

# **ASX ANNOUNCEMENT**

14 July 2022

# Outstanding Initial Well Test Results at HMW Project

High lithium grades, porosity and brine flow rates recorded

# **Highlights:**

- 72-hour constant rate testing successfully completed at first Pata Pila pumping well (PPB-01-21).
  - Brine sampling confirms high grade resource (Li > 910 mg/L).
  - Hydraulic testing saw aquifer response showing favourable conditions for high volume brine production (15 – 20L per second).
- 30-day longer term pumping test started and flowing steadily.
- Porosity test (RBRC) for specific yield on second Pata Pila well core samples returned positive results (range of 10.1 – 21.0%, mean of 14.1%).
- Pumping tests to be completed on three further wells; a second well at Pata Pila and two wells at Rana de Sal.
- Testing of first well at Rana de Sal (PBRS-01-21) is imminent.

Galan Lithium Limited (ASX: GLN) (**Galan** or **the Company**) is pleased to provide an update on the long-term pump testing program for its 100%-owned Hombre Muerto West Lithium Project (**HMW Project**), located on the Western Basin of the Hombre Muerto salar in Catamarca Province, Argentina. These tests are an integral part of the current Definitive Feasibility Study (**DFS**) for the HMW Project.

#### Galan Managing Director, JP Vargas de la Vega, commented:

"We are extremely pleased with the outcomes from the 3-day constant rate pump test at the first Pata Pila well, PPB-01-21. High lithium grades, porosity and brine flow rates are a powerful combination for driving operational efficiency and economic performance. These outstanding hydrological outcomes are paramount to the project DFS foundations and further validates the world-class nature of the lithium brine resource we hold at HMW.

The results are a ready demonstration of the substantial progress we are making in advancing the Project. They also represent key de-risking of the planned HMW development. While we are focussed on a substantially lower risk, conventional process route and project development at HMW, we are ensuring that every aspect of our planned operation at HMW is comprehensively evaluated and proven, both technically and commercially."

## Well pump testing program update

The well pump testing program is advancing at the HWM Project in order to evaluate the hydraulic properties of the target brine bearing aquifers. A series of hydraulic tests have been successfully performed on the first pumping well at Pata Pila (PPB-01-21). These include a step test and constant rate test.

Long term (30-day) pumping tests at PPB-01-21 began on 30 June and are set to conclude on 30 July 2022. Brine levels and samples for geochemical analysis will be collected throughout the testing period. This series of pump tests are planned to be conducted across a further three wells, being a second well at Pata Pila and two wells at Rana de Sal. Testing of the first well at Rana de Sal (PBRS-01-21) is expected to commence in the next few days.

All well pump test data is to be incorporated into the upcoming HMW Resource/Reserve model. This will form part of the current DFS for the HMW Project, being undertaken by Hatch Engineering.

## Constant rate test outcomes at Pata Pila: High lithium grades and brine flow rates

The constant rate test was performed for 72 hours and observed with three (3) different piezometers. Aquifer response during the pumping test indicates favorable conditions (permeability) for brine production with expected flowrates between 15 - 20 L/s per well at Pata Pila.

Fourteen brine samples were collected throughout the duration of the test and analyzed for lithium (Li) at the Alex Stewart laboratory. Chemical results positively confirm a high-grade brine resource, with an increasing Li grade during pumping, stabilising at approximately 910 mg/L (see Figure 1 for results). The site operations and sampling procedures were supervised by SRK Consultants.

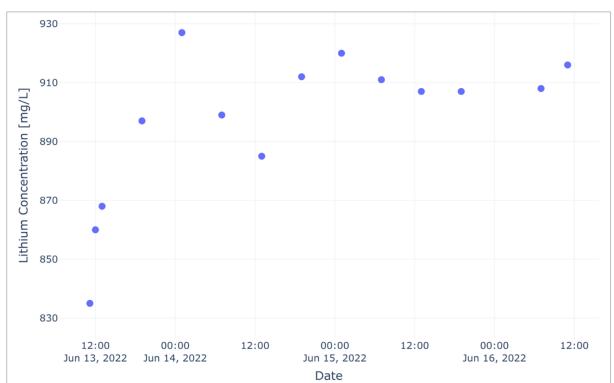


Figure 1 – Lithium grade [mg/L] samples obtained during the 72 hours constant rate test at PPB-01-21.

