

Perth, Western Australia 13 September 2012

# GALAXY SAL DE VIDA DEFINITIVE FEASIBILITY STUDY UPDATE

## Highlights

- DFS anticipated to be completed in Q1 2013
- Sal de Vida team boosted following key lithium expert appointments including industry veteran Dr Vijay Mehta as Senior Technical Advisor
- Sal de Vida team highly qualified in lithium brine operations

Galaxy Resources Ltd (ASX: GXY) ("Galaxy" or "the Company") advises that the Definitive Feasibility Study ("DFS") being undertaken on its Sal de Vida lithium and potash brine project ("Sal de Vida" or "the Project") in Argentina is progressing well and is expected to be completed in Q1 2013.

Galaxy acquired a 70% stake in the Sal de Vida project following its merger with Lithium One Inc., which was completed in July 2012.

Argentinean engineering firm TAGING S.A. ("TAGING"), which specialises in Argentinian mining projects with extensive experience in lithium brine projects, has been appointed to complete the DFS.

International engineering company Hatch Ltd ("Hatch") is providing specialist process input for Galaxy during the DFS process. Hatch was the designer and EPCM contractor for Galaxy's Jiangsu Lithium Carbonate Plant ("Jiangsu") in China and also has extensive lithium brine and operational experience in South America.



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A number of lithium experts to bolster the existing Sal de Vida project team have also been appointed. Most notable is the appointment of lithium industry veteran Dr Vijay Mehta as Senior Technical Advisor. Dr Mehta has 45+ years of experience in brine based lithium processing technology, including 30 years at FMC Lithium, where he developed the lithium plant at FMC's Hombre Muerto Salar project, which adjoins Sal de Vida.

**Key Technical Team** include Dr Vijay Mehta – Senior Technical Advisor, Jerome Lukes – Senior Technical Engineer, David Butts – Pond Operation & Design, Dr Greg Sheehan – Process Operation and Design, Dr Jingyuan Liu – GM Business Readiness.

Key Project Management include lain Scarr – General Manager Argentina, Terry Stark - Project Director, Ernest Burga - Engineering Project Manager (See below for full profiles).

Galaxy Managing Director Iggy Tan said: "We have assembled a highly qualified and experienced technical team to oversee the preparation of the DFS for Sal de Vida. The team has extensive brine pond and lithium processing experience as well as strong operational and design expertise and incorporates experience from the three operating lithium brine operations in Chile and Argentina as well as Galaxy's Jiangsu plant in China.



"Our strategy is to advance Sal de Vida's development in order to meet the anticipated demand for lithium carbonate required in lithium-ion batteries for electronics, electric vehicles and battery storage grows. A final investment decision on the development of Sal de Vida will be made upon receipt of a positive DFS and provided Jiangsu is operating at targeted production and cashflow levels on a sustained basis," Mr Tan said.

Sal de Vida is situated in the renowned 'lithium triangle' at the meeting point of Argentina, Chile and Bolivia. Galaxy's strategic plan is for Sal de Vida to produce 25,000 tpa of lithium carbonate, taking Galaxy's total lithium carbonate production to 42,000 tpa. At 25,000 tpa lithium carbonate production Sal de Vida would also produce approximately 100,000 tpa of saleable potash-by product.

Sal de Vida's brine chemistry is highly favourable, with high levels of lithium and potash and low levels of magnesium and sulphate impurities. Sal de Vida is located adjacent to FMC Lithium's El Fenix lithium operation in the Salar del Hombre Muerto, which has been in operation for the last 15 years.

The Sal de Vida Pre-Feasibility Study ("**PFS**"), completed in October 2011, estimated a net present value for the project of US\$1.07 billion. The average operating cost was estimated at US\$1,537 per tonne of finished lithium carbonate, generating a net pre-tax cash flow of US\$139 million per annum.

