



## Plateau Uranium Announces Initial Lithium Resource Estimate Within Existing Uranium Resource Base in Peru

Results of preliminary testwork indicate strong potential for Lithium by-product with recoveries of up to 73%

- Resources of 52.3Mt at 0.13% containing 67,000 t Li<sub>2</sub>O (Indicated) and 87.7Mt at 0.12% containing 109,000 t Li<sub>2</sub>O (Inferred).
- Lithium resources reported are from only 4 of the Company's 14 uranium deposits, as they have sufficient lithium assay data.
- Lithium resource estimates have been calculated only from within the defined uranium resources footprint, reported on May 6, 2015 using 75 ppm U cutoff.
- Independent external testwork indicates lithium solution recoveries of up to 73% in un-optimized initial leach tests.
- By-product lithium production has the potential to add value to the Company's compelling uranium story that already has lowest quartile potential operating costs of \$17.28/lb U<sub>3</sub>O<sub>8</sub> (see January 25, 2016 news release).

TORONTO, ONTARIO -- (Marketwired – March ●, 2016) – Plateau Uranium Inc. ("Plateau Uranium" or the "Company") (TSX VENTURE:PLU)(FRANKFURT:QG1)(US OTC:PLUUF) is pleased to announce a maiden lithium mineral resource estimate within four of its uranium deposits located on the Macusani Plateau in the Puno District of southeastern Peru, as well as results of initial unoptimized metallurgical tests displaying positive Lithium extraction and recoveries. The NI 43-101 lithium mineral resource estimate report will be filed on SEDAR within 45 days.

### Highlights of Lithium Mineral Resource Estimates by Category

The consolidated mineral resource estimates, based on a 75ppm U cut-off grade, and wholly contained within the previously defined uranium resource estimates, are as follows:

- **Indicated: 52.31 M tonnes** grading 0.13% Li<sub>2</sub>O, containing **67,000 t of Li<sub>2</sub>O equivalent**
- **Inferred: 87.68 M tonnes** grading 0.12% Li<sub>2</sub>O, containing **109,000 t of Li<sub>2</sub>O equivalent**
- The average **potassium grade included in the lithium resources estimates is 3.71% K** for the **Indicated resource** and **3.73% K** for the **Inferred resource**.

### Lithium Recovery Highlights

Internal testwork to date has displayed Lithium recoveries of up to 86% while un-optimized external tests run at K-UTEC AG Salt Technologies (K-UTEC), a leading process engineering firm in Germany with lithium extraction expertise, displayed Lithium recoveries of up to 73% using sulphuric acid. Expected products from lithium extraction would be lithium carbonate and potassium sulphate.

### Ted O'Connor, CEO of Plateau Uranium commented:

"Although we are a uranium-focused company, recognizing the presence of lithium and establishing this large initial lithium resource within only a small subset of our defined uranium resource base is significant. Lithium has the potential to add substantial value to our already robust uranium project as a prospective by-product following uranium extraction.

We have only included lithium resources contained within four of the uranium deposits considered in the PEA, and within that only lithium resources hosted within uranium mineralization above our 75 ppm U threshold – the economic cutoff established in the PEA using a US\$50/lb U<sub>3</sub>O<sub>8</sub> price.

We have independently confirmed internal testwork that suggested the lithium can be successfully leached with sulphuric acid, and we anticipate that lithium carbonate (Li<sub>2</sub>CO<sub>3</sub>) and potassium sulphate (K<sub>2</sub>SO<sub>4</sub>) should be the potential products precipitated from the leach solutions using this process. More testing and engineering work is required to assess the potential impact to the project economics at the Macusani Plateau, and such work is being planned.

While we lack lithium chemical analyses for the entire set of uranium deposits, our interpretation is that lithium mineralization appears to be relatively consistent. Lithium is strongly correlated with uranium mineralization and appears to be present in all of the uranium deposits' host rocks. We will be evaluating a program to analyze a number of our other uranium deposits for lithium."

### **Mineral Resource Estimate Details**

The Mineral Corporation has updated the mineral resource estimates for the Chilcuno Chico, Quebrada Blanca, Tantamaco and Isivilla deposits to include estimates of lithium (Li) and potassium (K). Mineral resource estimates for these deposits were previously reported in a NI 43-101 technical report, filed on SEDAR in June 2015, which reported uranium (U) grades only. No new exploration has been undertaken in the interim, and the uranium mineral resource estimates have not been updated or revised in any way; this update has focused solely on adding lithium and potassium grades to existing uranium resource estimates.