# Porosity test (RBRC) outcomes at Pata Pila

Data from the first batch of twenty (20) core samples obtained from the Pata Pila Diamond Drillhole undergoing Relative Brine Release Capacity (RBRC) testing has been received. These analyses were conducted at the Daniel B. Stephens & Associates (DBS&A) laboratories based in Albuquerque, USA.

The RBRC results are positive with specific yield values consistent with reported values in the literature for medium-to-fine sand lithologies, and as previously described with respect to the core samples. The RBRC values ranged between 10.1% and 21.0%, with a mean specific yield value of 14.1%.

A second batch consisting of 39 core samples has already been selected by SRK geologists on site and is being prepared for transportation to the DBS&A laboratory. This batch includes samples from both Rana de Sal and Pata Pila.



Figure 2 – Brine discharge at PBPP-01-21 during long term pumping test.

#### The Galan Board has authorised this release.

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#### **Forward-Looking Statements**

Some of the statements appearing in this announcement may be in the nature of forward-looking statements. You should be aware that such statements are only predictions and are subject to inherent risks and uncertainties. Those risks and uncertainties include factors and risks specific to the industries in which Galan Lithium Limited operates and proposes to operate as well as general economic conditions, prevailing exchange rates and interest rates and conditions in the financial markets, among other things. Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement. No forward-looking statement is a guarantee or representation as to future performance or any other future matters, which will be influenced by several factors and subject to various uncertainties and contingencies, many of which will be outside Galan Lithium's control. Galan Lithium Limited does not undertake any obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions or conclusions contained in this announcement. To the maximum extent permitted by law, none of Galan Lithium Limited, its directors, employees, advisors, or agents, nor any other person, accepts any liability for any loss arising from the use of the information contained in this announcement. You are cautioned not to place undue reliance on any forward-looking statement. The forward-looking statements in this announcement reflect views held only as at the date of this announcement.

#### **About Galan**

Galan Lithium Limited (ASX:GLN) is an ASX-listed lithium exploration and development business. Galan's flagship assets comprise two world-class lithium brine projects, HMW and Candelas, located on the Hombre Muerto salar in Argentina, within South America's 'lithium triangle'. Hombre Muerto is proven to host lithium brine deposition of the highest grade and lowest impurity levels within Argentina. It is home to the established El Fenix lithium operation (Livent Corporation) and the Sal de Vida (Allkem) and Sal de Oro (POSCO) lithium projects. Galan is also exploring at Greenbushes South in Western Australia, approximately 15km south of the Tier 1 Greenbushes Lithium Mine.

Hombre Muerto West (HMW): A ~14km by 1-5km region on the west coast of Hombre Muerto salar neighbouring Livent Corp to the east. HMW is currently comprised of seven concessions – Pata Pila, Rana de Sal, Deceo III, Del Condor, Pucara, Catalina and Santa Barbara. Geophysics and drilling at HMW demonstrated a significant potential of a deep basin. In March 2020, a maiden resource estimate delivered 1.1Mt of LCE for two of the largest concessions (Pata Pila and Rana de Sal). That resource now sits at 2.3Mt of LCE with exploration upside remaining for the rest of the HMW concessions not included in the current indicated resource.

Candelas: A ~15km long by 3-5km wide valley filled channel which project geophysics and drilling have indicated the potential to host a substantial volume of brine and over which a maiden resource estimated 685kt LCE (Oct 2019). Furthermore, Candelas has the potential to provide a substantial amount of processing water by treating its low-grade brines with reverse osmosis, this is without using surface river water from Los Patos River.

**Greenbushes South Lithium Project:** Galan has an Exploration Licence application (E70/4629) covering a total area of approximately 43 km². It is approximately 15kms to the south of the Greenbushes mine. In January 2021, Galan entered into a sale and joint venture with Lithium Australia Ltd for an 80% interest in the Greenbushes South Lithium project, which is located 200 km south of Perth, the capital of Western Australia. With an area of 353 km², the project was originally acquired by Lithium Australia NL due to its proximity to the Greenbushes Lithium Mine ('Greenbushes'), given that the project covers the southern strike projection of the geological structure that hosts Greenbushes. The project area commences about 3km south of the current Greenbushes open pit mining operations.

