FISSION URANIUM CORP.

ANNUAL INFORMATION FORM

FOR THE FISCAL YEAR ENDED JUNE 30, 2014

February 25, 2015

FISSION URANIUM CORP.
ANNUAL INFORMATION FORM
TABLE OF CONTENTS

ANNUAL INFORMATION FORM
FISSION URANIUM CORP.

PRELIMINARY NOTES

The information contained in this Annual Information Form ("**AIF**") is presented as of February 25, 2015 unless otherwise stated herein. Unless the context otherwise requires, all references to the "**Company**" or "**Fission**" shall mean Fission Uranium Corp., together with all of its subsidiaries.

You should read this AIF in conjunction with the audited annual financial statements and accompanying notes of Fission for the year ended June 30, 2014 and the management's discussion and analysis ("**MD&A**") thereon, which are available on Fission's SEDAR profile at www.sedar.com. The Company presents its financial statements and MD&A in Canadian dollars and in accordance with International Financial Reporting Standards ("**IFRS**").

Currency

Unless otherwise specified, all references in the AIF to "dollars" or to "$" are to Canadian dollars and all references to "US dollars" or to "US$" are to United States of America dollars.

Metric Equivalents

For ease of reference, the following factors for converting metric measurements into imperial equivalents are provided:

To Convert From Metric	To Imperial	Multiply by
Hectares	Acres	2.471
Metres	Feet (ft.)	3.281
Kilometres (km.)	Miles	0.621
Tonnes	Tons (2000 pounds)	1.102
Grams/tonne	Ounces (troy/ton)	0.029

Special Note Regarding Forward-Looking Statements

This AIF and the documents incorporated into this AIF by reference, contain "forward-looking statements" within the meaning of applicable Canadian securities legislation (forward-looking information and forward-looking statements being collectively herein after referred to as "forward-looking statements") that are based on expectations, estimates and projections as at the date of this AIF or the dates of the documents incorporated herein by reference, as applicable. These forward-looking statements include but are not limited to statements and information concerning: statements relating to the business and future activities of, and developments related to Fission after the date of this AIF; market position, and future financial or operating performance of Fission; liquidity of the Common Shares; the ability of Fission to develop the PLS Property; anticipated developments in operations; the future price of uranium; the timing and amount of estimated future production; costs of production and capital expenditures; mine life of mineral projects, the timing and amount of estimated capital expenditure; costs and timing of exploration and development and capital expenditures related thereto; operating expenditures; success of exploration activities, estimated exploration budgets; currency fluctuations; requirements for additional capital; government regulation of mining operations; environmental risks; unanticipated reclamation expenses; title disputes or claims; limitations on insurance coverage; the timing and possible outcome of pending litigation in future periods; the timing and possible outcome of regulatory and permitted matters; goals; strategies; future growth; planned exploration activities and planned future acquisitions; the adequacy of financial resources; and other events or conditions that may occur in the future.

Any statements that involve discussions with respect to predictions, expectations, beliefs, plans, projections, objectives, assumptions or future events or performance (often but not always using phrases such as "expects", or "does not expect", "is expected", "anticipates" or "does not anticipate", "plans", "budget", "scheduled", "forecasts", "estimates", "believes" or "intends" or variations of such words and phrases or stating that certain actions, events or results "may" or "could", "would", "might", or "will" be taken to occur or be achieved) are not statements of historical fact and may be forward-looking statements and are intended to identify forward-looking statements, which include statements relating to, among other things, the ability of Fission to continue to successfully compete in the market.

These forward-looking statements are based on the beliefs of Fission's management, as well as on assumptions which such management believes to be reasonable based on information currently available at the time such statements were made. However, there can be no assurance that the forward-looking statements will prove to be accurate. By their nature, forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of Fission to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, without limitation: risks related to Fission's limited business history; unknown environmental risks arising from past activities on Fission's properties; the limited number of exploration prospects relied on; risks related to future acquisitions and joint ventures, such as new geographic, political, operating, financial and geological risks or risks related to assimilating operations and employees; risks related to the prior business of Alpha; the potential for additional financings and dilution of the equity interests of Fission's shareholders; that Fission has no history of mineral production or mining operations; risks related to the nature of mineral exploration and development; discrepancies between actual and estimated mineral resources; risks caused by factors beyond Fission's control, such as uranium market price volatility, recovery rates of minerals from mined ore and demand for nuclear power; risks related to competition in the mineral industry; that Fission has no history of dividends; risks related to regulatory requirements, including Environmental Laws and regulations and liabilities, risks related to obtaining permits and licences and future changes to Environmental Laws and regulations; risks related to Fission's inability to obtain insurance for certain potential losses; risk related to uranium industry competition and international trade restrictions; the potential deregulation of the electrical utility industry; risks related to the public acceptance and perception of nuclear power; competition of nuclear power with other energy sources; environmental risks and hazards, including unknown environmental risks related to past activities; risks related to current or future litigation which could affect Fission's operations; risks related to political developments and policy shifts; risks related to costs of land reclamation; risks related to Fission's title to the PLS Property; risks related to dependence on key personnel; risks related to amendments to laws; risks related to the involvement of some of the directors and officers of Fission with other natural resource companies active in the same region as the PLS Property; risks related to the influence of third party stakeholders on the exploration and development of the PLS Property; risks related the market value of Fission Common Shares; changes in labour costs or other costs of production; labour disputes; delays in obtaining governmental approvals or financing or in the completion of development or construction activities; the ability to renew existing licenses or permits or obtain required licenses and permits; increased infrastructure and/or operating costs; and risks of not meeting exploration budget forecasts. Some of the important risks and uncertainties that could affect forward-looking statements are described further under the heading "*Risk Factors*".

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements. These forward-looking statements are made as of the date of this AIF and, other than as required by applicable securities laws, the Company assumes no obligation to update or revise them to reflect new events or circumstances.

Cautionary Note to U.S. Investors – Information Concerning Preparation of Resource and Reserve Estimates

This AIF has been prepared in accordance with the requirements of the securities laws in effect in Canada, which differ from the requirements of United States securities laws. Unless otherwise indicated, all resource and reserve estimates included in this AIF have been prepared in accordance with NI 43-101 and the Canadian Institute of Mining and Metallurgy Classification System. NI 43-101 is a rule developed by the Canadian Securities

Administrators which establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. NI 43-101 permits the disclosure of a historical estimate made prior to the adoption of NI 43-101 that does not comply with NI 43-101 to be disclosed using the historical terminology if the disclosure: (a) identifies the source and date of the historical estimate; (b) comments on the relevance and reliability of the historical estimate; (c) the key assumptions, parameters and methods used to prepare the historical estimate; (d) states whether the historical estimate uses categories other than those prescribed by NI 43-101; (e) includes any more recent estimates or data available; (f) comments on what work needs to be done to upgrade or verify the historical estimate as current mineral resources or mineral reserves; and (g) includes the disclaimers required by NI 43-101.

Canadian standards, including NI 43-101, differ significantly from the requirements of the SEC, and resource and reserve information contained herein may not be comparable to similar information disclosed by U.S. companies. In particular, and without limiting the generality of the foregoing, the term "resource" does not equate to the term "reserves". Under U.S. standards, mineralization may not be classified as a "reserve" unless the determination has been made that the mineralization could be economically and legally produced or extracted at the time the reserve determination is made. The SEC's disclosure standards normally do not permit the inclusion of information concerning "measured mineral resources", "indicated mineral resources" or "inferred mineral resources" or other descriptions of the amount of mineralization in mineral deposits that do not constitute "reserves" by U.S. standards in documents filed with the SEC. U.S. investors should also understand that "inferred mineral resources" have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. It cannot be assumed that all or any part of an "inferred mineral resource" will ever be upgraded to a higher category. Under Canadian rules, estimated "inferred mineral resources" may not form the basis of feasibility or pre-feasibility studies except in rare cases. Investors are cautioned not to assume that all or any part of an "inferred mineral resource" exists or is economically or legally mineable. Disclosure of "contained ounces" in a resource is permitted disclosure under Canadian regulations; however, the SEC normally only permits issuers to report mineralization that does not constitute "reserves" by SEC standards as in place tonnage and grade without reference to unit measures. The requirements of NI 43-101 for identification of "reserves" are also not the same as those of the SEC. Accordingly, information concerning mineral deposits set forth herein may not be comparable with information made public by companies that report in accordance with U.S. standards.

GLOSSARY OF NON-TECHNICAL TERMS

In the AIF or materials incorporated by reference, unless otherwise defined or unless there is something in the subject matter or context inconsistent therewith, the following terms have the meanings set forth herein or therein:

"**ABCA**" means the *Business Corporations Act* (Alberta) and the regulations made thereunder, as now in effect and as they may be promulgated or amended from time to time;

"**AIF**" or "**Annual Information Form**" means this annual information form and any appendices, schedules or attachments hereto;

"**Alpha Arrangement**" means an arrangement under section 193 of the ABCA between Fission and Alpha pursuant to which Fission acquired all of the issued and outstanding shares of Alpha;

"**Alpha**" means Alpha Minerals Inc.;

"**Alpha Replacement Option**" has the meaning ascribed thereto in this AIF under the heading "*Description of Capital Structure – Options*";

"**Azincourt**" means Azincourt Uranium Inc.;

"**Brades**" means Brades Resources Corp.;

"**Brades Shares**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014*";

"**Broker Warrants**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Subscription Receipt Offering*";

"**CBCA**" means the *Canada Business Corporations Act*, and the regulations made thereunder, as now in effect and as they may be promulgated or amended from time to time;

"**Common Shares**" has the meaning ascribed to that term in this AIF under the heading "*Corporate Structure – Name, Address and Incorporation*";

"**Denison**" means Denison Mines Corp.;

"**Denison Arrangement**" means the plan of arrangement under section 192 of the CBCA pursuant to which Denison acquired all of the issued and outstanding shares of Fission Energy and the Fission Business was transferred to Fission;

"**Dundee**" means Dundee Securities Ltd.;

"**Environmental Laws**" means all laws, imposing obligations, responsibilities, liabilities or standards of conduct for or relating to: (a) the regulation or control of pollution, contamination, activities, materials, substances or wastes in connection with or for the protection of human health or safety, the environment or natural resources (including climate, air, surface water, groundwater, wetlands, land surface, subsurface strata, wildlife, aquatic species and vegetation); or (b) the use, generation, disposal, treatment, processing, recycling, handling, transport, distribution, destruction, transfer, import, export or sale of hazardous substances;

"**Escrow Release Conditions**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Subscription Receipt Offering*";

"**Final Prospectus**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Special Warrant Offering*";

"**Fission**" or the "**Company**" has the meaning ascribed to that term in this AIF under the heading "*Preliminary Notes*";

"**Fission 3.0**" means Fission 3.0 Corp.;

"**Fission 3.0 Arrangement**" means the plan of arrangement between Fission and Fission 3.0 under section 192 of the CBCA pursuant to which all of Fission's properties (and certain liabilities in connection with its properties), other than the PLS Property, were transferred to Fission in exchange for common shares of Fission 3.0;

"**Fission 3.0 Arrangement Circular**" means the Management Information Circular of Fission dated October 29, 2013, which is available on Fission's SEDAR profile at www.sedar.com;

"**Fission Board**" means the board of directors of Fission;

"**Fission Business**" has the meaning ascribed thereto in this AIF under the heading "*Description and General Development of the Business – Three Year History*";

"**Fission Energy**" means Fission Energy Corp.;

"**Fission Option Plan**" means the Fission Stock Option Plan dated July 30, 2013;

"**Fission Properties**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Three Year History*";

"**Flow-Through Offering**" has the meaning ascribed thereto in this AIF under the heading "*Description and General Development of the Business – Events Subsequent to June 30, 2014*";

"**Flow-Through Shares**" has the meaning ascribed thereto in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Subscription Receipt Offering*";

"**IFRS**" has the meaning ascribed thereto in this AIF under "*Preliminary Notes*";

"**Initial Subscription Receipt Offering**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Subscription Receipt Offering*";

"**MD&A**" has the meaning ascribed to that term in this AIF under the heading "*Preliminary Notes*";

"**NI 43-101**" means National Instrument 43-101 "*Standards of Disclosure for Mineral Projects*" of the Canadian Securities Administrators;

"**NI 51-102**" means National Instrument 51-102 "*Continuous Disclosure Obligations*" of the Canadian Securities Administrators;

"**NI 52-110**" means National Instrument 52-110 "*Audit Committees*" of the Canadian Securities Administrators;

"**NRC**" has the meaning ascribed to that term in this AIF under the heading "*Risk Factors – Public Acceptance of Nuclear Energy Cannot Be Assured*";

"**Options**" means options to purchase Common Shares;

"**OTCQX**" means OTCQX International exchange operated by OTC Markets Group Inc.;

"**PLN Property**" means the Patterson Lake North property located in the Athabasca Basin region of Saskatchewan, Canada;

"**PLS Property**" or "**Property**" means the Patterson Lake South property located in the Athabasca Basin region of Saskatchewan, Canada, which, as of the date of this AIF, is Fission's only property;

"**PLS Property Technical Report**" means the NI 43-101 Technical Report prepared by David A. Ross, M.Sc., P.Geo., of Roscoe Postle Associates Inc. entitled "Technical Report on the Patterson Lake South Property, Northern Saskatchewan, Canada" with an effective date of February 12, 2015 and available under Fission's profile on SEDAR at www.sedar.com;

"**RPA**" means Roscoe Postle Associates Inc.;

"**SEC**" means the United States Securities and Exchange Commission;

"**SEDAR**" means the System for Electronic Document Analysis and Retrieval as outlined in NI 13-101, which can be accessed online at www.sedar.com;

"**Special Warrant Offering**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Special Warrant Offering*";

"**Special Warrant Offering Closing Date**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Special Warrant Offering*";

"**Special Warrant Option**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Special Warrant Offering*";

"**Special Warrant Underwriters**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Special Warrant Offering*";

"**Special Warrants**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Special Warrant Offering*";

"**Subscription Receipt Offering**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Subscription Receipt Offering*";

"**Subscription Receipts**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Subscription Receipt Offering*";

"**TSX**" means the Toronto Stock Exchange;

"**TSX-V**" means the TSX Venture Exchange;

"**Underwriters**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Subscription Receipt Offering*";

"**Underwriters' Option**" has the meaning ascribed to that term in this AIF under the heading "*Description and General Development of the Business – Year Ended June 30, 2014 – Subscription Receipt Offering*";

"**United States**" or "**U.S.**" means the United States of America, its territories and possessions, any State of the United States, and the District of Columbia; and

"**Warrants**" means share purchase warrants for the purchase of Common Shares.

GLOSSARY OF MINING TERMS AND ABBREVIATIONS

In this AIF or materials incorporated by reference, unless otherwise defined or unless there is something in the subject matter or context inconsistent therewith, the following terms have the meanings set forth herein or therein:

Assay:	The chemical analysis of mineral samples to determine the metal content.
Capital Expenditure:	All other expenditures not classified as operating costs.
Concentrate:	A metal-rich product resulting from a mineral enrichment process such as gravity concentration or flotation, in which most of the desired mineral has been separated from the waste material in the ore.
Cut-off Grade (CoG):	The grade of mineralized rock, which determines as to whether or not it is economic to recover its content by further concentration.
Dip:	Angle of inclination of a geological feature/rock from the horizontal.
Fault:	The surface of a fracture along which movement has occurred.
Grade:	The measure of concentration within mineralized rock.
ha.	Hectares
km	Kilometre
lb	Pound
m	Metre
Mineral/Mining Claim:	A lease area for which mineral rights are held.
ppm	Parts per million
Strike:	Direction of line formed by the intersection of strata surfaces with the horizontal plane, always perpendicular to the dip direction.

CORPORATE STRUCTURE

Name, Address and Incorporation

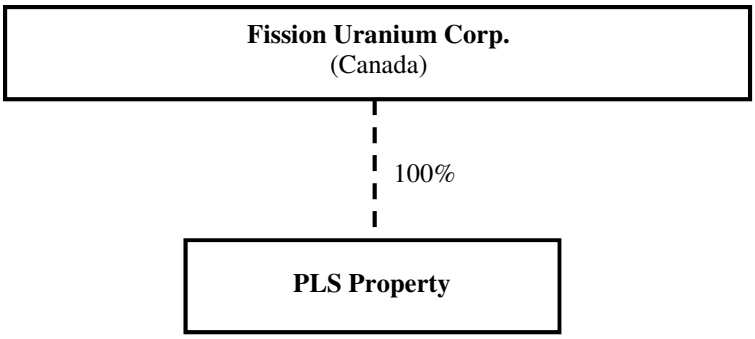
Fission was incorporated pursuant to the CBCA on February 13, 2013. Fission is a reporting issuer in British Columbia, Alberta, Saskatchewan, Ontario and New Brunswick and files its continuous disclosure documents with the relevant Canadian securities regulatory authorities. Such documents are available on Fission's profile on the SEDAR website at www.sedar.com. The authorized capital of Fission is an unlimited number of common shares without par value (the "**Common Shares**").

The head office of Fission is located at Suite 700 – 1620 Dickson Avenue, Kelowna, British Columbia, V1Y 9Y2. The registered and records office of Fission is located at 700 - 595 Howe Street, Vancouver, British Columba, V6C 2T5.

The Company's Common Shares are listed for trading on the TSX under the trading symbol "FCU" and on the OTCQX under the trading symbol "FCUUF".

Intercorporate Relationships

Fission previously had one wholly-owned subsidiary, Alpha Minerals Inc., a company incorporated under the laws of the province of Alberta and continued under the *Canada Business Corporations Act* (the "**CBCA**") on March 14, 2014. Effective April 1, 2014, Alpha amalgamated into the Company pursuant to the statutory procedures under Section 185 of the CBCA. The Company's corporate structure is set out below.



DESCRIPTION AND GENERAL DEVELOPMENT OF THE BUSINESS

Fission is a junior resource issuer primarily engaged in the growth and advancement of its core asset, the PLS Property, located in Saskatchewan, Canada. The management of Fission considers the PLS Property to be its only material property for the purposes of NI 43-101.

Three Year History

Fission was incorporated on February 13, 2013 as a wholly-owned subsidiary of Fission Energy. On April 26, 2013, Fission Energy completed the Denison Arrangement pursuant to which Denison acquired all of the issued and outstanding securities of Fission Energy and all outstanding shares of Fission were distributed to shareholders of Fission Energy, creating a new publicly-traded corporation holding the PLN Property, the PLS Property, Clearwater West property, North Shore property and the Macusani property located in Peru that were previously held by Fission Energy (collectively, the "**Fission Properties**"), $17,518,145 in cash and certain other assets and liabilities (together with the Fission Properties, the "**Fission Business**").

Year Ended June 30, 2013

In April, 2013, Fission applied for the listing of the Common Shares on the TSX-V. On April 26, 2013, Fission Energy, Denison and Fission completed the Denison Arrangement pursuant to which Fission acquired, among other things, Fission Energy's 50% interest in the PLS Property.

On April 29, 2013, Fission entered into a property option and joint venture agreement with Azincourt with respect to the PLN Property, pursuant to which Azincourt was granted the option to acquire up to 50% of the interest in the PLN Property subject to incurring $12,000,000 in certain exploration expenditures and paying $4,750,000 in cash or common shares of an equivalent value over a four year period. Fission's interest in the PLN Property was later transferred to Fission 3.0 pursuant to the Fission 3.0 Arrangement. See "*Alpha and Fission 3.0 Arrangements*" below.

On April 30, 2013, the Common Shares commenced trading on the TSX-V.

Year Ended June 30, 2014

On July 23, 2013, Fission changed its auditor from Ernst & Young LLP to PricewaterhouseCoopers LLP.

On October 15, 2013, Fission and Brades jointly announced that they had signed a letter of intent to enter into a property option agreement whereby Brades can earn up to a 50% interest in Fission's Clearwater West property in the southwestern Athabasca Basin region of Saskatchewan, Canada by incurring $5,000,000 of certain staged exploration expenditures on or before October 10, 2016 and issuing to Fission the number of common shares in the capital stock of Brades (the "**Brades Shares**") on closing that would comprise 9.9% of the then-issued Brades Shares. The Clearwater West property and the associated letter of intent with Brades was later transferred to Fission 3.0 pursuant to the Fission 3.0 Arrangement. See "*Alpha and Fission 3.0 Arrangements*", below.

Subscription Receipt Offering

On October 24, 2013, Fission completed a bought-deal private placement (the "**Initial Subscription Receipt Offering**") of 8,581,700 (inclusive of the Underwriters' Option (as defined below)) non-transferable subscription receipts of Fission (the "**Subscription Receipts**") at a price of $1.50 per Subscription Receipt for aggregate total gross proceeds of $12,872,550. Each Subscription Receipt was exchangeable for, upon satisfaction of certain conditions, including the completion of the Fission 3.0 Arrangement and the Alpha Arrangement (the "**Escrow Release Conditions**"), flow-through common shares ("**Flow-Through Shares**") of Fission after the completion of the Fission 3.0 Arrangement. The Initial Subscription Receipt Offering was led by Dundee on behalf of a syndicate of underwriters, including Raymond James Ltd., Cantor Fitzgerald Canada Corp., Canaccord Genuity Corp., and Macquarie Capital Markets Canada Ltd. (collectively, and together with Dundee, the "**Underwriters**").

Pursuant to the underwriting agreement entered into between Fission and the Underwriters, the Underwriters were granted the option to purchase additional Subscription Receipts equal to 15% of the Initial Subscription Receipt Offering (the "**Underwriters' Option**", together with the Initial Subscription Receipt Offering, the "**Subscription Receipt Offering**").

On December 9, 2013, following satisfaction of the Escrow Release Conditions, each Subscription Receipt was exchanged for one Flow-Through Share and the Underwriters received: (a) in respect of the first 7,670,500 Subscription Receipts distributed, a cash commission equal to 6.0% of the gross proceeds from the sale of such Subscription Receipts and that number of non-transferable broker warrants ("**Broker Warrants**") equal to 6.0% of that number of Subscription Receipts; and (b) in respect of the remaining 911,200 Subscription Receipts distributed, a cash commission equal to 6% of 40% of the gross proceeds from the sale of such Subscription Receipts and that the number of Broker Warrants equal to 6% of 40% of the number of Subscription Receipts. Each Broker Warrant is exercisable into one common share of the Company for a period of 24 months from the date of issuance of the Broker Warrants, at a price of $1.50 per Common Share.

The gross proceeds of the Subscription Receipt Offering were deposited into escrow on October 24, 2013 immediately following the closing of the Subscription Receipt Offering and were released to Fission on December 9, 2013.

Alpha and Fission 3.0 Arrangements

On September 3, 2013, Fission and Alpha announced the signing of a non-binding letter of intent pursuant to which Fission proposed to acquire the Alpha shares. Alpha's primary asset was its 50% interest in the PLS Property, the other 50% of which is held by Fission.

On September 17, 2013, Fission signed an arrangement agreement with Alpha pursuant to which Fission agreed to acquire all of the outstanding Alpha shares through the Alpha Arrangement and to effect the Fission 3.0 Arrangement. Under the terms of the Alpha Arrangement, Fission agreed to offer shareholders of Alpha 5.725 Common Shares and a cash payment of $0.0001 for each Alpha share held. Additionally, it was agreed that Alpha would transfer $3,000,000 in cash and all of Alpha's properties, (other than Alpha's 50% interest in the PLS Property), marketable securities and property and equipment located in Alpha's office in Vancouver, BC to a newly-incorporated company (now known as Alpha Exploration Inc.), whose shares would be distributed to the shareholders of Alpha.

On December 6, 2013, Fission completed the Alpha Arrangement and the Fission 3.0 Arrangement. Upon completion of the Alpha Arrangement, in accordance with TSX-V requirements, the Alpha shares were delisted from the TSX-V prior to the opening of markets on December 6, 2013. Subsequently, Alpha ceased to be a reporting issuer under the securities laws of British Columbia and Alberta.

As a result of Fission's acquisition of the Alpha shares pursuant to the Alpha Arrangement, as of the date of this AIF, Fission holds a 100% interest in the PLS Property.

Pursuant to the Fission 3.0 Arrangement, Fission transferred $3,000,000 in cash and all of its properties (and certain liabilities in connection with such properties), other than its 50% interest in the PLS Property, to Fission 3.0 in exchange for 152,960,604 common shares of Fission 3.0. All outstanding shares of Fission 3.0 were then distributed to the shareholders of Fission, creating a new publicly-traded corporation holding certain exploration assets in Canada and in Peru that were previously held by Fission. A detailed summary of the Fission 3.0 Arrangement is contained in the Fission 3.0 Arrangement Circular, which is available on Fission's SEDAR profile at www.sedar.com.

Effective April 1, 2014, Alpha amalgamated into the Company pursuant to the statutory procedures under Section 185 of the CBCA.

Special Warrant Offering

On April 1, 2014 (the "**Special Warrant Offering Closing Date**"), Fission completed a private placement of 17,968,750 (inclusive of the Special Warrant Option (as defined below)) special warrants (the "**Special Warrants**") at a price of $1.60 per Special Warrant, for gross proceeds of $28,750,000 (the "**Initial Special Warrant Offering**"). The Initial Special Warrant Offering was led by Dundee on behalf of a syndicate of underwriters including Cantor Fitzgerald Canada Corporation, Macquarie Capital Markets Canada Ltd., Raymond James Ltd., BMO Nesbitt Burns Inc., TD Securities Inc., Clarus Securities Inc. and Cormark Securities Inc. (the "**Special Warrant Underwriters**").