Across all four deposits, lithium mineralization occurs in a 40m to 60m thick zone, which is interpreted to be a discreet lithological unit within the acidic volcanic rocks of the Macusani Plateau. It has been indentified that this is the same unit that hosts the previously reported uranium mineralization.

The mineral resource estimates are based on 296 drillholes. Sampling was carried out at varying sampling intervals, which was informed by the uranium grade distribution. All samples were vertically composited to create 1.5m "bench composites" that were used throughout the estimation process.

The exploration and sampling protocols described in the existing published NI 43 101 technical report are applicable for the current lithium mineral resource estimates, however, the certified reference materials (standards) inserted for uranium were not certified for lithium. As a result, The Mineral Corporation requested that the Company undertake a re-sampling and analysis exercise to assess the accuracy and precision of the previous laboratory results. This program was completed and these results are considered acceptable for the reporting of mineral resource estimates in the Indicated and Inferred categories.

The lithium distribution within the host rocks has a prominent vertical zonation and well structured horizontal variograms were obtained. Ordinary Kriging (OK) oriented sub-parallel to the basal mineralization surface was employed and dynamic anisotropy, which allows the rotation of search volume and variogram models for each cell in the model was applied, to honour the slightly dipping trend of the mineralization. Lithium and potassium grades were estimated within the same block model which supported the original uranium mineral resource estimate, which was 50m X 50m X 3m in well informed areas, and 100m X 100m X 3m in less well informed areas.

The geological and grade continuity with respect to lithium is at least as good as that for uranium. The Mineral Corporation has thus elected to retain the original mineral resource categorization of these estimates, which was based on the data quality, data spacing and geostatistical confidence associated with the uranium mineralization.

The Qualified Person has assessed that there are 'reasonable prospects of eventual economic extraction' for the lithium and potassium included in these mineral resource estimates, provided that they are considered as by-products of the envisaged uranium operation at the Macusani

Plateau. In this regards, the broad economics of extracting lithium and potassium have relied on the Preliminary Economic Assessment (PEA) of the Macusani Project, published by Plateau Uranium in January 2016, and supported by reasonably based processing and marketing assumptions. Updated mineral resources have only been estimated for four of the uranium deposits which were considered in the PEA.

The mineral resource estimates are as follows:

Deposit	Classification	Metric Units							Imperial Units		
		Tonne (Mt)	U grade (ppm)	U <sub>3</sub> O <sub>8</sub> grade (ppm)	Li grade (ppm)	Li <sub>2</sub> O equiv (%)	Li <sub>2</sub> O Content (kt)	K grade (%)	Ton (Mt)	U <sub>3</sub> O <sub>8</sub> Content (Mlb)	U <sub>3</sub> O <sub>8</sub> Grade (lb/ton)
Chilcuno Chico	Indicated	34.840	218	258	599	0.13	44.93	3.71	38.405	19.8	0.52
	Inferred	30.995	294	347	586	0.13	39.10	3.76	34.166	23.7	0.69
Quebrada Blanca	Indicated	5.509	279	329	541	0.12	6.42	3.68	6.073	4.0	0.66
	Inferred	13.436	269	317	511	0.11	14.78	3.67	14.811	9.4	0.63
Tantamaco	Indicated	7.393	191	225	615	0.13	9.79	3.73	8.150	3.7	0.45
	Inferred	35.849	172	202	580	0.12	44.77	3.69	39.517	16.0	0.40
Isivilla	Indicated	4.568	296	350	600	0.13	5.90	3.67	5.035	3.5	0.70
	Inferred	7.396	295	348	638	0.14	10.16	3.81	8.153	5.7	0.70
<b>TOTAL INDICATED</b>		<b>52.311</b>	<b>228</b>	<b>268</b>	<b>595</b>	<b>0.13</b>	<b>67.01</b>	<b>3.71</b>	<b>57.663</b>	<b>31.0</b>	<b>0.54</b>
<b>TOTAL INFERRED</b>		<b>87.677</b>	<b>240</b>	<b>283</b>	<b>576</b>	<b>0.12</b>	<b>108.73</b>	<b>3.73</b>	<b>96.648</b>	<b>54.8</b>	<b>0.57</b>

Minor discrepancies due to rounding may occur.

Density 1.98 t/m<sup>3</sup>

Cut-off 75ppm U

## Metallurgical Testwork Details

The Company is aware that the host rocks to the uranium mineralization at the Macusani Plateau are enriched in lithium. However, lithium was only analyzed at some of the more recently drilled and delineated uranium deposits.

