



**Fission**  
URANIUM CORP.

Suite 700 – 1620 Dickson Ave.  
Kelowna, BC V1Y 9Y2

[rich@fissionuranium.com](mailto:rich@fissionuranium.com)  
[www.fissionuranium.com](http://www.fissionuranium.com)

TSX SYMBOL: FCU  
OTCQX SYMBOL: FCUUF  
FRANKFURT SYMBOL: 2FU

July 31, 2017

## **Fission Hits Widest Mineralization to Date Outside of the R780E Zone with 1.5km Step Out from Triple R Deposit**

***Hole PLS17-564 in R1515W Zone intersects 135.5m of total comp mineralization, including 8.25m total comp >10,000 cps and multiple intervals of >65,535 cps***

**FISSION URANIUM CORP.** ("Fission" or "the Company") is pleased to announce the results of an additional 2 holes testing the recently-discovered, land-based, R1515W zone where drilling **has intersected the widest cumulative mineralization and some of the strongest radioactivity to date outside of the Triple R Deposit**, at its' PLS property in Canada's Athabasca Basin region. The two holes have encountered **very wide mineralization and strongly radioactive peaks in multiple stacked zones, at the R1515W zone**, which is 1.5km west of the Triple R deposit. Of particular importance, hole PLS17-564 (line 1545W) intersected **135.5m total composite mineralization, including 8.25m total composite >10,000 cps and multiple intervals of >65,535 cps** (the maximum reading possible by the RS-121 scintillometer before saturation).

Of additional importance, **the nature of mineralization of the R1515W zone, including multiple stacked lenses and wide lateral widths, is showing increasingly similarities to the R780E – the primary zone of the Triple R deposit.** The Triple R hosts mineral resources of 81.1M lbs @ 1.83% U<sub>3</sub>O<sub>8</sub> (indicated) in 2.01M tonnes and 27.2M lbs @ 1.57% U<sub>3</sub>O<sub>8</sub> (inferred) in 0.79M tonnes at a cut-off grade of 0.2% U<sub>3</sub>O<sub>8</sub> within the pit boundary and at an incremental underground cut-off grade of 0.25% U<sub>3</sub>O<sub>8</sub>.

### **Drilling Highlights Include:**

- **1.5km Step Out from Triple R Deposit.** The two holes, PLS17-563 and PLS17-564 have encountered wide, high-grade intercepts over 1.5km west of the Triple R deposit.
- **Wide, High-Grade Mineralization within Multiple Stacked Lenses Represent Notable Similarities to the Triple R Deposit's R780E zone.** The results from summer drilling at R1515W have encountered geological features with similarities to the R780E zone of the Triple R deposit. Outside of the Triple R deposit, the R1515W is the zone that compares most similarly to the R780E zone with respect to lateral width and style of mineralization.
- Hole PLS17-564 (line 1545W):
  - **135.5m** total composite mineralization over a 173.0m section (between 101.0m to 274.0m), including
    - **8.25m** total composite **>10,000 cps**

- Hole PLS17-563 (line 1515W):
  - **88.5m** total composite mineralization over a 149.0m section (between 115.5m to 264.5m), including
    - **1.49m** total composite **>10,000 cps**

Ross McElroy, President, COO, and Chief Geologist for Fission, commented

*"We are very excited by the results of these drill holes – not only because of the width and strength of the mineralization but of the confirmation that the land-based R1515W zone has notable mineralization similarities to the Triple R deposit's R780E zone 1.5km to the east. These similarities, including multiple stacked lenses, are reason why the widths we've encountered in these last two holes, are so impressive. These features have the potential to rapidly grow mineral resources – as was the case with the R780E zone delineation. The R1515W is still at an early stage and these drill results are highly promising."*

### **R1515W Zone Summary**

The on-land R1515W zone is located within the Patterson Lake Corridor along strike to the west of the R840W zone. A total of 12 holes, 10 of which are mineralized, have traced mineralization over a strike length of 70m and a lateral width of up to 53m wide (line 1515W). Mineralization begins at the top of bedrock, which occurs at 100m depth below surface. The lithologic setting which hosts the mineralization is similar to other zones of the Patterson Lake Corridor, being an overall package dominated by a quartz+feldspar+biotite+garnet gneiss with intercalated steeply south-dipping intervals of silica+sulphide+graphite bearing mafic gneiss. Mineralization occurs within strong hydrothermally altered, structurally controlled sections interpreted as multiple stacked intervals that appear to be parallel to each other and parallel to the mafic gneiss. As is the case particularly with the R780E zone, mineralization morphology is a complex geometry controlled by and parallel to steeply south-dipping lithological boundaries as well as a preferential sub-horizontal orientation.