The Special Warrant Underwriters were granted the option to purchase up to an additional 15% of the Initial Special Warrant Offering (the "**Special Warrant Option**", together with the Initial Special Warrant Offering, the "**Special Warrant Offering**"), exercisable in whole or in part at any time up to 48 hours prior to the closing of the Special Warrant Offering Closing Date.

Each Special Warrant was exercisable for one Common Share at any time after the Special Warrant Offering Closing Date for no additional consideration and all unexercised Special Warrants were deemed to be exercised at

4:00 p.m. (Toronto time) on the earlier of: a) the date that was four months and one day following the Special Warrant Offering Closing Date, and b) the first business day after a receipt was issued for a final prospectus (the "**Final Prospectus**") by the securities regulatory authorities where the Special Warrants are sold, qualifying the Common Shares issued upon exercise or deemed exercise of the Special Warrants.

On April 24, 2014, Fission filed the Final Prospectus in the provinces of British Columbia, Alberta, Saskatchewan, Ontario and New Brunswick qualifying the distribution of 17,968,750 Common Shares issuable upon the deemed exercise of the Special Warrants. The Common Shares underlying such Special Warrants were issued on April 28, 2014.

Events Subsequent to June 30, 2014

On September 23, 2014, Fission completed a private placement of 9,602,500 (inclusive of an over-allotment option) Flow-through Shares, at a price of $1.50 per Flow-through Share, for gross proceeds of $14,403,750 (the "**Flow-through Offering**"). The Flow-through Offering was conducted on a bought deal basis by a syndicate of underwriters led by Dundee.

On October 8, 2014, Fission received final approval and began trading its shares on the TSX. Concurrently, Fission's shares were delisted from the TSX-V.

On January 9, 2015, Fission announced the results of an independent resource estimate for the R00E and R780E zones at its 100% owned PLS Property. The high-grade uranium deposit has been named the 'Triple R' deposit.

On February 23, 2015, Fission filed the PLS Property Technical Report on SEDAR.

Significant Acquisitions

The acquisition of Alpha on December 6, 2013 pursuant to the Alpha Arrangement represented a significant acquisition for Fission for the purposes of Part 8 of NI 51-102. For further information with respect to the acquisition of Alpha, see "*General Development of the Business – Three Year History – Year Ended June 30, 2014 – Alpha and Fission 3.0 Arrangements*". On April 4, 2014 the Company filed a business acquisition report on its SEDAR profile with the information prescribed by Form 51-102F4 under NI 51-102 in connection with the acquisition of Alpha, as required by Part 8 of NI 51-102.

NARRATIVE DESCRIPTION OF THE BUSINESS

Summary of the Business

Fission is focused on advancing its core asset, the PLS Property, a uranium exploration property located in the Athabasca Basin region of Saskatchewan, Canada.

The management of Fission considers the PLS Property to be its only material property for the purposes of NI 43-101. For more information on the PLS Property, see "*Mineral Properties - Summary*" and the PLS Property Technical Report available under Fission's profile on SEDAR at www.sedar.com .

Competitive Conditions

The uranium exploration and mining business is a competitive business. The Company competes with numerous other companies and individuals in the search for and the acquisition of attractive mineral properties. The success of the Company will depend not only on its ability to operate and develop its properties but also on its ability to select and acquire suitable properties or prospects for development or mineral exploration. See "*Risk Factors - Uranium Industry Competition and International Trade Restrictions*".

Employees

As of the date of this AIF, Fission has 38 employees and 9 people working on a consulting basis. The operations of Fission are managed by its directors and officers. Fission engages reputable consulting firms from time to time for technical and environmental services as required to assist in evaluating its interests and recommending and conducting work programs. See "*Risk Factors - Dependence on Key Personnel*".

Environmental Protection

The Company's operations are subject to environmental regulations promulgated by government agencies from time to time. Environmental legislation provides for restrictions and prohibitions of spills, releases or emissions of various substances related to mining industry operations, which could result in environmental pollution. A breach of such legislation may result in imposition of fines and penalties. In addition, certain types of operations require submissions to and approval of environmental impact assessments. Environmental legislation is evolving, which means stricter standards and enforcement, fines and penalties for non-compliance are becoming more stringent. Environmental assessment of proposed projects carries a heightened degree of responsibility for companies and directors, officers and employees. There is no assurance that future changes in environmental regulation, if any, will not adversely affect the Company's operations, including its capital expenditures and competitive position. See "*Risk Factors – Environmental Risks and Hazards*".

Foreign Operations

The Company is incorporated pursuant to the laws of Canada and is a reporting issuer in British Columbia, Alberta, Saskatchewan, Ontario and New Brunswick. The Company's material asset is its 100% interest in the PLS Property located in Saskatchewan, Canada. The Company is not dependent on any foreign operations.

Reorganizations

On December 6, 2013, in connection with the Fission 3.0 Arrangement, the Company transferred and sold $3,000,000 in cash and all of its properties, other than its 50% interest in the PLS Property, to Fission 3.0, then a wholly-owned subsidiary, in exchange for 152,960,604 common shares of Fission 3.0. All outstanding shares of Fission 3.0 were then distributed to the shareholders of Fission, creating a new publicly-traded corporation holding certain exploration assets in Canada and in Peru that were previously held by Fission. See "*General Development of the Business – Three Year History – Year Ended June 30, 2014 – Alpha and Fission 3.0 Arrangements*".

MINERAL PROPERTIES

General

The Company's only mineral property is the PLS Property. David A. Ross, M.Sc., P.Geo., the author of the PLS Technical Report, is an independent qualified person under National Instrument 43-101 and has approved of the summary of the PLS Property Technical Report provided below. The following summary is extracted from the PLS Property Technical Report. The full text of the PLS Property Technical Report is available under the Company's profile on the SEDAR website at www.sedar.com and on the Company's website at www.fissionuranium.com.

PROPERTY DESCRIPTION AND LOCATION

The PLS Property consists of 17 contiguous mineral claims in northern Saskatchewan, located approximately 550 km north-northwest of the city of Prince Albert and 150 km north of the community of La Loche. The Property is accessible by vehicle along all-weather gravel Highway 955, which bisects the Property in a north-south direction.

The Universal Transverse Mercator (UTM) co-ordinates for the approximate centre of the Property are 600,000mE, 6,387,500mN (NAD83 UTM Zone 12N). The geographic co-ordinates for the approximate centre of the Property are 57°37' N latitude and 109° 22'W longitude. The Property is located within 1:50,000 scale NTS map sheets 74F/11 (Forrest Lake) and 74F/12 (Wenger Lake). It is irregularly shaped and extends for approximately 29 km in

the east-west direction and for approximately 19 km in the north-south direction . The approximate centre of Triple R deposit is located at UTM coordinates 598,000mE, 6,390,000mN (NAD83 UTM Zone 12N).

Land Tenure

The PLS Property consists of 17 contiguous mineral claims covering an area of 31,039 ha. The Triple R deposit is located on claim S-111376. Table 1-1 lists the relevant tenure information for the Property.

TABLE 1-1 LAND TENURE
Fission Uranium Corp. – Patterson Lake South Property

Claim	Effective Date	Anniversary Date	Good Standing Date	Area (ha)	Status
S-110707	28-Mar-07	27-Mar-15	25-Jun-36	812	Active
S-110955	31-May-07	30-May-15	28-Aug-36	1,327	Active
S-111375	13-Jun-08	12-Jun-15	10-Sep-36	2,493	Active
S-111376	13-Jun-08	12-Jun-15	10-Sep-36	3,310	Active
S-111377	13-Jun-08	12-Jun-15	10-Sep-36	1,645	Active
S-111783	30-Apr-10	29-Apr-15	28-Jul-36	1,004	Active
S-112217	13-Dec-11	12-Dec-15	12-Mar-22	1,202	Active
S-112218	13-Dec-11	12-Dec-15	12-Mar-22	1,299	Active
S-112219	13-Dec-11	12-Dec-15	12-Mar-22	987	Active
S-112220	13-Dec-11	12-Dec-15	12-Mar-22	1,218	Active
S-112221	13-Dec-11	12-Dec-15	12-Mar-23	2,621	Active
S-112222	13-Dec-11	12-Dec-15	12-Mar-22	846	Active
S-112282	22-Jun-11	21-Jun-15	19-Sep-35	3,789	Active
S-112283	22-Jun-11	21-Jun-15	19-Sep-23	1,003	Active
S-112284	22-Jun-11	21-Jun-15	19-Sep-35	2,021	Active
S-112285	22-Jun-11	21-Jun-15	19-Sep-22	5,404	Active
S-112370	23-Nov-11	22-Nov-15	20-Feb-36	58	Active

The mineral claims constituting the Property were ground staked and are therefore designated as non-conforming legacy claims. As of December 6, 2012, the Property and component claims locations were defined as electronic mineral claim parcels within the Mineral Administration Registry of Saskatchewan (MARS). As of the effective date of the PLS Property Technical Report, the mineral claims are all in good standing and are all registered in the name of Fission. As of December 31, 2014, assessment credits totalling $9,242,900 were available for claim renewal. Assessment credits totalling $465,585 are required to renew the Property claims upon their respective annual anniversary dates. In the absence of sufficient assessment credits, there is a provision in Saskatchewan to keep the claims in good standing by making a deficiency payment or a deficiency deposit.

On March 7, 2013, Fission Energy announced that it had entered into an agreement (the Agreement) with Denison whereby Denison agreed to acquire all the issued and outstanding shares of Fission Energy. Under this Agreement, Fission Energy spun out certain of its assets, including its 50% interest in the PLS Property, into a newly formed, publicly traded company, Fission by way of a court-approved plan of arrangement.

Pursuant to the Agreement, Denison acquired a portfolio of uranium exploration projects including Fission Energy's 60% interest in the Waterbury Lake uranium project, as well as Fission Energy's exploration interests in all other properties in the eastern part of the Athabasca Basin, its interests in two joint ventures in Namibia, plus its assets in

Quebec and Nunavut. Fission's assets consisted of the remaining assets of Fission Energy including the 50% interest in the PLS Property.

Subsequently, Fission acquired its joint venture partner, Alpha Minerals Inc., and now holds a 100% interest in the PLS Property.

Mineral Rights

In Canada, natural resources fall under provincial jurisdiction. In the Province of Saskatchewan, the management of mineral resources and the granting of exploration and mining rights for mineral substances and their use are regulated by the Crown Minerals Act and The Mineral Tenure Registry Regulations, 2012, that are administered by the Saskatchewan Ministry of the Economy. Mineral rights are owned by the Crown and are distinct from surface rights.

In Saskatchewan, a mineral claim does not grant the holder the right to mine minerals. A Saskatchewan mineral claim in good standing can be converted to a lease upon application. Leases have a term of 10 years and are renewable. A lease proffers the holder with the exclusive right to explore for, mine, work, recover, procure, remove, carry away and dispose of any Crown minerals within the lease lands which are nonetheless owned by the Province. Surface facilities and mine workings are therefore located on Provincial lands and the right to use and occupy lands is acquired under a surface lease from the Province of Saskatchewan. A surface lease carries a maximum term of 33 years, and may be extended as necessary, to allow the lessee to develop and operate the mine and plant and thereafter to carry out the reclamation of the lands involved.

Fission does not currently have surface rights associated with the Property.

Royalties and Other Encumbrances

RPA is not aware of any royalties due, back-in rights, or other encumbrances by virtue of any underlying agreements.

Permitting

RPA is not aware of any environmental liabilities associated with the Property.

RPA understands that Fission has all the required permits to conduct the proposed work on the Property. RPA is not aware of any other significant factors and risks that may affect access, title, or the right or ability to perform the proposed work program on the Property.

ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

Accessibility

The PLS Property is located approximately 550 km north-northwest of the city of Prince Albert, Saskatchewan. Prince Albert is serviced by multiple flights daily from Saskatoon. The Property can be reached by driving northward along paved Highway 155 for a distance of approximately 300 km to the community of La Loche. At La Loche, the all-weather gravel Highway 955 (Cluff Lake Mine Road) heads northwards and enters the Property at the 144 km marker. Highway 955 bisects the Property in a north-south direction. Two four-wheel drive roads branch off from Highway 955 allowing access to the east and west halves of the Property.

Climate

The PLS Property is located within the Mid-Boreal Upland Ecoregion of the Boreal Shield Ecozone (Marshall and Schutt, 1999). The summers are short and cool and the winters are long and cold. The ground is snow covered for six to eight months of the year. The ecoregion is classified as having a sub-humid high boreal ecoclimate. Table 2-1 illustrates the climatic data for the two most proximal Environment Canada weather stations.

TABLE 2-1 CLIMATIC DATA - CLUFF LAKE AND FORT CHIPEWAYAN
Fission Uranium Corp. - Patterson Lake South Property

	Cluff Lake (SK) 58°22'N 109°31'W	Fort Chipewayan (AB) 58°46'N 111°07'W
Mean January temperature	-20.4°C	-21.9°C
Mean July temperature	16.9°C	14.1°C
Extreme maximum temperature	36.0°C	34.7°C
Extreme minimum temperature	-49.0°C	-50.0°C
Average annual precipitation	451.0 mm	365.7 mm
Average annual rainfall	N/A	250.4 mm
Average annual snowfall	162.8 cm	116.9 cm

Despite the harsh conditions, drilling and geophysical surveys can be performed year round. Geological and most geochemical surveys are restricted to the snow free months.

Local Resources

Various services are available at La Loche including temporary accommodations, fuel, and emergency medical services. A greater range of services is available at Prince Albert. Fixed wing aircraft are available for charter at Fort McMurray in Alberta, and Buffalo Narrows, La Loche, and La Ronge in Saskatchewan. Helicopters are available for charter at Fort McMurray and La Ronge.

Infrastructure

With the exception of all-weather gravel Highway 955, there is no permanent infrastructure on the Property.

Physiography

The topography of northern Saskatchewan is characterized by low hills, ridges, drumlins, and eskers, with lakes and muskeg common in the low-lying areas. Outcrop of the underlying Athabasca sandstone and basement rocks is rare. Numerous lakes and ponds generally show a northeasterly elongation imparted by the most recent glaciation. Elevation varies between 500 MASL and 565 MASL.

Loamy, grey soils produce taller trees than in the Shield. Aspen, white spruce, jack pine, black spruce, and tamarack are common.

Wildlife consists of moose, woodland caribou, mule deer, white-tailed deer, elk, black bear, timber wolf, and beaver. Birds include white-throated sparrow, American redstart, bufflehead, ovenbird, and hermit thrush. Fish include northern pike, pickerel, whitefish, lake trout, rainbow trout, and perch.

The Property is at the resource development stage. RPA is of the opinion that, to the extent relevant to the mineral project, there is a sufficiency of surface rights and water.

HISTORY

Prior Ownership

All of the claims comprising the Property were ground staked from February 2007 to December 2011. Claim S-110707 was originally staked on behalf of ESO Uranium Corporation (ESO). Claim S-110955 was originally staked on behalf of Strathmore Minerals Corp (Strathmore) and transferred to Fission Energy in its plan of arrangement. In January 2008, Fission Energy and ESO entered into a 50/50 joint venture and contributed the claims existing at that

time. As part of the agreement, Fission Energy contributed mineral claims S-110954 and S-110955 while ESO contributed S-110707 and S-110723. Mineral claims S-110954 and S-110723 were eventually allowed to lapse. Subsequently, additional staked claims, including S-111376 which is now known to host the Triple R deposit, were for the benefit of the joint venture.

Pursuant to an agreement with Denison in 2013, Fission Energy spun out some of its assets into a newly formed company, Fission, including a 50% interest in the Property. Fission subsequently acquired ESO's successor company, Alpha Minerals Inc., to hold a 100% interest in the Property.

Exploration and Development History

The following description of historic exploration work conducted on the PLS Property and its immediate vicinity is taken from Armitage (2013).

The Property was geologically mapped as part of a larger area by W.F. Fahrig for the Geological Survey of Canada (GSC) in 1961 (Hill, 1977). Another geological mapping project completed in 1961 by L.P. Tremblay of the GSC covered the Property and Firebag River Area at a scale of four miles to the inch (Hill, 1977).

In 1969, photogeologic mapping and airborne radiometric and magnetic surveys were completed on the Property for Wainoco Oil and Chemicals Ltd. The surveys did not detect any notable structures or anomalies (Atamanik, Downes and van Tongeren, 1983).

Canadian Occidental Petroleum Ltd. (CanOxy) completed extensive exploration on and around the Property from 1977 to 1981. Exploration comprised an airborne Questor INPUT electromagnetic (EM) survey; ground HLEM and magnetic geophysical surveys, geological, geochemical, alphameter (radon), and radiometric surveys; and diamond drilling.

In 1977, CanOxy discovered a very strong six station alphameter (radon) anomaly with dimensions of 1.2 km by 1.7 km on what is now claim S-111375. This anomaly coincides with high uranium in soil values and anomalous scintillometer (radiometric) values. It was suggested that this alphameter anomaly was responding to radioactive exotic boulders within the till of the Cree Lake Moraine, however, no follow-up work was done (Hill, 1977).

CanOxy's 1977 ground EM survey delineated the Patterson Lake Conductor Corridor that traverses the center of Patterson Lake on claim S-111376, and extends onto claim S-111375. Several disrupted conductors and inferred cross cutting features were identified as priority 1, 2, and 3 drill targets on claim S-111376.

CanOxy drill hole CLU-12-79 was positioned based on an airborne EM conductor, which was later refined by ground EM surveys. This drill hole is located on the northernmost conductor of the Patterson Lake conductor corridor, and is on the west shore of Patterson Lake within claim S-111376. Drill hole CLU-12-79 was highlighted by a 6.1 m wide sulphide-graphite "conductor" that contained anomalous uranium, copper, and nickel concentrations. Strong hematite and chlorite alteration was observed in the regolith and fresh basement rock, and two curious spikes in radioactivity occur in the fresh basement lithologies (Robertson, 1979).

Historical Resource Estimates

No resource estimates have been prepared by previous owners.

Past Production

There has been no production from the Property up to the effective date of the PLS Property Technical Report.

GEOLOGICAL SETTING AND MINERALIZATION

Regional Geology

The most significant uranium metallogenic district in Canada is the Athabasca Basin, which covers over 85,000 km^2 in northern Saskatchewan and northeastern Alberta. The basin itself is a relatively undeformed and unmetamorphosed clastic sequence of Mesoproterozoic rocks known as the Athabasca Group, lying unconformably on the deformed and metamorphosed rocks of the Western Churchill Province of the Archean Canadian Shield. The basement rocks consist of Archean orthogneisses, which are overlain by and structurally intercalated with the highly deformed supracrustal Paleoproterozoic Wollaston Group (Annesley et al., 2005).

The east-west elongate Athabasca Basin lies astride two subdivisions of the Western Churchill Province, the Rae Subprovince (Craton) on the west and the Hearne Subprovince (Craton) to the east. These are separated by the northeast trending Snowbird Tectonic Zone, which beneath the Athabasca Basin is called the Virgin River-Black Lake shear zone. In the western Athabasca Basin, where the Property is located, lithologies belonging to the Lloyd Domain of the Talston Magmatic Zone (TMZ) underlie the Athabasca Basin. The TMZ is dominated by a variety of plutonic rocks and an older basement complex (McNicoll et al., 2000). The basement complex varies widely in composition from amphibolites to granitic gneisses to high grade pelitic gneisses.

Local Geology

The following description of the local geology is taken from Armitage (2013).

The PLS Property lies within the northeastern limits of the Cretaceous Mannville Group which covers a large portion of western Saskatchewan. The Lexicon of Canadian Geologic Units describes the lithology of the Mannville Group as "interbedded non-marine sands and shales overlain by a thin, non-marine calcareous member which is overlain by marine shales, glauconitic sands and non-marine salt-and-pepper sands. The marine sequence is overlain by a paralic and non-marine sequence having a diachronous contact with the marine sequence."

Regionally discontinuous Devonian La Loche Formation exists beneath the Cretaceous sediments. The Lexicon describes the lithology of the La Loche Formation as "regolithic, poorly sorted breccia; fine to coarse grained, white to medium brownish grey arkosic sandstones and conglomeratic sandstones, with thin interbeds of sandy mudstone toward the top; arkosic grit and edgewise conglomerates and silty grits with festoon bedding toward the top." The La Loche Formation is thought to be a reworked regolith lying on the Precambrian surface.

The Mannville Group lies adjacent southwest of the Athabasca Group sandstone and conglomerate with lesser dolomite and shale. (Yeo et al, 2001). The Smart Quartz Arenite member of the Athabasca is in contact with the Lower Mannville member.

Basement rocks of the Rae Subprovince consist of the Clearwater Domain and the Western Granulite. Although not well defined due to limited exposure and mapping, the Clearwater Domain is recognized by the following three lithologic groups: equigranular granite, porphyritic granite, and felsic gneiss. The felsic gneisses resemble those of the Virgin River and Mudjatik Domains, and contrast sharply with the Western Granulite blue quartz gneisses (Lewry and Sibbald, 1977). The Clearwater Domain represents a mobile zone with middle amphibolite facies metamorphic conditions, where Hudsonian age tectonic and metamorphic events are probable. Three episodes of fold forming movements have been recognized in felsic gneisses of the Clearwater Domain (Lewry and Sibbald, 1980).

Western Granulite (East Lloyd) rocks comprise a sequence of layered granodioritic to dioritic gneisses, with subordinate anorthosites, anorthositic gabbros, granites, and minor quartzitic and pelitic paragneisses. Blue quartz commonly occurs in the gneisses. Metamorphic mineral paragenesis indicates a static pyroxene granulite facies metamorphism overprinted by a lower amphibolite facies event (Atamanik, Downes and van Tongeren, 1983).

Property Geology

The following description of the property geology is taken from Armitage (2013).

Pleistocene overburden covers the entire PLS Property with thicknesses ranging from six metres to 100 m. Drumlins and glacial striations in the area show a general ice direction of southwest. Below the overburden, the PLS Property is underlain by rocks of the Phanerozoic Mannville Group comprised of shale, mudstone, sandstone, and coal (Gittings, 1980). The eastern limit of the Mannville Group strikes northwest and perpendicular to the Patterson Lake conductor corridor, although rare occurrences of Manville group sediments exist as "islands" further to the east.

The Devonian La Loche Formation has only been observed in some drill holes. The La Loche Formation intervals were about four metres thick, and comprised fine grained light grey sandstone with some angular to sub-angular granules to pebbles of basement (quartzite and quartz-feldspar-biotite gneiss), occasional sand to gravel pitchblende clasts, and rare Athabasca sandstone cobbles.

Drilling to date indicates that the Athabasca Group is not present on the Property, although it may be possible that "islands" of Athabasca sandstone exist within the northeast extent of the Property. Regolith underlies and is distributed approximately parallel to the Pleistocene overburden and Cretaceous sediments. Where regolith is strongly developed, the upper 10 m is often strongly hematite stained. A highly altered "green zone" is below the hematized zone, which is mostly chlorite. Composition of the regolith comprises disaggregated quartz grains set in a pale green to red hematite stained, fine grained chlorite, clay mineral, sericite groundmass (Gittings, 1980).

On the Property, unexposed Precambrian Shield is present east of the Colorado and Mannville Groups. These Precambrian basement rocks represent the boundary zone between the Clearwater Domain and East Lloyd Domain, which is thought to be north-northwest of the Patterson Lake conductor corridor.

SMDC interpreted the boundary zone between the Clearwater and Western Granulite (East Lloyd) Domains as trending north-northeasterly through Patterson Lake (Atamanik, Downes and van Tongeren, 1983). The geological boundary of the Clearwater Domain is open to interpretation, however, Wallis (1970) traced the western margin of this domain through the Carswell structure. The boundary zone between the Clearwater and Western Granulite Domains is analogous to other late-Hudsonian, early-Helikian fault zones such as the Black Lake fault and the Virgin River shear zone. This cataclastic zone may have remained active during and after deposition of the Athabasca Group (Wallis, 1982).

CanOxy classified the Precambrian basement rocks below sedimentary or regolith stratigraphy on the property into two distinctly different units. Firstly, the younger Western Granites (Clearwater Domain) are located in the west and northwest areas of the property. This unit is non-foliated, even and medium grained, and has low gravity and featureless magnetic responses with no linear conductors. The Western Granites are good source rocks for uranium, and are believed to have an intrusive igneous origin (Gittings, 1980).

The second basement unit was classified as the Eastern Metamorphics (Western Granulite Domain), which are older (possibly Archean) and cover most of the property. This unit comprises an assemblage of cataclastically deformed and retrogressively metamorphosed gneisses and granulite facies described in three major groups: granitic and granodioritic gneiss; quartz-sericite (muscovite) chlorite gneiss; and garnetiferous pyroxene granulites. Higher gravity and magnetic responses are associated with numerous linear conductors, which drilled as graphitic horizons with varying amounts of sulphides (Gittings, 1980).

