Fission Discovers Multiple New Radon Anomalies at PLS; Completes Winter 2014 Regional Program

April 28, 2014 (Source: Marketwired) – FISSION URANIUM CORP. (TSX VENTURE:FCU)(OTCQX:FCUUF)(FRANKFURT:2FU) ("Fission" or "the Company") is pleased to announce the results of its final ten regional exploration holes of the winter 2014 drill program as well as results of radon-in-lake surveys at its 100% owned Patterson Lake South (PLS) property in Canada's Athabasca Basin. The remaining holes, part of the regional exploration drill program that identified the new R1620E zone (see NR dated March 21, 2014), did not encounter new occurrences of significant radioactivity but have provided encouraging data for use in upcoming drill programs. The Winter Radon in lake water survey included coverage over parts of 15 discrete basement electromagnetic (EM) conductor axis clustered in 4 separate high priority areas (Area A, B, C and D). Preliminary analysis shows radon in water anomalies of various intensity are present on all conductors surveyed.

Some of the radon anomalies are on the scale of intensity as the anomalies associated with the PL-3B conductor at PLS that led to the discovery of high-grade uranium mineralization in drill core in 2013. The 2013 radon survey assisted targeting along the PL-3B conductor was a contributing factor in the success of drill collar step outs as large as 465m at PLS.

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

“Mineralization to date at PLS has been discovered by drill testing along just two basement EM conductors (PL-3B and PL-3C). Over 120 such conductor axis have been identified by geophysics on this remarkable property and we are highly encouraged by the strong results of this survey. Given the ice conditions in some parts of Patterson and Forest lakes during the Winter program, we were unable to drill test a number of high priority geophysics and radon supported target areas. However, these surveys will play an important role in targeting and prioritizing new holes in future drill programs including the upcoming Summer drill program.”

The Winter 2014 regional drilling tested three EM conductors: PL-1B, PL-2C and PL-3C. The discovery and expansion of the R1620E zone, via previously reported holes PLS14-196 and PLS14-208 (see NR dated Mar 31, 2014 and Apr 24, 2014), occurred while testing the PL-3C conductor. The results from the remaining holes have encountered geology of significant interest to Fission and warrant follow up.

Exploration Drilling

A total of 12 drill holes testing 3 separate parallel basement electromagnetic (EM) conductors (PL-1B, PL-2C and PL-3C), were completed as part of the exploration drill program, designed to explore for new occurrences of uranium mineralization. Two of these holes, (PLS14-196 and PLS14-208) testing on the PL-3C EM conductor, were successful in discovering a new zone of mineralization, the R1620E zone, and were reported on previously (Mar 31, 2014 and Apr 24, 2014 respectively). Ten other holes tested the 3 conductors, and although no anomalous radioactive mineralization was encountered, all drill holes intersected sequences of pelitic gneiss (locally graphitic and sulphide-bearing) and semipelitic gneiss which are considered important host rocks for high-grade basement hosted uranium mineralization.

PL-1B Conductor:

The PL-1 trend of EM conductors defines the northern boundary of the geophysics defined northern Patterson Lake Corridor (with the PL-3 series defining the southern boundary of the corridor). The east-north-east trending PL-1 series of EM conductors is approximately 6.1km long and consists of 3 defined conductors on strike of each other. The PL-1B conductor is the middle discrete EM conductor of the PL-1 series and has a strike length of approximately 3.1km. Three holes tested an approximately 1.2km length of the PL-1B conductor.

PL-1B Conductor

		Collar			* Hand-held Scintillometer Results On Mineralized Drillcore (>300 cps / >0.5M minimum)				Sand-stone	Base-ment Uncon-formity	Total Drill-hole
Hole ID	Zone	Grid Line	Az	Dip	From (m)	To (m)	Width (m)	CPS Peak Range	From – To (m)	Depth (m)	Depth (m)
PLS14-188	PL-1B	450E	145	-84	No Significant Radioactivity				NA	50.8	485.0
PLS14-206	PL-1B	1665E	276	-87	No Significant Radioactivity				NA	61.9	432.5
PLS14-212	PL-1B	825E	97	-87	No Significant Radioactivity				NA	59.0	341.0

PLS14-188 (line 450E) was collared as steeply dipping and completed to a depth of 485.0m, intersecting bedrock at 50.8m. The collar was located approximately 30m north of PLS12-003 targeting the up-dip projection of a large chlorite and clay altered fault zone encountered in PLS12-003. The hole cored moderately chlorite and hematite altered pelitic gneiss to 433.0m transitioning to a semipelitic gneiss to the end of the hole at 485.0m. The hole did not intersect the same fault zone as PLS12-003, possibly suggesting the dip of the fault is to the north rather than the south.

