

12 November 2024

RINCON LITHIUM PROJECT JORC MINERAL RESOURCE UPGRADE & EXPLORATION TARGET

HIGHLIGHTS

- **Upgraded Total Mineral Resource Estimate (MRE) of 731,801 tonnes of Li_2CO_3 with a weighted mean average lithium concentration of 329mg/L, comprising;**
 - **An Indicated MRE of 640,330 tonnes Li_2CO_3 with a weighted mean average lithium concentration of 327mg/L, and**
 - **An Inferred MRE of 91,471 tonnes Li_2CO_3 with a weighted mean average lithium concentration of 352mg/L**
- **Exploration Target¹ of an additional 186,000 tonnes to 466,000 tonnes of contained Li_2CO_3 to a depth of 400m**
- **Combined JORC Mineral Resource and Exploration Target¹ estimates outline potential for a range of 917,000 tonnes to 1.2 million tonnes of contained Li_2CO_3 to a depth of 400m and provides further support for possible increased commercial scale development at Rincon**
- **Upgraded MRE used to update hydrogeological & dynamic model to increase mine-life & brine abstraction scenarios, and optimise brine borefield design**
- **Resource and brine aquifer remain open at depth – with excellent scope for resource expansion from deeper drilling and tenement acquisitions**

¹ An Exploration Target is not a Mineral Resource. The potential quantity and grade of an Exploration Target is conceptual in nature. A Mineral Resource has been identified above the Exploration Target, but there has been insufficient exploration to estimate any extension to the Mineral Resource and it is uncertain if further exploration will result in the estimation of an additional Mineral Resource.

Argosy Minerals Limited (ASX: **AGY**) ("**Argosy**" or "**Company**") is pleased to announce another upgrade to the JORC Code (2012) compliant Total Mineral Resource Estimate and an additional Exploration Target estimate at the Rincon Lithium Project, located in Salta Province, Argentina.

The upgraded Total Mineral Resource Estimate comprises 731,801 tonnes of lithium carbonate with a weighted mean average lithium concentration of 329mg/L, including an Indicated MRE of 640,330 tonnes of Li_2CO_3 with a weighted mean average lithium concentration of 327mg/L and an Inferred MRE of 91,471 tonnes of Li_2CO_3 with a weighted mean average lithium concentration of 352mg/L.

As part of the MRE upgrade, a JORC Code (2012) compliant Exploration Target was also prepared, outlining an estimated 186,000 tonnes to 466,000 tonnes of Li_2CO_3 (between the depth interval of 102.5m to 400m below the Indicated MRE in the northern project area, and from ~90m to 400m below ground level within the alluvial fan tenements area).

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The combined JORC Mineral Resource and Exploration Target¹ estimates outline the potential for a range of up to 917,000 tonnes to 1.2 million tonnes of lithium carbonate to a depth of 400m below ground level at the Rincon Project.

Argosy Managing Director, Jerko Zuvella said **“We are very pleased to further upgrade the Total Mineral Resource Estimate at our Rincon Lithium Project to 731,801 tonnes of lithium carbonate.**

In addition, we are delighted with the Exploration Target estimate, providing further evidence of the substantial upside potential that exists to increase the MRE to well above 1 million tonnes.

We have used the upgraded MRE to update the hydrogeological and dynamic modelling, which will contribute to the engineering and DFS works currently being conducted.

These significant milestones further validate Argosy’s ambitions and near-term growth phase to fully develop the Rincon Lithium Project.”

The 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 and within the zone of hypersaline brine (being above the elevation of adjacent competent halite within the alluvial fan tenement area).

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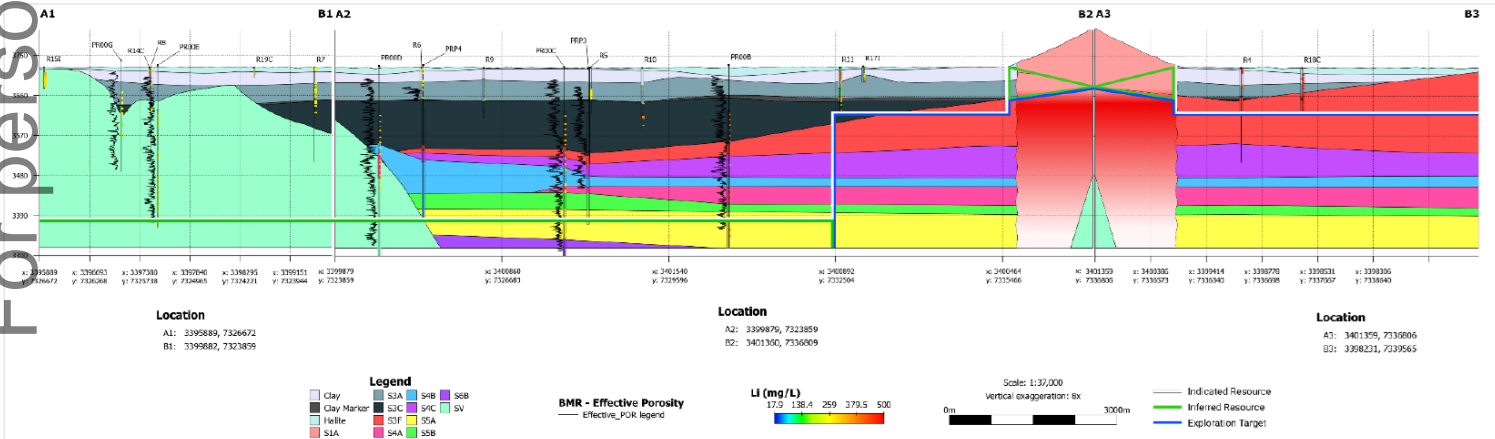


Figure 1. Rincon Lithium Project – Vertical Extent of MRE and Exploration Target

The updated MRE and Exploration Target outlined in this announcement is based on the MRE prepared and announced on 15 January 2024 – “JORC Resource Upgrade for Rincon Lithium Project - Substantial 180% Increase” and the additional tenements acquired by the Company as announced 25 June 2024 – “Additional Tenements Expand Strategic Landholding at Rincon Lithium Project”. The January announcement provides all the drilling and assay data along with estimates of specific yield based on BMR geophysical logging and laboratory analysis on core samples that underpin and support the updated MRE and Exploration Target details outlined in this announcement. A summary of the drilling details that underpin this work is presented in Figure 6.