Table 3-1 lists the geological formations in the area of the Property.

TABLE 3-1 GEOLOGICAL FORMATIONS
Fission Uranium Corp. - Patterson Lake South Property

Age				Unit
Eon	**Era**	**Period**	**Epoch**	**Description**
Phanerozoic	Cenozoic	Quaternary	Pleistocene	Overburden ranging from clays to boulders
	Mesozoic	Cretaceous	Early	Colorado Group: clay, mudstone, sandstone, coal
				Manville Formation: Shale, mudstone, sandstone, coal
Precambrian	Helikian			Athabasca Formation: quartzose sandstone
	Aphebian			Regolith, western granite, acidic porphyry dykes
	Archean			Granitic and granodiorite gneiss, quartz-sericite-chlorite gneiss, garnetiferous pyroxene granulites

Mineralization

Parts of the following description of the mineralization on the PLS Property is taken from Mineral Services Canada Inc. (2014a).

Uranium mineralization at the PLS Property is hosted primarily within metasedimentary basement lithologies and, to a much lesser extent, within overlying sandstone currently thought to be Devonian in age. Additional work is recommended to determine the age of the overlying sandstone, and if indeed Devonian, works is required to determine why these rocks are mineralized.

Mineralization within the sandstone typically occurs as fine grained disseminations, sooty blebs, and rarely semi-massive uranium mineralization. Uranium concentrations within the Sandstone are generally low to moderate but grades greater than 1.0% U_3O_8 have been intersected in particularly well mineralized drill holes. Mineralized sandstone is typically strongly clay and chlorite altered, though locally can be pervasively hematite stained a deep red. Relative to basement hosted mineralization, only a very small amount of mineralized sandstone has been intersected on the PLS Property to date.

Basement hosted mineralization at the PLS Property occurs in a wide variety of styles, the most common of which occurs within the graphitic pelitic gneiss and appears to be fine grained disseminated and fracture filling uranium minerals with a strong hydrocarbon/carbonaceous matter association. Uranium minerals, where visible, appear to be concordant with the regional foliation and dominant structural trends identified through oriented core and fence drilling (i.e., steeply dipping to the southeast). Typically, mineralization within the graphitic pelitic gneiss is associated with pervasive, strong, grey-green chlorite and clay alteration. The dominant clay species identified through PIMA analysis is magnesium-chlorite interpreted to be sudoite. The pervasive clay and chlorite alteration eliminates the primary mineralogy of the host rock with only a weakly defined remnant texture remaining. Locally, intense rusty limonite-hematite alteration in the pelitic gneisses strongly correlates with high grade uranium mineralization and a “rotten”, wormy texture.

Less common styles of uranium mineralization within the graphitic pelitic gneiss which are often associated with very high grade uranium include: semi-massive and hydrocarbon rich; intensely clay altered (kaolinite) with uranium-hydrocarbon buttons; and massive metallic mineralization. These zones of very high grade mineralization generally occur along the contact of the graphitic pelitic gneiss and silicified south side semi-pelite and comprise a high grade mineralized spine. This spine may represent a zone of intense structural disruption which has been completely overprinted by alteration and mineralization. However, drill holes which undercut the strongly mineralized spine have failed to show signs of significant structural damage. Particularly well mineralized drill holes are often associated with thin swarms of dravite-filled breccia.

Uranium mineralization within the north and south semi-pelites which bound the graphitic pelite generally occurs as fine grained disseminations and is almost always associated with pervasive whitish-green clay and chlorite alteration with local pervasive hematite. The mineralized zones within the semi-pelites are interpreted to be stacked structures parallel to the regional strike and dip along the PLG-3B conductor.

Results of the detailed mineralogical work at the PLS Property indicate that the dominant uranium mineral present is uraninite, with subordinate amounts of coffinite, possible brannerite and U-Pb oxide/oxyhydroxide. Uranium minerals occur mainly as anhedral grains and polycrystalline aggregates with irregular terminations; irregularly developed veinlets, locally showing extremely complex intergrowths with silicates; micrometric inclusions and dendritic intergrowths with silicates; and very fine grained dissemination intercalated with clays. In the samples studied, U-minerals also occur as fine grained inclusions in carbonaceous matter (hydrocarbon).

Distribution and Morphology

To date, uranium mineralization has been discovered in four target areas on the PLS Property; R600W, R00E, R780E, and R1620E. The R600W, R00E, and R780E mineralized zones all occur within a corridor of variably graphitic pelitic gneiss flanked to the north and south by semi-pelitic gneiss over a 1.7 km strike length of the PLG-3B EM conductor. The R1620E zone is currently intersected only by two drill holes and is located on the PLG-3C EM conductor which, based on geology, is considered to be the eastern extension of the PLG-3B EM conductor.

No significant uranium mineralization has been intersected in exploration drilling away from the PLG-3B and 3C conductors.

R00E Zone

The R00E mineralized zone was the first mineralized zone discovered on the PLS Property and was intersected during the fall 2012 drill program. The sixth drill hole of the campaign, PLS12-022, was a vertical hole drilled from the western shore of Patterson Lake testing for the up-dip extension of the strong alteration and weak mineralization intersected in PLS12-016 (0.07% U_3O_8 over 1.0 m). PLS12-022 intersected a total of 12.5 m of uranium mineralization beginning at the top of bedrock (55.3 m) including a main zone averaging 1.1% U_3O_8 over 8.5 m from 70.5 m to 79.0 m.

The R00E zone is currently defined by 41 drill holes intersecting uranium mineralization over a combined grid east-west strike length of 125 m and a maximum grid north-south width of 47 m. Uranium mineralization at R00E trends north-easterly, in line with the corridor of variably graphitic pelitic gneiss.

At R00E, uranium mineralization is generally found within several metres of the top of bedrock which occurs at a depth of 50 m to 60 m vertically from surface. Several holes (e.g., PLS13-037, PLS13-039) drilled along the southern edge of the mineralization have intersected the down dip uraniferous root over 100 m below the top of bedrock. Uranium mineralization at R00E is hosted within the variably graphitic pelitic gneisses, northern semi-pelitic gneiss, and Devonian sandstone. No uranium mineralization has been intersected to date in the silicified semi-pelite (which bounds the graphitic pelite to the south) or in the southern semi-pelite.

As the R00E zone is interpreted to be roughly flat lying at the top of bedrock, vertical holes have dominantly been utilized to delineate mineralization. Vertical holes intersect the mineralized zone roughly perpendicular and therefore provide an approximate true thickness. Table 3-2 shows a selection of significant mineralized drill hole intersections at the R00E zone.

TABLE 3-2 ZONE R00E SIGNIFICANT INTERSECTIONS
Fission Uranium Corp. - Patterson Lake South Property

HoleID	Interval Length (m)	Average grade (% U_3O_8)	Hole Dip
PLS12-024	18.0	1.8	-89°
PLS13-043	22.0	4.8	-89°
PLS13-049	18.5	1.9	-88°
PLS13-059	20.5	8.6	-73°
PLS13-079	17.5	6.0	-74°

Note: Average grades are based on uncut chemical assay values.

R780E Zone

The R780E zone was discovered during the winter 2013 drill program with drill hole PLS13-038. PLS13-038 targeted an intense radon-in-water anomaly occurring along the PLG-3B conductor, approximately 390 m east of the PLS discovery hole. Drill hole PLS13-038 intersected a 34.0 m wide zone of very strong uranium mineralization, beginning at 87.0 m, averaging 4.9% U_3O_8.

The R780E zone is currently defined by 194 drill holes over a grid east-west strike length of 900 m and a maximum grid north-south width of 93 m. Similar to R00E, R780E mineralization trends approximately northeast, in line with the corridor of variably graphitic pelitic gneiss. Representative sections and plans from the R780E zone are provided in the section below under the heading, "*Mineral Resources*".

As with the R00E zone, R780E uranium mineralization has varying thickness, from tens of centimetres along the flanks to very wide intervals within the graphitic pelites, as seen in PLS14-187 which intersected high grade uranium mineralization over 100 m in vertical core length. In section view, R780E mineralization generally occurs as sub-vertically and southeast dipping zones, concordant with the regional dip. A very high grade spine of uranium mineralization occurs within the main zone and has been traced as a series of lenses across almost the entire strike length of the R780E zone. The high grade spine occurs along the contact between the variably graphitic pelitic gneiss and silicified semi-pelite.

At the western R780E zone, uranium mineralization extends to near the top of bedrock. Moving eastward, the top of mineralization appears to be plunging at approximately -7°. In general, the western R780E mineralization morphology is similar to the R00E, spatially restricted to the northern semi-pelite, variably graphitic pelitic gneiss, and Devonian sandstone. Moving eastward through the R780E zone, mineralization has been intersected within the variably graphitic pelitic gneiss, northern semi-pelite and Devonian sandstone and, unlike the R00E zone, strong mineralization has been cored in the silicified semi-pelite and southern semi-pelite. Grid line 690E is the furthest point to the east that Devonian sandstone has been intersected along the PLG-3B EM conductor.

Initial drilling at the R780E zone consisted of all vertical holes for three main reasons: testing for subhorizontal mineralization similar to the R00E zone, limitations with the reverse circulation (RC) drill rig used to pre-case holes, and summer barge drilling where angled holes were not technically achievable. Many holes during the winter 2014 program and almost all holes from the summer 2014 drill program were angle holes, drilled south to north in order to intersect both contacts of the mineralized bodies. Table 3-3 shows a selection of significant drill hole intersections at the R780E zone.

TABLE 3-3 ZONE R780E SIGNIFICANT INTERSECTIONS
Fission Uranium Corp. - Patterson Lake South Property

Hole ID	Interval Length (m)	Average Grade (% U_3O_8)	Hole Dip
PLS13-038	34.0	4.9	-89°
PLS13-053	49.5	6.3	-86°
PLS13-075	54.5	9.1	-88°
PLS14-129	38.0	13.7	-90°
PLS14-164	91.0	4.3	-90°
PLS14-187	102.5	6.0	-90°
PLS14-248	47.5	13.2	-70°

Note: Average grades are based on uncut chemical assay values.

R600W Zone

The R600W mineralized zone was discovered during the fall 2013 exploration drill program. The seventh drill hole of the program, PLS13-116, was an angle hole drilled to the north, targeting a radon-in-soil anomaly along the western end of the PLG-3B conductor. The drill hole intersected a thin zone of anomalous radioactivity hosted in the northern semi-pelite and a follow-up vertical hole was drilled targeting the graphitic pelitic corridor to the south. The follow-up hole, PLS13-118, intersected 6.5 m of uranium mineralization, beginning at 192.0 m and averaging 0.3% U_3O_8.

The R600W zone is currently defined by five drill holes with a total grid east-west strike length of 30 m and a maximum grid north-south width of 30 m. Similar to the R00E and R780E zones, mineralization trends northeasterly in line with the corridor of graphitic pelitic gneiss.

R1620E Zone

The R1620E mineralized zone was discovered during the winter 2014 drill program. Hole PLS14-196 tested a moderate radon-in-water anomaly along the PLG-3C EM conductor, which is interpreted to be the extension of the PLG-3B EM conductor. PLS14-196 intersected 28.5 m of uranium mineralization beginning at a depth of 100.0 m down hole which averaged 0.2% U_3O_8.

The R1620E zone is currently defined by two drill holes. Uranium mineralization at the R1620E occurs in graphitic pelitic gneiss and appears associated with the graphitic pelitic gneiss – silicified semi-pelite contact. Additional drilling is recommended.

EXPLORATION

With the exception of drilling, exploration work performed on the Property by Fission Energy, ESO, and their successor companies since 2007 is summarized in this section. Work completed on the Property and its immediate vicinity by other parties prior to 2007 is summarized in under the heading "History" above. Drilling completed on the Property since 2011 is summarized under the heading "*Drilling*" below.

Radon and Ground Radiometric Surveys

2008 Radon and Radiometric Surveys

From early to mid-October 2008, a preliminary Electret Ion Chamber (EIC) radon detection survey consisting of 280 sample locations on the northernmost portion of the Property was completed by RadonEx Ltd. (RadonEx) of St. Lazare, Quebec. A radiometric gamma survey was done concurrently with the radon survey. Sample locations were spaced 200 m apart along four east-west running lines. Locations were 100 m apart along Highway 955 and both

branching four-wheel drive roads. Up to five tightly spaced sample locations were completed for each CanOxy alphameter anomaly on the Property. Step-out and confirmation sample locations were completed as time allowed. Radon sampling was not conducted during or within 24 hours of a precipitation event.

Radon and radiometric values were generally low across the PLS Property (Armitage, 2013). Radon and radiometric values ranged from 0.07 pCi/m^2/sec to 1.78 pCi/m^2/sec and 15 cps to 114 cps, respectively. The average radon value was 0.42 pCi/m^2/sec, and the average radiometric value was 58 cps. Most elevated radon and radiometric values coincide, which indicates that elevated radon values are likely related to a source within the first two feet of the overburden.

2011 Radon and Radiometric Surveys

Throughout June 2011, a radon survey consisting of 462 sample locations on two grids was completed. A radiometric total count gamma-ray survey was carried out concurrently with the radon survey. Sample locations were spaced at 100 m intervals along north-south oriented lines, which were spaced 200 m apart. Grids 1 and 2 are located west and east of Highway 955, respectively. Radon sampling was not conducted during or within 24 hours of a precipitation event.

Radon values show strong anomalies related to the historical CanOxy alphameter anomalies and the 2009 airborne radioactive hotspots on Grid 1. Strong radon anomalies are associated with historical CanOxy electromagnetic conductors on Grid 2. Radon values ranged from 0.05 pCi/m^2/sec to 18.06 pCi/m^2/sec, with an average value of 0.51 pCi/m^2/sec. Radiometric values were generally low to moderately anomalous across the PLS Property, and ranged from 30 cps to 90 cps with an average radiometric value of 55 cps.

Most anomalous radon values on Grid 1 were associated with moderately elevated radiometric values, which typically indicate that the anomalous radon values are likely related to a source within the first metre of the overburden. However, this may not be the case where high grade uranium boulders or a source is present at greater depths. Anomalous radon values on Grid 2 are not associated with elevated radiometrics, which indicates a possible uranium mineralization at depth. Radon anomalies were found to be coincident with CanOxy EM conductors on Grid 2.

Three sample locations of interest are located in the northwest corner of Grid 1, away from the bulk of coincident radon and radiometric anomalies found in the south half of Grid 1. Samples PR11-043 and PR11-085 show anomalous radon values (1.58 pCi/m^2/sec and 2.17 pCi/m^2/sec, respectively) with average to weakly anomalous radiometric values (66 cps and 52 cps, respectively). Sample PR11-091 shows a strongly anomalous radon value (6.18 pCi/m^2/sec) with a very low radiometric value (34 cps).

The southeast corner of Grid 2 shows radon and radiometric anomalies south of the EM conductors. There are five radiometrically anomalous sample locations (PR11-404 to 408) in a column with only one of these locations (PR11-407) having strongly anomalous radon values. East of this anomalous radiometric column, sample location PR11-420 shows anomalous radon (1.65 pCi/m^2/sec) with a low radiometric value (50 cps) (Ainsworth, 2011b).

2013 Radon and Ground Radiometric Surveys

During January and February 2013, RadonEx conducted an EIC radon in lake water (radon-in-water) and radon in lake sediment (radon-in-sediment) survey on the Property (Charlton, Owen and Charlton, 2013). TDEM and VTEM conductors with coincident resistivity lows located along strike of the discovery hole PLS12-022 were targeted. Station spacing was 20 m on 60 m north-south oriented lines within four main areas across Patterson Lake. A total of 186 radon-in-water samples and 167 radon-in-sediment samples were collected.

In Areas 1 and 2, the western side of the survey, an east-west to east-northeast–west-southwest (ENE-WSW) trend appears in both sets of data. This is thought to indicate either the eastern extension of the glacially deposited mineralized boulder train or a fault that is controlling radon diffusion. In Areas 3 and 4, the eastern side of the survey, the correlation between sediment and water results is less evident and results in these areas were generally lower than in the western section of the lake.

Overall, the radon-in-sediment samples are considered complementary to the radon-in-water samples. The radon-in-water samples are considered to be more indicative of uranium. Radon-in-sediment anomalies may be more indicative of localized detrital concentrations of uranium in lake bottom depressions.

During April 2013, RadonEx conducted additional EIC radon-in-water and radon-in-sediment surveying on Patterson Lake (Charlton, Owen and Charlton, 2013b). Station spacing was generally 20 m and line spacing was generally 60 m. This survey was intended to infill areas from a previous radon-in-water and sediment survey, and to extend the coverage. A total of 151 sediment samples and 220 water samples were collected.

Most of the sediments collected were fine sand with small pebbles and small amounts of organic matter. Two areas were characterized by sediments with high iron content and pebbles with iron nodules, namely, the southwest portion of the survey area, where the highest concentration of anomalous radon readings is located, and the northeast portion of the survey area, where a few moderately anomalous readings were collected during the February 2013 radon survey. Iron enrichment in the northeast portion of the survey area is much less prominent than in the southwest portion of the grid.

A clear ENE-WSW trend in the radon-in-water results is coincident with the strong VTEM conductor and with the Triple R deposit. The trend also appears in the radon-in-sediment results to a lesser degree.

The water anomalies are often offset and tend to be more dispersed, and the sediment anomalies are more localized, suggesting that anomalies in water may be associated with either a localized sediment anomaly or anomalies, or an area of anomalous radon-in-sediment content. The dispersion patterns from sediment to water are not constant, perhaps as a result of either glacially deposited mineralized boulders, or localized, structurally controlled leakages between the test stations.

During August 2013, an EIC radon detection survey consisting of 434 sample locations was completed by RadonEx. A radiometric gamma survey was performed concurrently with the radon survey. Samples were located at 10 m intervals. Survey lines were from 100 m to 450 m in length and spaced from 10 m to 40 m.

The survey area extended approximately 700 m westward from discovery diamond drill hole PLS12-022 on the west shore of Patterson Lake, and was conducted to locate any additional mineralization down-ice and westward of the known mineralized zone.

Results suggested generally moderate variations in radon flux measurements across the survey area. Measurements appeared to increase towards the north end of the two north-reaching extension lines, however, further radon sampling would be required in order to substantiate these observations.

2014 Radon Surveys

From January to March 2014, RadonEx conducted additional EIC radon-in-water and radon-in-sediment surveying on the Property (Charlton, Owen and Charlton, 2014). The surveys covered four separate areas: three on Patterson Lake and one on nearby Forrest Lake. In total, the surveys consisted of 2,610 radon-in-water sample stations and 266 radon-in-sediment sample stations. Station spacing was generally 20 m and line spacing was generally 60 m, locally 30 m. The survey was intended to locate radon anomalous zones and trends along previously located geophysical conductor corridors interpreted from TDEM and VTEM surveys.

At Area A, covering the area of the mineralized zone and the primary conductive corridor, a series of discontinuous radon trends is evident and eleven radon-in-water anomalies and trends are chosen for potential drill testing. The top ten Area A radon-in-water results compare well with the R780E Zone radon-in-water results from 2013. A discordant set of radon anomalies is suggestive of east-southeast striking cross-faulting.

At Area B, in the northeastern section of Patterson Lake, two parallel radon trends are recognized, of which the north one is very strong and appears to correspond to a conductor axis. Radon trends are suggestive of north-trending cross-faulting through the grid area.

The Area C radon coverage in the southwest part of Patterson Lake reveals two anomalous parallel radon trends, which partially correlate to conductors. Area C radon-in-water results compare very favourably with the 2013 R780E results. A north-trending fault is interpreted to displace and reorient the radon trends.

Area D is a large irregular grid covering northern parts of Forrest Lake. Water depths are much greater here, particularly in the D-2 area (>70 m), where the bottom is covered with a thick layer of organics. Radon signatures are masked and muted in this part of the lake and no radon targets are identified at D-2.

In the D-1 area to the northeast, where the lake is shallower, five extremely high radon-in-water anomalies were found, including some of the highest radon-in-water results yet recorded on the Property.

During August 2014, Remote Exploration Services (Pty) Ltd (RES) conducted a RadonX radon cup survey over the 600W Zone at PLS (RES, 2014). In total, 580 cups were deployed in a grid with 20 m line spacing and 10 m cup spacing along line. The total area of the grid was 0.11 km^2. The survey was conducted in order to compare and confirm results from 2013 RadonEx radon cup surveying over the same grid area.

The RadonX method is an on-land technique that involves deployment and burial of cartridges containing activated charcoal, onto which radon gas (emanating to surface from its source as a radioactive decay daughter product of uranium) is adsorbed over the course of up to 10 days. This large measurement duration serves to average out diurnal variations in the amount of radon gas released at surface due to varying air pressure, and greatly increases the signal strength of the low abundances of radon that are typically recorded. A RadonX survey supplements airborne radiometric data by evaluating the radon flux in the ground air and in so doing allows for the delineation of buried uranium deposits or extensions of existing radiometric anomalies that may extend below cover.

Radon gas is absorbed onto activated charcoal contained within a cartridge fitted into the base of an inverted cup that is buried in the ground. Optimal burial duration is 10 days. After retrieval, gamma radiation from the daughter products of the adsorbed radon is measured using a field scintillometer. Background effects are reduced and corrected for through the use of a lead castle.

The survey results confirmed zones of anomalous and highly anomalous radon flux values (RnV) that in general are centred on or slightly to the north of the main ENE-WSW trending EM conductor that is associated with the mineralization. The orientation of this EM conductor parallels the interpreted strike of major fault structures in the area. Faults are known conduits for radon gas emanating from uraniferous mineralized bodies.

The western zone of anomalous RnV correlates with a delineated mineralized zone defined from drilling. Additionally, there is a northwest trend of slightly anomalous to anomalous RnV that intersects the north-northeast trend and could represent subordinate structures in this direction. Further assessment of the RnV anomalies in relation to drilling results and other geological and geophysical datasets is required to fully understand the relationship of RnV to defined mineralization.

During October 2014, RES conducted a radon cup survey over three separate areas east of Forrest Lake, approximately 10 km southeast of the Triple R deposit (RES, 2014b). In total, 867 cups were deployed. The grids consisted of 30 m line spacing and 20 m cup spacing along each line. The total area of the three grids encompassed 0.481 km^2.

The three grids targeted high priority conductors identified by airborne VTEM surveying and/or ground TDEM surveying, namely the PLV-68A conductor (Grid S1), the PLV-63D conductor (Grid S3), and the PLV-63C conductor (Grid S4). Areas and trends of anomalous radon flux measurements were observed on each of the three grids.

Airborne Surveys

2007 Megatem Survey

During November 2007, prior to the execution of the PLS joint venture between Fission Energy and ESO Uranium, Fission and ESO completed a fixed wing combined electromagnetic (MEGATEM) and magnetic airborne survey

over their respective mineral claims: For Fission, claims S-110954 and S-110955 and for ESO, claims S-110707 and S-110723. The results of the survey were of very low resolution (Armitage, 2013).

2009 Special Projects Survey

In mid-October 2009, Special Projects Inc. (SPI) completed a combined fixed wing LiDAR, radiometric and high resolution airborne magnetic geophysical survey over the northern portion of the Property totalling approximately 3,342 line-km. Flight lines were oriented at 135° and were spaced at 50 m intervals. The aeromagnetic survey successfully delineated different basement lithologies. A structural interpretation was completed which identified the traces of surface and basement faults, shear zones, and areas of structural complexity (McElroy and Jeffrey, 2010). The airborne radiometric spectrometer survey outlined a number of uraniferous hot-spots within a 3.9 km long by 1.4 km wide area, which was subsequently found to be the result of a radioactive boulder field that contained boulders composed of massive or semi massive uranium oxide minerals. This radioactive area extended south of claim S-111375, which led to the staking of claim S-111783 in April 2010.

2012 Geotech Survey

In mid-February 2012, Geotech Ltd. completed a detailed, combined helicopter-borne versatile time-domain electromagnetic (VTEMplus) survey with Z and X component measurements and a horizontal magnetic gradiometer survey over the entirety of the Property. Flight lines totalling 1,711.3 line-km and oriented at 135° were flown at 200 m line spacing.

The survey was instrumental in defining conductive packages over the Property. In many cases, the relative shallow depth provided sufficient resolution from the airborne data to establish drill targets. However, the complex nature and sometimes flat lying conductor geometry could not be adequately resolved without ground geophysical follow-up in some cases (Armitage, 2013).

2012 Special Projects Survey

From mid- to late September 2012, SPI completed a combined fixed wing LiDAR, radiometric, and magnetic survey over the southern portion of the Property totalling 5,611.5 line-km of which 5,147.3 line-km were flown within the Property boundary. The flight lines were oriented at 126° and were spaced at 50 m intervals.

The data was merged with the previous 2009 SPI high resolution survey to create a seamless magnetic grid over the Property area.

From the analysis of the field data, it was apparent that the geological setting of the Property area is complicated and that there are numerous lineaments related to contacts and structures between basement units.

The Property area has several predominant trends. The survey area is divided into three magnetic zones: a central zone (A) of relatively low magnetism characterized as predominantly northeast magnetic trends (conforming to the general domain orientation of the Athabasca Basin), a western zone (B) of relatively high magnetism with predominant northwest magnetic trends, and an eastern zone (C) of low magnetism with predominant north northeast trends (Bingham, 2012).