PLS14-206 (line 1665E) targeted a strong radon anomaly coincident with the PL-1B conductor. The hole was collared as steeply dipping and completed to a depth of 432.5m, intersecting bedrock at 61.9m. From 61.9m to 350.5m the basement is predominantly a pelitic gneiss, locally graphitic with sulphides and from 350.5m to 432.5m predominantly a semipelitic gneiss. Moderate to strong chlorite alteration was encountered from the top of the bedrock to 107.1m. A very large fault zone was encountered from 278m to 334m within graphitic pelitic gneiss. This target requires follow-up drilling.

PLS14-212 (line 825E) targeted a strong radon anomaly coincident with the PL-1B conductor. The hole was collared as steeply dipping and completed to a depth of 341.0m, intersecting bedrock at 59.0m. From 59.0m to 317.6m the basement is predominantly a pelitic gneiss locally graphitic with sulphides and from 317.6m to 341.0m predominantly a semipelitic gneiss. Several centimeter size fault zones from 12° to 86° to core axis were encountered between 64m to 195m.

PL-2C Conductor:

The PL-2 series of EM conductors are located in the middle of the geophysics defined northern Patterson Lake Corridor. The PL-2 trend of EM conductors is approximately 3km long and consists of 3 defined conductors on strike. The western area of the PL-2 series consists of 2 EM conductors (PL-2A and PL-2B) that are oblique (cross-cutting?) to the main east-north-east trend. The PL-2C conductor is parallel to the dominant trend of the PL-1 and PL-3 series. PL-2C has a strike length of approximately 2.3km. Four holes tested an approximately 1.9km length of the PL-2C conductor.

PL-2C Conductor

		Collar			* Hand-held Scintillometer Results On Mineralized Drillcore (>300 cps / >0.5M minimum)				Sand-stone	Base-ment Uncon-formity	Total Drill-hole
Hole ID	Zone	Grid Line	Az	Dip	From (m)	To (m)	Width (m)	CPS Peak Range	From – To (m)	Depth (m)	Depth (m)
PLS14-162	PL-2C	2460E	57	-90	No Significant Radioactivity				NA	59.4	392.0
PLS14-168	PL-2C	1200E	127	-87	No Significant Radioactivity				NA	58.5	482.0
PLS14-182	PL-2C	570E	304	-89	No Significant Radioactivity				NA	53.6	374.0
PLS14-202	PL-2C	570E	99	-87	No Significant Radioactivity				NA	52.2	368.0

PLS14-162 (line 2460E) targeted the most intense part of a basement resistivity low and at a conductive bright spot along the PL-2C conductor, close to an interpreted NNE-SSW trending cross-fault. The hole was collared as a vertical hole and completed at depth of 392.0m, intersecting bedrock at 59.4m. From 59.4m to 298.9m, the basement is an alternating sequence of pelitic gneiss (locally graphitic and sulphide bearing) and semipelitic gneiss and from 298.9m to 392.0m predominantly a semipelitic gneiss. Narrow mylonitic intervals are present from 92.2m to 97.2m. Weak to locally moderate chlorite alteration is present throughout, with occasional patches of hematitic alteration between 71.0m to 102.5m.

PLS14-168 (line 1200E) targeted a strong radon anomaly south of the PL-2C conductor. The hole was collared as steeply dipping and completed to a depth of 482.0m, intersecting bedrock at 58.5m. From 58.5m to 446.2m the basement is predominantly a pelitic gneiss (locally graphitic and sulphide bearing) with occasional alternating sequences of semipelitic gneiss and from 446.2m to 482.0m predominantly a pelitic granofel. Locally moderate to strong hematite alteration was encountered from the top of the bedrock to 106.8m.