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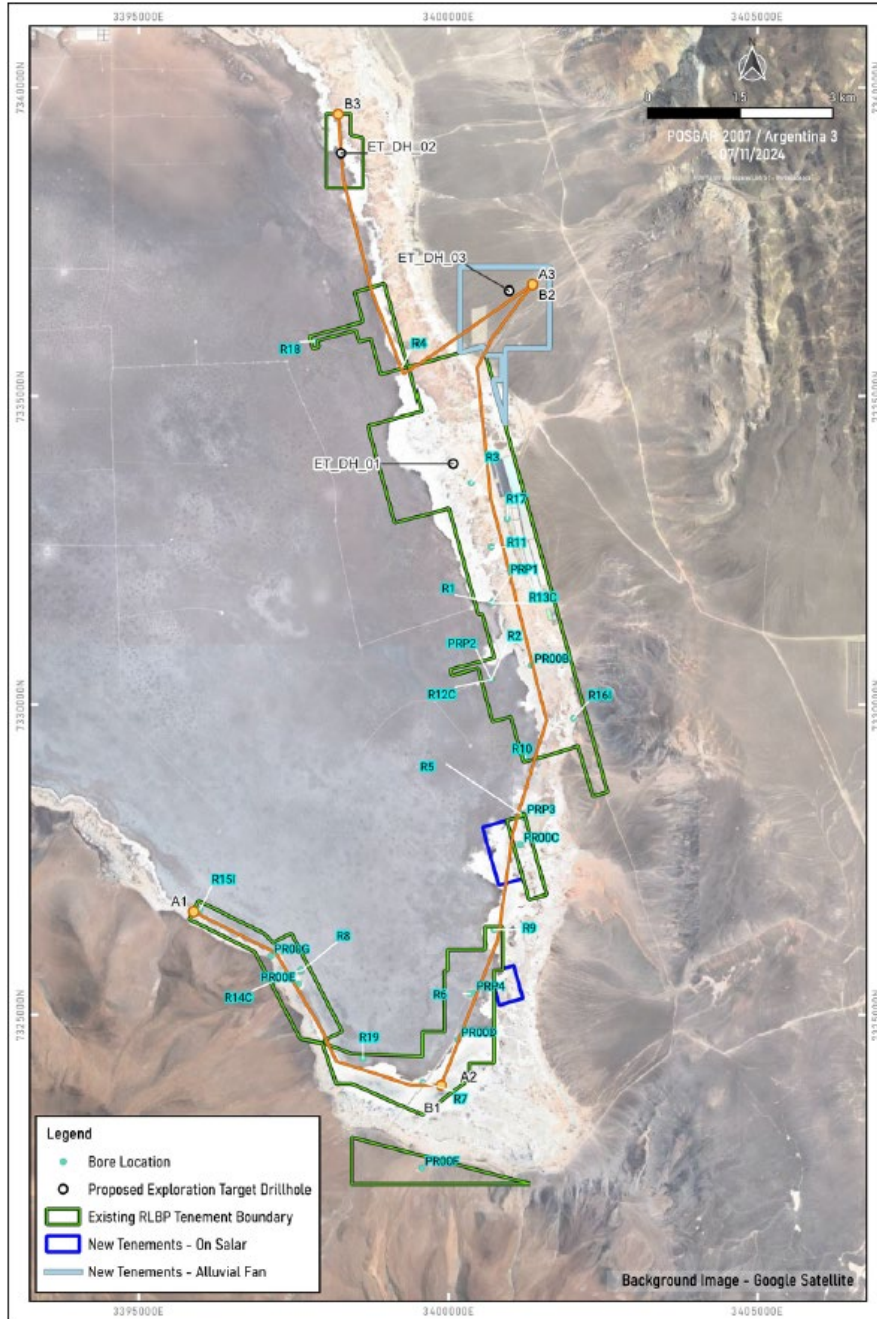


Figure 2. Rincon Lithium Project – Lateral Extent of MRE

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

The Company has previously drilled 29 brine investigation drill holes 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.

The Company engaged AQ2 to prepare an updated MRE to include the recently acquired tenements area, an expanded Exploration Target and proposed associated field activities for the evaluation of the Exploration Target.





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The updated Mineral Resource Estimate is summarised below:

- The Indicated Resource has increased to 640,330 tonnes of Li_2CO_3 - this increase is a result of the new tenements adjoining existing project tenements. The new tenements are located proximal enough to existing drill holes, and in an hydrogeologically contiguous zone, for the area contained within to be considered an Indicated Resource.
- The Inferred Resource has increased to 91,471 tonnes of Li_2CO_3 , which can be attributed to the new alluvial fan tenements. The Inferred Resource in this area is constrained by the upper surface of the brine and elevation of competent halite (which forms a base to the Inferred Resource).

