



## **ASX Announcement**

**5 October 2016**

### **Dark Horse Executes Agreement with Oronegro**

### **Completes Reconnaissance Field Work and Rock Chip Sampling From Lithium Bearing Pegmatites in San Luis and Córdoba Provinces, Argentina**

### **High Grade Assays Recorded**

Dark Horse Resources Limited (ASX:DHR; "DHR" or "Company") is pleased to confirm that, following a period of due diligence, it has today executed a formal agreement with the vendors of Oronegro SA (Oronegro). Under the agreement, Dark Horse can acquire 100% of Oronegro and holds exclusive exploration rights for lithium and other strategic minerals throughout the San Luis and Córdoba provinces of Argentina. The agreement incorporates the matters contained in the MOU previously agreed between the parties and as detailed in the Company's ASX release of 26 July 2016. Dark Horse will now make the initial consideration payment of cash plus shares to the Oronegro vendors. Following the Company's ASX release of 26 July 2016, Oronegro also entered into an Exclusivity Agreement to acquire 100% of the Las Tapias Mine in Córdoba province, the most important beryl and spodumene past producer in Argentina.

The Company has also received the results of a first phase of reconnaissance field work and rock chip sampling on selected lithium bearing pegmatites throughout its large portfolio of properties in the San Luis and Córdoba provinces of Argentina.

#### **Highlights:**

- **Field reconnaissance work confirmed the presence of extensive outcropping spodumene bearing pegmatites within the El Totoral claim in San Luis Province.**
- **El Totoral district identified old workings and spodumene showings along a north trending belt approximately 4.5km in length and 300m in width.**
- **A total of 54 rock chip samples were collected and assayed by ALS Australia.**
- **El Totoral assay results returned maximum 0.9m @ 3.28% Li<sub>2</sub>O, 87 g/t Ta<sub>2</sub>O<sub>5</sub>**
- **Sampling of spodumene from dump material in Los Chañares district returned 3.99% Li<sub>2</sub>O and 67 g/t Ta<sub>2</sub>O<sub>5</sub>.**
- **Best assay from spodumene material collected underground at Las Tapias returned 6.04% Li<sub>2</sub>O.**



Dark Horse Resources Ltd ACN 068 958 752  
Level 27, 111 Eagle Street, Brisbane QLD 4001  
P: +61 7 3303 0650 F: + 61 7 3303 0681  
E: [info@darkhorseresources.com.au](mailto:info@darkhorseresources.com.au)  
W: [www.darkhorseresources.com.au](http://www.darkhorseresources.com.au)

Executive Director David Mason commented: “Dark Horse is very excited with these initial exploration results from its new lithium projects in Argentina. This program covered only a small part of the extensive portfolio of projects the Company is acquiring from its partner, Oronegro SA. It is most pleasing to see high lithium and tantalum results from both the historical mining areas and the newly identified El Totoral district.



**Photo 1:** View to the south east of the main quarry at the San Luis quartz-feldspar mine in EL Totoral district, San Luis province. The pegmatite on the front hill is approximately 20m wide and dips steeply to the west. (Note white vehicle in the central-left side of the photo, for size reference).

Field reconnaissance and rock chip sampling was completed during August 2016 on selected lithium bearing pegmatites throughout the Company’s tenement portfolio, including El Totoral, Los Chañares and Las Cuevas in San Luis and Las Tapias in Córdoba (Figures 1 and 2).