PLS14-182 (line 570E) tested the northern part of the strong paired radon-in-water anomaly along and at the west end of the PL-2C conductor. The hole was collared as steeply dipping and completed to a depth of 374.0m, intersecting bedrock at 53.6m. Basement rocks consist of alternating sequences of pelitic gneiss and semipelitic gneiss throughout. Moderately strong hematite alteration is present from 55.0m to 64.9m.

PLS14-202 (line 570E) was a follow-up of PLS14-182 testing the southern part of the strong paired radon in water anomaly approximately 30m south of the PL-2C conductor axis. The hole was collared as steeply dipping and completed to a depth of 368.0m, intersecting bedrock at 52.2m. Similar to hole PLS14-182 the basement rocks consist of alternating sequences of pelitic gneiss and semipelitic gneiss throughout. Moderately strong hematite alteration is present from 94.7m to 100.2m and 119.3m to 121.1m.

PL-3C Conductor:

The PL-3 trend of EM conductors define the southern boundary of the northern Patterson Lake Corridor (with the PL-1 trend defining the northern boundary of the corridor). The east-north-east trending PL-3 series of EM conductors is approximately 8.8km long and consists of 3 defined conductors on strike of each other. The PL-3C conductor is the eastern discrete EM conductor of the PL-3 trend and has a strike length of approximately 1.3km. It is located approximately 250m east of the PL-3B conductor (associated with most of the mineralization discovered to date at PLS). Five holes tested an approximately 0.8km length of the PL-3C conductor, with anomalous radioactive mineralization encountered in 2 holes (PLS14-196 and PLS14-208) previously reported.

PL-3C Conductor

		Collar			* Hand-held Scintillometer Results On Mineralized Drillcore (>300 cps / >0.5M minimum)				Sand-stone	Base-ment Uncon-formity	Total Drill-hole
Hole ID	Zone	Grid Line	Az	Dip	From (m)	To (m)	Width (m)	CPS Peak Range	From – To (m)	Depth (m)	Depth (m)
PLS14-152	PL-3C	2265E	147	-86	No Significant Radioactivity				NA	60.9	359.0
PLS14-154	PL-3C	2190E	276	-86	No Significant Radioactivity				NA	59.7	401.0
PLS14-176	PL-3C	1500E	23	-87	No Significant Radioactivity				NA	61.3	359.0

PLS14-152 (line 2265E) targeted a weak radon anomaly which is offset from the ground TDEM conductor axis roughly the same distance as mineralization at R00E. The hole location is at a conductive bright spot along the PL-3C conductor and near the most intense part of the basement resistivity low along this conductor. PLS14-152 was a 10 m north step out of PLS13-040 which was interpreted to have intersected the southern semi-pelite. The hole was collared as steeply dipping and completed to a depth of 359.0m, intersecting bedrock at 60.9m. The hole intersected a moderately clay/chlorite altered, strongly graphitic sulphide rich pelitic gneiss and occasional mylonites over a 154.4 m interval (114.8m to 269.2m), flanked by a semipelite gneiss. In many respects, this is a similar sequence of rock as seen associated with mineralization to the west.

PLS14-154 (line 2190E) was designed as a follow-up of holes PLS13-040 and PLS13-057, coincident with a moderate radon anomaly which is off-set to the north from the TDEM conductor axis. The hole was collared 15m grid north of PLS13-040, which had displayed moderate to strong alteration at the top of the bedrock. The hole was collared as steeply dipping and completed to a depth of 401.0m, intersecting bedrock at 59.7m. Basement rocks consist of an intercalated sequence of

graphitic pelitic gneiss, semipelitic gneiss and diabase. Numerous narrow centrimetric size fault intervals oriented 5° to 60° to core axis is present from 63m to 94m.

PLS14-176 (line 1500E) targeted a moderate radon in water anomaly located on the north side of the PL-3C conductor axis at its western end. The hole was collared as steeply dipping and completed to a depth of 359.0m, intersecting bedrock at 61.3m. Basement rocks consist of an intercalated sequence of graphitic pelitic gneiss and semipelitic gneiss throughout. Numerous narrow centrimetric size fault intervals oriented 7° to 50° to core axis are present from 64m to 106m.