Trenching and Boulder Surveys

Several trenching and boulder surveys have been carried out on the Property since 2011.

June 2011 Boulder Prospecting

In June 2011, 89 radioactive hotspots from the 2009 airborne radiometric survey were investigated on the ground. The radioactive hotspots were spread out over an area of approximately 3.9 km long by up to 1.4 km wide that trended north-northeast to south-southwest.

A total of 66 radioactive boulder samples (PB11-01 to PB11-66) were recovered during the survey with 41 of those samples having off-scale radioactivity (>9,999 cps). Fifty-seven of the boulder samples were composed of massive or semi-massive uranium oxide minerals, or were basement rocks that contained blebs and/or finely disseminated uranium oxide minerals. The boulder samples ranged from gravel sized to greater than 40 cm x 30 cm x 15 cm. The boulders assayed from 3 ppm U to 39.6% U_3O_8, and formed a boulder field with an area of 4.9 km long by up to 860 m wide, representing a very significant discovery.

Eight soil samples were also taken (PS11-01 to PS11-08), with only one of these samples having off-scale radioactivity.

Based on this small sample set, the strong pathfinder elements for the high grade uranium oxide include Au, B, Co, Cr, Cu, Li, Mo, Pb, Sb, Sr, Th, W, Zr, and most rare earth elements (REE). Oddly, Ni was not found to be a strong pathfinder element (Ainsworth, 2011b).

October 2011 Trenching and Boulder Prospecting

From mid- to late October 2011, a program consisting of trenching and boulder prospecting was completed on mineral claims S-111375, S-111376, and S-111783.

The trenches were situated so as to best assess the uraniferous boulder field that was discovered in June 2011. The uraniferous boulders lie between two major terminal moraines of the Cree Lake Moraine. The trenches were located on three lines traversing the terrain in the up-ice direction. These trenches cover the region from the westernmost moraine to the northeast where surficial material bearing uraniferous boulders is overlain by non-radioactive overburden. The trenches were located on the ground using a handheld Garmin GPS unit.

A total of 18 trenches were excavated (PT11-01 to 18). Trenches PT11-01 and PT11-02 were 10 m in length located within claim S-111783. Trenches PT11-03 to PT11-16 were 10 m to 20 m in length located within S-111375. Two pit-like trenches (PT11-17 and 18) were three metre in diameter located within S-111376. The trenches were spaced not closer than 100 m unless conditions in the field warranted changes. Trenches were excavated using a Case 9080B excavator, operated by Methy Construction of La Loche, Saskatchewan.

A total of 25 soil samples and 21 boulder samples were recovered from the trenches. Soil and boulder samples were submitted to Saskatchewan Research Council Geoanalytical Laboratories (SRC) in Saskatoon, Saskatchewan, for analysis. Soil and boulder samples were analyzed for 63 element by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES). In addition, boulder samples were analyzed for uranium by fluorimetry (partial digestion), U_3O_8 (wt %), and boron. Fire assay was used for gold.

The magnetic susceptibility of the materials was measured by holding an Exploranium KT-9 Kappameter in the no pin configuration against the wall of the trench. In general, the magnetic susceptibility of the surficial materials is much lower, less than 0.5 x 10-3 SI units, than in rock.

An Exploranium GR-110 scintillometer was held against the wall of the trench for approximately 30 s and the highest reading obtained was recorded. If a strongly radioactive area was found near the profile, the profile readings were located away from that area or otherwise recorded in the notes. In general, the radioactivity reflects the stratigraphy more strongly than the magnetic susceptibility, however, this may be a result of the values occurring over a wider range.

A total of 25 soil samples were recovered from trenches PT11-01 to PT11-16. Maximum radiometric values of the in-situ soil samples ranged from 80 cps to 2418 cps. Uranium in soil values ranged from below detection limits (< 2 ppm U) to 336 ppm. All samples identified as non-radioactive assayed below detection limits, and all soils identified as radioactive assayed above detection limits, indicating a correlation between radioactivity and uranium values.

Eight boulders were found in trench PT11-08, three were found in trench PT11-06, two were found in each of trenches PT11-03, PT11-05, PT11-10 and PT11-11, and one was found in each of trenches PT11-12 and PT11-14. A total of 21 uraniferous boulders were recovered from the trenches (Ainsworth and Thomas, 2012).

In mid- to late October 2011, the boulder survey consisted of prospecting with an Exploranium GR-110 handheld scintillometer while trenches were being excavated or backfilled, and while traversing between trenches. The survey resulted in the discovery of many uraniferous boulders. Where radiometric readings were elevated, hand-dug test pits were excavated until a uranium mineralized boulder was found or no obvious radioactive source was located.

Forty-nine of the boulder samples (PB11-67 to PB11-115) were recovered within claims S-111375 and S-111783. All 49 uranium oxide mineralized boulders were found within the limits of the June 2011 boulder field over an area of approximately 4.9 km long by up to 0.9 km wide. These were composed of massive or semi-massive uranium oxide minerals, or were basement rocks that contained blebs and/or finely disseminated uranium oxide minerals. The boulder samples ranged from gravel sized up to 25 cm x 30 cm x 40 cm. Radioactivity of these boulders ranged from 701 cps to >9,999 cps (off-scale), and assays ranged from 0.07% U_3O_8 to 31.4% U_3O_8 (Ainsworth and Thomas, 2012).

October 2012 Boulder Prospecting

From early to mid-October 2012, radioactive hotspots in two separate areas identified by the September 2012 SPI airborne survey were investigated on the ground. The first area (within mineral claims S-111375, S-111783, S-112219, S-112222, and S-112282) was located down-ice from Patterson Lake, and the second area (within and outside mineral claim S-112220) was located down-ice from Forest Lake. A total of 48 radioactive boulders were recovered.

Boulder surveying in the Patterson Lake area recovered 40 radioactive boulders with 17 of those samples having off-scale radioactivity (>9,999 cps). Thirty-six of these 40 boulder samples were composed of massive or semi-massive uranium oxide minerals, or were basement rocks that contained visible blebs and/or finely disseminated uranium oxide minerals. The boulder samples ranged from gravel sized to 30 cm in the longest dimension, and assayed from 9 ppm U to 40.0% U_3O_8. These additional boulder samples increased the size of the Patterson Lake boulder field to approximately 7.35 km long by up to 1.0 km wide.

The strong pathfinder elements for the high grade uranium oxide are consistent with previous surveys, namely: Au, B, Co, Cr, Cu, Li, Mo, Pb, Sb, Sr, Th, W, Zr, and most REE.

Boulder prospecting in the Forest Lake area recovered eight radioactive boulders with radioactivity ranging from 139 cps to 1,060 cps. No visible uranium mineralization was observed in any of the basement boulders that comprised lithologies of quartz-feldspar gneiss, schist, and quartz-feldspar-mafic granite and pegmatite. These boulders ranged from cobble sized to over 80 cm in the longest dimension. The boulders assayed from 6 ppm U to 84 ppm U (Ainsworth, 2012b).

Ground Geophysical Surveys

2008 Self-Potential Survey

In early October 2008, a preliminary self-potential (SP) survey consisting of three lines totalling 8.7 km was completed. SP stations were spaced at 20 m intervals along the lines. Negative values represent most SP anomalies. Lithologic conditions targeted in this survey were clay altered zones, which are conductive and exhibit a negative SP anomaly.

The SP survey values ranged from -339 mV to +124 mV. Four anomalies were delineated (Ainsworth and Beckett, 2008).

2011 and 2012 DC Resistivity, Hlem And Squid-Em Surveys

Geophysics carried out during November and December of 2011, and February through April of 2012 consisted of DC Resistivity, MaxMin HLEM, and very Small Moving Loop SQUID-EM (SQUID-EM) surveys. The ground geophysics carried out on the PLS Main Grid area as a follow-up from a radioactive uraniferous boulder field

located five kilometres to the southwest that was discovered in June 2011. Survey totals were 30.58 km of MaxMin HLEM, 83.60 km of resistivity, and 14.40 km of SQUID-EM.

Although the MaxMin HLEM survey did locate conductor axes, there was noticeable difficulty in resolving conductivities and even some masking of conductors by high quadrature responses believed to be caused by conductive Cretaceous sediments. The SQUID-EM survey conducted at much lower frequencies was successful at resolving basement conductor positions, apparent dips, and conductivities.

The DC Resistivity was successful in defining a number of potential targets based on conductivity, changes in the width of conductive packages, and more subtle features indicating possible cross structures. The Resistivity and VTEM were initially used for drill targeting with a limited amount of ground SQUID-EM used to follow up some VTEM targets (Bingham, 2012).

2012 and 2013 Resistivity and Squid-Em Surveys

Geophysics carried out during 2012 and 2013 consisted of DC Resistivity, SQUID-EM surveys on the PLS West Grid area, and SQUID-EM surveys and Small Moving Loop Transient EM survey coverage on the PLS Main Grid area. Survey totals were 24.6 line km of Resistivity and 30.9 line km of EM surveys.

The extended resistivity data of both the PLS Main grid and PLS West grid appeared to be more effective to map the expected conductive Cretaceous sediments in this area.

Three conductors were outlined with the ground SQUID-EM survey on the PLS West grid. The south conductor is the most prospective due to strike length, conductivity, and an association with an enhanced basement resistivity low in the vicinity of the conductor on lines 2400E and 2600E. Line 2400E shows a marked increase in amplitude and conductivity. The west end of the central conductor may have a structural association. The north conductor is of low priority mostly due to its apparent shallow dip.

On the PLS Main grid, the SQUID-EM surveys in-filled and located the south (mineralized), central, and north conductors along the main conductor trends. The amplitude of the south (mineralized) “B” conductor is very weak and flat lying on lines 7200E and 7400E. The south (mineralized) “B” conductor is interpreted as much deeper and weaker on the east extent (Lines 7000, 7200, and 7400) (Bingham, 2013).

2013 and 2014 Resistivity and Squid-Em Surveys

Geophysics carried out during late 2013 and early 2014 consisted of DC Resistivity and very Small Moving Loop SQUID-EM surveys conducted by Discovery Int’l Geophysics Inc. (Discovery). During the periods of July to August 2013 and September to October 2013, pole-dipole resistivity surveys were done over the Verm and Far East grids. During December 2013, pole-dipole resistivity surveys were carried out over the Area B and Forrest Lake grids. During December 2013 to February 2014, Discovery carried out HT SQUID Small Moving Loop TEM surveys over the Area B, Far East, Forrest Lake, and Verm grids. A total of 93.9 km of pole-dipole DC resistivity and 43.7 km of Small Moving Loop EM surveys were conducted.

The 2013-2014 geophysical surveys were successful in defining priority ground targets based on a combination of resistivity and EM surveys over priority areas based on previous VTEM surveys. Additional follow-up work is recommended.

DRILLING

As of the effective date of the PLS Property Technical Report, Fission and its predecessor companies have completed 94,326.41 m of drilling on the PLS Property. Table 4-1 lists the holes by drilling program.

TABLE 4-1 DIAMOND DRILLING PROGRAMS

Fission Uranium Corp. - Patterson Lake South Property

Drilling Program	Type	Number of Holes	Holes	Metres Drilled
Nov-Dec 2011	Diamond Drilling	7	PDD11-01 - PDD11-07	837.7
Feb-Apr 2012	Diamond Drilling	16	PLS12-001 - PLS12-016	2179.4
Oct-Nov 2012	Diamond Drilling	9	PLS12-017 - PLS12-025	1658.5
Oct-Nov 2012	Dual Rotary	12	PLSDR12-001 - PLSDR12-012	1547.9
Jan-Apr 2013	Diamond Drilling	46	PLS13-026 - PLS13-071	9942.1
Jul-Nov 2013	Diamond Drilling	53	PLS13-072 - PLS13-124	15,564.0
Jan-Apr 2014	Diamond Drilling	92	PLS14-125 - PLS14-216	34,252.1
Jul-Sep 2014	Diamond Drilling	82	PLS14-217 - PLS14-298	28,344.6
Total		**317**		**94,326.41**

Diamond Drilling

Since November 2011, 305 diamond drill holes have been completed. The initial drill program in 2011 was contracted to Aggressive Drilling Ltd. from Saskatoon, Saskatchewan, that used a skid-mounted Boart Longyear LF-70 drill. From February 2012 to April 2013, the drilling has been contracted to Hardrock Diamond Drilling Ltd. from Penticton, British Columbia, which used Atlas Copco CS-10 and CS-1000 skid-mounted drills. From July 2013 onwards, drilling was carried out by Bryson Drilling Ltd. from Archerwill, Saskatchewan, using Zinex Mining Corp A5 diamond drills.

Unless the hole was pre-cased using an RC drill, the usual procedure was to drill through the overburden with HQ (60.3 mm diameter) equipment and sink HW (117.65 mm) casing until the rods became stuck or bedrock is reached. If the HQ rods became stuck, the hole was deepened using NQ (47.6 mm diameter) equipment until competent bedrock was reached at which time NW (91.95 mm) casing was reamed into bedrock.

Until the summer of 2014, all holes located over the lake were drilled vertically. Holes drilled during the 2011 and winter 2012 drilling programs were tested for dip deviation with acid tests. The fall 2012 drilling program holes were either acid tested or surveyed with a Reflex EZ-Shot instrument. Upon completion, all holes drilled in 2013 were surveyed using an Icefields gyro survey tool. The Icefields gyro was replaced in 2014 by a Stockholm Precision Tools north seeking gyro. From the summer 2013 drill program onwards, drill holes were also surveyed while drilling was underway using a Reflex EZ-Shot at 50 m intervals.

All holes were systematically probed within the rods using a Mount Sopris 500 m (4MXA-1000) or 1,000 m (4MXC-1000) winch, Matrix logging console, and either a 2PGA-1000 or 2GHF-1000 total gamma count probe upon completion of the hole. Handheld Exploranium GR-110 total count gamma-ray scintillometers were used to measure the radioactivity of the return water and core until the winter 2014 program, after which Radiation Solutions RS-121 total count gamma-ray scintillometers were used.

The collars of the 2011 and winter 2012 program holes were located using a handheld Garmin GPSMAP 60CSx instrument. During the winter 2013 program, drilled holes were located using a Trimble GeoXH handheld GPS instrument and a Trimble 5800 base station for differential correction. From the summer 2013 drill program onwards, all holes were located using a Trimble R10 GNSS real time kinematic (RTK) system. All drill hole positions from the 2012 fall program onwards were surveyed again upon completion of the hole to account for moving of the drill, due to the either ground conditions or drilling difficulty. All roads and traverses travelled were located with a handheld Garmin GPSMAP 60CSx or Trimble instrument noted above.

Initially, the core from the first drilling programs was stored at the Big Bear Lodge on Grygar Lake, but since August 2013, all the core has been stored at a purpose-built storage facility located west of Patterson Lake (595930E, 6389030N; NAD 83, Zone 12N).

Dual Rotary Drilling

From October to November 2012, twelve 4.5 in. (11.43 cm) diameter dual rotary drill holes totalling 1,541.0 m were completed by J.R. Drilling Ltd. of Cranbrook, British Columbia, using a Foremost DR-12 drill. The drilling was meant to penetrate the glacial sediments overlying bedrock so that the specific (and more radioactive) till sheet hosting uranium mineralized boulders could be traced back to bedrock source by gamma probing the overburden. Additionally, some rotary drill hole collars were planned to also test bedrock VTEM and time-domain EM (TDEM) conductors by drilling approximately 20 m into solid bedrock. The overburden and basement material was collected on site in sampling buckets at one metre intervals. Each bucket was measured using an Exploranium GR-110G total count gamma-ray scintillometer, and a one to three kilogram sub-sample was removed for logging.

Each drill hole was logged using a Mount Sopris 2PGA-1000 gamma probe. Additionally, holes PLSDR12-001 and PLS12-009 through PLSDR12-012 were surveyed using a custom downhole spectrometer probe, built and operated by Special Projects Inc. A Trimble GeoXH handheld GPS instrument and a Trimble 5800 base station for differential corrections were utilized to locate all dual rotary drill hole locations. All roads and traverses travelled were located with a handheld Garmin GPSMAP 60CSx instrument.

According to Ainsworth (2012b), accurate and precise sample collection for geochemical analysis was challenging due to several factors. Sample volume returned through the cyclone was at times overwhelming, and was further complicated by the large influx of groundwater. The drilling itself introduced sample bias especially in terms of size fraction and relative abundance. It was found that fine materials were prone to be either washed or blown away. Since the maximum size of returned samples was approximately two centimetres to three centimetres, it can be presumed that material larger than small pebbles was either pushed out of the way or crushed by the advancing drill bit and casing.

The current working depth of each rotary hole was determined by marking the casing every metre. The inaccuracies of this method were confirmed by comparing the determined final depth to the gamma probe wire line measured final depth; discrepancies of several metres were common.

Caving of material around the casing and subsequent transport to surface introduced sample contamination, especially in thick sand units beneath the water table.

Reverse Circulation Drilling

In January 2013, the process of pre-drilling the casings of most holes was initiated. Northspan Explorations Ltd. (Northspan) was contracted to set the casing to a targeted depth of one metre to two metres above bedrock. Northspan used either a Hornet XL or Attacus RC drill to sink the HW (117.65 mm) casing. No samples were recovered during the RC drilling. A Trimble GeoXH handheld GPS instrument and Trimble 5800 base station for differential corrections were utilized to locate all drill collar locations during the winter 2013 program. From the summer 2013 drill program onwards, all holes were located using a Trimble R10 GNSS real time kinematic (RTK) system. All roads and traverses travelled were located with a handheld Garmin GPSMAP 60CSx instrument.

Drill Core Sampling

Core recovery is generally very good to excellent, allowing for representative samples to be taken and accurate analyses to be performed.

The drill core was placed sequentially in wooden core boxes at the drill by the drillers. Twice daily, the core boxes were transported by Fission personnel to Fission's core logging and sampling facility where depth markers were checked and the core was carefully reconstructed. The core was logged geotechnically on a run by run basis including the number of naturally occurring fractures, core recovery, rock quality designation (RQD), and range of radiometric counts per second. The core was scanned using an Exploranium GR-110G total count gamma-ray scintillometer until the winter 2014 program, after which Radiation Solutions RS-121 scintillometers were used.

The core was descriptively logged utilizing a Panasonic Tough Book laptop computer by a Fission geologist paying particular attention to major and minor lithologies, alteration, structure, and mineralization. Logging and sampling information was entered into a spreadsheet based template which was integrated into the project digital database.

All drill core was photographed wet with a digital camera, before splitting.

Fission's sampling protocol calls for representative samples to be taken of both sandstone and basement lithologies. At least one representative sample of sandstone (Devonian or Athabasca) was taken when intersected. In thicker zones of sandstone (>5 m), representative samples were taken at 2.5 m intervals. Representative samples of basement lithologies consisting of 50 cm of split core (halved) were taken every 10 m within the basement, starting immediately in bedrock.

In addition to the representative samples, point samples were taken in both sandstone and basement lithologies.

All sandstone and basement intervals with handheld scintillometer readings greater than 300 cps, or containing significant faults and associated alteration, were continuously sampled with a series of 50 cm split core samples. In areas of strong to intense alteration, evenly spaced 50 cm split core samples were taken from the start of the alteration. The spacing of the samples varied with the width of the alteration zone as follows: one metre spacing for alteration zones less than or equal to five metres long, two metre spacing for alteration zones between five metres and 30 m long and, five metre spacing for alteration zones more than 30 m long.

Samples for density measurements were taken in both sandstone and basement lithologies. Because of the limited thickness of sandstone intersected on the Property, Sarioglu (2014) recommended that a least one sandstone sample be taken for density measurement per hole, where possible. Density samples in mineralized sandstone giving handheld scintillometer readings greater than 300 cps were taken at 2.5 m intervals. No density samples were taken in barren sandstone from the 2014 summer drill program. Basement samples for density were taken at 20 m intervals until the winter 2014 drill program, after which no barren basement density samples were taken.

Core marked for sampling was split in half using a manual core splitter. Half the core was returned to the core box and the other half was placed in plastic sample bags and secured with an impulse sealer.

Split core samples were tracked using three part ticket booklets. One tag was stapled into the core box at the start of the appropriate sample interval, one tag was placed into the sample bag, and the final tag was retained in the sample booklet for future reference. For each sample, the date, drill hole number, project name, and sample interval depths were noted in the sample booklet. The data were transcribed to an Excel spreadsheet and stored on the Fission data server. Sample summary files were checked for accuracy against the original sample booklets after the completion of each drill program. The digital sample files also contain alteration and lithology information.

Core trays were marked with aluminum tags. All core from holes drilled on the Property is stored on core racks at Fission's core logging facility.

The plastic sample bags were put into five-gallon sample pails and sealed and were held in a secure area until they were ready for transportation. The samples were picked up on site by Marsh Expediting and transported by road to La Ronge before transhipment to SRC in Saskatoon. SRC operates in accordance with ISO/IEC 170:2005 (CAAN-P-4E) General Requirements of Mineral Testing and Calibration Laboratories) and is also compliant with CAN-P-1579, Guidelines for Mineral Analysis Testing Laboratories.

At SRC, sandstone and basement samples were prepared in separate areas of the laboratory to minimize the potential for contamination. Sample preparation in the laboratory involved drying the samples and sorting them according to radioactivity before jaw crushing.

In RPA's opinion, the logging and sampling procedures meet or exceed industry standards and are adequate for the purpose of Mineral Resource estimation.

SAMPLE PREPARATION, ANALYSES AND SECURITY

Sample Preparation and Analysis

Drill Core Geochemical Analysis

All geochemistry core samples were analyzed by the ICP1 package offered by SRC, which includes 62 elements determined ICP-OES. All samples were also analyzed for boron until the end of the winter 2012 drill program and uranium by fluorimetry (partial digestion). Uranium by fluorimetry was replaced at SRC in late 2012 by ICP-MS analysis which has not been undertaken on Fission's samples beyond the winter 2013 drill program.

For partial digestion analysis, samples were crushed to 60% -2 mm and a 100 g to 200 g sub-sample was split out using a riffler. The sub-sample pulverized to 90% -106 µm using a standard puck and ring grinding mill. The sample was then transferred to a plastic snap top vial. An aliquot of pulp was digested in a mixture of HNO_3:HCl in a hot water bath for an hour before being diluted by 15 ml of de-ionized water. The samples were then analyzed using a Perkin Elmer ICP-OES instrument (models DV4300 or DV5300). For total digestion analysis, an aliquot of pulp was digested to dryness in a hot block digester system using a mixture of concentrated HF:HNO_3:$HCLO_4$. The residue was then dissolved in 15 ml of dilute HNO_3 and analyzed using the same instrument(s) as above.

Select samples with low concentrations of uranium (<100 ppm) identified by the partial and/or total ICP-OES analysis were also analyzed by fluorimetry (2012) and ICP-MS (winter 2013). After being analyzed by ICP-OES, an aliquot of digested solution was pipetted into a 90% Pt - 10% Rh dish and evaporated. A NaF/LiF pellet was placed on the dish and fused on a special propane rotary burner then cooled to room temperature. The uranium concentration of the sample was then read using a Spectrofluorimeter. Uranium by fluorimetry has a detection limit of 0.1 ppm (total) or 0.02 ppm (partial). In the fall of 2012 uranium analysis by fluorimetry was replaced at SRC with uranium by ICP-MS. For ICP-MS partial digestions an aliquot of sample pulp is digested in a mixture of concentrated nitric hydrochloric acid (HNO_3:HCl) in a test tube in a hot water bath, then diluted using deionized water. Samples were analyzed using a Perkin Elmer Elan DRC II instrument.

For boron analysis, an aliquot of pulp was fused in a mixture of NaO_2/$NaCO_3$ in a muffle oven. The fused melt was dissolved in de-ionized water and analyzed by ICP-OES.

Drill Core Assay

Drill core samples from mineralized zones were sent to SRC for uranium assay. The laboratory offers an ISO/IEC 17025:2005 accredited method for the determination of U_3O_8 in geological samples. The detection limit is 0.001% U_3O_8. Samples were crushed to 60% -2 mm and a 100 g to 200 g sub-sample was split out using a riffle splitter. The sub-sample was pulverized to 90% -106 µm using a standard puck and ring grinding mill. An aliquot of pulp was digested in a concentrated mixture of HNO_3:HCl in a hot water bath for an hour before being diluted by de-ionized water. Samples were then analyzed by a Perkin Elmer ICP-OES instrument (models DV4300 or DV5300).

In addition to uranium assaying, some samples from mineralized zones were also assayed by SRC for gold and platinum group elements (Pt, Pd). Samples were first dried at 80°C overnight, then jaw crushed to 60% -2 mm, and a 100 g to -200 g sub-sample was split out using a riffle splitter. The sub-sample was pulverized to 90% -106 µm using a puck and ring grinding mill. An aliquot of sample pulp was mixed with fire assay flux in a clay crucible and a silver inquart was added prior to fusion. The mixture was fused at 1,200°C for 90 minutes. After the mixture had fused, the slag was poured into a form which was cooled. The lead bead was recovered and chipped until only the precious metal bead remains. The bead was then parted in diluted HNO_3. The precious metals were dissolved in aqua regia and then diluted for analysis by ICP-OES and/or Atomic Absorption Spectrometry (AAS). The analysis has a detection limit of 2 ppb for all three elements. SRC participates in CANMET (CCRMP/PTP-MAL) proficiency testing for elements assayed using this method.