Unit	Description	Aquifer Characteristics			Drainable Porosity (%)	Drainable Brine Volume (Mm ³)	Numeric Interpolant		
		Aquifer Volume	Porosity	In-Situ Brine Volume			Li	Li ₂ CO ₃	Li ₂ CO ₃
		(Mm ³)	(%)	(Mm ³)			(mg/L)	(mg/L)	T
Indicated Resource									
S1A (South)	Alluvium	33	21%	7	10%	3.3	232	1238	4133
S1F	Fractured Halite	163	21%	34	10%	16.9	337	1799	30456
S2	Clay	398	48%	191	3%	11.9	322	1720	20548
S3A	Mixed Clastics	542	42%	228	12%	62.9	318	1701	106939
S3B	Clay	76	41%	32	1%	0.8	340	1819	1391
S3C	Black Sand	867	38%	332	13%	114.8	324	1730	198642
S3F	Competent Halite	789	13%	106	3%	23.7	374	2000	47362
S4A	Mixed Clastics	159	24%	37	12%	19.1	387	2071	39515
S4B	Clay Dominant	243	23%	49	5%	12.6	348	1862	23519
S4C	Sand Dominant	217	20%	37	12%	26.1	378	2019	52660
S5B	Clay Dominant	149	23%	30	3%	3.7	371	1986	7409
S5A	Mixed Clastics	147	21%	27	10%	14.7	392	2094	30691
SV	Volcanics	1125	17%	153	5%	56.3	256	1370	77065
Inferred Resource									
S1A (North)	Alluvium	54	21%	11.1	10%	5.4	358	1913	10244
S2	Clay	0.9	48%	0.4	3%	0.0	322	1720	47
S3A	Mixed Clastics	2.8	42%	1.2	12%	0.3	318	1701	558
S3B	Clay	0.3	41%	0.1	1%	0.0	340	1819	5
S3C	Black Sand	0.2	38%	0.1	13%	0.0	324	1730	55
S5A	Mixed Clastics	270	21%	52	10%	30	392	2094	62778
S6B	Clay Dominant	37	20%	5.2	3%	0.7	283	1515	1016
SV	Volcanics	249	17%	41	5%	12	256	1370	16767
Total		5489		1368		412	329		731801
Total Indicated Resource									640330
Total Inferred Resource									91471
Total Mineral Resource Estimate									731801

Figure 3. Rincon Lithium Project – Upgraded Total Mineral Resource Estimate

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The new tenements area has been incorporated into the geological model and have been included in the area of the MRE where:

- On the basis of geomorphological setting and geological outcrop, there is likely to be continuity from the existing model into the new tenements.
- The dimensions (depth of unity boundaries) can be determined from the existing geological model.
- Where the distance over which the existing geological model is extrapolated falls within the limits of the semi-variogram such that estimates of grade and drainable porosity can reasonably be applied.

Where one of the above criteria cannot be met, then the additional tenements have been included as an Inferred Resource. Where two or more criteria cannot be met, the area of the new tenements have been assessed as part of the Exploration Target.

An Exploration Target has been defined for the northern project area at a depth interval of 102.5mbgl to 400mbgl, and in the alluvial fan tenements at a depth interval of ~90mbgl to 400mbgl. To account for uncertainties in weighted average lithium grades and weighted average specific yield values, an upper and lower estimate of each has been adopted to develop an Exploration Target range. It is estimated that the depths intervals outlined above may contain an Exploration Target of between 186,000 and 466,000 tonnes of Li₂CO₃.

Unit	Description	Aquifer Volume (Mm ³)	Lower Estimate				Upper Estimate				Remarks
			Drainable Porosity (%)	Drainable Brine Volume (Mm ³)	Li (mg/L)	LiCO ₃ T	Drainable Porosity (%)	Drainable Brine Volume (Mm ³)	Li (mg/L)	LiCO ₃ T	
			(%)	(Mm ³)	(mg/L)	T	(%)	(Mm ³)	(mg/L)	T	
S1A	Alluvium	638.4	5%	31.9	229	39086	10%	63.8	363	123924	Lower estimate assumes alluvial sediments clay dominant, upper estimates assumes alluvial sediments dominated by sand/gravel.
S3 / S4 / S5	Clastics / Competent Halite	1785.0	4%	84.2	327	147170	8%	168.3	380	342000	Lower estimate assumes Halite > Clastics, Upper estimate assumes Clastics > Halite.
Lower Estimate Total						186000	Upper Estimate Total				466000

Figure 4. Rincon Lithium Project – Exploration Target

The spatial extent of the Exploration Target is shown on the section in Figure 1. Future drilling is proposed to investigate the Exploration Target described above, involving three drillholes to ~400mbgl, geological logging, collection of drill core for specific yield and PSD analysis, collection of brine samples via packers, assessment of physical parameters through geophysical logging and, where warranted, completion of drillholes with 50 mm PVC casing (for use as future monitoring bores). The extent, if any, to which this drilling and testing will result in the conversion of the Exploration Target into a Mineral Resource is uncertain.

Appendix A:

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

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Hole ID	Northing (m)	Elevation (masl)	Drilled Depth (mbgl)	Cased Depth (mbgl)	Drilling Method	Assay Interval (mbgl)	No. of Brine Assays	No. of Pumped Brine Assays	No. of Core Samples	Azimuth	Dip	Purpose	Logged BMR Interval (m)	
													From	To
R1	7331661	3721	102.5	102	Diamond	82 - 100	3	-	6	0	-90	Exploration / monitoring	-	-
R2	7330412	3723	100.6	102	Diamond	0 - 102	17	-	23	0	-90	Exploration / monitoring	-	-
R3	7333587	3723	102.5	102	Diamond	42 - 96	11	-	23	0	-90	Exploration / monitoring	-	-
R4	7335479	3722	102.5	102	Diamond	Mar-78	8	-	4	0	-90	Exploration / monitoring	-	-
R5	7328233	3724	102.6	102	Diamond	48 - 72	4	-	13	0	-90	Exploration / monitoring	-	-
R6	7325338	3723	81.5	81.5	Diamond	6 - 69.5	10	-	0	0	-90	Exploration / monitoring	-	-
R7	7323909	3722	102.5	102	Diamond	0 - 102.5	16	-	14	0	-90	Exploration / monitoring	-	-
R8	7325709	3722	101	99	Diamond	48 - 99	5	-	10	0	-90	Exploration / monitoring	-	-
Stage 1 Totals			795.7				74		93					
R9	7326379	3734	100.5	102	Diamond	45-112	5	-	-	0	-90	Exploration / monitoring	-	-
R10	7329151	3734	147	147	Diamond	45-129	5	-	-	0	-90	Exploration / monitoring	-	-
R11	7332554	3735	100	100	Diamond	0-100	21	-	-	0	-90	Exploration / monitoring	-	-
R12	7330406	3730	25.5	25.5	Mud rotary	Jan-19	1	15	-	0	-90	Shallow Pumping	-	-
R13	7331648	3730	23	19.5	Mud rotary	Jan-13	1	13	-	0	-90	Shallow Pumping	-	-
R14	7325723	3734	22	19.5	Mud rotary	0.5-13	1	15	-	0	-90	Shallow Pumping	-	-
R15	7326707	3734	50.5	49.5	Diamond / Mud rotary	0.6-45	11	15	-	0	-90	Shallow Pumping	-	-
R16	7329779	3733	32	31	Diamond / Mud rotary	0.6-29	2	12	-	0	-90	Shallow Pumping	-	-
R17	7333011	3738	36.5	36.5	Diamond / Mud rotary	0.6 - 36	5	13	-	0	-90	Shallow Pumping	-	-
R18	7335884	3734	107	90.5	Diamond / Mud rotary	0.6 - 99	16	-	-	0	-90	Pumping	-	-
R19	7324295	3734	21	19	Diamond / Mud rotary	0.6 - 17	4	13	-	0	-90	Shallow Pumping	-	-
PRP 1	7331671	3722	100	100	Mud Rotary	-	-	-	-	0	-90	Pumping	-	-
PRP 2	7330414	3722	101	101	Mud Rotary	-	-	-	-	0	-90	Pumping	-	-
Stage 2 Totals			866				72	96						
PR00B	7330638	3729	412.5	375	Diamond	112-386	13		9	0	-90	Exploration / Monitoring	24.82	368.7
PR00C	7327760	3725	423	423	Diamond	112-380	15		6	0	-90	Exploration / Monitoring	28.88	413.68
PR00D	7323476	3727	427	360	Diamond	110-305.5	16		6	0	-90	Exploration / Monitoring	28.88	404.04
PR00E	7324427	3727	365.5	330	Diamond	109-365.5	18		6	0	-90	Exploration / Monitoring	26	353.6
PR00F	7324889	3729	219	217.5	Diamond	33-219	15		5	0	-90	Exploration / Monitoring	29.2	209.8
PR00G	7321403	3738	250.5	246	Diamond	57-171	7		4	0	-90	Exploration / Monitoring	25.98	244.76
PRP3	7328194	3721	350	270	Mud rotary	-	1	1	-	0	-90	Pumping	41.2	268.56
PRP4	7325354	3729	350	220	Mud rotary	-	1	1	-	0	-90	Pumping	49.72	79.82
Stage 3 Totals			2797.5				86	2	36					

Figure 5. Rincon Lithium Project – Drilling Summary

Basis for Mineral Resource Estimate

Hydrogeological Model

The MRE is based on the conceptual hydrogeological as described in the 15th January 2024 announcement. The model comprises 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 fine-grained sand throughout and competent halite (interbedded) at the base of the unit.

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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 down-hole 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

The derivation of estimated drainable porosity is as per that announced on 15 January 2024 – "JORC Resource Upgrade for Rincon Lithium Project - Substantial 180% Increase". 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 (i.e., edge of evaporitic sediments) and/or the edge of Argosy's tenements (where the aquifer continues beyond tenement boundaries). The lateral extent of the model is shown on Figures 1 and 2. The Resource has been calculated to a maximum depth of 400mbgl. This depth is based on the density and depth of current drilling and the Resource remains open over much of the RLBP area.

Within the alluvial fan tenements area, the upper limit of the Inferred Resource has been defined by the brine/freshwater interface. The depth of the interface was estimated using the Ghyben-Herzberg relationship, which uses the relative density and elevation of both interacting groundwater bodies (i.e. freshwater and hypersaline brine). The elevation of the

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top of the competent halite proximal to the alluvial tenements has been assigned as the base of the Inferred Resource within the alluvial fan area.

In the north of the project area (north of drill hole PR00B), the resource extends to 102.5mbgl and no exploration has been completed beyond this depth. This is because massive halite was previously encountered at depth in this area which was thought to be extensive and continuous. However, this massive halite unit in drill hole PR00B was only present between 176mbgl and 199mbgl and the unit is underlain by clastic deposits, implying the massive halite may be underlain by clastic sediments further north. This area has been defined as an Exploration Target.

The resource includes the southernmost tenement on the basis of drill results from hole PR00F. Drill holes PR00D, PR00E, PR00F and PR00G all encountered volcanic basement at varying depths. On the flanks of the salar, this was encountered from near surface in drill holes PR00F and PR00G. Further north into the salar, it was encountered from around 310mbgl in drill hole PR00D. The volcanic basement is characterised by relatively low recoverable porosity (5%). Permeability may be limited to fractured and brecciated horizons resulting in lower long-term pumping rates from this unit compared with the clastic sediments (although it is noted that no pumping tests have been completed in the volcanic basement to date). Thus, the volcanic unit is likely to form a base to the Mineral Resource in the south of the area.

In the southernmost tenement, drill hole PR00F was drilled to 217m depth and the MRE in this tenement has been constrained to this depth.