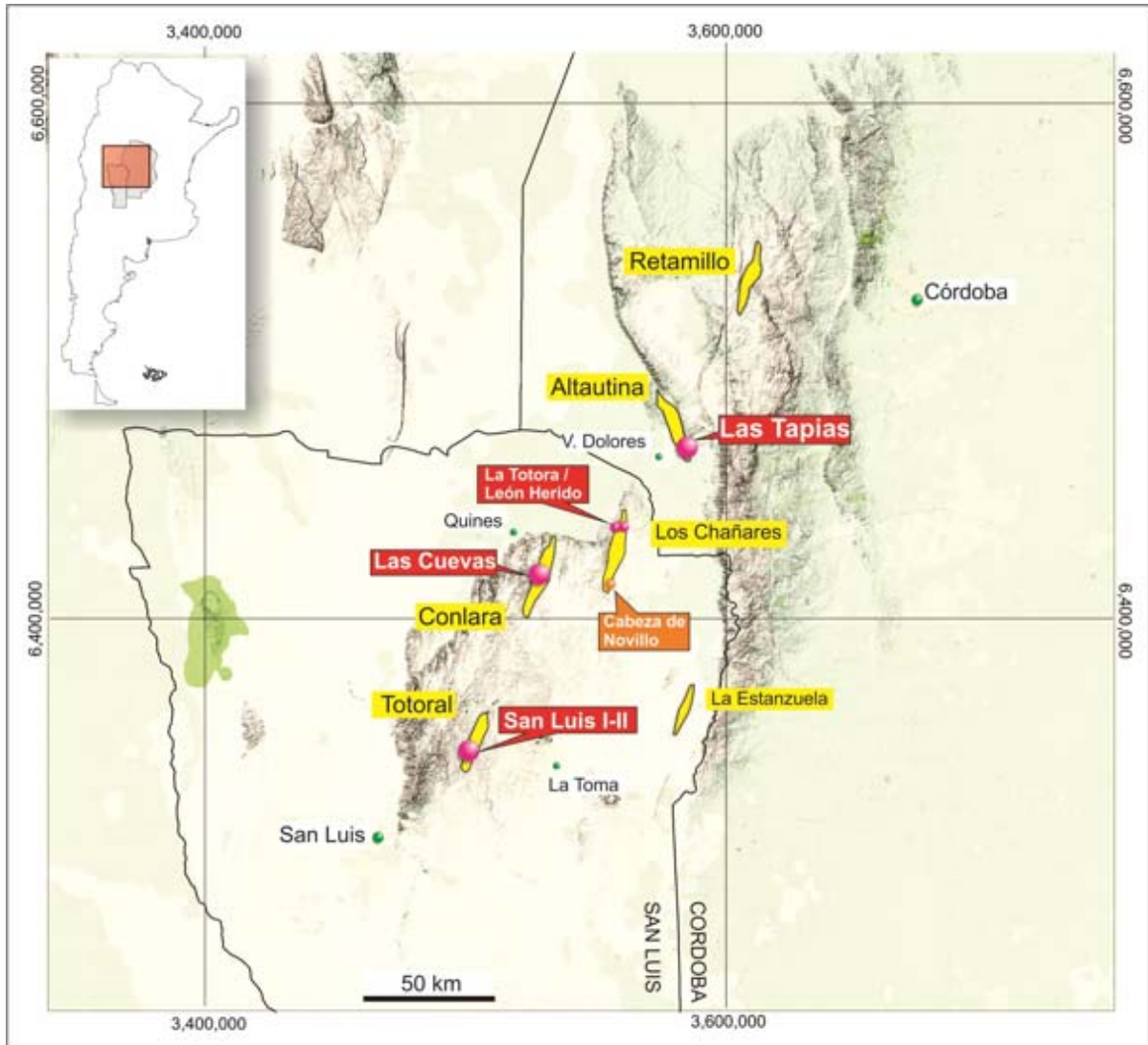
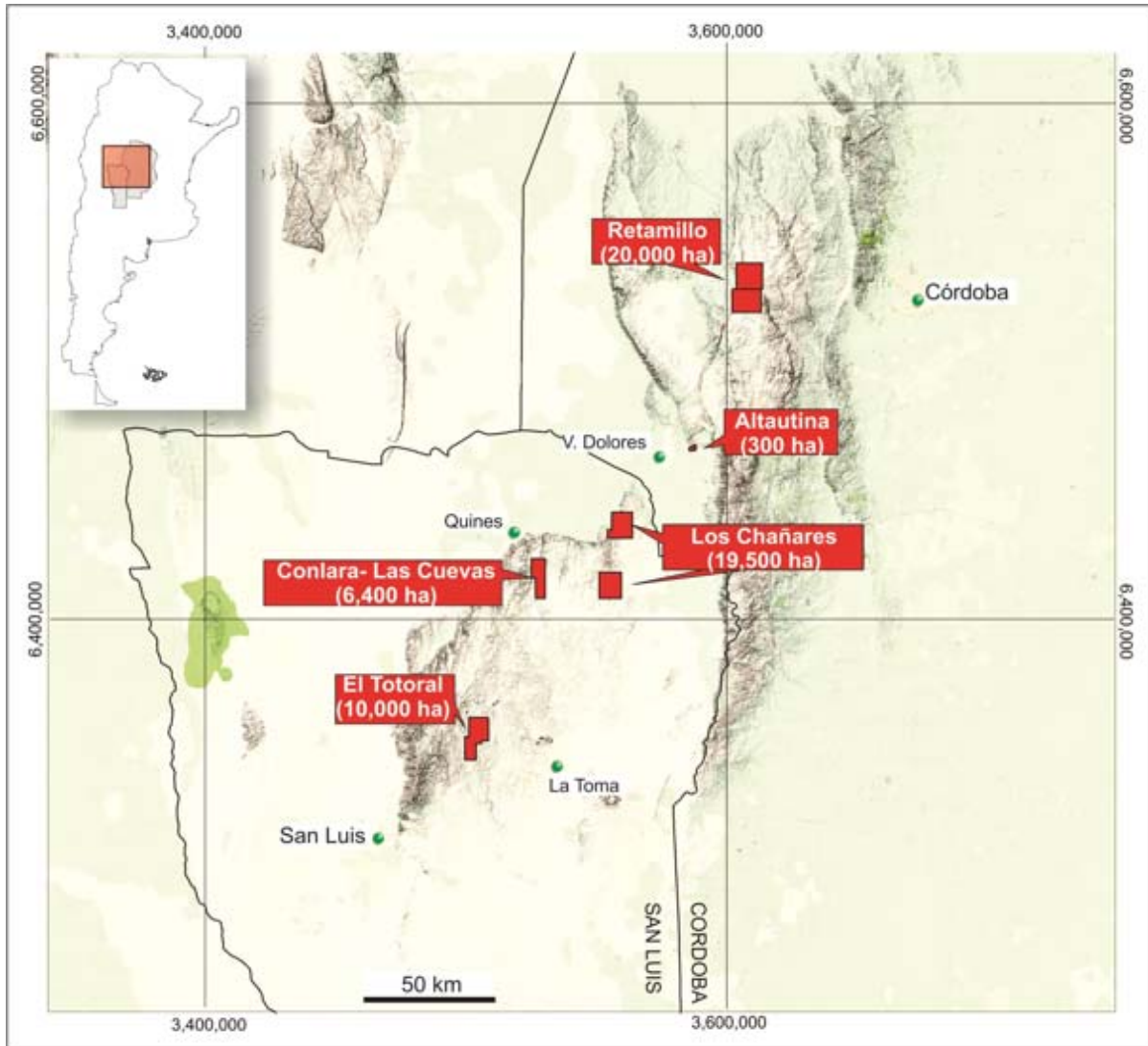