Key Technical Information for the Radon Survey

The radon in water survey followed up on 15 discrete geophysics-identified time domain electromagnetic (TDEM) basement conductors in 4 high priority areas (Areas A, B C and D). Fission's use of Radon Ex's lake bottom radon sampling survey, where the survey is conducted in the winter beneath the lake ice over known EM conductor axis), has shown to be an important layer of information to be used in identifying areas reflective of nearby radioactive source anomalies in bedrock. Analysis of these results were useful in assisting drill targeting during the 2013 drill programs at PLS.

The EIC (Electret Ionization Chamber) survey to measure samples of radon in lake beneath the surface ice was conducted by RadonEx Exploration Management, of St Lazare, Quebec. The survey comprised primarily samples of measurements of radon in water.

Area A

Area A covers a 1.517 sq. km area which includes a group of 4 discrete and parallel east-north-east trending EM conductors with 5 km total conductor length covered, including the PL3B conductor (which is associated with the high-grade "R" zones). The 2013 survey area covered the PL-3B and PL-3C conductor

axis. The winter 2014 survey covered the remaining 2 parallel EM conductors (PL-1B and PL-2C).

The sample grid was based on 30m to 60m line spacing with 20m sample spacing. A total of 848 radon in water samples were collected and included 27 repeat sample locations. 3 x two-point anomalies (1 at 2400 sq m and 2 at 1200 sq m areas) and 11 x one-point anomalies (8 at 1200 sq m, 1 at 900 sq m and 2 at 600 sq m) were identified. These are in addition to the 6 anomalies identified in 2013 which included 5 x one-point anomalies (2400 sq m each) and 1 x 3 point anomaly (3600 sq m).

Area B

Area B is located approximately 2 to 3km north-east of Area A. Area B covers a 0.34 sq. km area which includes two northeast trending EM conductor with 1.5 km total conductor length covered.

The sample grid was based on 60m line spacing with 20m sample spacing. A total of 256 radon in water and 26 radon in sediment samples were collected. 5 x one-point anomalies, covering 1200 sq m each were identified.

Area C

Area C is located approximately 1.5km to the south of Area A. Area C covers a 0.412 sq. km area which includes a group of 4 discrete and parallel east-north-east trending EM conductors with 1.46 km total conductor length covered.

The sample grid was based on 60m to 120m line spacing with 20m sample spacing. A total of 281 radon in water and 36 radon in sediment samples were collected. A number of anomalies were identified: 1 x five-point anomaly (6200 sq m), 1 x two-point anomaly (2400 sq m) and 7 x one-point anomalies (1200 sq m each).

Area D

Area D is located approximately 5km to the southeast of Area C in the Forest Lake corridor. Area D covers a 2.815 sq. km area which includes a group of 14 east-northeast trending parallel discrete conductor segments with 4.6 km total conductor length covered.

The sample grid was based on 30m to 60m line spacing with 20m sample spacing. A total of 1225 radon in water samples were collected and included 27 repeat sample locations. Nine x one-point anomalies (1200 sq m each).

Fission has now completed the Winter 2014 exploration program with a total of 35,198m in 92 completed holes (105 holes were pre-collared by the RC drill) using 5 diamond drills and 2 RC drills for pre-collaring; 80 holes (87%) were designed as delineation holes on the main mineralized trend and 12 holes (13%) were designed as exploration holes with the objective to discover new mineralized occurrences.

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

Natural gamma radiation in drill core that is reported in this news release was measured in counts per second (cps) using a hand held Exploranium GR-110G total count gamma-ray scintillometer. 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 intersections are down-hole, core interval measurements and true thickness is yet to be determined.

All holes are planned to be radiometrically surveyed 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.

Split core samples from the mineralized section of core will be taken continuously through the mineralized intervals and submitted to SRC Geoanalytical Laboratories (an SCC ISO/IEC 17025: 2005 Accredited Facility) of Saskatoon for analysis, which includes U3O8 (wt %) and fire assay for gold. All samples sent for analysis will include a 63 element ICP-OES, uranium by fluorimetry and boron. Assay results will be released when received.

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

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