Elsewhere, the MRE has been extended to a depth of 400m over the southern portion of the project area. However, only three of the six drill holes reach this depth. Therefore:

- An Indicated Resource has been determined to a depth of 350mbgl (the depth to which all drill holes reached).
- An Inferred Resource has been determined for the interval between 350mbgl and 400mbgl (the depth with reduced drill density).

Lithium Distribution

The distribution of lithium concentration within the aquifer has also been estimated using 3D modelling software – ARANZ Leapfrog Geo. The interpolation used the sampled intervals from all drill holes. 3D brine concentrations have been interpolated for each hydrostratigraphic unit. However, as groundwater exists in a continuum between geological formations, during the modelling process, data points outside of each specific unit (ie. in overlying or underlying units) were also used in determining the likely distribution of lithium within that unit. The modelling provides both an interpolated model of Li concentrations (mg/L) through the unit and the total mass of Li contained within the unit (kg). The model assumes the aquifer is completely saturated with brine to within 1 m of the salar surface.

Spacing between drill holes ranges between 400m to 3000m with an average of around 2000m (albeit to varying depths). A spacing of 2000m 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. Li brine distribution is interpolated rather than extrapolated).

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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.

Li₂CO₃ potential has been estimated from the observed Li concentrations using a conversion factor of 5.347 (i.e. Li (mg/L) x 5.347 = Li₂CO₃ (mg/L)).

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 PR00G on the eastern margins of the model, in volcanics).

Mineral Resource Estimate

The Indicated and Inferred MRE are static estimates; they represent the volume of potentially recoverable brine that is contained within the defined aquifer. They take 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 and Inferred MRE also take 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.

Hydrogeology - Aquifer Parameters

Based on previous pumping tests and BMR-derived estimates of hydraulic conductivity:

- ▶ There is an extensive fractured halite aquifer over the surface of the salar 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 1,200m²/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 over 300m 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 300m²/d. The drainable porosity is estimated to be between 10% and 12% for the main aquifer units and 2% and 5% for the units with lower hydraulic conductivity.

On this basis, the design of a borefield to abstract brine is feasible.

The drainable porosity is the key measure to determine the volume of contained brine.

Exploration Target Information

The Exploration Target is 186,000 tonnes to 466,000 tonnes of Li₂CO₃. The Exploration Target covers:

- ▶ The interval 102.5mbgl to 400mbgl below the existing Indicated MRE in the northern project area, incorporating a potential depth extension to the salar sediments.
- ▶ The interval ~90mbgl (base of Inferred Resource) to 400mbgl below the alluvial fan tenements area, incorporating mineralised brine in a marginal alluvial fan.

In the north of the project area (north of drill hole PR00B), the Indicated Resource extends to 102.5mbgl, and no exploration has been completed beyond this depth. During previous

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drilling campaigns, massive halite was encountered at relatively shallow depths (40-50mbgl) in this area which was thought to be extensive and continuous at depth. However, this massive halite unit in drill hole PR00B was only present between 176mbgl and 199mbgl and the unit is underlain by clastic deposits, implying the massive halite may be underlain by clastic sediments further north. This area north of PR00B, from 102.5mbgl to 400mbgl forms the basis of an Exploration Target.

The alluvial fan tenements area occurs on the eastern edge of the salar and covers alluvial fan sediments. The environment is comparable with the location that hosts the Argentina Lithium brine prospect, with the Company's alluvial fan tenements area abutting the southern Argentina Lithium tenement. Geophysical surveys have been completed by Argentina Lithium, where potential brine aquifers occur to depths greater than 200mbgl. The upper zone of the saline interface (to the base of the adjacent competent halite elevation) has been assigned as Inferred Resource. On this basis, from the base of the Inferred Resource (~90mbgl) to an exploration depth of 400mbgl is proposed for the alluvial sediments in the alluvial fan tenements area.

Exploration Target – Grade Range

An estimated range in average grade that may apply to the Exploration Target within the alluvial fan tenements area has been estimated as follows:

- Freshwater exploration well "Reyna 1", located on the flanks of the salar within the alluvial deposits, intersected the saltwater interface with a lithium concentration of 229mg/L.
- Potential lithium grades have been interpolated in the geological model using all surrounding data. The average grade within the alluvial fan tenement was estimated to be 363mg/L.

The Exploration Target within the alluvial fan tenements area has been estimated based on a grade range between 229mg/L (the minimum observed in the area) and 363mg/L (the interpolated weighted mean average from the model).

An estimated range in average grade that may represent the Exploration Target within the northern project area has been calculated as follows:

- The Indicated Resource estimate comprises 640,330 tonnes of lithium carbonate with a weighted average grade of 327mg/L of lithium.
- Lithium grades typically increase in the northern area of the project, and lithium grades of the deep sediments in the north are estimated (via numeric interpolation in the model) to be 380mg/L.

The Exploration Target within the northern project area has been estimated based on a range in grade of between 327mg/L and 380mg/L.

Drainable Brine Volume

The largest uncertainty with respect to the Exploration Target is the relative proportion of each hydrostratigraphic unit over the depth interval 102.5mbgl and 400mbgl in the northern project area and the composition of the alluvial sand sediments with depth in the alluvial fan tenements area.



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The relative proportion of each unit and composition of the alluvial sediments will have a significant effect on the weighted average specific yield and volume of potentially recoverable brine. If proportionately more competent halite (S3F) or clay dominant units (S4B, S5B and S6B) were encountered below 102.5mbgl, then the weighted average specific yield would be lower. Conversely, if proportionately sand dominated lithologies (S4C and S5C) were encountered below 102.5m, then the weighted average specific yield would be higher. Similarly, if the alluvial sediments are dominated by clay, the weighted average specific yield would be lower, or higher if dominated by sand or gravel.

