Fission Hits 11.10% U3O8 Over 3m in 4.22% U3O8 Over 8m; Wraps Up Summer Assays

05.02.2014 | Marketwired

Final summer assays confirm broad mineralization, highlight western end of discovery

KELOWNA, BRITISH COLUMBIA--(Marketwired - Feb 5, 2014) - **Fission Uranium Corp. (TSX VENTURE:FCU)(OTCQX:FCUUF)(FRANKFURT:2FU)** ("**Fission**" or "**the Company**") is pleased to announce assays for the final twenty holes of the summer 2013 drill program at its Patterson Lake South (PLS) property in Canada's Athabasca Basin. Of particular note is hole PLS13-109 (line 750E) which returned 4.22% U3O8 over 8.0m including a higher grade interval of 11.10% U3O8 over 3.0m. Of additional note is the broad mineralization returned by the recently discovered R600W zone, the land-based westernmost zone of the PLS drill-hole discoveries. This highlights the prolific and highly prospective nature of the PL-3B corridor which hosts the 1.78km strike length identified so far.

All five lake-based holes and five of the six holes on R600W returned considerable mineralization. Nine additional regional holes were unmineralized, however, the data provided by these holes has contributed significantly to Fission's understanding of the geological setting and controls of mineralization at PLS.

Assay Highlights include:

PLS13-109 (line 750E)

- **8.0m** (108.0m to 116.0m) @ **4.22% U3O8, including**
- **3.0m** (108.0m to 111.0m) @ **11.1% U3O8**
- Best Assay in hole: **0.5m** (110.5m to 111.0m) @ **24.6% U3O8**

PLS13-108 (line 810E)

- **19.5m** (152.5m to 172.0m) @ **0.99% U3O8, including**
- **1.5m** (188.5m to 190.0m) @ **6.52% U3O8**

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

"We are very encouraged by the highly successful summer 2013 program which showed the continued overall growth of high grades at PLS as well as the multiple and thick intervals returned by holes at the western end of the strike length. The evidence that PLS is host to a large-scale mineralized system continues to build rapidly."

Composited % U3O8 mineralized intervals are summarized in Tables 1, 2, 3 and 4 below. Samples from the drill core are split in half sections on site. Where possible, samples are standardized at 0.5m down-hole intervals. One-half of the split sample is sent to SRC Geoanalytical Laboratories (an SCC ISO/IEC 17025: 2005 Accredited Facility) in Saskatoon, SK for analysis which includes U_3O_8 (wt %) and fire assay for gold, while the other half remains on site for reference. All analysis include a 63 element ICP-OES, uranium by fluorimetry and boron. All depth measurements reported, including sample and interval widths are

down-hole, core interval measurements and true thickness are yet to be determined.

R585E Zone:

The R585E zone is located approximately 90m grid east of the easternmost defined edge of the R390E zone (defined by PLS13-088 on line 480E) and presently has a defined strike length of 30m (line 570E to line 600E) and a lateral grid north-south width of up to approximately 10m, as defined by 4 holes. The R585E discovery hole (PLS13-098) was targeted along the northern edge of the low resistivity feature, which is associated with the mineralized east-northeast trending pelitic corridor and a coincident radon in water anomaly. The geologic setting of the R585E zone is similar to other zones, consisting of mineralization primarily associated with sequences of steeply south dipping pelitic lithology with localized mylonites and cataclasites.

Table 1

Composited Mineralized Intervals (Down-hole measurements)

Zone	Hole ID	Grid Line	From (m)	To (m)	Interval (m)	U3O8 (wt%)
R585E	PLS13-106	585E	101.50	102.00	0.50	0.06
			114.00	114.50	0.50	0.12
			118.00	118.50	0.50	0.16
			121.50	122.50	1.00	0.08
			125.00	126.00	1.00	0.12
			131.50	132.00	0.50	0.20
			136.50	137.00	0.50	0.37
			152.00	153.50	1.50	0.24
			158.50	164.00	5.50	0.19
			166.50	183.50	17.00	0.11
			186.50	188.00	1.50	0.18
			193.50	198.50	5.00	0.15
			202.00	214.50	12.50	0.39
			218.00	220.50	2.50	0.05
			223.00	231.00	8.00	0.13
			233.50	242.50	9.00	0.18

Composite Parameters

1. **Minimum Thickness: 0.50m**
2. **Grade Cut-off: 0.05 U3O8 (wt%)**
3. **Maximum Internal Dilution: 2.00m**

Line 585E:

- **Drillhole PLS13-106** was collared as a vertical hole and was completed at a depth of 332.0m. The collar is located approximately 10m grid north of PLS13-098. A total of 16 discrete mineralized intervals grading >0.05% U3O8 and ranging in width from 0.5m to 17.0m and separated by unmineralized sections ranging from 2.5m - 15.0m wide, were intersected over a 141.0m section (101.5m - 242.5m) (see Table 1).