Drill Core Pima Analysis

Core chip samples for clay analysis were sent to Rekasa Rocks Inc, a private facility in Saskatoon, for analysis on a PIMA spectrometer using short wave infrared spectroscopy. Samples were air or oven dried prior to analysis in

order to remove any excess moisture. Reflective spectra for the various clay minerals present in the sample were compared to the spectral results from Athabasca samples for which the clay mineral proportions have been determined in order to obtain a semi-quantitative clay estimate for each sample.

Drill Core Petrographic Analysis

Samples collected for petrography were sent to Vancouver Petrographics Ltd, Langley, British Columbia, for the preparation of thin sections and polished slabs. Petrographic analysis was performed in the office of Mineral Services Canada Inc. (MSC) using a Nikon Eclipse E400 microscope equipped with transmitted and reflected light.

Drill Core Bulk Density Analysis

Drill core samples collected for bulk density measurements were sent to SRC. Samples were first weighed as received and then submerged in de-ionized water and re-weighed. The samples were then dried until a constant weight was obtained. The sample was then coated with an impermeable layer of wax and weighed again while submersed in de-ionized water. Weights were entered into a database and the bulk density of each sample was calculated. Water temperature at the time of weighing was also recorded and used in the bulk density calculation.

Quality Assurance and Quality Control

Quality assurance/quality control (QA/QC) programs provide confidence in the geochemical results and help ensure that the database is reliable to estimate Mineral Resources. Fission's program includes the following components (Sarioglu, 2013):

1) Determination of precision – achieved by regular insertion of duplicates for each stage of the process where a sample is taken or split;

2) Determination of accuracy – achieved by regular insertion of standards or materials of known composition;

3) Checks for contamination – by insertion of blanks.

Results from the QA/QC program are reviewed on an ongoing basis as received from the laboratory and a formal report is compiled by MSC at the end of each drill campaign.

Protocols for Duplicates

Three types of duplicate samples are submitted:

a) ***Field duplicates***: These are quarter core duplicates split in Fission's core facility. The field duplicate contains all levels of error: core splitting, sample size reduction, sub-sampling of the pulp, and the analytical error. One duplicate is to be inserted for every 20 regular samples. For mineralized drill holes, at least two field duplicate samples should be taken, one from the mineralized zone and one from unmineralized basement. In thicker mineralized zones (> 20 m), a field duplicate should be taken every 20 samples. For each drill hole, the field duplicates should be retained and inserted into the batch at the end of the hole and assigned sample numbers following on from the last sample in the hole.

b) ***Preparation duplicates***: These are sample splits taken after the coarse crush but before pulverizing. A preparation duplicate should be inserted for each field duplicate submitted. The preparation duplicates are taken by the laboratory. To facilitate this, during sampling, an empty sample bag with a Fission sample tag is inserted into the batch after each field duplicate with instructions for the laboratory to prepare and insert a preparation duplicate of the previous sample.

c) ***Pulp duplicate***: This is a split of the pulp material that is weighed and analyzed separately. Similar to the preparation duplicate, the pulp duplicates are inserted for each field duplicate by inserting an empty bag

with a Fission sample tag and instructions for the laboratory to prepare and insert a duplicate of the pulp from the previous sample.

Protocols for Standards and Blanks

Certified reference materials (CRM) were obtained from Canadian Centre for Mineral and Energy Technology (CANMET). These include UTS-3 (0.051 % U_3O_8), DH-1A (0.262% U_3O_8), and BL-5 (7.09% U_3O_8) which represent low, medium and high grade references, respectively. Blank material was sourced from the remaining half split core of previously analyzed samples that returned uranium concentrations below detection limits for the 2013 program and massive quartz veins intersected on the Property for the 2014 program.

One blank was inserted for each drill hole that intersects mineralization. Blank reference samples were not submitted for holes that did not intersect mineralization.

One of each reference sample type was inserted into the sample batch for each drill hole that intersected mineralization. CRM containers were shaken prior to use to ensure homogeneity and 15 g of material was required per sample. Samples were taken with clearly marked plastic spoons to avoid cross contamination between containers. For holes that did not intersect mineralization, only the low grade reference sample was inserted.

QA/QC Results

Results from the QA/QC program are documented in various reports by MSC. RPA relied on these reports in addition to independent verifications and review of QA/QC data. In summary, results indicated that the resource database is suitable to estimate Mineral Resources for the Triple R deposit.

Tables 5-1 and 5-2 summarize the different types of QA/QC samples and sample counts. Prior to the winter 2012 drill program, the only QA/QC procedures implemented on samples from the PLS Property were those performed internally by SRC as discussed below.

TABLE 5-1 SUMMARY OF QA/QC SOURCE AND TYPE BY YEAR
Fission Uranium Corp. - Patterson Lake South Property

	2011 Fall	2012 Winter	2012 Fall	2013 Winter	2013 Summer	2014 Winter	2014 Summer
Blanks (pulp)	N	N	N	Y	N	N	N
Blanks (rock)	N	N	N	N	Y	Y	Y
Fission CRMs	N	N	N	Y	N	N	N
CANMET CRMs	N	N	N	N	Y	Y	Y
Field Duplicate, Prep & Pulp Duplicates							
Partial and total (ppm) duplicates (1/4 split)	N	Y	Y	Y	Y	Y	N
Partial and total (ppm) duplicates (1/2 split)	N	N	N	N	N	Y	Y
U_3O_8 wt.% duplicates (1/4 split)	N	N	Y	Y	Y	Y	N
U_3O_8 wt.% duplicates (1/2 split)	N	N	N	N	N	Y	Y
SRC CRMs for U_3O_8	N	Y	Y	Y	Y	Y	Y
SRC CRMs for Au	N	Y	Y	Y	N	N	N
SRC ICP repeats	Y	Y	Y	Y	Y	Y	Y
SRC U_3O_8 wt.% repeats	N	N	Y	Y	Y	Y	Y
SRC Au repeats	N	Y	Y	Y	Y	Y	Y

TABLE 5-2 SUMMARY OF QA/QC SAMPLING INSERTIONS BY YEAR
Fission Uranium Corp. - Patterson Lake South Property

	Fall 2011	Winter 2012	Fall 2012	Winter 2013	Summer 2013	Winter 2014	Summer 2014	Total
Drill Holes	7	16	9	46	53	92	82	305
Total Original	49	530	518	4,791	9,058	26,732	17,045	58,723
Blanks	0	0	0	39	49	114	74	276
Field Duplicates	0	54	42	151	425	1,269	789	2,730
Coarse Reject Duplicates	0	54	42	151	425	1,269	789	2,730
Pulp Duplicates	0	54	42	151	425	1,269	789	2,730
Fission CRMs	0	0	0	119	151	273	203	746
SRC CRMs	3	48	133	672	1,503	3,953	2,469	8,781
SRC Repeats	2	30	69	545	1,472	3,970	4,348	10,436
Total QA/QC	5	240	328	1,828	4,450	12,117	9,461	28,429

Note: Counts are for the entire PLS Property.

A failure criterion for blank samples is met when a sample returns >0.005% U_3O_8, which is a concentration five times greater than the detection limit of the instrument (0.00% U_3O_8). Two sample failures occurred with a maximum of 0.022% U_3O_8. Fission chose not to take corrective steps after reviewing the grades, failure rate, and other QA/QC results from these two batches.

A total of 746 CRM samples were submitted by Fission for analysis at SRC. Failure criteria for CRM samples are met when either (a) two consecutive samples return values outside two standard deviations from the mean, on the same side of the mean, or (b) any sample returns a value outside three standard deviations from the mean.

Three samples returned values outside of three standard deviations from the mean. Four consecutive medium grade CRMs from the summer 2013 program returned values outside of two standard deviations from the mean on the same side of the mean, suggesting a possible sample bias. Three of the failed medium grade CRMs were re-analyzed by SRC and the results were all below the expected value again. Four consecutive samples plot outside two standard deviations and three samples outside three standard deviations. Three of the failed medium grade standards were re-analyzed by SRC and the results were all below the expected value again.

Although ten CRM samples failed the QA/QC criteria, the overall results, methods, and follow-up work by Fission are acceptable. RPA recommends that the lower than expected results from CRM DH-1A be investigated and explained.

Fission's protocols call for reject and pulp duplicates to be taken from the field duplicate. Results are as expected, with better repeatability for the pulps and coarse rejects.

Enhancements To The QA/QC Program

In addition to the QA/QC described above, it is a good practice to analyze approximately 5% to 10% of the samples at an external laboratory to act as an independent auditor and negate any potential biases within a given laboratory. RPA agrees with MSC's recommendation of sending duplicates of samples analyzed to date by SRC to another "umpire" laboratory prior to any feasibility studies for the PLS Property. Care should be taken to ensure that the duplicate samples cover the range of grades present at PLS.

Based on the data validation and the results of the standard, blank, and duplicate analyses, RPA is of the opinion that the assay database is of sufficient quality for Mineral Resource estimation.

SRC Internal QA/QC Program

Quality control was maintained by all instruments at SRC being calibrated with certified materials. Quality control samples were prepared and analyzed with each batch of samples. Within each batch of 40 samples, one to two quality control samples were inserted. Five U_3O_8 reference standards are used: BLA2, BL3, BL4A, BL5, and SRCUO2 which have concentrations of 0.502%, 1.21% U_3O_8, 0.148% U_3O_8, 8.36% U_3O_8, and 1.58% U_3O_8, respectively. Four gold standards were also used by SRC for the project: OXG83, OXL75, OXL78, and SJ10, which have gold concentrations of 1,002 ppb, 5,876 ppb, 5,876 ppb, and 2,643 ppb, respectively. With the exception of SRCUO2, all reference materials are certified and provided by CANMET. One in every 40 samples was analyzed in duplicate. All quality control results must be within specified limits otherwise corrective action was taken. If for any reason there was a failure in an analysis, the subgroup affected was reanalyzed.

SRC has developed and implemented a laboratory management system which operates in accordance with ISO/IEC 17025:2005 (CAN-P-4E), General Requirements for the Competence of Mineral Testing and Calibration laboratories. The laboratory also participates in a Certified Interlaboratory Testing Program (CCRMP/PTP-MAL) for gold using lead fusion fire assay with an AAS finish. All processes performed at the laboratory are subject to a strict audit program, which is performed by approved trained quality professionals.

Both Fission and RPA are independent of SRC.

Security and Confidentiality

Drill core was delivered directly to Fission's core handling facility. After logging, splitting, and bagging, core samples for analysis were stored in a secured shipping container at the same facility. The samples were picked up on site by Marsh Expediting and transported by road to La Ronge before transhipment to SRC in Saskatoon. The shipping container was kept locked or under direct supervision of the Fission staff. A sample transmittal form was prepared that identified each batch of samples.

SRC considers customer confidentially and security of utmost importance and takes appropriate steps to protect the integrity of sample processing at all stages from sample storage and handling to transmission of results. All electronic information is password protected and backed up on a daily basis. Electronic results are transmitted with additional security features. Access to SRC's premises is restricted by an electronic security system. The facilities at the main laboratory are regularly patrolled by security guards 24 hours a day.

After the analyses described above are completed, analytical data are securely sent using electronic transmission of the results, by SRC to Fission. The electronic results are secured using WINZIP encryption and password protection. These results are provided as a series of Adobe PDF files containing the official analytical results and a Microsoft Excel spreadsheet file containing only the analytical results.

In RPA's opinion, the sample security and shipping procedures meet or exceed industry standards, and the QA/QC program as designed and implemented by Fission is adequate and the assay results within the database are suitable for use in a Mineral Resource estimate.

DATA VERIFICATION

RPA reviewed and verified the resource database used to estimate the Mineral Resources for the Triple R deposit. The verification included a review of the QA/QC methods and results, verifying assay certificates against the database assay table, standard database validation tests, and two site visits including drill core review. The review of the QA/QC program and results is presented under the heading "*Sample Preparation, Analyses and Security*".

RPA considers the resource database reliable and appropriate to prepare a Mineral Resource estimate.

Site Visit and Core Review

RPA visited the property twice during active drilling campaigns, once during a winter drill program and again during a summer drill program. During the March 2014 visit, RPA visited several ice-based drills and reviewed all

core handling, logging, sampling, and storage procedures. During the September 2014 visit, RPA visited barge-based drills and again reviewed all aspects of the drill campaign, from core handling through to sample shipment.

RPA examined core from several drill holes and compared observations with assay results and descriptive log records made by Fission geologists. As part of the review, RPA verified the occurrences of mineralization visually and by way of a handheld scintillometer. Holes reviewed included but were not limited to: PLS13-64, PLS13-75, PLS14-129, PLS14-183, and PLS14-186. There are no known outcrops of significance on the property to visit.

Database Validation

RPA performed the following digital queries. No significant issues were identified.

- Header table: searched for incorrect or duplicate collar coordinates and duplicate hole IDs.
- Survey table: searched for duplicate entries, survey points past the specified maximum depth in the collar table, and abnormal dips and azimuths.
- Core recovery table: searched for core recoveries greater than 100% or less than 80%, overlapping intervals, missing collar data, negative widths, and data points past the specified maximum depth in the collar table. Of the 25,238 core recovery intervals, 293 have recovery values which exceed 105% and should therefore be investigated as these may represent transcription error.
- Lithology, Scintillometer, and Probe tables: searched for duplicate entries, intervals past the specified maximum depth in the collar table, overlapping intervals, negative widths, missing collar data, missing intervals, and incorrect logging codes.
- Geochemical and assay table: searched for duplicate entries, sample intervals past the specified maximum depth, negative widths, overlapping intervals, sampling widths exceeding tolerance levels, missing collar data, missing intervals, and duplicated sample IDs.

Independent Verification of Assay Table

The geochemical table contains 54,962 records. RPA verified approximately 2,200 records representing 4% of the data for gold and uranium values against 20 different laboratory certificates received directly from SRC. No discrepancies were found.

MINERAL RESOURCE ESTIMATE

RPA estimated Mineral Resources for the Triple R deposit using drill hole data available as of January 5, 2015 (Table 6-1). Estimated block model grades are based on chemical assays only. Gold grades were also estimated and average 0.51 g/t for the Indicated Resources and 0.56 g/t for the Inferred Resources. All Mineral Resources are reported within a preliminary optimized open pit shell generated in Whittle software. A relatively minor amount of mineralization was not captured by the Whittle shell. No Mineral Reserves have been estimated at the project.

TABLE 6-1 MINERAL RESOURCE SUMMARY
Fission Uranium Corp. – Patterson Lake South Property

	Tonnes	% U_3O_8	g/t Au	Pounds U_3O_8	Ounces Au
Indicated	2,291,000	1.58	0.51	79,610,000	38,000
Inferred	901,000	1.30	0.56	25,884,000	16,000

Notes:
1. CIM definitions were followed for Mineral Resources.
2. Mineral Resources are reported within a preliminary optimized open pit shell at a cut-off grade of 0.1% U_3O_8. The cut-off grade is based on a long-term price of US$50 per lb U_3O_8.
3. A minimum mining width of 2.0 m was used.
4. Bulk density ranged between 2.25 t/m^3 and 2.39 t/m^3 depending on mineralized domain.
5. Numbers may not add due to rounding.

Resource Database

The resource estimate was prepared using drill hole data available to January 5, 2015. This includes holes up to and including PLS14-298 for a total of 317 drill holes. Of these, 232 holes representing 75,914.55 m of drilling are located within the area of the mineral resources (Table 6-2). The wireframe models representing the mineralized zones are intersected by 224 holes.

Fission maintains a complete set of drill hole plus other exploration data for the entire Property in Dassault Systèmes GEOVIA GEMS Version 6.5 software (GEMS). RPA exported only those data used to estimate resources and built a new GEMS project. Table 6-2 lists the records for drill hole data in or near the Triple R deposit.

TABLE 6-2 GEMS DATABASE RECORD COUNT

Fission Uranium Corp. - Patterson Lake South Property

Table Name	Number of Records*
Hole-ID	232
Survey	9,170
U_3O_8 Chemical Assays	54,962
Lithology	4,334
Scintillometer	22,508
Density	10,096
Full width mineralized intersections	1,119
Composites	28,902
5 m level composites	15,013

* In the area of the Triple R deposit only.

The verification steps made by RPA are described under the heading "*Data Verification*" below. In summary, no discrepancies were identified and RPA is of the opinion that the GEMS drill hole database is valid and suitable to estimate Mineral Resources for the Triple R deposit.

Geological Interpretation and 3D Solids

Wireframe models of mineralized zones were used to constrain the block model grade interpolation process. RPA interpreted and constructed wireframe models using a nominal cut-off grade of 0.05% U_3O_8 and minimum core length of two metres. Wireframes of the High Grade domain were created at a minimum grade of approximately 5% U_3O_8. The interpretation for most zones was guided by preliminary grade-shell wireframes created in Leapfrog modelling software.

RPA built the wireframe models using 3D polylines on east looking vertical sections spaced 15 m apart. Infill polylines were added to accommodate for irregular geometries. Polylines were "snapped" to assay intervals along the drill hole traces such that the sectional interpretations "wobbled" in 3D space. Polylines were joined together in 3D using tie lines and the continuity was checked using a longitudinal section and level plans.

As discussed under the heading "*Drilling*", most drill holes were oriented vertically, which produces challenges when interpreting steeply dipping mineralization. To the extent possible, RPA used information available from the angle holes to locate the hanging wall and footwall contacts of the mineralized zones and to interpret their true thickness. The sectional outlines of the mineralized zones based on angle holes was commonly extrapolated or interpolated to sections with vertical drilling only. This resulted in relatively regular outlines of the mineralized domains in plan view. RPA recommends that predominantly angle holes be drilled as part of any follow-up infill drill campaigns.

In total, RPA interpreted, built, and used 21 wireframe models of the mineralization, also known as domains (Table 6-3). Wireframes were assigned to zones as identified by Fission disclosures. The R00E zone is located at the western end and the much larger R780E zone is located along strike to the east. The R00E and R780E zones have an overall strike length of approximately 1.2 km, with the R00E measuring approximately 125 m in strike length and the R780E zones measuring approximately 900 m in strike length. A 225 m gap separates the R00E zone to the west and the R780E zones to the east. Mineralization remains open along strike both to the western and eastern extents, and at depth.

The R780E zones are 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 50 m of overburden. The deposit extends from immediately beneath the overburden to a maximum depth of 330 m below the topographic surface.

TABLE 6-3 SUMMARY OF WIREFRAME MODELS

Fission Uranium Corp. - Patterson Lake South Property

Zone	Wireframe Name	GEMS Block Code	Wireframe Volume (m^3)
R00E	R00_1	601	57,228
	R00_2	602	4,003
R780E (Main)	MZ	101	985,259
R780E (High grade)	HG	1001	57,104
R780E (Other Zones)	FW_1	201	14,926
	FW_2	202	3,726
	FW_3	203	49,063
	FW_4	204	25,589
	FW_5	205	38,184
	FW_6	206	6,544
	LZ_1	301	11,769
	LZ_2	302	19,417
	LZ_3	303	33,013
	LZ_4	304	6,376
	LZ_5	305	61,444
	LZ_6	306	13,979
	LZ_7	307	2,426
	LZ_8	308	30,438
	EAST_1	401	74,072
	EAST_2	402	22,865
	HW_1	501	63,375

The High Grade (HG) domain consists of seven lenses within the R780E Main Zone (MZ), the largest continuous domain within the R780E area. Collectively, these two domains make up more than 80% of the contained pounds of

U_3O_8 in the Mineral Resource. Both domains are elongated in the grid east-west direction and dip steeply to the south. The MZ measures approximately 740 m along strike. Both the down dip and true thickness of the MZ vary due to the irregular shape of the mineralization, however, in general, the down dip measurement ranges between 50 m and 80 m, and the true thickness is in most places between 20 m and 30 m but can be as little as two metres to a maximum of 45 m.

The HG domain alone contains more than half the contained pounds of U_3O_8 classified as Indicated Resources. It was modelled as seven steeply dipping wireframe solids located entirely within the R780E MZ. They span over 500 m of strike length, measure between 10 m and 40 m down dip, and generally range between three metres and ten metres thick.

A number of other wireframe solids make up a smaller portion of the Mineral Resource. Most of the secondary domains are oriented similarly to the Main Zone, that is, elongated east-west, dipping steeply to the south. Some, including R00E, were modelled with a horizontal orientation. Additional drilling is recommended to better define the geometry of mineralization.

Statistical Analysis

Assay values located inside the wireframe models were tagged with domain identifiers and exported for statistical analysis. Results were used to help verify the modelling process. Basic statistics by domain are summarized in Table 6-4.

TABLE 6-4 STATISTICS OF RESOURCE ASSAY VALUES BY DOMAIN
Fission Uranium Corp. - Patterson Lake South Property

	MZ	HG	FW_1	FW_2	FW_3
No. of Cases	12,746	826	79	21	75
Minimum (%U_3O_8)	0.00	0.01	0.00	0.01	0.00
Maximum (%U_3O_8)	43.50	65.70	6.96	0.90	2.08
Median (%U_3O_8)	0.10	12.40	0.13	0.17	0.12
Mean (%U_3O_8)	0.63	16.77	0.56	0.23	0.28
Wt. Mean (%U_3O_8)	0.64	16.88	0.55	0.23	0.28
Std. Dev. (%U_3O_8)	2.14	14.38	1.02	0.23	0.45
Coeff. of Variation	3.37	0.86	1.83	0.98	1.56
	FW_4	**FW_5**	**FW_6**	**LZ_1**	**LZ_2**
No. of Cases	59	385	112	150	214
Minimum (%U_3O_8)	0.00	0.00	0.00	0.00	0.00
Maximum (%U_3O_8)	3.84	22.10	44.90	24.70	39.40
Median (%U_3O_8)	0.15	0.06	0.28	0.22	0.08
Mean (%U_3O_8)	0.30	0.84	2.19	2.33	1.85
Wt. Mean (%U_3O_8)	0.30	0.84	2.19	2.33	1.86
Std. Dev. (%U_3O_8)	0.53	2.40	6.23	4.61	4.86
Coeff. of Variation	1.79	2.85	2.85	1.98	2.63
	LZ_3	**LZ_5**	**LZ_5**	**LZ_7**	**LZ_8**
No. of Cases	212	49	459	62	446
Minimum (%U_3O_8)	0.00	0.00	0.00	0.00	0.00
Maximum (%U_3O_8)	43.70	2.48	7.59	1.43	13.90
Median (%U_3O_8)	0.28	0.09	0.11	0.08	0.10
Mean (%U_3O_8)	1.60	0.26	0.35	0.26	0.36
Wt. Mean (%U_3O_8)	1.60	0.26	0.35	0.26	0.36
Std. Dev. (%U_3O_8)	5.14	0.46	0.79	0.38	0.99
Coeff. of Variation	3.22	1.77	2.26	1.47	2.74
	EAST_1	**EAST_2**	**HW_1**	**R00_1**	**R00_2**
No. of Cases	279	122	321	830	48
Minimum (%U_3O_8)	0.00	0.01	0.00	0.00	0.03
Maximum (%U_3O_8)	20.80	2.03	2.63	48.80	35.10
Median (%U_3O_8)	0.14	0.10	0.07	0.25	0.63
Mean (%U_3O_8)	1.14	0.22	0.18	1.64	5.52
Wt. Mean (%U_3O_8)	1.14	0.22	0.18	1.63	5.52
Std. Dev. (%U_3O_8)	3.04	0.32	0.32	4.62	8.95
Coeff. of Variation	2.66	1.43	1.78	2.82	1.62

Cutting High Grade Values

Where the assay distribution is skewed positively or approaches log-normal, erratic high grade assay values can have a disproportionate effect on the average grade of a deposit. One method of treating these outliers in order to reduce their influence on the average grade is to cut or cap them at a specific grade level. In the absence of

production data to calibrate the cutting level, inspection of the assay distribution can be used to estimate a "first pass" cutting level.

Review of the resource assay histograms within the wireframe domains and a visual inspection of high grade values on vertical sections suggest cutting erratic values to 55% in the HG domain, to 10% U_3O_8 in all other domains defined by wireframe solids, and to 7% U_3O_8 outside the wireframes, designated as Low Grade Halo.

For the MZ domain, by cutting 116 high values to 10% U_3O_8, the average grade was reduced from 0.64% U_3O_8 to 0.56% U_3O_8 and the coefficient of variation was reduced from 3.37 to 2.54. For the HG domain, by cutting 12 high values to 55% U_3O_8, the average grade was reduced from 16.88% U_3O_8 to 16.80% U_3O_8 and coefficient of variation was reduced from 0.86 to 0.85.