### **Key Lithium Appointments**

Key technical appointments to the Sal de Vida Project group and their relevant experience are as follows:

### Dr Vijay Mehta – Senior Technical Advisor

Dr Mehta is a lithium industry veteran, with 45+ years of experience in brine based processing technology. Dr Mehta was the Product and Process Technology Development Leader of FMC Lithium for 30 years, stepping down in 2010. He has visited most of the world's lithium resource projects and owns 12 US patents and has written in excess of 50 technical reports and papers on lithium. He was the one of the founding developers of FMC's lithium plant in the Hombre Muerto Salar, which has produced lithium carbonate since 1998.

## Mr Jerome Lukes – Senior Technical Engineer

Mr Lukes has extensive experience in the recovery of lithium carbonate from brines. He designed and managed the process research and development at the Salar de Atacama Mine (SQM) in Chile. Mr Lukes led process development for the potash plant at the Potasio Rio Colorado Project in Argentina and other solar evaporation projects in Brazil, Australia, Saudi Arabia, Egypt, Mexico and the US.

## Mr David Butts – Pond Operation & Design

Mr Butts is a lithium industry veteran who has devoted around 40 years exclusively to the extraction of minerals and salts from lakes, oceans, salars, and underground deposits. He participated in the design and operation of solar pond complexes at Ogden (Utah), FMC Lithium (Argentina) and Quidam Basin (China). Mr Butts has supervised the building of hundreds of kilometres of solar pond dikes around the globe.

## Dr Greg Sheehan – Process Operation and Design

Dr Sheehan is Hatch's Lithium Global Practice Director. He has over 27 years experience in extractive metallurgy and hydrometallurgical processes. Within his role at Hatch, he established lithium team capabilities in four global centres. Dr Sheehan was the lead process engineer for Galaxy's 17,000 tpa Jiangsu plant. His team has conducted operational support, feasibility studies and project reviews on a number of lithium brine projects in South America.

## Dr Jingyuan Liu – GM Business Readiness

Dr Liu has over 20 years experience in project management, process design and equipment design involving mineral processing, chemical industries, non-ferrous industries, iron and steel industries and energy industries. He has a PhD



degree in Chemical Engineering. He previously had a senior design role in a mineral processing equipment provider. He also worked as a consultant at Hatch prior to joining Galaxy. Dr Liu was the client project manager for Jiangsu.

Key project management appointments to the Sal de Vida Project group and their relevant experience are as follows:

### Mr Iain Scarr - General Manager Argentina

Mr. Scarr brings extensive experience in industrial minerals exploration and development garnered from a 30 year career with Rio Tinto and its subsidiaries. Until February 2009, Mr Scarr was Rio Tinto Exploration's Commercial Director for Industrial Minerals Exploration. In that position he played key leadership roles in marketing, commercial, and strategic assessments of worldwide industrial minerals projects, including Rio Tinto's Jadar Lithium Project in Serbia. Previously, as Vice President of Exploration for Rio Tinto America Industrial Minerals Inc, Mr. Scarr led diverse exploration teams across the Americas, Australia, and Africa. He has also worked extensively in Argentina, including at Rio Tinto's Tincalayu Borates Mine at Salar del Hombre Muerto, just northwest of the Company's Sal de Vida Project.

#### Mr Terry Stark - Project Director

Mr Stark is a mining engineer with more than 35 years of experience throughout Australia in the nickel, gold, manganese and chromite industries. His experience covers mine development and operation and he has been responsible for the construction of three new projects in recent years. He is the holder of a West Australian First Class Mine Manager's Certificate of Competency and a Quarry Manager's Certificate of Competency. Mr Stark oversaw the development and construction of the Mt Cattlin spodumene project. Mr Stark is currently Galaxy's Resources Division Managing Director.

### Mr Ernest Burga - Engineering Project Manager

Mr Burga is a mechanical engineer with more than 35 years of international exposure to design, project engineering and project management. He has participated in Sherrit's Ambatovy Nickel project, DeBeers Victor Diamond Project, Grupo Mexico Precious Metals refinery, Kennecott's Smelter Effluent Treatment Plant and Minera Escondida Ph. III concentrator expansion. He has been involved in the Sal de Vida project since 2010 providing technical support for the project definition stage, PEA and as Engineering Manager for the Sal de Vida Project he brings a solid technical expertise for implementing the Feasibility studies and subsequent project implementation phases.