R780E Zone:

The R780E zone is located approximately 150m grid east of the easternmost defined edge of the R585E zone (defined by PLS13-129 on line 600E) and presently has a defined strike length of 75m (line 750E to line 825E) and a lateral grid north-south width of up to approximately 60m, as defined by 14 holes. The discovery hole (PLS13-048) was targeted in the middle of an identified radon in water anomaly. The geologic setting of the R780E zone is similar to other zones, consisting of mineralization primarily associated with sequences of steeply south dipping pelitic lithology with localized mylonites and cataclasites.

Table 2

Composited Mineralized Intervals (Down-hole measurements)

Zone	Hole ID	Grid Line	From (m)	To (m)	Interval (m)	U3O8 (wt%)
R780E	PLS13-105	765E	107.00	107.50	0.50	0.15
			109.50	110.00	0.50	0.07
			113.00	122.50	9.50	0.36
			128.00	131.00	3.00	3.93
			128.50	129.50	1.00	10.85
			145.50	148.50	3.00	0.15
			151.00	151.50	0.50	0.09
			189.00	192.50	3.50	1.12
			195.00	197.50	2.50	0.10
			204.00	204.50	0.50	0.16
			210.50	211.50	1.00	0.32
			245.00	246.00	1.00	0.20
			249.00	249.50	0.50	0.30
			253.00	253.50	0.50	0.06
			263.50	264.50	1.00	0.27
			326.50	330.50	4.00	0.06
	PLS13-107	765E	137.50	166.50	29.00	0.17
			171.50	174.50	3.00	1.94
			178.50	179.50	1.00	0.92
			192.50	199.00	6.50	0.57
			197.50	198.50	1.00	1.58
			203.50	204.00	0.50	0.09
			207.00	207.50	0.50	0.15
			251.50	265.00	13.50	0.23
			267.50	274.00	6.50	0.22
			289.00	290.00	1.00	0.27
			306.50	309.50	3.00	0.10
	PLS13-108	810E	81.00	81.50	0.50	0.07
			91.00	91 .50	0.50	0.06
			96.50	97.00	0.50	0.09
			102.00	102.50	0.50	0.15
			107.50	112.50	5.00	0.06
			117.00	122.00	5.00	0.05
			125.50	130.00	4.50	0.18
			132.50	140.00	7.50	0.11
			143.50	144.00	0.50	0.31
			148.50	149.00	0.50	0.20
			152.50	172.00	19.50	0.99
			156.00	158.00	2.00	3.46
			166.75	168.00	1.25	3.92
			174.50	181.00	6.50	0.67
			174.50	177.00	2.50	1.64
			184.50	195.50	11.00	1.33
			188.50	190.00	1.50	6.52
			200.50	202.00	1.50	0.21
			217.00	217.50	0.50	0.06
			228.00	232.50	4.50	3.48
			268.00	269.00	1.00	0.55
			275.50	276.00	0.50	0.13
	PLS13-109	750E	108.00	116.00	8.00	4.22
			108.00	111.00	3.00	11.10
			137.50	138.50	1.00	0.09
			141.00	158.50	17.50	0.55
			161.00	163.00	2.00	0.05
			168.50	169.00	0.50	0.44
			174.00	174.50	0.50	0.06
			178.00	179.00	1.00	0.22
			181.50	182.00	0.50	0.52
			197.00	203.00	6.00	0.59
			205.50	211.50	6.00	5.89
			209.00	210.50	1.50	14.57
			266.50	267.00	0.50	0.07

			275.00	281.00	6.00	0.08
			285.50	287.00	1.50	0.09
			295.00	296.50	1.50	0.06
			300.00	309.50	9.50	0.13
			333.00	333.50	0.50	0.15

Composite Parameters

1. **Minimum thickness: 0.50m**
2. **Grade Cut-off: 0.05 U3O8 (wt%)**
3. **Maximum Internal Dilution: 2.00m**

Line 750E:

- **Drillhole PLS13-109** was collared as a vertical hole and was completed at a depth of 401.0m. The collar is located 15m grid west of PLS13-107. A total of 16 discrete mineralized intervals grading >0.05% U3O8 and ranging in width from 0.5m to 17.5m and separated by unmineralized intervals ranging from 2.5m to 55.0m wide, were intersected over a 225.5m span (108.0m - 333.5m) (see Table 2). The strongest mineralized interval returned a value of 4.22% U3O8 over 8.0m (108.0m - 116.0m) including a higher grade interval returning 11.1% U3O8 over 3.0m (108.0m - 111.0m) and a second interval of 5.89% U3O8 over 6.0m (205.5m - 211.5m) including a higher grade interval returning 14.57% U3O8 over 1.5m (209.0m - 210.5m).