TABLE 6-5 STATISTICS OF RESOURCE CUT ASSAY VALUES BY DOMAIN
Fission Uranium Corp. - Patterson Lake South Property

	MZ	**HG**	**FW_5**	**FW_6**
No. of Cases	12,746	826	385	112
Minimum (%U_3O_8)	0.00	0.01	0.00	0.00
Maximum (%U_3O_8)	10.00	55.00	10.00	10.00
No. Assays Cut	116	12	6	5
Median (%U_3O_8)	0.10	12.40	0.06	0.28
Mean (%U_3O_8)	0.56	16.69	0.76	1.40
Wt. Mean (%U_3O_8)	0.56	16.80	0.76	1.40
Std. Dev. (%U_3O_8)	1.43	14.15	1.84	2.51
Coeff. of Variation	2.54	0.85	2.43	1.79
	LZ_1	**LZ_2**	**LZ_3**	**LZ_8**
No. of Cases	150	214	212	446
Minimum (%U_3O_8)	0.00	0.00	0.00	0.00
Maximum (%U_3O_8)	10.00	10.00	10.00	10.00
No. Assays Cut	10	8	7	2
Median (%U_3O_8)	0.22	0.08	0.28	0.10
Mean (%U_3O_8)	1.85	1.39	1.02	0.35
Wt. Mean (%U_3O_8)	1.85	1.40	1.02	0.35
Std. Dev. (%U_3O_8)	3.00	2.65	1.98	0.87
Coeff. of Variation	1.62	1.90	1.95	2.47
	EAST_1	**R00_1**	**R00_2**	
No. of Cases	279	830	48	
Minimum (%U_3O_8)	0.00	0.00	0.03	
Maximum (%U_3O_8)	10.00	10.00	10.00	
No. Assays Cut	9	34	9	
Median (%U_3O_8)	0.14	0.25	0.63	
Mean (%U_3O_8)	0.97	1.19	3.34	
Wt. Mean (%U_3O_8)	0.97	1.18	3.34	
Std. Dev. (%U_3O_8)	2.16	2.32	4.07	
Coeff. of Variation	2.23	1.95	1.22	

Compositing

Sample lengths range from 25 cm to 3.0 m within the wireframe models, however, 99% of the samples were taken at 0.5 m intervals. Given this distribution, and considering the width of the mineralization, RPA chose to composite to two metre lengths. Assays within the wireframe domains were composited starting at the first mineralized wireframe boundary from the collar and resetting at each new wireframe boundary. Assays were cut prior to compositing. Composites less than 0.5 m, located at the bottom of the mineralized intercept, were removed from the database.

Table 6-6 shows the composite statistics by domain.

TABLE 6-6 DESCRIPTIVE STATISTICS OF COMPOSITE VALUES BY DOMAIN
Fission Uranium Corp. - Patterson Lake South Property

	MZ	**HG**	**FW_1**	**FW_2**	**FW_3**
No. of Cases	3,324	225	21	5	20
Minimum (%U_3O_8)	0.00	0.17	0.01	0.10	0.01
Maximum (%U_3O_8)	10.00	53.17	2.34	0.35	0.94
Median (%U_3O_8)	0.14	13.69	0.36	0.25	0.15
Mean (%U_3O_8)	0.55	16.74	0.55	0.24	0.27
Std. Dev. (%U_3O_8)	1.10	11.66	0.57	0.12	0.28
Coeff. of Variation	1.99	0.70	1.04	0.50	1.03
	FW_4	**FW_5**	**FW_6**	**LZ_1**	**LZ_2**
No. of Cases	16	105	30	41	62
Minimum (%U_3O_8)	0.02	0.00	0.00	0.01	0.00
Maximum (%U_3O_8)	1.18	8.43	8.57	6.77	7.76
Median (%U_3O_8)	0.23	0.11	0.59	1.11	0.27
Mean (%U_3O_8)	0.30	0.72	1.32	1.78	1.25
Std. Dev. (%U_3O_8)	0.28	1.43	1.92	2.12	1.82
Coeff. of Variation	0.95	2.00	1.46	1.19	1.46
	LZ_3	**LZ_4**	**LZ_5**	**LZ_7**	**LZ_8**
No. of Cases	63	13	117	17	121
Minimum (%U_3O_8)	0.00	0.06	0.00	0.00	0.00
Maximum (%U_3O_8)	10.00	0.51	3.14	0.64	3.92
Median (%U_3O_8)	0.33	0.18	0.16	0.19	0.13
Mean (%U_3O_8)	0.88	0.20	0.35	0.23	0.33
Std. Dev. (%U_3O_8)	1.54	0.13	0.51	0.19	0.53
Coeff. of Variation	1.75	0.65	1.44	0.82	1.61
	EAST_1	**EAST_2**	**HW_1**	**R00_1**	**R00_2**
No. of Cases	72	33	83	213	12
Minimum (%U_3O_8)	0.00	0.01	0.00	0.02	0.13
Maximum (%U_3O_8)	9.04	0.88	1.19	10.00	9.31
Median (%U_3O_8)	0.20	0.14	0.10	0.34	0.95
Mean (%U_3O_8)	0.97	0.22	0.18	1.16	3.31
Std. Dev. (%U_3O_8)	1.84	0.21	0.21	2.01	3.68
Coeff. of Variation	1.90	0.97	1.18	1.73	1.11

Continuity Analysis

RPA generated downhole, omni-directional, and directional variograms using the two-metre composite U_3O_8 values located within the mineralized wireframes. The downhole variogram suggests a relative nugget effect of approximately 20%. Long range directional variograms were focused in the plane of mineralization, which most commonly strikes east-west and dips steeply to the south. To improve the variogram for the MZ, only composite values ranging between 0.05% U_3O_8 and 8% U_3O_8 were used. Most ranges were interpreted to be 15 m. Ranges for the HG domain also varied between 10 m and 20 m.

RPA also visually reviewed and contoured the drill hole results to identify trends of high grade mineralization. Several shallow to moderately eastward plunging higher grade zones were identified and these were mostly modelled as part of the HG domain within the MZ.

Interpolation Parameters

Grade interpolations for U_3O_8 and gold were made using inverse distance cubed (ID^3) with a minimum of two to a maximum of seven composites per block estimate. The search ellipse varied slightly by domain (Table 6-7). Hard boundaries were used to limit the use of composites between domains. Most search ellipses are 50 m by 50 m by 10 m for a 5:5:1 anisotropic ratio. Since the Low Grade Halo domain is unconstrained, RPA limited the search ellipse to 10 m by 10 m by 5 m which is equivalent to two blocks.

TABLE 6-7 BLOCK ESTIMATE SEARCH STRATEGY BY DOMAIN
Fission Uranium Corp. - Patterson Lake South Property

Domain	Rotation Type	Rotation (degrees)	X (m)	Y (m)	Z (m)
HG	ZYZ	None	50	10	50
MZ	ZYZ	None	50	10	50
EAST_1	ZXZ	0,-20,0	50	10	50
EAST_2	ZXZ	None	50	10	50
FW_1	ZXZ	0,-20,0	50	10	50
FW_2	ZXZ	0,-20,0	50	10	50
FW_3	ZXZ	0,-20,0	50	10	50
FW_4	ZXZ	0,-20,0	50	10	50
FW_5	ZXZ	0,-20,0	50	10	50
FW_6	ZXZ	0,-20,0	50	10	50
HW_1	ZXZ	0,-20,0	50	10	50
LZ_1	ZYZ	None	50	50	10
LZ_2	ZXZ	0,-20,0	50	50	10
LZ_3	ZXZ	0,-20,0	50	10	50
LZ_4	ZXZ	0,-20,0	50	10	50
LZ_5	ZXZ	0,-20,0	50	10	50
LZ_6	ZXZ	0,-20,0	50	10	50
LZ_7	ZXZ	none	50	10	50
LZ_8	ZXZ	0,-20,0	50	10	50
R00_1	ZYZ	none	50	50	10
R00_2	ZYZ	none	50	50	10
HALO	ZYZ	none	10	4	10

Note: GEMS ZYZ rotation nomenclature is used above. Positive rotation around the X axis is from Y towards Z, around the Y axis is from Z toward X, and around the Z axis is from X toward Y. Rotations are with respect to the rotated model.

Density

Bulk density is used to convert volume to tonnage and, in some cases, weight block grade estimates. For example, high grade uranium deposits of the Athabasca Basin have bulk densities that commonly vary with grade due to the very high density of pitchblende/uraninite compared to host lithologies. Bulk density also varies with clay alteration and in situ rock porosity. When modelling high grade uranium deposits, it is common to estimate bulk density values throughout the deposit and to weight grades by density, since small volumes of high grade material contain large quantities of uranium oxide.

RPA carried out correlation analyses of the bulk density measurements against uranium grades. Unlike most deposits in the Athabasca Basin, the high grade uranium mineralization at the Triple R deposit has relatively low density values. Uranium grade ranges of 20% U_3O_8 to 60% U_3O_8 within the basin more commonly exhibit density values ranging from 3.0 g/cm^3 to 6.0 g/cm^3. Triple R high grade mineralization is often associated with carbon which may account for the lower than expected density values. RPA recommends that additional density data be collected and analyzed for high grade mineralization.

Given the relationships between grade, density, and rock types; RPA chose to assign bulk densities by domain. The Triple R resource database includes more than 10,096 density measurements. RPA flagged measurements by grade and domain, and created a sub-set of more than 2,000 representative measurements. From the sub-set, RPA chose the following density values: 2.25 t/m^3 for the R00E Zone, 2.32 t/m^3 for the MZ and other zones in the R780E area, 2.35 t/ m^3 for the HG domain, and 2.39 t/m^3 for the Low Grade Halo.

Block Model

The GEMS block model is rotated 23.8° and is made up of 317 columns, 380 rows, and 108 levels for a total of 13,009,680 blocks. The model origin (lower-left corner at highest elevation) is at UTM coordinates 597,768.8 mE, 6,389,371.7 mN and 540 m elevation. Each block is two metres wide, five metres high, and five metres along strike. A partial block model is used to manage blocks partially filled by mineralized rock types, including blocks along the edges of the deposit. A partial model has parallel block models containing the percentage of mineralized rock types contained within each block. The block model contains the following information:

- domain identifiers with rock type;
- estimated grades of U_3O_8 and gold;
- the percentage volume of each block within the mineralization wireframe models;
- tonnage factors, in tonnes per cubic metre;
- the distance to the closest composite used to interpolate the block grade; and
- the resource classification of each block.

Cut-Off Grade and Preliminary Open Pit Shell

To fulfill the NI 43-101 requirement of “reasonable prospects for eventual economic extraction”, RPA prepared a preliminary open pit shell to constrain the block model for resource reporting purposes. The preliminary pit shell was generated using Whittle software.

The assumptions used in the Whittle pit shell analysis are listed in Table 6-8.

TABLE 6-8 PIT SHELL OPTIMIZATION FACTORS
Fission Uranium Corp. - Patterson Lake South Property

Parameter	Value
Pit Slope	45°
Process Recovery	95%
Price	50$/lb U_3O_8
Mining Cost	$3 per tonne mined
Processing Cost	$62.51 per tonne milled
Tailings cost	0.98 per tonne milled
Shipping cost	0.65 $/lb U_3O_8
Contingencies	3.77 $/lb U_3O_8
Royalty	9.10 $/lb U_3O_8
G&A	$7.00 per tonne milled
Density overburden	2.0 t/m^3
Density waste	2.65 t/m^3
Density mineralization	2.25 to 2.39 t/m^3
Block Size	5 x 2 x 5 m

The Whittle analysis gave a pit discard cut-off grade of 0.1% U_3O_8, which was used as a cut-off grade to report Mineral Resources.

Most of the preliminary open pit shell used to report resources is located beneath Patterson Lake. RPA is of the opinion that the value of the deposit could potentially support capital costs associated with the required dewatering.

Classification

Definitions for resource categories used in the PLS Technical Report are consistent with those defined by CIM (2014) and adopted by NI 43-101. In the CIM classification, a Mineral Resource is defined as "a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form grade or quality and quantity that there are reasonable prospects for eventual economic extraction". Mineral Resources are classified into Measured, Indicated, and Inferred categories. A Mineral Reserve is defined as the "economically mineable part of a Measured and/or Indicated Mineral Resource demonstrated by studies at Pre-Feasibility or Feasibility level as appropriate". Mineral Reserves are classified into Proven and Probable categories. No Mineral Reserves have been estimated for the Property.

Mineral Resources were classified as Indicated or Inferred based on drill hole spacing and the apparent continuity of mineralization. Most of the MZ domain was classified as Indicated owing to the closely spaced drilling throughout the length of the zone. In these areas of Indicated, drill hole sections are spaced 15 m apart along strike and vertical holes are spaced approximately 10 m along each section. Angle holes are spaced between 15 m and 45 m, averaging 30 m, in the along strike direction. Only two isolated extremities were classified as Inferred. Four of the seven High Grade lenses were classified entirely as Indicated. Two were classified entirely as Inferred, and easternmost lens was classified partly as Indicated and partly as Inferred. Almost the entire R00E Zone was classified as Indicated. All material outside the wireframes, within the Low Grade Halo domain, was classified as Inferred.

Mineral Resource Reporting

At a cut-off grade of 0.1% U_3O_8, Indicated Mineral Resources are estimated to total 2,291,000 tonnes at an average grade of 1.58% U_3O_8 containing 79,610,000 pounds of U_3O_8. Inferred Mineral Resources are estimated to total 901,000 tonnes at an average grade of 1.30% U_3O_8 containing 25,884,000 pounds of U_3O_8. Gold grades were also estimated and average 0.51 g/t for the Indicated Resources and 0.56 g/t for the Inferred Resources. All Mineral Resources are reported within a preliminary optimized open pit shell generated in Whittle software. A relatively

minor amount of mineralization was not captured by the Whittle shell. No Mineral Reserves have been estimated at the project.

Table 6-9 reports Mineral Resources by Zone and Sub-Zone. The Zones are those areas traditionally referred to by Fission in press releases and on its website and are generally defined by differences in location with respect to local grid easting. The Sub-Zones refer to the different types of interpreted wireframes and can also be referred to as domains. The High Grade domain consists of several lenses within the Main Zone. The Main Zone is the largest zone at both R00E and R780E. Other Zones refer to smaller mineralized zones adjacent to the Main Zone. The Low Grade Halo is material that falls outside the interpreted wireframe models.

TABLE 6-9 TONNAGE AND GRADE BY ZONE AND SUB-ZONE – JANUARY 5, 2015
Fission Uranium Corp. - Patterson Lake South Property

				Grade		Contained Metal	
Category	**Zone**	**Sub-Zone**	**Tonnes**	**% U_3O_8**	**g/t Au**	**Pounds U_3O_8**	**Ounces Au**
Indicated	R00E	Main Zone	126,000	1.15	0.15	3,180,000	1,000
Indicated	R780E	Main Zone	1,898,000	0.69	0.39	28,763,000	24,000
		High Grade	110,000	18.21	2.77	44,297,000	10,000
		Other Zones	157,000	0.97	0.67	3,369,000	3,000
Total Indicated			**2,291,000**	**1.58**	**0.51**	**79,610,000**	**38,000**
Inferred	R00E	Main Zone	8,000	3.57	0.59	669,000	
Inferred	R780E	Main Zone	23,000	1.26	0.89	648,000	1,000
		High Grade	24,000	26.35	3.77	13,860,000	3,000
		Other Zones	585,000	0.68	0.56	8,797,000	11,000
		Low Grade Halo	260,000	0.33	0.22	1,910,000	2,000
Total Inferred			**901,000**	**1.30**	**0.56**	**25,884,000**	**16,000**

Notes:
1. CIM definitions were followed for Mineral Resources.
2. Mineral Resources are reported within a preliminary optimized open pit shell at a cut-off grade of 0.1% U_3O_8. The cut-off grade is based on a long-term price US$50 per lb U_3O_8.
3. A minimum mining width of 2.0 m was used.
4. Bulk density ranged between 2.25 t/m^3 and 2.39 t/m^3 depending on mineralized domain.
5. Numbers may not add due to rounding.

Table 6-10 reports Mineral Resources at different cut-off grades and demonstrates that the Triple R deposit is relatively insensitive to cut-off grade up to 0.8% U_3O_8.

TABLE 6-10 TONNAGE AND GRADE BY CUT-OFF – JANUARY 5, 2015
Fission Uranium Corp. - Patterson Lake South Property

Class/Cut-Off		Grade		Contained Metal	
% U_3O_8	Tonnes	% U_3O_8	g/t Au	Pounds U_3O_8	Ounces Au
Indicated					
0.8	771,000	4.02	1.09	68,325,000	27,000
0.2	1,821,000	1.94	0.61	78,064,000	36,000
0.1	**2,291,000**	**1.58**	**0.51**	**79,610,000**	**38,000**
0.05	2,495,000	1.45	0.47	79,947,000	38,000
Inferred					
0.8	209,000	4.57	1.53	21,109,000	10,000
0.2	657,000	1.74	0.72	25,118,000	15,000
0.1	**901,000**	**1.30**	**0.56**	**25,884,000**	**16,000**
0.05	1,186,000	1.01	0.44	26,331,000	17,000

Notes:
1. CIM definitions were followed for Mineral Resources.
2. Mineral Resources are reported within a preliminary optimized open pit shell at a cut-off grade of 0.1% U_3O_8. The cut-off grade is based on a long-term price US$50 per lb U_3O_8.
3. A minimum mining width of 2.0 m was used.
4. Bulk density ranged between 2.25 t/m^3 and 2.39 t/m^3 depending on mineralized domain.
5. Numbers may not add due to rounding.

Mineral Resource Validation

RPA validated the block model by visual inspection, volumetric comparison, swath plots, and block grade estimation using an alternative method. Visual comparison on vertical sections and plan views, and a series of swath plots found good overall correlation between the block grade estimates and supporting composite grades.

The estimated total volume of the wireframe models is 1,580,800 m^3, while the volume of the block model at a zero grade cut-off is 1,579,700 m^3. Results are listed by domain in Table 6-11.

TABLE 6-11 VOLUME COMPARISON
Fission Uranium Corp. - Patterson Lake South Property

Domain	Volume Wireframes (m^3 x 1,000)	Volume Blocks (m^3 x 1,000)	Difference
HG	57.1	57.1	0%
MZ	985.3	984.6	0%
EAST_1	74.1	73.9	0%
EAST_2	22.9	22.9	0%
FW_1	14.9	14.8	-1%
FW_2	3.7	3.7	0%
FW_3	49.1	49.1	0%
FW_4	25.6	25.6	0%
FW_5	38.2	38.4	1%
FW_6	6.5	6.7	3%
HW_1	63.4	63.7	1%
LZ_1	11.8	11.8	1%
LZ_2	19.4	19.2	-1%
LZ_3	33.0	32.9	0%
LZ_4	6.4	6.4	0%
LZ_5	61.4	61.3	0%
LZ_6	14.0	13.7	-2%
LZ_7	2.4	2.4	-1%
LZ_8	30.4	30.3	0%
R00E	61.2	61.1	0%
Total	**1,580.8**	**1,579.7**	**0%**

RECOMMENDATIONS

RPA is of the opinion that, the PLS Property hosts a significant uranium deposit and merits considerable exploration and development work. The primary objectives are to expand the Triple R resource and explore elsewhere on the Property. RPA concurs with Fission's planned work program and budget of $15 million (Table 7-1) for 2015. Work will include:

- 18,000 m of step-out angle drilling in both the along-strike and up- and down-dip directions;
- 12,000 m of drilling for a property-wide exploration;
- a Preliminary Economic Assessment;
- additional metallurgical test work; and
- various social and environmental baseline studies.

TABLE 7-1 PROPOSED PHASE 1 BUDGET

Fission Uranium Corp. - Patterson Lake South Property

Item	$ M
Drilling (~30,000 m)	12.3
Interpretation, Resource Update, etc.	1.0
Geotechnical and Engineering Studies	0.2
Metallurgical and Mill Design Studies	0.2
Permitting and Environmental Work	0.2
Operating Costs/Office	1.0
Infrastructure Studies	0.1
Total	**15**

The recommended Phase 2 budget of $20 million would be contingent on Phase 1 results. Work would include additional drilling, metallurgical test work, geotechnical drilling, and a Preliminary Feasibility Study.

RISK FACTORS

An investment in Fission is speculative and involves a high degree of risk due to the nature of the Company's business and the present stage of its development. The following risk factors, as well as risks not currently known to the Company, could materially adversely affect the Company's future business, operations and financial condition and could cause them to differ materially from the estimates described in forward-looking statements contained herein. Prospective investors should carefully consider the following risk factors along with the other matters set out herein:

Limited Business History

Fission has a short history of operations and has no history of earnings. The likelihood of success of Fission must be considered in light of the problems, expenses, difficulties, complications and delays frequently encountered in connection with the establishment of any business. Fission has limited financial resources and there is no assurance that funding will be available to it when needed. There is also no assurance that Fission can generate revenues, operate profitably, or provide a return on investment, or that it will successfully implement its plans.

Unknown Environmental Risks for Past Activities

Exploration and mining operations incur risks of releases to soil, surface water and groundwater of metals, chemicals, fuels, liquids having acidic properties and other contaminants. The risk of environmental contamination from present and past exploration or mining activities exists for mining companies. Companies may be liable for environmental contamination and natural resource damages relating to properties that they currently own or operate or at which environmental contamination occurred while or before they owned or operated the properties. No assurance can be given that potential liabilities for such contamination or damages caused by past activities at the PLS Property do not exist.

Limited Exploration Prospects

The PLS Property is Fission's sole material property. Accordingly, the Company does not have a diversified portfolio of exploration prospects, either geographically or by mineral targets. The Company's operations could be significantly affected by fluctuations in the market price of uranium, as the economic viability of the Company's sole project is heavily dependent upon the market price for uranium.

Acquisitions and Joint Ventures

Fission may evaluate from time to time opportunities to acquire and joint venture mining assets and businesses. These acquisitions and joint ventures may be significant in size, may change the scale of Fission's business and may

expose it to new geographic, political, operating, financial and geological risks. Fission's success in its acquisition and joint venture activities will depend on its ability to identify suitable acquisition and joint venture candidates and partners, acquire or joint venture them on acceptable terms and integrate their operations successfully with those of Fission. Any acquisitions or joint ventures would be accompanied by risks, such as the difficulty of assimilating the operations and personnel of any acquired companies; the potential disruption of Fission's ongoing business; the inability of management to maximize the financial and strategic position of Fission through the successful incorporation of acquired assets and businesses or joint ventures; additional expenses associated with amortization of acquired intangible assets; the maintenance of uniform standards, controls, procedures and policies; the impairment of relationships with employees, customers and contractors as a result of any integration of new management personnel; dilution of Fission's present shareholders or of its interests in its subsidiaries or assets as a result of the issuance of shares to pay for acquisitions or the decision to grant earning or other interests to a joint venture partner; and the potential unknown liabilities associated with acquired assets and businesses. There can be no assurance that Fission would be successful in overcoming these risks or any other problems encountered in connection with such acquisitions or joint ventures. There may be no right for shareholders to evaluate the merits or risks of any future acquisition or joint venture undertaken except as required by applicable laws and regulations.

Risks Related to the Prior Business of Alpha

Prior to the Alpha Arrangement, Alpha was an independent uranium exploration company focused on the exploration and development of properties in British Columbia, Ontario and Saskatchewan. Completion of the Alpha Arrangement resulted in a combination of some of the business activities carried on by each of Alpha and Fission as separate entities at the time of closing of the Alpha Arrangement. See "*Description and General Development of the Business – Three Year History – Year Ended June 30, 2014 – Alpha and Fission 3.0 Arrangements*" above. The combination of those activities into Fission may expose shareholders and creditors to different business risks than those to which they were exposed to prior to completion of the Alpha Arrangement. There can be no assurance that Alpha's prior operations, conduct and pre-existing liabilities, including in connection with its exploration activities at the PLS Property, will not lead to legal or regulatory proceedings against the Company.

Any legal or regulatory proceedings, should they materialize, could have a material adverse effect on the Company's financial position and results of operations. All historical information regarding Alpha contained or incorporated by reference in this AIF, was provided by Alpha in connection with the Alpha Arrangement. Although Fission has no reason to doubt the accuracy or completeness of such information, any inaccuracy or material omission in the information about or relating to Alpha contained in the AIF could result in unanticipated liabilities or expenses, increase the cost of integrating the companies or adversely affect the operational plans of Fission and its results of operations and financial condition.

Additional Financing and Dilution

Fission is focused on advancing its core asset, the PLS Property, and will use its working capital to carry out such advancement and growth. However, Fission will require additional funds to further such activities. To obtain such funds, Fission may sell additional securities including, but not limited to, its Common Shares or some form of convertible security, the effect of which would result in a substantial dilution of the equity interests of Fission's shareholders.

There is no assurance that additional funding will be available to Fission for additional exploration or for the substantial capital that is typically required in order to bring a mineral project, such as the PLS Property, to the production decision or to place a property, such as the PLS Property, into commercial production. There can be no assurance that Fission will be able to obtain adequate financing in the future or that the terms of such financing will be favourable. Failure to obtain such additional financing could result in the delay or indefinite postponement of further exploration, advancement and growth of the PLS Property.