Figure 1: Map showing the location of the Las Tapias, Las Cuevas and other historic spodumene mines (red dots) in the principal pegmatite districts of San Luis and Córdoba Provinces.



**Figure 2. Map showing the location of the Claim applications (Cateos) made in San Luis and Córdoba Provinces totaling 54,600 Ha.**

In the southernmost region of El Totoral district within the San Luis province, field reconnaissance identified old workings and spodumene showings along a north trending belt at least 4.5 km in length and 300m in width, centered in the historic San Luis quartz-feldspar mine (Photo 1). Best assay results returned 0.8m@ 3.28% Li<sub>2</sub>O, 87 g/t Ta<sub>2</sub>O<sub>5</sub>. The pegmatite field is composed of folded and boudinaged bodies (up to 20 m wide and 700m in length) intruding the low-grade rocks (phyllites and slates) of the Pringles Metamorphic Complex and appears to be closely related to the intrusion of S-type Paso Del Rey leucogranite (of possible Ordovician age, Oyarzabal, 2004).

The spodumene occurrences in Los Chañares district (La Totorá, Don Pancho, Agua Dorada and León Herido) are related to isolated folded pegmatites that have previously been subject to small-scale exploitation from 1938 to 1945. Spodumene mineralisation is related to pegmatites up to 4m wide (León Herido) that can be mapped for up to 100 m along the strike. Selective sampling of spodumene from dump material returned results of 3.99 % Li<sub>2</sub>O and 67 g/t Ta<sub>2</sub>O<sub>5</sub>. (There is significant amounts of spodumene rich dump material on the surface at the mine, which is the waste product from the quartz-feldspar mining activities).

Field reconnaissance work at the Las Tapias quartz-feldspar mine in Cordoba province has given the Company a better understanding of the mineralization identified underground and at surface. Best assay results from spodumene material collected underground at the mine returned 6.04 % Li<sub>2</sub>O.

### Assay Results

Assays were performed by ALS Australia using ME-ICP82b technique. The assay data is presented in the table below (Figure 3) as equivalent lithium oxide using a standard conversion factor of 2.153 for Ta to Ta<sub>2</sub>O<sub>5</sub> the conversion factor of 1.221 was applied.