Line 765E:

- **Drillhole PLS13-105** was collared as a vertical hole and was completed at a depth of 419.0m. The collar is located 10m grid south of PLS13-107. Hole deviation migrated grid east thus causing the interception of mineralization up to 15m grid east off section line. A total of 15 discrete mineralized intervals grading >0.05% U3O8 and ranging in width from 0.5m to 9.5m and separated by unmineralized intervals ranging from 2.0m to 62.0m wide, were intersected over a 223.5m span (107.0m - 330.5m) (see Table 2).

- **Drillhole PLS13-107** was collared as a vertical hole and was completed at a depth of 402.0m. The collar is located 15m grid west of PLS13-080. A total of 10 discrete mineralized intervals grading >0.05% U3O8 and ranging in width from 0.5m to 29.0m and separated by unmineralized intervals ranging from 4.0m to 44.0m wide, were intersected over a 172.0m span (137.5m - 309.5m) (see Table 2).

Line 810E:

- **Drillhole PLS13-108** was collared as a vertical hole and was completed at a depth of 392.0m. The collar is located 10m grid north of PLS13-101. A total of 18 discrete mineralized intervals grading >0.05% U3O8 and ranging in width from 0.5m to 19.5m and separated by unmineralized intervals ranging from 2.5m to 35.5m wide, were intersected over a 195.0m span (81.0m - 276.0m) (see Table 2). The strongest mineralized interval returned a value of 0.99% U3O8 over 19.5m (152.5m - 172.0m) and a second interval of 1.33% U3O8 over 11.0m (184.5m - 195.5m) including a higher grade interval returning 6.52% U3O8 over 1.5m (188.5m - 190.0m).

R600W Zone

The R600W zone discovery was the result of follow-up by drilling of a radon in sediment anomaly identified during the summer program. The radon anomaly is located between 540W and 630W and may be associated with inferred north-south cross cutting structures. This anomaly lies along an ENE trend, parallel and just north of the PL-3B EM conductor. The R600W zone presently has a defined strike length of 30m (line 615W to line 585W) and a lateral grid north-south width of up to approximately 20m, as defined by 5 holes.

Table 3

Composited Mineralized Intervals (Down-hole measurements)

Zone	Hole ID	Grid Line	From (m)	To (m)	Interval (m)	U3O8 (wt%)
R600W	PLS13-116	600W	No significant mineralization			
	PLS13-118	600W	174.50	177.50	3.00	0.06
			182.50	183.00	0.50	0.12
			186.50	187.50	1.00	0.08
			192.00	198.50	6.50	0.34
	PLS13-121	600W	98.70	110.50	11.80	0.20
			141.00	144.00	3.00	0.05
			150.00	150.50	0.50	0.06
			195.50	196.00	0.50	0.13
	PLS13-122	585W	101.50	103.50	2.00	0.06
			108.00	108.50	0.50	0.06
			158.50	159.00	0.50	0.15
	PLS13-123	585W	98.00	114.00	16.00	0.08
			132.50	139.50	7.00	0.10
			142.50	145.00	2.50	0.10
			159.00	160.00	1.00	0.07
	PLS13-124	615W	97.50	103.50	6.00	0.29
			107.00	109.50	2.50	0.24
			112.50	118.50	6.00	0.08
			139.00	144.00	5.00	0.08
			147.50	150.00	2.50	0.06
			184.50	185.00	0.50	0.08
			188.00	188.50	0.50	0.05
			198.00	208.50	10.50	0.08

Composite Parameters

1. **Minimum thickness: 0.50m**
2. **Grade Cut-off: 0.05 U3O8 (wt%)**
3. **Maximum Internal Dilution: 2.00m**

Line 615W:

- **Drillhole PLS13-124** was collared as a vertical hole and was completed at a depth of 257.0m. The collar is located 15m grid west of PLS13-121. A total of 8 discrete weakly mineralized intervals grading >0.05% U3O8 and ranging in width from 0.5m to 10.5m and separated by unmineralized intervals ranging from 3.0m to 34.5m wide, were intersected over a 111.0m span (97.5m - 208.5m) (see Table 3).