**PLS17-563 (line 1515W)** – Collared as an angled hole, mineralization extends approximately 32m down-dip from PLS17-561. Mineralization on line 1515W currently has an across-strike lateral width of 53m.

**PLS17-564 (line 1545W)** – Collared as an angled hole, mineralization extends approximately 28m down-dip from PLS17-562. Mineralization on line 1545W currently has an across-strike lateral width of 45m.

**Table 1: R1515W Zone**

Hole ID	Zone	Grid Line	Collar		* Hand-held Scintillometer Results On Mineralized Drillcore (>300 cps / >0.5M minimum)				Lake Depth (m)	Sandstone From - To (m)	Basement Unconformity Depth (m)	Total Drillhole Depth (m)
			Az	Dip	From (m)	To (m)	Width (m)	CPS Peak Range				
			PLS17-563	R1515W	1515W	315	-82.5	115.5				
					122.0	132.5	10.5	<300 - 1200				
					142.0	143.0	1.0	720 - 1490				
					146.0	166.5	20.5	<300 - 17210				
					169.5	178.0	8.5	<300 - 1850				
					181.0	185.5	4.5	<300 - 660				

					189.0	191.5	2.5	<300 - 350				
					194.5	197.0	2.5	<300 - 330				
					201.5	206.5	5.0	400 - 8100				
					210.5	211.5	1.0	1310 - 1360				
					228.0	228.5	0.5	1500				
					234.5	264.5	30.0	<300 - 31200				
PLS17-564	R1515W	1545W	322.5	-79.6	101.0	160.5	59.5	<300 - 17000	NA	NA	101.0	328.0
					163.5	178.0	14.5	<300 - >65,535				
					198.5	211.0	12.5	<300 - >65,535				
					214.5	257.0	42.5	<300 - 14200				
					267.5	274.0	6.5	<300 - 8200				
PLS17-565	R1515W	1575W	322.5	-79.6	101.0	160.5	59.5	Abandoned	NA	NA	104.1	151.0

- Hole PLS17-565 was abandoned due to technical problems with drilling.

Natural gamma radiation in drill core that is reported in this news release was measured in counts per second (cps) using a hand held RS-121 Scintillometer manufactured by Radiation Solutions, which is capable of discriminating readings to 65,535 cps. Natural gamma radiation in the drill hole survey that is reported in both core and reverse circulation "RC" holes this news release was measured in counts per second (cps) using a Mount Sopris 2GHF-1000 Triple Gamma probe, which allows for more accurate measurements in high grade mineralized zones. The Triple Gamma probe is preferred in zones of high grade mineralization. The reader is cautioned that scintillometer readings are not directly or uniformly related to uranium grades of the rock sample measured, and should be used only as a preliminary indication of the presence of radioactive materials. The degree of radioactivity within the mineralized intervals is highly variable and associated with visible pitchblende mineralization. All intersection measurements are down-hole. All depths reported of core interval and down-hole gamma measurements including radioactivity and mineralization intervals widths are not always representative of true thickness and true thicknesses are yet to be determined in zones outside of the Triple R deposit. Within the Triple R deposit, individual zone wireframe models constructed from assay data and used in the resource estimate indicate that both the R780E and R00E zones have a complex geometry controlled by and parallel to steeply south-dipping lithological boundaries as well as a preferential sub-horizontal orientation.

### **PLS Mineralized Trend & Triple R Deposit Summary**

Uranium mineralization at PLS occurs within the Patterson Lake Conductive Corridor and has been traced by core drilling approximately 3.18km of east-west strike length in five separated mineralized "zones". From west to east, these zones are: R1515W, R840W, R00E, R780E and R1620E. Thus far only the R00E and R780E have been included in the Triple R deposit resource estimate, where-as the R840W and R1620E zones and the recent addition of the R1515W zone, fall outside of the current resource estimate window.