The following method has been used in estimating a range of specific yields that may apply to the sediments in the northern project area Exploration Target (between 102.5mbgl and 400mbgl) and alluvial fan tenements area Exploration Target:

- ▶ Using data from the Indicated MRE, the relative proportion of hydrostratigraphic units S4 to S6 that were encountered in the southern area (at depths to ~400mbgl) were determined. This has been used to calculate a weighted average specific yield of 8%. This estimate has been used as an upper bound on the specific yield that maybe encountered between 102.5mbgl and 400mbgl in the northern project area Exploration Target.
- ▶ Competent halite may become predominant with depth and towards the north of the project area. Depending on the extent of this predominance, the weighted average specific yield will be lower as the proportion of competent halite increases. The lower bound to specific yield has been derived from the case where competent halite constitutes 70% of the geological mass below 102.5mbgl. In this case, the weighted average specific yield is 4%. This estimate has been used as a lower bound for the specific yield that maybe encountered between 102.5mbgl and 400mbgl in the northern project area Exploration Target.
- ▶ The sediments in the alluvial fan tenements area are likely to comprise a combination of fine (silts and clays) and coarse (sand and gravel) material. The relative proportion of these is not known. In the absence of other data, an upper specific yield limit of 10% and a lower specific yield limit of 5% has been applied to this area.

Future Work

Future drilling is proposed to investigate the Exploration Target described above. An exploration drill-hole programme is outlined below, and proposed drill holes are shown on Figure 2.

Drillhole Name	Easting	Northing	Dip (°)	Target Depth (m)	Target and Remarks
ET_DH_01	3400071	7336414	90	400	Deep clastic sediments, northern area
ET_DH_02	3398278	7338934	90	400	Deep clastic sediments, northern area
ET_DH_03	3400981	7336704	90	400	Alluvial fan sediments

Notes:

Coordinates	Argentine Posgar Guas Kugar Zone 3
Drilling Method	Diamond
Brine Sampling	Brine samples from specific depths for laboratory analysis
Core	Geological description core and RBR Lab Test
Geol. Sampling	Sand samples from core (if possible) for Particle Size Distribution Analysis in lab
Completion	Complete to full depth with 50 mm PVC casing and slotted screen

Figure 6. Rincon Lithium Project – Exploration Target

The drilling and testing programme will involve:

- ▶ Diamond drilling to up to 400mbgl.



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- Detailed geological logging.
- Collection of cores for laboratory analysis of specific yield (using the Relative Brine Release methodology).
- Collection of disturbed geological samples for Particle Size Distribution analysis (PSD) and subsequent estimate of specific yield using a "pedogenic transfer function" method.
- Collection and analysis of brine samples from specific depth intervals using packers to isolate sampled horizons.
- Completion of selected exploration drill holes with 50mm PVC casing and slotted screen.

Drilling will focus on confirming the geology, specific yield and brine grade over the depths of interest. Once hydrogeological and Li-mineral prospectivity has been confirmed, then the requirements to determine extraction methodologies can be assessed. The programme outlined in Figure 6 is conceptual and will be subject to progressive review during the implementation and as results become available.

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 www.argosyminerals.com.au or contact us via admin@argosyminerals.com.au or Twitter @ArgosyMinerals.

For further information:

Jerko Zuvela
Managing Director

T | +61 8 6188 8181

E | admin@argosyminerals.com.au

W | www.argosyminerals.com.au

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 www.argosyminerals.com.au and www.asx.com. Argosy confirms that it is not



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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.

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:

28th Nov 2018 - Argosy delivers exceptional PEA results for Rincon Project

8th Feb 2021 - \$30M Placement to Fund 2,000tpa Production

10th Feb 2021 - Clarifying Announcement

3rd August 2023 – Rincon Test Pumping Results

15th January 2024 – JORC Resource Upgrade for Rincon Lithium Project - Substantial 180% Increase

12th April 2024 – Updated: Dynamic Modelling Produces Outstanding Results for Rincon Lithium Project

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





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JORC Table 1

Reporting of Exploration Results – JORC (2012) Requirements

Section 1: Sampling Techniques and Data

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Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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 (e.g. 'reverse circulation drilling was 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. 	<ul style="list-style-type: none"> Geology has been sampled using HQ diamond drilling and mud-rotary drilling techniques (at 200mm diameter). Brine samples have been recovered from specific intervals using packers with airlift and/or bailed recovery. 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 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, 30cm lengths were cut from the bottom of the tubes and sealed with end caps and tape to maintain sample humidity. Core drilling was undertaken to obtain representative samples of the sediments that host brine. 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. 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 re-labelled with a sample number before sending the sample to the laboratory. 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 unstable conditions in the drill hole). Packer sampling was undertaken on a nominal 12m separation basis. All of the holes were geophysically logged to assess both brine properties and petrophysical properties of the formation. Fluid logs were temperature and





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Criteria	JORC Code Explanation	Commentary
		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	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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. 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. 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.
Drill sample recovery	<ul style="list-style-type: none"> Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	<ul style="list-style-type: none"> 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. 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). 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. 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.
Logging	<ul style="list-style-type: none"> 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Diamond holes are logged by a geologist, who is also supervised taking brine samples and core samples for laboratory porosity analysis. 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 qualitative characteristics, such as the sedimentary