Line 600W:

- **Drillhole PLS13-116** was collared as a vertical hole and was completed at a depth of 323.0m. The collar is located 30m grid north of PLS13-121. This was the first hole in the R600W vicinity and although not mineralized, did indicate that mineralization could be present near-by and that the most prospective location was south of hole PLS13-116. Interpretation suggested that the stratigraphic sequence encountered was north of the desired dominantly pelitic sequence, which is associated with high-grade mineralization further to the east.

- **Drillhole PLS13-118** was collared as a vertical hole and was completed at a depth of 314.0m. The collar is located 10m grid south of PLS13-121. A total of 4 discrete weakly mineralized intervals grading >0.05% U3O8 and ranging in width from 0.5m to 6.5m and separated by unmineralized intervals ranging from 3.5m to 5.0m wide, were intersected over a 24.0m span (174.5m - 198.5m) (see Table 3).

- **Drillhole PLS13-121** was collared as a vertical hole and was completed at a depth of 248.0m. The collar is located approximately 30m grid south of PLS13-116. A total of 4 discrete weakly mineralized intervals grading >0.05% U3O8 and ranging in width from 0.5m to 11.8m and separated by unmineralized intervals ranging from 3.0m to 18.5m wide, were intersected over a 97.3m span (98.7m - 196.0m) (see Table 3).

Line 585W:

- **Drillhole PLS13-122** was collared as a vertical hole and was completed at a depth of 332.0m. The collar is located 15m grid east of PLS13-118. A total of 3 discrete weakly mineralized intervals grading >0.05% U3O8 and ranging in width from 0.5m to 2.0m and separated by unmineralized intervals ranging from 4.5m to 50.0m wide, were intersected over a 57.5m span (101.5m - 159.0m) (see Table 3).

- **Drillhole PLS13-123** was collared as a vertical hole and was completed at a depth of 260.0m. The collar is located 10m grid north of PLS13-122. A total of 4 discrete weakly mineralized intervals grading >0.05% U3O8 and ranging in width from 1.0m to 16.0m and separated by unmineralized intervals ranging from 3.0m to 18.5m wide, were intersected over a 62.0m span (98.0m - 160.0m) (see Table 3).

Regional Holes

Nine land-based drill holes (PLS13-110, 111, 112, 113, 114, 115, 117, 119 and 120) were drilled west of the R00E zone, along the same geophysics defined lithologic corridor which hosts the R00E, R390E, R585E, R780E and R945E zones, between lines 150W and 840W (see Table 4). The holes were targeted to test the east-northeast trending corridor in conjunction with interpreted intersecting cross-faults, in particular where radon anomalies were returned. All holes with the exception of PLS13-110 intersected varying amounts of pelitic gneiss, with associated localized development of weak to moderate clay alteration, overlying a semipelitic gneiss. In addition, a common feature to most holes was an intersection of a diabase dyke, ranging in widths from 2.1m to 17.1m wide. Although no mineralization was encountered, varying degrees of secondary hydrothermal alteration were present in all holes, thus providing encouragement for the prospectivity of the western strike extension of the PL-3B corridor.

Table 4

Composited Mineralized Intervals (Down-hole measurements)

Zone	Hole ID	Grid Line	From (m)	To (m)	Interval (m)	U3O8 (wt%)
Regional	PLS13-110	405W	*No significant mineralization*			
	PLS13-111	405W	*No significant mineralization*			
	PLS13-112	840W	*No significant mineralization*			
	PLS13-113	405W	*No significant mineralization*			
	PLS13-114	705W	*No significant mineralization*			
	PLS13-115	360W	*No significant mineralization*			
	PLS13-117	360W	*No significant mineralization*			
	PLS13-119	195W	*No significant mineralization*			
	PLS13-120	150W	*No significant mineralization*			

Composite Parameters

1. **Minimum thickness: 0.50m**
2. **Grade Cut-off: 0.05 U3O8 (wt%)**
3. **Maximum Internal Dilution: 2.00m**

A $12M, 90 hole, 30,000m drill program and ground geophysics surveys continues at PLS. Updated maps and files can be found on the Company's website at http://www.fissionuranium.com/projects/patterson-lake-south-sk/.

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 and is headquartered in Kelowna, British Columbia. Common Shares are listed on the TSX Venture 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, President and COO

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. 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.*

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.

Contact

Fission Uranium Corp.
Rich Matthews
Investor Relations
TF: 877-868-8140
rich@fissionuranium.com
www.fissionuranium.com