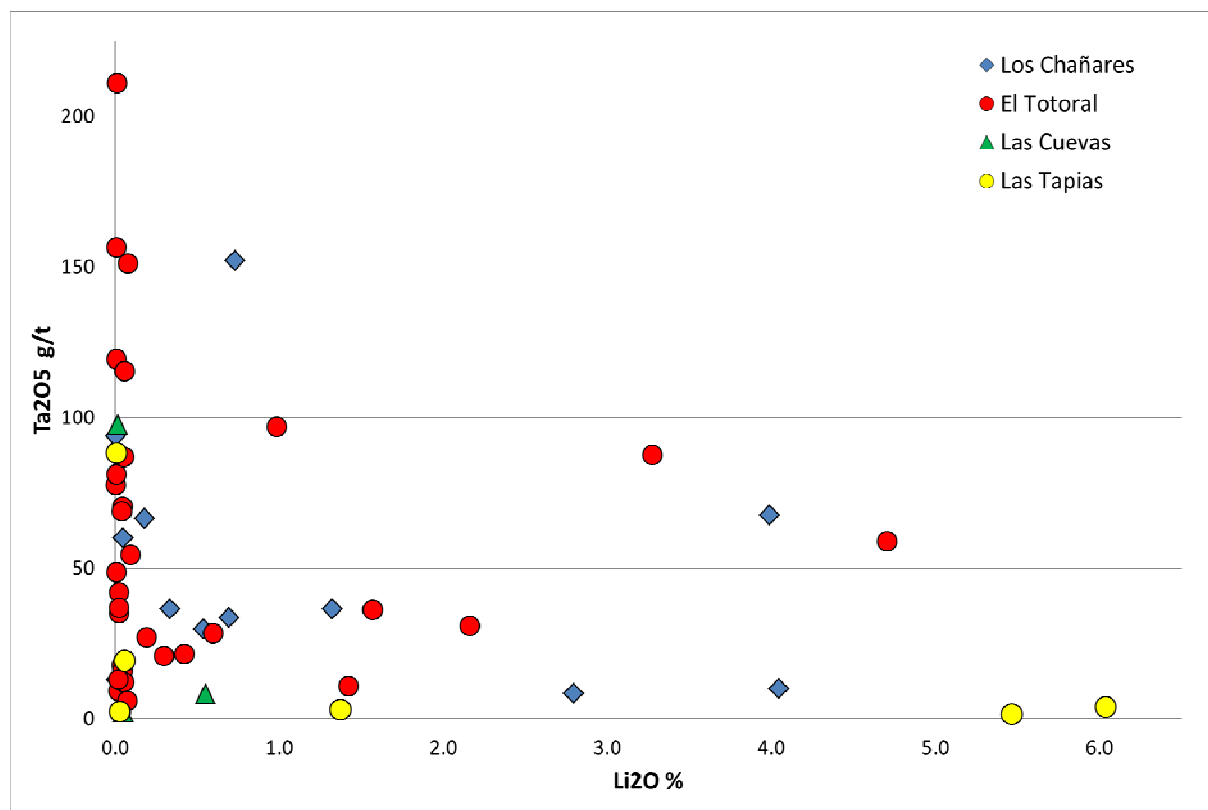


Figure 3: Graph of Li<sub>2</sub>O and Ta<sub>2</sub>O<sub>5</sub> assay results returned from recent rock chip sampling at El Totoral, Los Chañares, Las Cuevas and Las Tapias districts.

Most of the Li grades and some of the Ta grades of the rock chip samples are within or above known commercial grades on presently operating hard rock Li-Ta mines – e.g. Mt Cattlin in Western Australia (1.04% Li<sub>2</sub>O, 149ppm Ta<sub>2</sub>O<sub>5</sub>).

### El Totoral

The Company collected 31 rock chip samples from El Totoral. Due to the very large size of the spodumene crystals, obtaining a representative sampling of the bulk lithium content of the pegmatite proved difficult. A continuous channel sample (PL023, 24, 25) across a well exposed mineralized structure returned 3.4m @ 0.88% Li<sub>2</sub>O, 45 g/t Ta<sub>2</sub>O<sub>5</sub> (includes 0.88 m @ 3.28% Li<sub>2</sub>O, 87 g/t Ta<sub>2</sub>O<sub>5</sub>). The assay results validate visual observations of spodumene and confirms the presence of a trend > 4.5km in length, 300m in width, consisting of several distinct outcrop areas of spodumene bearing pegmatites.