#### **Competent Persons Statement**

The information contained herein that relates to Exploration Results is based on information compiled or reviewed by Dr Luke Milan, who has consulted to the Company. Dr Milan is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Dr Milan consents to the inclusion of his name in the matters based on the information in the form and context in which it appears.

# ANNEXURE 1 JORC CODE, 2012 EDITION – TABLE 1

# **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised 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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg '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 (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Drill core was recovered in 1.5 m length core runs in core split tubes to minimize sample disturbance. Core recovery was carefully measured by comparing the measured core to the core runs.</li> <li>Drill core was to obtain representative samples of the stratigraphy and sediments.</li> <li>Water/brine samples were collected by purging the brine section of the hole of all fluid over an approximate 72 hour period. The hole was then allowed to re-fill with ground water and the purged sample for lab analysis collected.</li> <li>Samples were taken from the relevant section based upon geological logging and conductivity testing of water.</li> <li>Water/brine samples were collected as listed in table 1.</li> <li>Conductivity tests are taken on site with a field portable Hanna Ph/EC/DO multiparameter.</li> <li>Density measurements were undertaken on site with a field portable Atmospheric Mud Balance, made by OFI testing equipment.</li> </ul>
Drilling techniques	Drill type (eg core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg 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).	Diamond drilling with internal (triple) tube was used for drilling. The drilling produced core with variable core recovery, associated with unconsolidated material. Recovery of the more friable sediments was difficult, however core recovery by industry standards was very good.     Brine is used as base for drilling fluid for lubrication during drilling.
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 in triple (split) tubes. Appropriate additives were used for hole stability to maximize core recovery. The core recoveries were measured from the core and compared to the length of each run to calculate the recovery.</li> <li>Brine samples were collected over relevant sections based upon the geology encountered and ground water representation.</li> <li>Brine quality is not directly related to core recovery and is largely independent of the quality of core samples. However, the porosity and permeability of the lithologies where samples are taken is related to the rate of brine inflow.</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)</li> </ul>	<ul> <li>The core is logged by a senior geologist and contract geologists who are overseen by the senior geologist who also supervised the taking of samples for laboratory analysis.</li> <li>Logging is both qualitative and quantitative in nature. The relative proportions of different lithologies which have a direct bearing on the</li> </ul>

	photography.	overall porosity, contained and potentially
	The total length and percentage of the relevant intersections logged.  The total length and percentage of the relevant intersections logged.	extractable brine are noted, as are more qualitative characteristics such as the sedimentary facies. Cores are split for sampling and are photographed.  • All core was logged by a geologist
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Water/brine samples were collected by purging the hole of all fluid in the hole, to minimize the possibility of contamination, then allowing the hole to re-fill with ground waters. Samples were then taken form the relevant section.</li> <li>Duplicate sampling is undertaken for quality control purposes.</li> <li>20 Core samples for Relative Brine Release Capacity tests were posted in sealed plastic sleeves in 30 – 40 cm lengths. About 10 litres of brine was also provided.</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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<ul> <li>The Alex Stewart laboratory located in Jujuy, Argentina, is used as the primary laboratory to conduct the assaying of the brine samples collected.</li> <li>The Alex Stewart laboratory is ISO 9001 and ISO 14001 certified and is specialised in the chemical analysis of brines and inorganic salts, with considerable experience in this field.</li> <li>The SGS laboratory was used for secondary check analyses and is also certified for ISO 9001 and ISO 14001</li> <li>Relative Brine Release Capacity tests were conducted by the Daniel B. Stephens &amp; Associates in Albuquerque, New Mexico. This laboratory uses the established method and are experts in RBRC testing.</li> </ul>
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>	Field duplicates, standards and blanks are used to monitor potential contamination of samples and the repeatability of analyses.
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 survey locations were located using modern Garmin handheld GPS with an accuracy of +/-5m.</li> <li>The grid System used: POSGAR 2007, Argentina Zone 3</li> <li>Topographic control was obtained by handheld GPS, and the topography is mostly flat with very little relief.</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> </ul>	Water/brine samples were collected within isolated sections of the hole based upon the results of geological logging.     20 core samples were taken from representative lithologies throughout the brine bearing aquifer