Brine based lithium solution at Sal de Vida

Evaporation test ponds being monitored

Project Sal de Vida in Argentina



Pilot plant test work on site



Production test wells being drilled



Weather monitoring station



#### About Taging

Taging is an Argentina-based Engineering Firm that has during its 17 years provided engineering solutions to key industrial clients, both in Argentina and abroad with a commitment to quality and value. Taging's minerals processing market is the medium-sized projects of up to 500 million dollars which Taging feels are currently underserviced by larger firms in Argentina. Taging ensures quality execution through en emphasis on Project Management with Project Control function focusing on the cost, time and quality of the project. Taging is highly-focused on understanding the needs of their clients in the industries they work in, and developing custom-made engineering-based solutions to meet them, as evidenced by a department dedicated exclusively to the minerals processing industry. Owing to its depth of experience in feasibility studies, Taging has partnered in the Sal de Vida project with Calder Maloney - a Brisbane Engineering Consultancy Firm that enjoys local and international recognition for its technical excellence and client servicing, and who have successfully completed various NI 43-101 compliant Feasibility Studies.

#### About Hatch

Hatch provides consulting, design engineering, technologies, environmental services, operational services, and project and construction management to the global mining, metallurgical, energy and infrastructure sectors. Hatch has an international reputation for introducing innovative and reliable processes and equipment to client production facilities. Our client base is served by more than 11,000 Hatch professionals in 65 offices worldwide. Programs and projects under management by Hatch have an aggregate value of \$35 billion. Hatch is a leading provider of services to the lithium chemicals industry, supporting the existing South American operators and undertaking the full EPCM for the 17,000 tpa Galaxy Lithium (Jiangsu), China, lithium carbonate plant. Recently, Hatch has undertaken engineering and cost studies for clients developing lithium chemical production capability from brine and hard rock deposits in Argentina, Australia, Chile, Canada and USA. Hatch has a sound understanding of the industry cost drivers in many countries, including infrastructure and logistics, and provides innovative, site-specific plant designs for our lithium industry clients.

For more information, please contact:

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#### About Galaxy (ASX: GXY)

Galaxy Resources Ltd ("Galaxy") is an Australian-based global lithium company with lithium production facilities, hard rock mines and brine assets in Australia, China, Canada and Argentina. The Company is an integrated lithium mining, chemicals and battery company listed on the Australian Securities Exchange (Code: GXY) and is a member of the S&P/ASX 300 Index.

Galaxy wholly owns the Mt Cattlin project near Ravensthorpe in Western Australia which at full capacity can produce 137,000 tpa of spodumene concentrate as feed for the Company's wholly-owned Jiangsu Lithium Carbonate Plant in China's Jiangsu province. The Jiangsu Plant has commenced production and at full capacity will produce 17,000 tpa of battery grade lithium carbonate making the facility the largest producer in the Asia Pacific region and the fourth largest in the world.

Galaxy is also advancing plans to develop the Sal de Vida (70%) lithium and potash brine project in Argentina situated in the lithium triangle (where Chile, Argentina and Bolivia meet) which is currently the source of 60% of global lithium production.

The Company also owns the James Bay (100%) spodumene project in Quebec, Canada.

Lithium compounds are used in the manufacture of ceramics, glass, electronics and are an essential cathode material for long life lithium-ion batteries used to power e-bikes and hybrid and electric vehicles. Galaxy is bullish about the global lithium demand outlook and is positioning itself to achieve its goal of being involved in every step of the lithium supply chain.

#### Caution Regarding Forward Looking Information.

This document contains forward looking statements concerning Galaxy.

Forward-looking statements are not statements of historical fact and actual events and results may differ materially from those described in the forward looking statements as a result of a variety of risks, uncertainties and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.



Forward looking statements in this document are based on Galaxy's beliefs, opinions and estimates of Galaxy as of the dates the forward looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

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