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Criteria	JORC Code Explanation	Commentary
<p>Sub-sampling techniques and sample preparation</p>	<ul style="list-style-type: none"> • <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i> • <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i> • <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i> • <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i> • <i>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.</i> • <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i> 	<p>facies and their relationships. Cores are photographed when laid out for geological logging.</p> <ul style="list-style-type: none"> • Core recoveries are measured for the entire core recovered relative to the run length of 1.5m. • Disturbed samples from mud rotary drilling are logged by a geologist on site for the proportion of sand, clay, volcanics, and halite in each 1m sample. <ul style="list-style-type: none"> • Core samples are semi-systematically sub-sampled for laboratory analysis, cutting or selecting the lower 30cm 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. • Sub-samples were sent to an experienced porosity laboratory in the USA for testing. • 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. • 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. • Brine samples were collected during drilling of the diamond holes and at multiple points in time during pumping tests. • 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.
<p>Quality of assay data and laboratory tests</p>	<ul style="list-style-type: none"> • <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i> • <i>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.</i> • <i>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.</i> 	<ul style="list-style-type: none"> • The Norlab/Alex Stuart laboratory in Jujuy, Argentina was 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. • QA/QC check samples were sent to the Norlab/Alex Stuart laboratory separately. • 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. • Duplicates, blank, and field standard samples were included. • Relative errors between samples have a mean and





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Criteria	JORC Code Explanation	Commentary
		median error of less than 5% and 1% respectively.
Verification of sampling and assaying	<ul style="list-style-type: none"> The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	<ul style="list-style-type: none"> Accuracy, the closeness of measurements to the “true” or accepted value, was monitored by the insertion of field standards. Duplicate samples and blanks were included in the laboratory batch.
Location of data points	<ul style="list-style-type: none"> 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. Specification of the grid system used. Quality and adequacy of topographic control. 	<ul style="list-style-type: none"> 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. The location is in Zone 3 of the Argentine Gauss Kruger coordinate system, using the Argentine POSGAR datum.
Data spacing and distribution	<ul style="list-style-type: none"> Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	<ul style="list-style-type: none"> 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. Brine samples were collected from discrete horizons during diamond drilling. The mean spacing between drill holes is: <ul style="list-style-type: none"> ~950m for the MRE component to a depth of 102.5mbgl. ~1800m for the MRE between 102.5mbgl and 350mbgl. >2000m for the MRE between 350mbgl and 400mbgl.
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	<ul style="list-style-type: none"> The salar deposits that host lithium- bearing brines consist of sub-horizontal beds and lenses of halite, clay, and volcanoclastics. The vertical holes are essentially perpendicular to these units, intersecting their true thickness. Brine saturates the entire geological sequence below the water table (~ 1mbgl) and exists in a “continuum” within the pore-space of the geology.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Samples were transported to the laboratory for chemical analysis in sealed, rigid plastic bottles with sample numbers clearly identified. 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.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> No audits or reviews have been conducted at this point in time.

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Section 2: Reporting of Exploration Results

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Criteria	JORC Code Explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> 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. 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. 	<ul style="list-style-type: none"> 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. The Project comprises up to 8,606Ha 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. The properties are reported to be in good standing, with payments made to relevant government departments. Argosy currently have a 77.5% interest in Puna Mining S.A.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> Historical exploration was 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. The properties owned by the JV have been previously explored or exploited for borates. The MRE described in this assessment also draws on previous Exploration Results and an existing Indicated MRE derived from three prior stages of assessment completed by Argosy.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The sediments within the salar consist of halite, clays, volcanoclastics, 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. Brines within the salar are formed by solar concentration, with mineralized brines saturating the entire sedimentary sequence from approximately 1mbgl. 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).
Drill hole Information	<ul style="list-style-type: none"> 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 style="list-style-type: none"> 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





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Criteria	JORC Code Explanation	Commentary
	<ul style="list-style-type: none"> • easting and northing of the drill hole collar • elevation or RL (Reduced Level – elevation above sea level in meters) of the drill hole collar • dip and azimuth of the hole • down hole length and interception depth • hole length. • 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. 	<p>porosity analysis.</p> <ul style="list-style-type: none"> • 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. • 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.
Data aggregation methods	<ul style="list-style-type: none"> • 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. • 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. • The assumptions used for any reporting of metal equivalent values should be clearly stated. 	<ul style="list-style-type: none"> • 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. • The Exploration Target has been derived by using weighted mean average grades from the overlying Indicated Mineral Resource. • Lithium concentrations have been multiplied by 5.347 to calculate LCE.
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> • These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • 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'). 	<ul style="list-style-type: none"> • 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). • 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. • 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.
Diagrams	<ul style="list-style-type: none"> • 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 style="list-style-type: none"> • 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.
Balanced reporting	<ul style="list-style-type: none"> • 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. 	<ul style="list-style-type: none"> • This announcement presents representative data from drilling and sampling, such as lithological descriptions, brine concentrations, and information on the thickness of mineralisation. • The Exploration Target is based only on the extrapolation of adjacent and overlying drilling.
Other substantive exploration data	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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).





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Criteria	JORC Code Explanation	Commentary
	<i>characteristics; potential deleterious or contaminating substances.</i>	<ul style="list-style-type: none"> Two deep production bores were subject to pumping tests of between 3 and 7 days to assist in the determination of assumed mining factors.
Further work	<ul style="list-style-type: none"> <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i> <i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i> 	<ul style="list-style-type: none"> 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. Exploration programme comprising up to 3 diamond drill holes to depths of up to 400m is planned, covering core and brine sample recovery, laboratory assays and testing to confirm hydraulic properties. Collar locations are shown on the Figure in the announcement.