		Whether sample compositing has been applied.		
	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>	•	The brine concentrations being explored for generally occur as sub-horizontal layers and lenses hosted by conglomerate, gravel, sand, salt, silt and/or clay. Vertical diamond drilling is ideal for understanding this horizontal stratigraphy and the nature of the sub-surface brine bearing aquifers
	Sample security	The measures taken to ensure sample security.	•	Data was recorded and processed by trusted employees, consultants and contractors to the Company and overseen by senior management ensuring the data was not manipulated or altered. Samples are transported from the drill site to secure storage at the camp on a daily basis. Samples were checked by laboratories upon receipt for damage
/	Audits or reviews	The results of any audits or reviews of sampling techniques and data.	•	SRK has conducted audits to core logging sample and pumping procedures.

# **Section 2 Reporting of Exploration Results**

relation to geological structure	<ul> <li>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>	generally occur as sub-horizontal layers and lenses hosted by conglomerate, gravel, sand, salt, silt and/or clay. Vertical diamond drilling is ideal for understanding this horizontal stratigraphy and the nature of the sub-surface brine bearing aquifers
Sample security	The measures taken to ensure sample security.	<ul> <li>Data was recorded and processed by trusted employees, consultants and contractors to the Company and overseen by senior management ensuring the data was not manipulated or altered.</li> <li>Samples are transported from the drill site to secure storage at the camp on a daily basis.</li> <li>Samples were checked by laboratories upon receipt for damage</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	SRK has conducted audits to core logging sample and pumping procedures.
	orting of Exploration Results he preceding section also apply to this section.)	
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 licence to operate in the area.</li> </ul>	The Hombre Muerto Lithium Project consists of numerous licences located in Catamarca Province, Argentina. The tenements are owned by Blue Sky Lithium Pty Ltd ('Blue Sky'). The Company and Blue Sky executed a Share Sale Agreement whereby Galan Lithium Limited purchased 100% of the issued share capital of Blue Sky.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No historical exploration has been undertaking on this licence area. Both PPB-01-2-21 and PBRS-01-21 are west of the adjacent licence area held by Livent Corporations (NYSE:LVHM)
Geology	Deposit type, geological setting and style of mineralisation.	Both the Pata Pila and Rana De Sal licence areas cover sections of alluvial fans located on the western margin of the Hombre Muerto salar proper. The salar hosts a world-renowned lithium brine deposit. The lithium is sourced locally from weathered and altered felsic ignimbrites and is concentrated in brines hosted within basin fill alluvial sediments and evaporites.
Drill hole Information	<ul> <li>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>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) 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> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not</li> </ul>	<ul> <li>Drillhole ID: PPB-01-21</li> <li>Easting: 3377959 E (POSGAR 2007 Zone 3)</li> <li>Northing: 7191250 N (POSGAR 2007 Zone 3)</li> <li>Vertical hole</li> <li>Hole Depth: 220m</li> <li>Drillhole ID: PBRS-01-21</li> <li>Easting: 3376761 E (POSGAR 2007 Zone 3)</li> <li>Northing: 7195517 N (POSGAR 2007 Zone 3)</li> <li>Vertical hole</li> <li>Hole Depth: 220m</li> </ul>

Criteria	JORC Code explanation	Commentary
	Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
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>	No weighting or cut off grades have been applied to the assay results
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>	It is fairly assumed that the brine layers lie sub- horizontal and, given that the drillhole is vertical, that any intercepted thicknesses of brine layers would be of true thickness.
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.	Provided, refer to figures and tables in the document
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.	These results are from the first wells at Pata Pila and Rana de Sal licence areas.
Other substantive exploration data	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.	All meaningful and material information is reported
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>	Four wells in total to be completed by H2 2022     Based on the final results from the four wells, further exploratory diamond drilling will be considered at HMW