To understand the potential significance of the contained lithium more fully, the Company completed various lithium leach tests using warm sulphuric acid and achieved lithium recoveries of up to 86%. Two samples were sent to K-UTECH for external confirmation studies. Unoptimised lithium testwork completed by K-UTECH yielded lithium recoveries of 69% and 73% on samples with head grades of 631ppm Li and 518ppm Li using sulphuric acid heated to 250°C. In addition to the lithium, potassium also leaches during the process.

Although no precipitation work has been completed to date, K-UTECH believes that the leach solutions produced have similar chemistries and characteristics to current Lithium producers and should be capable of lithium carbonate precipitation and production. Additional precipitation of potassium sulphate, a desired fertilizer product is also expected. Future additional lithium leach test work is being planned and considered to refine the potential processing route and enhance lithium recoveries with the ultimate goal being to establish potential quantities and quality of a saleable lithium carbonate product, as well as to define acid consumption figures and production cost estimates for this potentially important by-product.

## Qualified Persons

Mr. Stewart Nupen, B.Sc. (Hons), FGSSA, Pr Sci Nat (No 400174/07) of The Mineral Corporation, South Africa, an independent geological consulting firm, is a Qualified Person as defined under National Instrument 43-101, and has prepared or supervised the preparation of, or has reviewed and approved, the scientific and technical data pertaining to the mineral resource estimates contained in this release. Mr. Ted O'Connor, P.Geo., CEO and Director of Plateau Uranium and a qualified person as defined by National Instrument 43-101 Standards of Disclosure for Mineral Projects, has reviewed and approved the scientific and technical information contained in this release.

## About The Mineral Corporation

The Mineral Corporation is based in Bryanston, Sandton (Johannesburg) South Africa and is a leading senior advisor to the international minerals business offering a broad range of services related to mineral exploration, mine development, and mine optimization across a diverse range of commodities and geographies. The Mineral Corporation has been working with the Company, and its predecessors for over six years.

## **About K-UTEC AG Salt Technologies**

K-UTEC AG Salt Technologies is based in Sondershausen, Germany and is a leading process design and engineering group with more than 60 years of expertise in potassium and lithium salt production industry.

## **About Plateau Uranium**

Plateau Uranium Inc. is a Canadian uranium exploration and development company focused on the exploration of its properties on the Macusani Plateau in southeastern Peru. The Company controls all reported uranium resources known in Peru and mineral concessions that cover over 910 km<sup>2</sup> situated near significant infrastructure. Plateau Uranium is listed on the TSX Venture Exchange under the symbol 'PLU' and quoted on the US OTC under the symbol 'PLUUF' and the Frankfurt Exchange under the symbol 'QG1'. The Company has 40,639,863 shares outstanding. For more information please visit [www.plateauuranium.com](http://www.plateauuranium.com).

*Neither TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this release.*

## **Forward Looking Information**

*This news release includes certain forward-looking statements concerning the future performance of Plateau Uranium's business, operations and financial performance and condition, as well as management's objectives, strategies, beliefs and intentions, including statements with respect to estimated production, capital costs and mine life; the future price of uranium; the estimation and/or realization of mineral resources; the timing and amount of estimated future production; costs of production; success of exploration activities; and future demand for uranium. Forward-looking statements are frequently identified by such words as "would", "may", "will", "plan", "expect", "anticipate", "estimate", "intend" and similar words referring to future events and results. Forward-looking statements are based on the current opinions and expectations of management. All forward-looking information is inherently uncertain and subject to a variety of assumptions, risks and uncertainties, including the speculative nature of mineral exploration and development, fluctuating commodity prices, competitive risks, general business, economic, competitive, political and social uncertainties and the availability of financing, as described in more detail in the Company's recent securities filings available at [www.sedar.com](http://www.sedar.com). Actual events or results may differ materially from those projected in the forward-looking statements and Plateau cautions against placing undue reliance thereon. Neither the Company nor their management assume any obligation to revise or update these forward-looking statements whether as a result of new information, future events or otherwise, except as required by law.*

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

Plateau Uranium Inc.

Ted O'Connor, CEO

+1-416-628-9600

[ted@plateauuranium.com](mailto:ted@plateauuranium.com)

Website: [www.plateauuranium.com](http://www.plateauuranium.com)

Facebook: [www.facebook.com/plateauuranium/](https://www.facebook.com/plateauuranium/)

Twitter: [www.twitter.com/plateauuranium/](https://www.twitter.com/plateauuranium/)