Section 3: Estimation and Reporting of Mineral Resources

Criteria	JORC Code Explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> Dropdown menus were used for digital data capture using standardised codes in the project database. 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. Assay data and data from core analysis are received in digital format from the laboratories and imported directly into the project database. Drill hole data points are plotted in a GIS system to check location. Database extracts for resource modelling work and GIS compilation work checked for accuracy. Random cross-checks are undertaken against field-logged geological descriptions and database entries and against assay data and laboratory provided analysis certificates.
Site Visits	<ul style="list-style-type: none"> <i>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.</i> 	<ul style="list-style-type: none"> A site visit by the CP is planned but has been completed at this stage. 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.
Geological Interpretation	<ul style="list-style-type: none"> <i>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</i> <i>Nature of the data used and of any assumptions made.</i> <i>The effect, if any, of alternative interpretations on Mineral Resource estimation.</i> <i>The use of geology in guiding and controlling Mineral Resource estimation.</i> 	<ul style="list-style-type: none"> 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. No alternative geological interpretations have

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	<p><i>The factors affecting continuity both of grade and geology.</i></p>	<p>been generated.</p> <ul style="list-style-type: none"> • 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. • Pumping tests and operational pumping for the pilot plant have not shown any hydraulic boundaries which adds to confidence in geological interpretation. • Pumping tests from deep bores have shown a leaky response which adds the confidence of vertical hydraulic continuity. • 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.
<p>Dimensions</p>	<ul style="list-style-type: none"> • <i>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.</i> 	<ul style="list-style-type: none"> • 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 ~1800ha. • 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. • Drilling has occurred to: <ul style="list-style-type: none"> • 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. • 400m depth in 3 drill holes. • 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 style="list-style-type: none"> • the entire salar surface (within Argosy tenements) to a depth of 102.5mbgl (an area of ~1800ha). • the southern half of the project area between 102.5mbgl and 350mbgl (an area of ~800ha) except the southernmost tenement where the depth is limited to 210mbgl (an area of ~109ha). • The Inferred Resource is modelled for two depth increments: <ul style="list-style-type: none"> • the aquifer sequence between 350mbgl and 400mbgl in the southern tenements only (~800 ha). • The aquifer sequence within the alluvial fan tenements between the estimated saltwater interface and elevation of surrounding competent halite (~206ha). • 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





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<p>Estimation and Modelling Techniques</p>	<ul style="list-style-type: none"> 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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. <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>	<p>interdigitating alluvial sediments.</p> <ul style="list-style-type: none"> 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 drainable porosity rather than total porosity). 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 volcanics. 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 volcanics. Geological surfaces were modelled with priority given to drill-hole data. Surfaces were modelled with a spatial resolution of 75m. Interpolations were undertaken with Leapfrog’s Linear Interpolation Function. 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. The interpolation was done using Leapfrog’s linear interpolation function with a 75m resolution and grade increments of 10mg/L between 180mg/L (minimum) and 480mg/L (maximum). The interpolation was done for each hydrostratigraphic unit (S1 to S6 and SV) However, as groundwater exists in a continuum (i.e. brine will migrate between units), the model drew on all data (including from other hydrostratigraphic units) in guiding the interpolation. The modelled volumes were multiplied by Drainable Porosity for each hydrostratigraphic unit to determine the potentially recoverable brine (Resource volume). The effective Drainable Porosity was determined from the laboratory core analysis, particle size distribution analysis and BMR logging. The combined unit volume, interpolated lithium grade distribution and drainable porosity was used to determine an in-situ brine resource (for each hydrostratigraphic unit). The Resource output was validated by comparing total sediment volumes with those estimated from a dynamic block model that has been developed in parallel, to support environmental approvals.





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Moisture	<ul style="list-style-type: none"> Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content. 	<ul style="list-style-type: none"> Not relevant to the assessment of brine deposits.
Cut-off parameters	<ul style="list-style-type: none"> The basis of the adopted cut-off grade(s) or quality parameters applied. 	<ul style="list-style-type: none"> 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.
Mining factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> 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. 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. Pumping tests indicate the deep interbedded aquifer has a moderate transmissivity of between 30 m²/d and 250 m²/d (varying with bore depth and implying a hydraulic conductivity in the range 0.5 m/d to 1 m/d). 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.
Metallurgical factors or assumptions	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Brine processing at the RLBP pilot plant has demonstrated Lithium enrichment to 99.8% with the of production of Li₂CO₃.
Environmental factors or assumptions	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Water-dependent ecosystems may exist on north-western margin of the salar in alluvial sediments and calcrete. The brine evaporation process will result in waste salts. Environmental approval is in progress but has not yet been granted. Assessment of a Mineral Reserve which will address the dynamic nature of the MRE, under operation conditions, has not been completed.
Bulk density	<ul style="list-style-type: none"> 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. The bulk density for bulk material must have been measured by methods that adequately account for void 	<ul style="list-style-type: none"> 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





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	<p><i>spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</i></p> <ul style="list-style-type: none"> • <i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i> 	<p>yield combine for brine resource calculation.</p> <ul style="list-style-type: none"> • 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).
Classification	<ul style="list-style-type: none"> • <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i> • <i>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).</i> • <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i> 	<ul style="list-style-type: none"> • Exploration data comprise: <ul style="list-style-type: none"> • an average drill hole spacing of 950m (to 102.5mbgl); 1800m (to 350mbgl) and over 2000m for the interval below 400mbgl). • brine analysis from all hydrostratigraphic units. • drainable porosity analysis based on core analysis from units S1 to S3 and BMR from S3 to S6 and SV. • pumping test results confirming brine extractability and composite lithium grade under dynamic conditions and hydraulic continuity vertically and laterally through the aquifer system. • These data provide confidence in estimating a mineral resource: <ul style="list-style-type: none"> • An Indicated MRE to a depth of 350m where the data density is greater. • An inferred MRE between 350m and 400m (where data density is reduced). • Appropriate account for brine resource reporting has been taken of all relevant factors. • The Classification result appropriately reflects the Competent Person's view of the deposit.
Audits or reviews	<ul style="list-style-type: none"> • <i>The results of any audits or reviews of Mineral Resource estimates.</i> 	<ul style="list-style-type: none"> • The modelling and the Mineral Resource estimates have been subject to internal peer review by Argosy and AQ2.
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> • <i>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.</i> • <i>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.</i> • <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i> 	<ul style="list-style-type: none"> • 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. • 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. • It is not possible to quantify the accuracy or extent of the above uncertainties. • 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

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		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.

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