of drilling. The drilling produced 1.5m core samples with 96% (of the 1584m) successfully recovered as core.</li> <li>Mud rotary drilling with a tri-cone bit was used to construct the pre-collar on four holes with a total of 513m (24%) of drilling. In 3 of the 4 holes, mud rotary drilling was conducted to the base of the existing Mineral Resource (~100m depth). In 1 drill hole, mud rotary drilling was conducted to 178.5m due to formation instability and the requirement to retain mud-control.</li> </ul>
Drill sample recovery	<ul> <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> <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 recovery was good, averaging 96% across the entire drill programme.</li> <li>Brine samples were nominally collected at discrete depths every 12m (over a 4.5m interval, dictated by the length of the packer and height of the drill rig mast) during the drilling using a single 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 and degrees of disturbance), 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>
Logging	<ul> <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> <li>Diamond holes are logged by a geologist, who is also supervised taking brine samples and core samples for laboratory porosity analysis.</li> <li>Logging is both qualitative and quantitative by 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</li> </ul>

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Criteria	JORC Code Explanation	Commentary
Sub-sampling	• If core, whether cut or sawn and whether quarter, half	<ul> <li>qualitative characteristics, such as the sedimentary facies and their relationships. Cores are photographed when laid out for geological logging.</li> <li>Core recoveries are measured for the entire core recovered relative to the run length of 1.5m.</li> <li>Disturbed samples from mud rotary drilling are logged by a geologist on site for the proportion of sand, clay, volcanics, and halite in each 1 m sample.</li> <li>Core samples are semi-systematically sub-sampled</li> </ul>
techniques and sample preparation	<ul> <li>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 subsampling 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> <li>for laboratory analysis, cutting or selecting the lower 30 cm of core in core runs. This sampling was semi-systematic (rather than systematic) as due to disaggregation of core during drilling and core handling. Core samples were selected to provide representation of each drill hole and comparative data for the BMR logging; the latter provides a continuous estimate of the petrophysical properties of the formation throughout the entire drill hole and allows interpolation between depths that are corroborated by core samples.</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 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 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>
Quality of assay data and laboratory tests	<ul> <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 (e.g.standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <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 the Norlab/Alex Stuart laboratory separately.</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> </ul>

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Criteria	JORC Code Explanation	Commentary
		• Relative errors between samples have a mean and median error of less than 5% and 1% respectively.
Verification of sampling and assaying	<ul> <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> <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>
Location of data points	<ul> <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> <li>The hole locations provided are the field locations measured with a handheld 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>
Data spacing and distribution	<ul> <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> <li>Lithological data was collected throughout the drilling, either through core recovery (or disturbed samples from rotary drilling), to build the geological model. Geological interpretation (notably of disturbed samples) was corroborated through comprehensive geophysical logging on all drill holes. Drill-data are used primarily for lithological interpretation. Importantly, Li is contained in brine within the pore space of the sediments and is collected through a separate airlift pumping process which is not affected due to the collection is disturbed samples (where drilling conditions necessitated this). Brine assays are representative of the horizon from which they were collected.</li> <li>Brine samples were collected from discrete horizons during diamond drilling.</li> <li>The mean spacing between drill holes is:         <ul> <li>~950m for the MRE component to a depth of 102.5mbgl.</li> <li>~1800m for the MRE between 350mbgl and 400mbgl.</li> </ul> </li> </ul>
Orientation of data in relation to geological structure	<ul> <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> <li>The salar deposits that host lithium- bearing brines consist of sub-horizontal beds and lenses of halite, clay, and volcaniclastics. The vertical holes are essentially perpendicular to these units, intersecting their true thickness.</li> <li>Brine saturates the entire geological sequence below the water table (~ 1mbgl) and exists in a "continuum" within the pore-space of the geology.</li> </ul>
Sample security	• The measures taken to ensure sample security.	<ul> <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 daily. All brine sample bottles are marked with a unique label.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	• No audits or reviews have been conducted at this point in time.