No History of Mineral Production or Mining Operations

Fission has never had a uranium producing property. There is no assurance that commercial quantities of uranium will be discovered nor is there any assurance that Fission's exploration programs will yield positive results. Even if

commercial quantities of uranium are discovered, there can be no assurance that the PLS Property will ever be brought to a stage where uranium resources can profitably be produced therefrom. Factors which may limit the ability to produce uranium resources include, but are not limited to, the spot price of uranium, availability of additional capital and financing and the nature of any mineral deposits. Fission does not have a history of mining operations that would guarantee it will produce revenue, operate profitably or provide a return on investment in the future. Fission has not paid dividends in the past and Fission does not have any plans to pay dividends in the foreseeable future.

Imprecision of Mineral Resource Estimates

Mineral resource figures are estimates, and no assurances can be given that the estimated levels of uranium will be produced or that Fission will receive the prices assumed in determining its mineral resources. Such estimates are expressions of judgment based on knowledge, mining experience, analysis of drilling results and industry practices. Valid estimates made at a given time may significantly change when new information becomes available. While Fission believes that the mineral resource estimates included are well established and reflect management's best estimates, by their nature, mineral resource estimates are imprecise and depend, to a certain extent, upon statistical inferences which may ultimately prove unreliable. Furthermore, market price fluctuations, as well as increased capital or production costs or reduced recovery rates, may render mineral resources containing lower grades of mineralization uneconomic and may ultimately result in a restatement of mineral resources. The evaluation of mineral resources is always influenced by economic and technological factors, which may change over time.

Economics of Developing Mineral Properties

Mineral exploration and development is speculative and involves a high degree of risk. While the discovery of an ore body may result in substantial rewards, few properties which are explored are commercially mineable and ultimately developed into producing mines. There is no assurance that Fission's uranium deposits are commercially mineable.

Should any mineral resources and reserves exist, substantial expenditures will be required to confirm mineral reserves which are sufficient to commercially mine and to obtain the required environmental approvals and permitting required to commence commercial operations. The decision as to whether a property contains a commercial mineral deposit and should be brought into production will depend upon the results of exploration programs and/or feasibility studies, and the recommendations of duly qualified engineers and/or geologists, all of which involves significant expense. This decision will involve consideration and evaluation of several significant factors including, but not limited to: (1) costs of bringing a property into production, including exploration and development work, preparation of production feasibility studies and construction of production facilities; (2) availability and costs of financing; (3) ongoing costs of production; (4) uranium prices, which are historically cyclical; (5) environmental compliance regulations and restraints (including potential environmental liabilities associated with historical exploration activities); and (6) political climate and/or governmental regulation and control. Development projects are also subject to the successful completion of engineering studies, issuance of necessary governmental permits, and availability of adequate financing. Development projects have no operating history upon which to base estimates of future cash flow.

The ability to sell and profit from the sale of any eventual mineral production from the PLS Property will be subject to the prevailing conditions in the minerals marketplace at the time of sale. The global minerals marketplace is subject to global economic activity and changing attitudes of consumers and other end-users' demand for mineral products. Many of these factors are beyond the control of a mining company and therefore represent a market risk which could impact the long term viability of Fission and its operations.

Factors Beyond the Control of Fission

The potential profitability of the PLS Property is dependent upon many factors beyond Fission's control. For instance, world prices of and markets for minerals are unpredictable, highly volatile, potentially subject to governmental fixing, pegging and/or controls and respond to changes in domestic, international, political, social and economic environments. Another factor is that rates of recovery of minerals from mined ore (assuming that such mineral deposits are known to exist) may vary from the rate experienced in tests and a reduction in the recovery rate

will adversely affect profitability and, possibly, the economic viability of a property. Profitability also depends on the costs of operations, including costs of labour, equipment, electricity, environmental compliance or other production inputs. Such costs will fluctuate in ways Fission cannot predict and are beyond Fission's control, and such fluctuations will impact on profitability and may eliminate profitability altogether. Additionally, due to worldwide economic uncertainty, the availability and cost of funds for advancing mineral projects and other costs have become increasingly difficult, if not impossible, to project. These changes and events may materially affect the financial performance of Fission.

Fission's potential future revenues will be directly related to the prices of uranium as its potential revenues are expected to be derived from uranium mining. Uranium prices are and will continue to be affected by numerous factors beyond Fission's control. Such factors include, among others, the demand for nuclear power; political and economic conditions in uranium producing and consuming countries such as Canada, the U.S., Russia and other former Soviet republics; reprocessing of used reactor fuel and the re-enrichment of depleted uranium tails; sales of excess civilian and military inventories (including from the dismantling of nuclear weapons) by governments and industry participants; and production levels and costs of production in countries such as Russia and former Soviet republics, Africa and Australia. The effect of these factors, individually or in the aggregate, is impossible to predict with accuracy. A decline in uranium prices may also require Fission to write down its mineral resources at the PLS Property, which would have a material adverse effect on its potential earnings and potential profitability.

Competition in the Mineral Industry

The mineral industry is competitive in all of its phases. The Company competes with other companies, some of which have greater financial and other resources than the Company and, as a result, may be in a better position to compete for future business opportunities. The Company competes with other exploration and mining companies for the acquisition of mineral interests as well as for the recruitment and retention of qualified employees and other personnel. There can be no assurance that the Company can compete effectively with these companies.

No Dividend History

No dividends on the Common Shares have been paid by Fission to date. Fission anticipates that for the foreseeable future it will retain future earnings and other cash resources for the operation and development of its business. Payment of any future dividends will be at the discretion of the Fission Board after taking into account many factors, including Fission's financial condition and current and anticipated cash needs.

Regulatory Requirements

The current or future operations of Fission, including advancement activities and possible commencement of production on the PLS Property, requires permits from various federal and local governmental authorities, and such operations are and will be governed by laws and regulations governing prospecting, development, mining, production, taxes, labour standards, occupational health, waste disposal, toxic substances, land use, environmental protection, mine safety and other matters. Companies engaged in the development, advancement and operation of mines and related facilities generally experience increased costs and delays in production and other schedules as a result of the need to comply with the applicable laws, regulations and permits. There can be no assurance that all permits which Fission may require for the development and construction of mining facilities and conduct of mining operations will be obtainable on reasonable terms or that such laws and regulations would not have an adverse effect on any mining project which Fission might undertake.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions including orders issued by regulatory or judicial authorities causing operations to cease or be curtailed, and may include corrective measures requiring capital expenditures, installation of additional equipment or remedial actions. Companies engaged in mining operations may be required to compensate those suffering loss or damage by reason of the mining activities and may have civil or criminal fines or penalties imposed upon them for violation of applicable laws or regulations.

Amendments or changes to current laws, regulations government policies and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on Fission and cause increases in costs or require abandonment or delays in the advancement and growth of the PLS Property.

Worldwide demand for uranium is directly tied to the demand for electricity produced by the nuclear power industry, which is also subject to extensive government regulation and policies. The development of mines and related facilities is contingent upon governmental approvals that are complex and time consuming to obtain and which, depending upon the location of the project, involve multiple governmental agencies. The duration and success of such approvals are subject to many variables outside Fission's control. Any significant delays in obtaining or renewing such permits or licenses in the future could have a material adverse effect on Fission. In addition, the international marketing of uranium is subject to governmental policies and certain trade restrictions, such as those imposed by the suspension agreements entered into by Canada with certain republics of the former Soviet Union. Changes in these policies and restrictions may adversely impact Fission's business.

Insurance

Fission's business is capital intensive and subject to a number of risks and hazards, including environmental pollution, accidents or spills, industrial and transportation accidents, labour disputes, changes in the regulatory environment, natural phenomena (such as inclement weather conditions, earthquakes, pit wall failures and cave-ins) and encountering unusual or unexpected geological conditions. Many of the foregoing risks and hazards could result in damage to, or destruction of, the PLS Property or any future processing facilities, personal injury or death, environmental damage, delays in or interruption of or cessation of its exploration or advancement activities, delay in or inability to receive regulatory approvals to transport its uranium concentrates, or costs, monetary losses and potential legal liability and adverse governmental action. Fission may be subject to liability or sustain loss for certain risks and hazards against which it does not or cannot insure or which it may reasonably elect not to insure because of the cost. This lack of insurance coverage could result in material economic harm to Fission.

Uranium Industry Competition and International Trade Restrictions

The international uranium industry, including the supply of uranium concentrates, is competitive, with supplies available from a relatively small number of western world uranium mining companies, from certain republics of the former Soviet Union and the People's Republic of China, from excess inventories, including inventories made available from decommissioning of nuclear weapons, from reprocessed uranium and plutonium, from used reactor fuel, and from the use of excess Russian enrichment capacity to re-enrich depleted uranium tails held by European enrichers in the form of UF6. The supply of uranium from Russia and from certain republics of the former Soviet Union is, to some extent, impeded by a number of international trade agreements and policies. These agreements and any similar future agreements, governmental policies or trade restrictions are beyond the control of Fission and may affect the supply of uranium available in the United States and Europe, which are the largest markets for uranium in the world. If Fission is unable to supply uranium to important markets in the U.S. or Europe, its business, financial condition and results of operations may be materially adversely affected.

Deregulation of the Electrical Utility Industry

Fission's future prospects may be tied directly to those of the electrical utility industry worldwide. Deregulation of the utility industry, particularly in North America and Europe, is expected to impact the market for nuclear and other fuels for years to come, and may result in the premature shutdown of nuclear reactors. Experience to date with deregulation indicates that utilities are improving the performance of their reactors and achieving record capacity factors. There can be no assurance that this trend will continue.

Public Acceptance of Nuclear Energy Cannot Be Assured

Growth in the demand for uranium and in the nuclear power industry will depend upon continued and increased acceptance of nuclear technology by the public as a safe and viable means of generating electricity. Growth of the uranium and nuclear power industry will also depend on continued and increased acceptance of nuclear technology

as a means of generating electricity. Because of unique political, technological and environmental factors that affect the nuclear industry, the industry is subject to public opinion risks which could have an adverse impact on the demand for nuclear power and increase the regulation of the nuclear power industry. An accident or incident at a nuclear reactor anywhere in the world, or an accident or incident relating to the transportation or storage of new or spent nuclear fuel, could negatively impact the public's acceptance of nuclear power and the future prospects for nuclear power generation, which may have a material and adverse effect on Fission's business, financial condition and results of operations.

The March 2011 natural disaster in Japan, with the resultant effect on certain of the country's nuclear reactors, has caused concern internationally as to the safety of nuclear energy as available source of power. Further, a number of heads of government and their legislative bodies have announced reviews and/or delays of plans to develop new nuclear power facilities. In the United States, the Chairman of the Nuclear Regulatory Commission ("**NRC**") has publicly stated that a more stringent review of design risks will be undertaken for both existing facilities and future applications for new nuclear power facilities. The additional scrutiny by the NRC could affect all parts of the organization including the licensing of new uranium production facilities. Other relevant regulatory bodies could also react to these recent events, resulting in additional delays or barriers in permitting and licensing new uranium production operations. It is too soon for Fission to determine the long-term impact such events will have on Fission's financial condition, results of operations and permitting plans.

Nuclear Energy Competes With Other Viable Energy Sources

Nuclear energy competes with other sources of energy, including oil, natural gas, coal and hydro-electricity. These other sources are to some extent interchangeable with nuclear energy, particularly over the longer term. Sustained lower prices of oil, natural gas, coal and hydro-electricity may result in lower demand for uranium concentrates and uranium conversion services, which in turn may result in lower market prices for uranium, which would materially and adversely affect Fission's business, financial condition and results of operations.

Environmental Risks and Hazards

All phases of Fission's operations are subject to environmental regulation in the jurisdictions in which it operates. These regulations mandate, among other things, the maintenance of air and water quality standards and land reclamation. They also set forth limitations on the transportation, storage and disposal of solid and hazardous waste. Environmental legislation is evolving in a manner which will require stricter standards and enforcement, increased fines and penalties for non-compliance, more stringent environmental assessments of proposed projects and a heightened degree of responsibility for companies and their officers, directors and employees. There is no assurance that future changes in environmental regulation, if any, will not adversely affect Fission's operations. Environmental hazards may exist on the PLS Property which are unknown to Fission at present and which have been caused by previous owners or operators of the PLS Property. Reclamation costs are uncertain and planned expenditures estimated by management may differ from the actual expenditures required.

Fission is not insured against most environmental risks. Insurance against environmental risks (including potential liability for pollution and other hazards as a result of the disposal of waste products occurring from exploration and production) has not been generally available to companies within the industry. Fission will periodically evaluate the cost and coverage of the insurance against certain environmental risks that is available to determine if it would be appropriate to obtain such insurance.

Without such insurance, and if Fission becomes subject to environmental liabilities, the payment of such liabilities would reduce or eliminate its available funds or could exceed the funds Fission has to pay such liabilities and result in bankruptcy. Should Fission be unable to fund fully the remedial cost of an environmental problem, Fission might be required to enter into interim compliance measures pending completion of the required remedy.

Litigation Risk

All industries, including the mining industry, are subject to legal claims, with and without merit. Defence and settlement costs can be substantial, even with respect to claims that have no merit. Due to the inherent uncertainty

of litigation process, the resolution of any particular legal proceeding could have a material adverse effect on Fission's financial position and results of operations.

Political Risk

Fission's future prospects may be affected by political decisions about the uranium market. There can be no assurance that the Canadian or other governments will not enact legislation restricting to whom Fission can sell uranium or that the Canadian or other governments will not increase the supply of uranium by decommissioning nuclear weapons.

Costs of Land Reclamation Risk

It is difficult to determine the exact amounts which will be required to complete all land reclamation activities in connection with the PLS Property. Reclamation bonds and other forms of financial assurance represent only a portion of the total amount of money that will be spent on reclamation activities over the life of a mine. Accordingly, it may be necessary to revise planned expenditures and operating plans in order to fund reclamation activities. Such costs may have a material adverse impact upon the financial condition and results of operations of Fission.

No Assurance of Title to Property

There may be challenges to title to the PLS Property. If there are title defects with respect to the PLS Property, Fission might be required to compensate other persons or perhaps reduce its interest in the PLS Property. Also, in any such case, the investigation and resolution of title issues would divert management's time from ongoing exploration and advancement programs at the PLS Property.

Dependence on Key Personnel

Fission is dependent on a relatively small number of key personnel, particularly Ross McElroy, its President and Chief Operating Officer and Devinder Randhawa, its Chief Executive Officer, the loss of any one of whom could have an adverse effect on Fission. At this time, Fission does not maintain key-person insurance on the lives of any of its key personnel. In addition, while certain of Fission's officers and directors have experience in the exploration of mineral producing properties, Fission will remain highly dependent upon contractors and third parties in the performance of its exploration and advancement activities at the PLS Property. There can be no guarantee that such contractors and third parties will be available to carry out such activities on behalf of Fission or be available upon commercially acceptable terms.

Risk of Amendments to Laws

Amendments to current laws, regulations and permits governing operations and activities of mining companies, or more stringent implementation thereof, could have a material adverse impact on Fission and cause increases in capital expenditures or production costs or require abandonment or delays in the advancement and growth of the PLS Property.

Conflicts of Interest

Some of the directors and officers of Fission are directors and officers of other companies, including Fission 3.0, which is active in the Athabasca Basin region of Saskatchewan, Canada. Some of Fission's directors and officers may continue to pursue the acquisition, exploration and, if warranted, the development of mineral resource properties on their own behalf and on behalf of other companies, some of which are in the same business as Fission, and situations may arise where such companies will be in direct competition with Fission. Fission's directors and officers are required by law to act in the best interests of Fission. They may have the same obligations to the other companies in respect of which they act as directors and officers. Discharge of their obligations to Fission may result in a breach of their obligations to the other companies and, in certain circumstances, this could expose Fission to liability to those companies. Similarly, discharge by the directors and officers of their obligations to the other

companies could result in a breach of their obligation to act in the best interests of Fission. Such conflicting legal obligations may expose Fission to liability to others and impair its ability to achieve its business objectives.

Influence of Third Party Stakeholders

The lands in which Fission holds an interest in at the PLS Property, or the exploration equipment and roads or other means of access which Fission intends to utilize in carrying out its work programs or general business mandates, may be subject to interests or claims by third party individuals, groups or companies. In the event that such third parties assert any claims, Fission's work programs may be delayed even if such claims are not meritorious. Such delays may result in significant financial loss and loss of opportunity for Fission.

Fluctuation in Market Value of Common Shares

The market price of the Common Shares, as publicly traded shares, can be affected by many variables not directly related to the corporate performance of Fission, including the market in which it is traded, the strength of the economy generally, the availability and attractiveness of alternative investments, and the breadth of the public market for the stock. The effect of these and other factors on the market price of Common Shares in the future cannot be predicted. The lack of an active public market could have a material adverse effect on the price of Common Shares.

DIVIDENDS

Other than in connection with the Fission 3.0 Arrangement, the Company has not, since the date of its incorporation, declared or paid any cash dividends on its Common Shares and does not currently have a policy with respect to the payment of dividends. For the immediate future Fission does not envisage any earnings arising from which dividends could be paid. The payment of dividends in the future will depend on the earnings, if any, and the Company's financial condition and such other factors as the Fission Board considers appropriate.

DESCRIPTION OF CAPITAL STRUCTURE

Common Shares

The Company is authorized to issue an unlimited number of Common Shares. The holders of the Common Shares are entitled to one vote per share at meetings of shareholders, to receive dividends if, as and when declared by the Fission Board (subject to the rights of securities, if any, having priority over the Common Shares) and to receive *pro rata* the remaining property and assets of the Company upon its dissolution or winding-up (subject to the rights of securities, if any, having priority over the Common Shares).

As of the date of this AIF, there were 368,685,972 Common Shares issued and outstanding. The Common Shares are listed on the TSX under the symbol "FCU" and on the OTCQX under the trading symbol "FCUUF".

Warrants

As of the date of this AIF, there were 5,582,687 Warrants outstanding with a weighted average exercise price of $0.9960. The Warrants have expiry dates ranging from April 25, 2015 to April 1, 2016.

The certificates representing the Warrants include customary adjustment provisions relating to the number of securities issuable and the exercise price per security in the event of material transactions or capital reorganization events that would affect the Common Shares (such as a subdivision or consolidation of the Common Shares, the issuance of other securities convertible into Common Shares or payment of an in-kind dividend or distribution) or would be a fundamental change to Fission (including a reclassification of Common Shares or completion of a material corporate transaction). After the Alpha Arrangement, each outstanding warrant of Alpha entitled a warrant holder to purchase 5.725 Fission Common Shares. The exercise prices were adjusted in accordance with the terms of the Alpha Arrangement.

Options

As of the date of this AIF, there were 33,768,333 Options outstanding with a weighted average exercise price of $1.0482 and expiry dates ranging from March 7, 2015 to December 15, 2019.

The Options are governed by the Fission Option Plan and each vested Option is exercisable for one Common Share upon the payment of the exercise price. At the time of the Alpha Arrangement, each outstanding stock option of Alpha was exchanged for 5.725 Options (the "**Alpha Replacement Options**"). The Alpha Replacement Options are fully vested, have exercise prices and expiry dates adjusted in accordance with the terms of the Alpha Arrangement and are exercisable for Common Shares instead of common shares of Alpha. A copy of the Option Plan is available for review at the offices of the Company or the registered offices of the Company, at Suite 700 – 595 Howe Street, Vancouver, BC, V6C 2T5.

MARKET FOR SECURITIES

Market

The Company's Common Shares are listed on the TSX under the trading symbol "FCU" and OTCQX under the trading symbol "FCUUF".

Trading Price and Volume

The following table shows the high and low trading prices and monthly trading volume of the Common Shares on the TSX-V and the TSX for the periods indicated:

Date	High ($)	Low($)	Volume
June, 2014	$1.35	$1.12	29,591,147
May, 2014	$1.29	$1.04	45,830,526
April, 2014	$1.71	$1.17	61,673,969
March, 2014	$1.73	$1.36	56,033,899
February, 2014	$1.46	$1.15	86,438,231
January, 2014	$1.26	$1.02	40,894,507
December, 2013	$1.19	$.98	15,821,524
November, 2013	$1.25	$1.03	10,458,623
October, 2013	$1.29	$1.01	22,678,725
September, 2013	$1.39	$1.07	53,438,693
August, 2013	$1.48	$0.94	97,509,189
July, 2013	$1.10	$0.63	24,954,311

Prior Sales

The following summarizes the Warrants, Special Warrants, Underwriter Warrants, Broker Warrants, Subscription Receipts and Options issued by the Company during the most recently completed financial year:

Date	Type of Security	Reason for Issuance	Number of Securities	Price or Exercise Price per Security
April 7, 2014	Options	Stock Option Grant	500,000	$1.65
April 4, 2014	Options	Stock Option Grant	6,500,000	$1.65

Date	Type of Security	Reason for Issuance	Number of Securities	Price or Exercise Price per Security
April 1, 2014	Special Warrants	Issued as part of Special Warrant Offering[(1)]	17,968,750	$1.60
April 1, 2014	Underwriter Warrants	Issued as part of underwriter consideration in connection with the Special Warrant Offering	898,439	$1.60
February 25, 2014	Options	Stock Option Grant	300,000	$1.31
February 17, 2014	Options	Stock Option Grant	570,000	$1.20
January 21, 2014	Options	Stock Option Grant	8,000,000	$1.20
December 13, 2013	Options	Stock Option Grant	1,000,000	$1.10
December 9, 2013	Broker Warrants	Broker Warrants issued in connection with the Subscription Receipt Offering[(2)]	482,099	$1.50
December 6, 2013	Options	Exchange of Alpha options for Fission options pursuant to the Alpha Arrangement	12,022	$0.1146
December 6, 2013	Options	Exchange of Alpha options for Fission options pursuant to the Alpha Arrangement	1,345,375	$0.1147
December 6, 2013	Options	Exchange of Alpha options for Fission options pursuant to the Alpha Arrangement	2,891,126	$0.1496
December 6, 2013	Warrants	Exchange of Alpha warrants for Fission warrants pursuant to the Alpha Arrangement	2,221,871	$0.1496
December 6, 2013	Options	Exchange of Alpha options for Fission options pursuant to the Alpha Arrangement	2,089,625	$0.2020
December 6, 2013	Warrants	Exchange of Alpha warrants for Fission warrants pursuant to the Alpha Arrangement	114,500	$0.2020
December 6, 2013	Options	Exchange of Alpha options for Fission options pursuant to the Alpha Arrangement	572,500	$0.2352
December 6, 2013	Options	Exchange of Alpha options for Fission options pursuant to the Alpha Arrangement	286,250	$0.2492
December 6, 2013	Options	Exchange of Alpha options for Fission options pursuant to the Alpha Arrangement	1,145,000	$0.6177
December 6, 2013	Options	Exchange of Alpha options for Fission options pursuant to the Alpha Arrangement	3,921,625	$0.6387
December 6, 2013	Warrants	Exchange of Alpha warrants for Fission warrants pursuant to the Alpha Arrangement	337,774	$0.7085

Date	Type of Security	Reason for Issuance	Number of Securities	Price or Exercise Price per Security
December 6, 2013	Warrants	Exchange of Alpha warrants for Fission warrants pursuant to the Alpha Arrangement	4,777,512	$0.8133
October 24, 2013	Subscription Receipts	Subscription Receipts issued in connection with the Subscription Receipt Offering[2]	8,581,700	$1.50
August 15, 2013	Options	Stock Option Grant	450,000	$1.34[3]

Notes:

(1) See "*Description and General Development of the Business – Year Ended June 30, 2014 – Special Warrant Offering*".

(2) See "*Description and General Development of the Business – Year Ended June 30, 2014 – Subscription Receipt Offering*".

(3) Subsequent to the grant of these options, the exercise price of 450,000 of these options, being the options that remained outstanding as of the completion of the Fission 3.0 Arrangement, was adjusted pursuant to the terms of the Fission 3.0 Arrangement. As a result of such adjustments, the original exercise price was reduced by $0.048, being the fair market value of one common share in the capital of Fission 3.0 at the time of the completion of the Fission 3.0 Arrangement.

DIRECTORS AND OFFICERS

The following table sets forth the name, province and country of residence and office held by each of our executive officers and directors as of the date of this AIF. Each director is elected at the annual meeting of shareholders or appointed pursuant to the provisions of our by-laws and applicable law to serve until the next annual meeting or until a successor is elected or appointed, subject to earlier resignation by the director.

Name, Office Held and Province/State and Country of Residence	Date Appointed	Principal Occupation for Preceding Five Years[1]
Devinder Randhawa *British Columbia, Canada* *Director, Chairman and CEO*	February 13, 2013	Mr. Randhawa is the Chairman and CEO of Fission and President of RD Capital Inc., a privately held consulting firm providing venture capital and corporate finance services to emerging companies in the resources and non-resource sectors both in Canada and the U.S. Prior to the completion of the Denison Arrangement, Mr. Randhawa was the Chairman and CEO of Fission Energy.
Ross McElroy[5] *British Columbia, Canada* *Director, President and COO*	February 13, 2013	Mr. McElroy is the President and COO of Fission and a professional geologist with over 25 years of experience in the mining industry. Prior to the completion of the Denison Arrangement, Mr. McElroy was the President and COO of Fission Energy.
William Marsh[2][3][4] *British Columbia, Canada* *Director*	May 31, 2013	Mr. Marsh is an independent consultant providing drilling advice to both public and private companies operating in Canada and internationally.
Jeremy Ross[5] *British Columbia, Canada* *Director*	August 7, 2014	Mr. Ross is a corporate development consultant with over 15 years experience advising junior mining and oil and gas companies. He was previously a director of the Company from June 2013 to December 2013.