### Los Chañares

Samples collected from Las Chañares district included; La Totorá (2 samples), Don Pancho (4 samples), Agua Dorada (2 samples); La Bomba (1 sample), León Herido (3 samples) and Cabeza de Novillo (2 samples).

Best assays results included:

- La Totorá – 0.54% Li<sub>2</sub>O, 30 g/t Ta<sub>2</sub>O<sub>5</sub>
- Don Pancho – 2.8% Li<sub>2</sub>O, 94g/t Ta<sub>2</sub>O<sub>5</sub>
- Agua Dorada – 4.0% Li<sub>2</sub>O, 36g/t Ta<sub>2</sub>O<sub>5</sub>
- La Bomba – 0.3% Li<sub>2</sub>O, 36g/tTa<sub>2</sub>O<sub>5</sub>
- León Herido – 3.99% Li<sub>2</sub>O, 152g/t Ta<sub>2</sub>O<sub>5</sub>
- Cabeza de Novillo – 1.2% Li<sub>2</sub>O, 25g/t Ta<sub>2</sub>O<sub>5</sub>

### Las Cuevas

Three samples were collected from the Las Cuevas lease and returned low lithium contents though reasonable tantalum contents (0.01 to 0.55% Li<sub>2</sub>O and up to 97 g/t Ta<sub>2</sub>O<sub>5</sub>).

### Las Tapias

The Company collected six samples from Las Tapias (3 underground samples, 3 surface samples). Samples collected at surface returned low Li<sub>2</sub>O values but up to 88 g/t Ta<sub>2</sub>O<sub>5</sub>. In contrast, samples collected underground in the Arce mine development area assayed from 1.38% to 6.04% Li<sub>2</sub>O from 1m by 1m panel sampling with massive zones of spodumene in the lowermost part of the area. It is speculated that the low lithium contents obtained on surface exposures of both El Totoral and Las Tapias may reflect weathering effects at surface.

### **Conclusions and Future Work**

Geochemical results of initial rock chip sampling indicates the El Totoral district represents a significant lithium-tantalum target. There are numerous pegmatite bodies and DHR will give this area priority in future exploration programs.

Additionally, Las Tapias represents a most attractive target and will be systematically investigated.

### **References**

Oyarzabal, J.C. 2004. Geología, mineralogía y petrogénesis de yacimientos pegmatíticos del distrito Totoral, Sierra de San Luis, Argentina. Ph.D. Thesis, Univ. Nacional de Córdoba, 371 pp.



On behalf of the Board  
Mr Karl Schlobohm  
**Company Secretary**



**Dark Horse Resources Ltd** ACN 068 958 752  
Level 27, 111 Eagle Street, Brisbane QLD 4001  
P: +61 7 3303 0650 F: + 61 7 3303 0681  
E: [info@darkhorseresources.com.au](mailto:info@darkhorseresources.com.au)  
W: [www.darkhorseresources.com.au](http://www.darkhorseresources.com.au)

### **Competent Persons Statement**

The information herein that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Neil Stuart, who is a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Neil Stuart is a Director of Dark Horse Resources Ltd.

Mr Stuart has more than five years experience which is relevant to the style of mineralisation and type of deposit being reported and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves' (the JORC Code). This public report is issued with the prior written consent of the Competent Person(s) as to the form and context in which it appears.

### **For further information contact:**

#### **Mr David Mason**

Executive Director, Dark Horse Resources Ltd  
Ph: 07 3303 0650

#### **Pru Maclean**

Investor Relations, Dark Horse Resources Ltd  
Ph: 07 3303 0650

### **About Dark Horse Resources:**

Since listing on the Australian Stock Exchange in 2011, Dark Horse Resources (formerly Navaho Gold) has evolved into a diversified exploration company, with interests in gold projects in the USA, numerous mineral licences in Australia, oil and gas projects in Australia (held via NavGas Pty Ltd), and coal, lithium and energy projects in Argentina.

The Company's current major focus is on its Argentinian projects. Argentina is undergoing significant political and social reforms, which has created a very attractive destination for mining and energy investment. Dark Horse is capitalising on this transition with its substantial Pico Coal Mine and Power Project, lithium projects and a portfolio of new resource and energy opportunities under review.



**Dark Horse Resources Ltd** ACN 068 958 752  
Level 27, 111 Eagle Street, Brisbane QLD 4001  
**P:** +61 7 3303 0650 **F:** + 61 7 3303 0681  
**E:** [info@darkhorsesresources.com.au](mailto:info@darkhorsesresources.com.au)  
**W:** [www.darkhorsesresources.com.au](http://www.darkhorsesresources.com.au)