## Section 2: Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul> <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 reporting along with any known impediments to obtaining a license to operate in the area.</li> </ul>	<ul> <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 licences 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 properties are in the province of Salta in northern Argentina, at an elevation of approximately 3740masl.</li> <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 reported to be in good standing, with payments made to relevant government departments. Argosy currently have a 77.5% interact in Puna Mining S.A.</li> </ul>
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	<ul> <li>interest in Puna Mining S.A.</li> <li>Exploration has been carried out in adjacent properties by the Canadian company Enirgi Group Corp., who conducted a feasibility study and defined an extensive Resource and Reserve on their adjacent properties (see announcement July 7, 2016). These properties are now owned by Rio Tinto.</li> <li>The properties owned by the JV have been previously explored or exploited for borates.</li> <li>The MRE described in this assessment also draws on previous Exploration Results and an existing Indicated MRE derived from two prior stages of</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>assessment completed by Argosy.</li> <li>The sediments within the salar consist of halite, clays, volcaniclastics, and lava flows, 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: fractured halite, fractured volcanic breccia and sandy-aquifers may support direct abstraction, while clay-dominant and massive halite appear to provide a source of long-term leakage as the surrounding transmissive aquifers are depressurised (based on pumping tests).</li> </ul>
Drill hole Information	• A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:	<ul> <li>Lithological data were collected from the holes as they were drilled, and core samples were retrieved. Detailed geological logging of cores has been completed and cores selected for laboratory</li> </ul>

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Criteria	JORC Code Explanation	Commentary
	<ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	<ul> <li>porosity analysis.</li> <li>Brine samples were collected from the packer and bailer sampling programme, and sent for analysis to the Norlab laboratory, together with quality control/quality assurance samples.</li> <li>All drill holes are vertical, (dip 90 degrees, azimuth 0 degrees). Depths ranged between 219m and 423m. Installation of monitoring wells in the drill holes has been completed.</li> </ul>
Data aggregation methods	<ul> <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> <li>No data aggregation has been undertaken in the resource modelling. The solute concentrations (including Li grade) have been applied in the resource model to the interval over which they were collected, and an interpolant developed in the model assuming gradual transition between grades. This is considered appropriate as brines exist as a continuum within the aquifer and not as zones of discrete grade.</li> <li>Lithium concentrations have been multiplied by 5.347 to calculate LCE.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <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> <li>The lithium-bearing brines are interpreted to begin from surface in the holes (that penetrate an existing Mineral Resource) and mineralised brine is interpreted to continue below this (from ~100m depth) to the base of drilling (219m to 423m).</li> <li>The lengths reported for mineralisation is from the first sample in the depth interval of 0 – 6m to the final sample at the base of each drill hole.</li> <li>Brine samples are representative of the width over which the sample was collected: on average a 4.5m interval from diamond drilled holes. However, the entire sedimentary sequence is saturated and mineralized brine exists in a continuum between sampled intervals.</li> </ul>
Diagrams	• Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	<ul> <li>A diagram is provided in the text of the announcement showing the location of the properties and drill holes. A geological cross- section is provided showing the encountered hydrostratigraphy and brine sampling intervals and grades. A table is provided in this announcement showing the location of the drill holes.</li> </ul>
Balanced reporting	• 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.	• This announcement presents representative data from drilling and sampling, such as lithological descriptions, brine concentrations, and information on the thickness of mineralisation.
Other substantive exploration data	<ul> <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> <li>All drill holes were subject to a comprehensive suite of wireline geophysical logs to assess brine properties (temperature and conductivity), lithology (long and short normal resistivity and spectral gamma), and petrophysical properties (borehole magnetic resonance – BMR).</li> <li>Two deep production bores were subject to pumping tests of between 3 and 7 days to assist in the determination of assumed mining factors.</li> </ul>





Criteria	JORC Code Explanation	Commentary
Further work	<ul> <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>	The static model and aquifer parameters derived from pumping tests, aquifer monitoring and BMR logging during the current programme will be used to support a dynamic flow model and allow production target determination. This modelling will allow prediction of produced Li grade over the life of the project and the extent to which the MRE is recoverable. The model will be comprehensive flow model taking account of solute transport, density dependence and boundary conditions as imposed by the surrounding catchment.

## Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
Database integrity	<ul> <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.</li> <li>Data validation procedures used.</li> </ul>	<ul> <li>Dropdown menus were used for digital data capture using standardised codes in the project database.</li> <li>Geological 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>Assay data and data from core analysis are received in digital format from the laboratories and imported directly into the project database.</li> <li>Drill hole data points are plotted in a GIS system to check location.</li> <li>Database extracts for resource modelling work and GIS compilation work checked for accuracy.</li> <li>Random cross-checks are undertaken against field-logged geological descriptions and database entries and against assay data and laboratory provided analysis certificates.</li> </ul>
Site Visits	• 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.	<ul> <li>A site visit by the CP is planned but has 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> </ul>
Geological Interpretation	<ul> <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> <li>Confidence in the geological interpretation within the MRE 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>Pumping tests and operational pumping for the pilot plant have not shown any hydraulic boundaries which adds to confidence in geological interpretation.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
		<ul> <li>Pumping tests from deep bores have shown a leaky response which adds the confidence of vertical hydraulic continuity.</li> <li>There is uncertainty over the continuity and extent of a massive halite unit in the northern part of the project area; presently the area affected (i.e. below 102.5mbgl in the north of the project area) is area is excluded from the MRE.</li> </ul>
Dimensions	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.	<ul> <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 ~1760ha.</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> <li>Drilling has occurred to: <ul> <li>100 – 102.5m depth in 19 drill holes and 350m depth in 6 drill holes providing a drill hole spacing of between 950m and 1800m.</li> <li>400m depth in 3 drill holes.</li> </ul> </li> <li>The Indicated Resource has been modelled for the entire aquifer sequence with drill hole spacing less than 200m (i.e. the Indicated MRE is modelled to 350m depth). The Indicated MRE has two depth increments: <ul> <li>the entire salar surface (within Argosy tenements) to a depth of 102.5mbgl (an area of ~1760ha)</li> <li>the southern half of the project area between 102.5mbgl and 350mbgl (an area of ~750ha) except the southernmost tenement Frodo where the depth is limited to 210mbgl (an area of ~109ha).</li> </ul> </li> <li>The Inferred Resource is modelled for the aquifer sequence between 350mbgl and 400mbgl in the southern tenements only (~750ha). 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 the protect and and and and and and and and and and</li></ul>







Criteria	JORC Code Explanation	Commentary
Criteria Estimation and Modelling Techniques	<ul> <li><b>IORC Code Explanation</b></li> <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 byproducts.</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 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> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<ul> <li>(RLBP). The model is a static model and takes no account of pumping / brine recovery (other than by the application of drainable porosity rather than total porosity).</li> <li>The model comprises 7 geological units – S1 to S6 and SV; with units S1, S3, S4 and S5 having further subdivisions (based on sedimentary facies). Hydrostratigraphic facies types were alluvium/colluvium, halite, mixed clastics, clay, sand and volcaniclastics. All lithologies encountered during drilling were assigned to one of these 6 sequences and hydrostratigraphic facies-type. The modelled sequence comprises a mix of interbedded clay, sand, halite. And volcaniclastics.</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 as dynamic processes start to prevail on the brine-chemistry.</li> </ul>
	<ul> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of</li> </ul>	aquifer was determined from the model by interpolating between each sample from each dril hole; samples collected after more than 1 minute of pumping or samples collected from pumping wells screened across multiple aquifers, were discounted as dynamic processes start to prevail or the brine-chemistry.
		<ul> <li>(including from other hydrostratigraphic units) in guiding the interpolation.</li> <li>The modelled volumes were multiplied by Drainable Porosity for each hydrostratigraphic unit to determine the potentially recoverable brine (Resource volume).</li> <li>The effective Drainable Porosity was determined from the laboratory core analysis, particle size distribution analysis and BMR logging.</li> <li>The combined unit volume, interpolated lithium grade distribution and drainable porosity was used to determine an in-situ brine resource (for each hydrostratigraphic unit).</li> <li>The Resource output was validated by comparing total sediment volumes with those estimated from a dynamic block model that has been developed in</li> </ul>