The discovery hole of what is now referred to as the Triple R uranium deposit was announced on November 05, 2012 with drill hole PLS12-022, from what is considered part of the R00E zone. Through successful exploration programs completed to date, it has evolved into a large, near surface, basement hosted, structurally controlled high-grade uranium deposit.

The Triple R deposit consists of the R00E zone on the western side and the much larger R780E zone further on strike to the east. Within the deposit, the R00E and R780E zones have an overall combined strike length validated by a resource estimate of approximately 1.05km with the R00E measuring approximately 105m in strike length and the R780E zones measuring approximately 945m in strike length. A 225m gap separates the R00E zone to the west and the R780E zones to the east, though sporadic narrow, weakly mineralized intervals from drill holes within this gap suggest the potential for further significant mineralization in this area. The R780E zone is located beneath Patterson Lake which is approximately six metres deep in the area of the deposit. The entire Triple R deposit is covered by approximately 50m to 60m of overburden.

Mineralization remains open along strike in both the western and eastern directions. Basement rocks within the mineralized trend are identified primarily as mafic volcanic rocks with varying degrees of alteration. Mineralization is both located within and associated with mafic volcanic intrusives with varying degrees of silicification, metasomatic mineral assemblages and hydrothermal graphite. The graphitic sequences are, associated with the PL-3B basement Electro-Magnetic (EM) Conductor. The R840W zone, located 495m west along strike of the Triple R deposit, now has a defined strike length of 465m and is still open. The recent discovery of the high-grade R1515W zone located a further 510m to the west of the R840W zone, now has a defined strike length of 70m and is open in multiple directions. The R840W and R1515W zones have significantly upgraded the prospectivity for further growth on land to the west of the Triple R deposit within the Patterson Lake Corridor. The recently discovered high-grade mineralization in the R1620E zone, located 210m to the east along strike similarly has significantly upgraded the prospectivity for further growth of the PLS resource to the east of the Triple R deposit.

Updated maps and files can be found on the Company's website at <http://fissionuranium.com/project/pls/>.

### **Patterson Lake South Property**

The 31,039 hectare PLS project is 100% owned and operated by Fission Uranium Corp. PLS is accessible by road with primary access from all-weather Highway 955, which runs north to the former Cluff Lake mine and passes through the nearby UEX-Areva Shea Creek discoveries located 50km to the north, currently under active exploration and development.

The technical information in this news release has been prepared in accordance with the Canadian regulatory requirements set out in National Instrument 43-101 and reviewed on behalf of the company by Ross McElroy, P.Geol., President and COO for Fission Uranium Corp., a qualified person.

### **About Fission Uranium Corp.**

Fission Uranium Corp. is a Canadian based resource company specializing in the strategic exploration and development of the Patterson Lake South uranium property - host to the class-leading Triple R uranium deposit - and is headquartered in Kelowna, British Columbia. Fission's common shares are listed on the TSX Exchange under the symbol "FCU" and trade on the OTCQX marketplace in the U.S. under the symbol "FCUUF."

**ON BEHALF OF THE BOARD**

"Ross McElroy"

---

**Ross McElroy, President and COO**

Investor Relations

Rich Matthews

TF: 877-868-8140

[rich@fissionuranium.com](mailto:rich@fissionuranium.com)

[www.fissionuranium.com](http://www.fissionuranium.com)

**Cautionary Statement:**

*Certain information contained in this press release constitutes "forward-looking information", within the meaning of Canadian legislation. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "plans", "expects" or "does not expect", "is expected", "budget", "scheduled", "estimates", "forecasts", "intends", "anticipates" or "does not anticipate", or "believes", or variations of such words and phrases or state that certain actions, events or results "may", "could", "would", "might" or "will be taken", "occur", "be achieved" or "has the potential to". Forward looking statements contained in this press release may include statements regarding the future operating or financial performance of Fission and Fission Uranium which involve known and unknown risks and uncertainties which may not prove to be accurate. Actual results and outcomes may differ materially from what is expressed or forecasted in these forward-looking statements. Such statements are qualified in their entirety by the inherent risks and uncertainties surrounding future expectations. Among those factors which could cause actual results to differ materially are the following: market conditions and other risk factors listed from time to time in our reports filed with Canadian securities regulators on SEDAR at [www.sedar.com](http://www.sedar.com). The forward-looking statements included in this press release are made as of the date of this press release and the Company and Fission Uranium disclaim any intention or obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as expressly required by applicable securities legislation.*