Criteria	JORC Code Explanation	Commentary
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Not relevant to the assessment of brine deposits.
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	<ul> <li>No cutoff grade has been adopted in the resource modelling as the static resource will not be representative of the produced grade during operations. All brine samples analysed are enriched with respect to Li and will contribute to a product that can be subject to solar evaporation.</li> </ul>
Mining factors or assumptions	<ul> <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>	<ul> <li>Potential brine abstraction is envisaged to involve pumping brine via a series of bores. Shallow bores will target the S1 - fractured halite and deep production bores will target interbedded sands in the S3A to S5A and SV units.</li> <li>Pumping tests indicate the S1 fractured halite has a high hydraulic conductivity and will support direct brine abstraction. This unit already supports production for the pilot plant.</li> <li>Pumping tests indicate the deep interbedded aquifer has a moderate transmissivity of between 30m²/d and 250m²/d (varying with bore depth and implying a hydraulic conductivity in the range 0.5m/d to 1m/d).</li> <li>It is envisaged the pumping from the deep aquifer interbedded sands will reduce hydrostatic pressure and induce leakage from the interbedded clay and halite within units the S3 to S6 units. Pumping tests on deep bores PRP3 and PRP4 were indicative of this leakage.</li> <li>A simplified dynamic model used for PEA and approvals indicates drawdown of while pumping from the deep aquifer in the order of 70m. The majority of the aquifer (to 400m) is predicted to remain saturated and pumping at economic rates is predicted to be sustainable.</li> </ul>
Metallurgical factors or assumptions	• 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.	<ul> <li>Brine processing at the RLBP pilot plant has demonstrated Lithium enrichment to 99.6% with the of production of Li<sub>2</sub>CO<sub>3</sub>.</li> </ul>
Environmental factors or assumptions	<ul> <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 reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<ul> <li>Water-dependent ecosystems may exist on northwestern margin of the salar in alluvial sediments and calcrete.</li> <li>The brine evaporation process will result in waste salts.</li> <li>Environmental approval is in progress but has not yet been granted.</li> <li>Assessment of a Mineral Reserve which will address the dynamic nature of the MRE, under operation conditions, has not been completed.</li> </ul>

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Criteria	JORC Code Explanation	Commentary
Bulk density	<ul> <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> <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 122 core samples covering units S1 to S4. The laboratory analysis was completed by GeoSystems Analysis (Arizona). The drainable porosity estimates also drew on BMR logging over 93% of the deep drilling (1978m of BMR logging below a depth of 102.5mbgl) and covering units S4 to S6 and SV. BMR logging was completed by Zelandez Brinefield Services (Salta, Argentina).</li> </ul>
Classification	<ul> <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> <li>Exploration data comprise:         <ul> <li>an average drill hole spacing of 950m (to 102.5mbgl); 1800m (to 350mbgl) and over 2000m for the interval below 400mbgl).</li> <li>brine analysis from all hydrostratigraphic units.</li> <li>drainable porosity analysis based on core analysis from units S1 to S3 and BMR from S3 to S6 and SV.</li> <li>pumping test results confirming brine extractability and composite lithium grade under dynamic conditions and hydraulic continuity vertically and laterally through the aquifer system.</li> </ul> </li> <li>These data provide confidence in estimating a mineral resource:         <ul> <li>An Indicated MRE to a depth of 350m where the data density is greater.</li> <li>An inferred MRE between 350m and 400m (where data density is reduced).</li> </ul> </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>
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	• The modelling and the Mineral Resource estimates have been subject to internal peer review by Argosy and AQ2.
Discussion of relative accuracy/ confidence	<ul> <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 to technical and economic evaluation. Documentation</li> </ul>	<ul> <li>The Mineral Resource is based on average drainable porosity for the major hydrogeological units and the interpolated distribution of those units and of lithium brine within those units.</li> <li>The average drainable porosity is derived from 122 core samples and 1978m of BMR logging (covering 93% of the deep aquifer resource) 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> </ul>





Criteria	JORC Code Explanation	Commentary
	<ul> <li>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> <li>It is not possible to quantify the accuracy or extent of the above uncertainties.</li> <li>The MRE 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 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>