Name, Office Held and Province/State and Country of Residence	Date Appointed	Principal Occupation for Preceding Five Years[1]
Frank Estergaard[2][3][4] *British Columbia, Canada* *Director*	February 7, 2014	Mr. Estergaard is a Chartered Accountant who retired as a Partner with KPMG in 2001. Mr. Estergaard has served as the director and chairman of the audit committee of QHR Technologies Inc. (TSX-V), the CFO of Metalex Ventures Ltd. (TSX-V), and the CFO for a private company, Rackforce Networks Inc. Mr. Estergaard was a director and the Chair of the Audit Committee of Fission Energy. Prior to being reappointed on February 7, 2014, Mr. Estergaard was a director and the Chair of the Audit Committee of the Company from incorporation until he resigned on December 6, 2013.
Anthony Milewski[2][3][4][5] *New York, USA* *Director*	August 29, 2014	Mr. Milewski is an expert on uranium industry supply and demand dynamics, has considerable experience in paper and physical uranium trading and is a frequent speaker at industry conferences. He has also managed numerous mining investments at various stages of development, including exploration, development and production and has served as a director of both public and private companies. Prior to founding Black Vulcan Resources, Mr. Milewski worked at Firebird Management, a specialist emerging market fund, where he focused on natural resource investments in Africa, Central Asia and the Former Soviet Union.
Paul Charlish *British Columbia, Canada* *CFO*	January 26, 2015	Mr. Charlish is the CFO of Fission with over 26 years' finance experience including public practice, audit/tax and public companies predominantly in the mining sector. Mr. Charlish is also the CFO of Fission 3.0 Corp. Prior to the completion of the Denison Arrangement, Mr. Charlish was the VP Finance of Fission Energy Corp.

Notes:

(1) The information as to principal occupation, business or employment and shares beneficially owned or controlled is not within the knowledge of the management of the Company and has been furnished by the respective directors and officers. Unless otherwise stated above, any directors and/or officers named above have held the principal occupation or employment indicated for at least five years. This is information is current to the date of this AIF.
(2) Member of the Audit Committee.
(3) Member of the Corporate Governance and Nominating Committee.
(4) Member of the Compensation Committee.
(5) Member of the Disclosure Committee

As a group, the directors and executive officers of Fission beneficially own, or control or direct, 6,324,165 Common Shares of Fission or 1.72% of its issued and outstanding Common Shares.

Cease Trade Orders, Bankruptcies, Penalties or Sanctions

No director or executive officer of Fission or a shareholder holding a sufficient number of securities of Fission to affect materially the control of Fission, within ten years before the date of this AIF, has been a director, chief executive officer or chief financial officer of any company (including Fission) that, while that person was acting in the capacity as director, chief executive officer or chief financial officer, or which resulted from an event that occurred while that person was acting in the capacity as director, chief executive officer or chief financial officer,

(a) was subject to a cease trade or similar order, or an order that denied the relevant company access to any exemption under securities legislation that was in effect for a period of more than 30 consecutive days; or

(b) within a year of that person ceasing to act in that capacity, became bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency or was subject to or instituted any proceedings, arrangement or compromise with creditors or had a receiver, receiver manager or trustee appointed to hold its assets.

The foregoing, not being within the knowledge of the Company, has been furnished by the respective directors, executive officers and shareholders holding a sufficient number of securities of the Company to affect materially control of the Company.

Penalties or Sanctions

No director or executive officer of Fission, or a shareholder holding a sufficient number of securities of Fission to affect materially the control of Fission, has

(a) been subject to any penalties or sanctions imposed by a court relating to securities legislation or by a securities regulatory authority or has entered into a settlement agreement with a securities regulatory authority; or

(b) been subject to any other penalties or sanctions imposed by a court or regulatory body that would likely be considered important to a reasonable investor in making an investment decision about Fission.

The foregoing, not being within the knowledge of the Company, has been furnished by the respective directors, executive officers and shareholders holding a sufficient number of securities of the Company to affect materially control of the Company.

Personal Bankruptcies

No director or executive officer of Fission or a shareholder holding a sufficient number of securities of Fission to affect materially the control of Fission, has, within the 10 years before the date of this AIF, become bankrupt, made a proposal under any legislation relating to bankruptcy or insolvency, or been subject to or instituted any proceedings, arrangement or compromise with creditors, or had a receiver, receiver manager or trustee appointed to hold the assets of the director, executive officer or shareholder.

The foregoing, not being within the knowledge of the Company, has been furnished by the respective directors, executive officers and shareholders holding a sufficient number of securities of the Company to affect materially control of the Company.

Conflicts of Interest

To the knowledge of Fission, and other than as disclosed herein, there are no known existing or potential material conflicts of interest among Fission, its directors and officers and any director or officer of Fission, or other members of management as a result of their outside business interests, except that certain of the directors or officers may serve as directors and officers of other companies, and therefore it is possible that a conflict may arise between their duties to Fission and their duties as a director or officer of such other companies. See "*Risk Factors – Conflicts of Interest*".

The directors of Fission are required by law to act honestly and in good faith with a view to the best interests of Fission and to disclose any interests that they may have in any material contract or material transaction. If a conflict of interest arises at a meeting of the board of directors of the Company, any director in a conflict is required to disclose his or her interest and abstain from voting on such matter. The directors and officers of Fission are aware of

the existence of laws governing accountability of directors and officers for corporate opportunity and requiring disclosures by directors of conflicts of interest in respect of Fission and are required to comply with such laws in respect of any directors' and officers' conflicts of interest or in respect of any breaches of duty by any of its directors or officers.

LEGAL PROCEEDINGS AND REGULATORY ACTIONS

Other than as described below, to the best of the Company's knowledge, there are no material legal proceedings by or against the Company or the PLS Property or affecting any of its interests during the most recent fiscal year of the Company and as of the date of this AIF, nor is the Company aware that any such proceedings are contemplated:

(a) On July 29, 2013, Fission Energy filed a Notice of Civil Claim, as amended on September 17, 2013, further amended on November 22, 2013 and third amended January 10, 2014 in the Supreme Court of British Columbia naming Jody Dahrouge, Debbie Dahrouge, 877384 Alberta Ltd. and Dahrouge Geological Consulting Ltd. as defendants. The litigation between the parties was resolved to the satisfaction of all parties.

(b) On November 8, 2013, Jody Dahrouge, Debbie Dahrouge, 877384 Alberta Ltd., and Dahrouge Geological Consulting Ltd. filed a Counterclaim in connection with the Claim naming Devinder Randhawa, Fission, Fission Energy and Denison as the defendants. The litigation between the parties was resolved to the satisfaction of all parties.

(c) On February 5, 2014, Jody Dahrouge filed a Notice of Civil Claim in the Supreme Court of British Columbia naming Fission and Devinder Randhawa as the defendants. The litigation between the parties was resolved to the satisfaction of all parties.

Furthermore, there are no (a) penalties or sanctions imposed against the Company by a court relating to securities legislation or by a securities regulatory authority during its most recently completed financial year; (b) other penalties or sanctions imposed by a court or regulatory body against the Company that would likely be considered important to a reasonable investor in making an investment decision in the Company; or (c) settlement agreements the Company entered into before a court relating to securities legislation or with a securities regulatory authority during its most recently completed financial year.

PROMOTERS

No person has acted as a promoter of the Company between the Company's incorporation on February 13, 2013 and the end of the last financial year on June 30, 2014 or during the current financial year.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

Other than as set forth below and other than transactions carried out in the ordinary course of business of the Company or any of its subsidiaries, none of the directors or executive officers of the Company, any shareholder directly or indirectly beneficially owning, or exercising control or direction over, shares carrying more than 10% of the voting rights attached to the shares of the Company, nor an associate or affiliate of any of the foregoing persons has had, from incorporation of the Company on February 13, 2013 to the date of this AIF, any material interest, direct or indirect, in any transactions that materially affected or would materially affect the Company or any of its subsidiaries.

TRANSFER AGENT AND REGISTRAR

The Company's registrar and transfer agent is Computershare Trust Company of Canada with offices located at 100 University Avenue, 9th Floor, Toronto, Ontario, M5J 2Y1.

MATERIAL CONTRACTS

The following is a summary of each material contract, other than contracts entered into in the ordinary course of Fission's business, that was entered into in the financial year ending June 30, 2014, or up to the date of this AIF, that is still in effect:

1. Arrangement Agreement dated September 17, 2013, between Fission and Alpha in connection with the Alpha Arrangement and Fission 3.0 Arrangement.

2. Underwriting Agreement dated October 24, 2013, between Fission, Dundee, Raymond James Ltd., Cantor Fitzgerald Canada Corp., Canaccord Genuity Corp., and Macquarie Capital Markets Canada Ltd. in connection with the Subscription Receipt Offering.

3. Underwriting Agreement dated April 1, 2014, between Fission, Dundee, Cantor Fitzgerald Canada Corporation, Macquarie Capital Markets Canada Ltd., Raymond James Ltd., BMO Nesbitt Burns Inc., TD Securities Inc., Clarus Securities Inc. and Cormark Securities Inc. in connection with the Special Warrant Offering.

4. Underwriting Agreement dated September 23, 2014, between Fission, Dundee, BMO Nesbitt Burns Inc., Raymond James Ltd., Macquarie Capital Markets Canada Ltd. and Cantor Fitzgerald Canada Corporation in connection with the Flow-Through Offering.

INTEREST OF EXPERTS

The disclosure with respect to the PLS Property contained in this AIF is based on the PLS Property Technical Report prepared by David A. Ross, M.Sc., P.Geo., of Roscoe Postle Associates Inc. To the best of the Company's knowledge, neither the qualified person referenced above, nor any director, officer, employee or partner of such qualified person or Roscoe Postle Associates Inc, as applicable, received or has received a direct or indirect interest in the property of the Company or of any associate or affiliate of the Company. As at the date hereof, the aforementioned persons, and the directors, officers, employees and partners, as applicable, of the aforementioned company beneficially own, directly or indirectly, in the aggregate, less than one percent of the securities of the Company.

The auditor for the Company is currently PricewaterhouseCoopers LLP, Chartered Accountants of Vancouver, British Columbia. PricewaterhouseCoopers LLP has advised the Company that it is independent within the meaning of the Rules of Professional Conduct of the Institute of Chartered Accountants of British Columbia.

ADDITIONAL INFORMATION

Additional information on the Company may be found on SEDAR at www.sedar.com. Additional information, including directors' and officers' remuneration and indebtedness to the Company, principal holders of the securities of the Company and securities authorized for issuance under equity compensation plans, is contained in the Company's Management Information Circular for its most recent annual general meeting ,which is available on SEDAR. Additional financial information is provided in the Company's audited consolidated financial statements for the year ended June 30, 2014, the notes thereto, the report of the external auditors and the Management's Discussion and Analysis both of which are available on SEDAR.

AUDIT COMMITTEE

Pursuant to the provisions of NI 52-110, reporting issuers are required to provide disclosure with respect to its audit committee including the text of the audit committee's mandate, composition of the committee, and the fees paid to the external auditor. Accordingly, the Company provides the following disclosure with respect to its Audit Committee.

Composition of the Audit Committee

As of the date of this AIF, the Company's Audit Committee is comprised of Frank Estergaard (Chair), William Marsh and Anthony Milewski. As defined in NI 52-110, all of the Audit Committee members are "independent". Also as defined in NI 52-110, all of the Audit Committee members are "financially literate", meaning that they have the ability to read and understand financial statements of the Company.

Relevant Education and Experience

All of the Audit Committee members are experienced businessmen with experience in financial matters; each has a broad understanding of accounting principles used to prepare financial statements and varied experience as to general application of such accounting principles, as well as the internal controls and procedures necessary for financial reporting, garnered from working in their individual fields of endeavour. In addition, each of the members of the Fission Audit Committee has knowledge of the role of an audit committee in the realm of reporting companies. Set out below is a description of the education and experience of each member of the Fission Audit Committee that is relevant to the performance of her or his responsibilities as an audit committee member.

Mr. Frank Estergaard	Mr. Estergaard is a Chartered Accountant who retired as a Partner with KPMG in 2001. His career with KPMG spanned 38 years, providing audit, taxation and business advice to clients in Vancouver, Vernon, Ottawa and Kelowna. He served a wide variety of corporations in the forestry, mining, real estate and land development, high technology, manufacturing, wholesale and retail industries. These companies ranged from start-ups to mature enterprises with both domestic and world-wide operations. In addition, he served on the Management Committee and Partnership Board of KPMG. Following his retirement from KPMG, Mr. Estergaard has served as a Director and Chairman of the audit committee of QHR Technologies Inc. (TSX-V), the CFO of Metalex Ventures Ltd. (TSX-V) and the CFO for a private company, Rackforce Networks Inc. Mr. Estergaard was awarded a B.Com from the University of British Columbia in 1963, was granted the designation of a Chartered Accountant in British Columbia in 1965 and in Ontario in 1989.
Mr. William Marsh	Mr. Marsh is an independent consultant providing drilling advice to both public and private companies operating in Canada and internationally, including preparing and administering project budgets. Mr. Marsh has served as a director and/or member of the audit committee of several publicly traded companies, including Predator Capital Inc., Wolf Capital Corp. and Ballyliffin Capital Corp. Previously, Mr. Marsh administered large-scale budgets while working for Chevron Canada Resources.
Mr. Anthony Milewski	Mr. Milewski holds a B.A. in Russian history from Brigham Young University, an M.A. in Russian and Central Asian Studies from the University of Washington, and a J.D. from the University of Washington. He holds an LLM in Corporate Finance from the Russian Academy of Sciences. He is an expert on uranium industry supply and demand dynamics, has considerable experience in paper and physical uranium trading and is a frequent speaker at industry conferences. He has also managed numerous mining investments at various stages of development, including exploration, development and production and has served as a director of both public and private companies. Prior to founding Black Vulcan Resources, Mr. Milewski worked at Firebird Management, a specialist emerging market fund, where he focused on natural resource investments in Africa, Central Asia and the Former Soviet Union.

Audit Committee Mandate

The Company has adopted a Mandate of the Audit Committee of the Board of Directors, which is attached as Schedule "A" to this AIF.

Audit Committee Oversight

During the most recently completed financial year, the Company's Board of Directors has not failed to adopt a recommendation of the audit committee to nominate or compensate an external auditor.

Reliance on Certain Exemptions

During the most recently completed financial year Fission relied on the exemption in Section 6.1 of NI 52-110 from the requirements of Part 3 (Composition of the Audit Committee) and Part 5 (Reporting Obligations).

Pre-Approval Policies and Procedures

Fission's Audit Committee Mandate requires that management seek approval from the Audit Committee of all non-audit services to be provided to Fission or any of its subsidiaries by Fission's external auditor, prior to engaging the external auditor to perform those non-audit services.

External Auditor Service Fees

In the following table, "audit fees" are fees billed by the Company's external auditor from the Company's incorporation on February 13, 2013 until the fiscal year ended June 30, 2014. "Audit-related fees" are fees not included in audit fees that are billed by the auditor for assurance and related services that are reasonably related to the performance of the audit or review of the Company's financial statements. "Tax fees" are fees billed by the auditor for professional services rendered for tax compliance, tax advice and tax planning. "All other fees" are fees billed by the auditor for products and services not included in the foregoing categories.

The fees paid by the Company to its auditor from its incorporation to June 30, 2014 are as follows:

Financial Period Ending	Audit Fees	Audit Related Fees	Tax Fees	All Other Fees
June 30, 2014	$233,766	$44,100	Nil	$37,800
June 30, 2013[(1)]	Nil	Nil	$39,572	$6,000

Notes:

(1) Fees paid to Fission's former auditor, Ernst and Young LLP.

SCHEDULE A

FISSION URANIUM CORP.

AUDIT COMMITTEE MANDATE

---

1. Introduction

The Audit Committee (the "Committee" or the "Audit Committee") of Fission Uranium Corp. ("Fission" or the "Corporation") is a committee of the Board of Directors (the "Board"). The Committee shall oversee the accounting and financial reporting practices of the Corporation and the audits of the Corporation's financial statements and exercise the responsibilities and duties set out in this Mandate.

2. Membership

Number of Members

The Committee shall be composed of three or more members of the Board.

Independence of Members

Whenever reasonably feasible, members of the Audit Committee should be independent and shall have no direct or indirect material relationship with the Corporation. If less than a majority of the Board are independent, then a majority of the members of the Audit Committee may be made of members that are not independent of the Corporation, provided that there is an exemption in the applicable securities law, rule, regulation, policy or instrument (if any). "Independent" shall have the meaning, as the context requires, given to it in National Instrument 52-110 *Audit Committees*, as may be amended from time to time, subject to any exemptions or relief that may be granted from such requirements.

Chair

At the time of the annual appointment of the members of the Audit Committee, the Board shall appoint a Chair of the Audit Committee. The Chair shall be a member of the Audit Committee, preside over all Audit Committee meetings, coordinate the Audit Committee's compliance with this Mandate, work with management to develop the Audit Committee's annual work-plan and provide reports of the Audit Committee to the Board.

Financial Literacy of Members

At the time of his or her appointment to the Committee, each member of the Committee shall have, or shall acquire within a reasonable time following appointment to the Committee, the ability to read and understand a set of financial statements that present a breadth and level of complexity of accounting issues that are generally comparable to the breadth and complexity of the issues that can reasonably be expected to be raised by the Corporation's financial statements.

Term of Members

The members of the Committee shall be appointed annually by the Board. Each member of the Committee shall serve at the pleasure of the Board until the member resigns, is removed, or ceases to be a member of the Board. Unless a Chair is elected by the Board, the members of the Committee may designate a Chair by majority vote of the full Committee membership.

3. Meetings

Number of Meetings

The Committee may meet as many times per year as necessary to carry out its responsibilities.

Quorum

No business may be transacted by the Committee at a meeting unless a quorum of the Committee is present. A majority of members of the Committee shall constitute a quorum.

Calling of Meetings

The Chair, any member of the Audit Committee, the external auditors, the Chairman of the Board, or the Chief Executive Officer or the Chief Financial Officer may call a meeting of the Audit Committee by notifying the Corporation's Corporate Secretary who will notify the members of the Audit Committee. The Chair shall chair all Audit Committee meetings that he or she attends, and in the absence of the Chair, the members of the Audit Committee present may appoint a chair from their number for a meeting.

Minutes; Reporting to the Board

The Committee shall maintain minutes or other records of meetings and activities of the Committee in sufficient detail to convey the substance of all discussions held. Upon approval of the minutes by the Committee, the minutes shall be circulated to the members of the Board. However, the Chair may report orally to the Board on any matter in his or her view requiring the immediate attention of the Board.

Attendance of Non-Members

The external auditors are entitled to attend and be heard at each Audit Committee meeting. In addition, the Committee may invite to a meeting any officers or employees of the Corporation, legal counsel, advisors and other persons whose attendance it considers necessary or desirable in order to carry out its responsibilities. At least once per year, the Committee shall meet with management to discuss any matters that the Committee or management considers appropriate.

Meetings without Management

The Committee shall hold unscheduled or regularly scheduled meetings, or portions of meetings, at which management is not present.

Procedure

The procedures for calling, holding, conducting and adjourning meetings of the Committee shall be the same as those applicable to meetings of the Board.

Access to Management

The Committee shall have unrestricted access to the Corporation's management and employees and the books and records of the Corporation.

4. Duties and Responsibilities

The Committee shall have the functions and responsibilities set out below as well as any other functions that are specifically delegated to the Committee by the Board and that the Board is authorized to delegate by applicable laws and regulations. In addition to these functions and responsibilities, the Committee shall perform the duties required of an audit committee by any exchange upon which securities of the Corporation are traded, or any governmental or regulatory body exercising authority over the Corporation, as are in effect from time to time (collectively, the "**Applicable Requirements**").

Financial Reports

(a) **General**

The Audit Committee is responsible for overseeing the Corporation's financial statements and financial disclosures. Management is responsible for the preparation, presentation and integrity of the Corporation's financial statements and financial disclosures and for the appropriateness of the accounting principles and the reporting policies used by the Corporation. The auditors are responsible for auditing the Corporation's annual consolidated financial statements and for reviewing the Corporation's unaudited interim financial statements.

(b) **Review of Annual Financial Reports**

The Audit Committee shall review the annual consolidated audited financial statements of the Corporation, the auditors' report thereon and the related management's discussion and analysis of the Corporation's financial condition and results of operation ("**MD&A**"). After completing its review, if advisable, the Audit Committee shall approve and recommend for Board approval the annual financial statements and the related MD&A.

(c) **Review of Interim Financial Reports**

The Audit Committee shall review the interim consolidated financial statements of the Corporation, and the related MD&A. After completing its review, if advisable, the Audit Committee shall approve and recommend for Board approval the interim financial statements and the related MD&A.

(d) **Review Considerations**

In conducting its review of the annual financial statements or the interim financial statements, the Audit Committee shall:

(i) meet with management and the auditors to discuss the financial statements and MD&A;

(ii) review the disclosures in the financial statements;

(iii) review the audit report prepared by the auditors;

(iv) discuss with management and/or the auditors, as requested, any litigation claim or other contingency that could have a material effect on the financial statements;

(v) review the accounting policies followed and critical accounting and other significant estimates and judgements underlying the financial statements as presented by management;

(vi) review any material effects of regulatory accounting initiatives or off-balance sheet structures on the financial statements as presented by management, including requirements relating to complex or unusual transactions, significant changes to accounting principles and alternative treatments under Canadian GAAP;

(vii) review any material changes in accounting policies and any significant changes in accounting practices and their impact on the financial statements as presented by management;

(viii) review management's report on the effectiveness of internal controls over financial reporting;

(ix) review the factors identified by management as factors that may affect future financial results; and

(x) review any other matters, related to the financial statements, that are brought forward by the auditors, management or which are required to be communicated to the Audit Committee under accounting policies, auditing standards or Applicable Requirements.

(e) **Approval of Other Financial Disclosures**

The Audit Committee shall review and, if advisable, approve and recommend for Board approval financial disclosure in a prospectus or other securities offering document of the Corporation, press releases disclosing, or based upon, financial results of the Corporation and any other material financial disclosure, including financial guidance provided to analysts, rating agencies or otherwise publicly disseminated.

Auditors

(a) **General**

The Audit Committee shall be responsible for oversight of the work of the auditors, including the auditors' work in preparing or issuing an audit report, performing other audit, review or attest services or any other related work.

(b) **Nomination and Compensation**

The Audit Committee shall review and, if advisable, select and recommend for Board approval the external auditors to be nominated and the compensation of such external auditor. The Audit Committee shall have ultimate authority to approve all audit engagement terms and fees, including the auditors' audit plan.

(c) **Resolution of Disagreements**

The Audit Committee shall resolve any disagreements between management and the auditors as to financial reporting matters brought to its attention.

(d) **Discussions with Auditors**

At least annually, the Audit Committee shall discuss with the auditors such matters as are required by applicable auditing standards to be discussed by the auditors with the Audit Committee.

(e) **Audit Plan**

At least annually, the Audit Committee shall review a summary of the auditors' annual audit plan. The Audit Committee shall consider and review with the auditors any material changes to the scope of the plan.

(f) **Independence of Auditors**

At least annually, and before the auditors issue their report on the annual financial statements, the Audit Committee shall obtain from the auditors a formal written statement describing all relationships between the auditors and the Corporation; discuss with the auditors any disclosed relationships or services that may affect the objectivity and independence of the auditors; and obtain written confirmation from the auditors that they are objective and independent within the meaning of the applicable Rules of Professional Conduct/Code of Ethics adopted by the provincial institute or order of chartered accountants to which the auditors belong and other Applicable Requirements. The Audit Committee shall take appropriate action to oversee the independence of the auditors.

(g) **Evaluation and Rotation of Lead Partner**

At least annually, the Audit Committee shall review the qualifications and performance of the lead partner(s) of the auditors and determine whether it is appropriate to adopt or continue a policy of rotating lead partners of the external auditors.

(h) **Requirement for Pre-Approval of Non-Audit Services**

The Audit Committee shall approve in advance any retainer of the auditors to perform any non-audit service to the Corporation that it deems advisable in accordance with Applicable Requirements and Board approved policies and procedures. The Audit Committee may delegate pre-approval authority to a member of the Audit Committee. The decisions of any member of the Audit Committee to whom this authority has been delegated must be presented to the full Audit Committee at its next scheduled Audit Committee meeting.

(i) **Approval of Hiring Policies**

The Audit Committee shall review and approve the Corporation's hiring policies regarding partners, employees and former partners and employees of the present and former external auditors of the Corporation.

(j) **Financial Executives**

The Committee shall review and discuss with management the appointment of key financial executives and recommend qualified candidates to the Board, as appropriate.

Internal Controls

(a) **General**

The Audit Committee shall review the Corporation's system of internal controls.

(b) **Establishment, Review and Approval**

The Audit Committee shall require management to implement and maintain appropriate systems of internal controls in accordance with Applicable Requirements, including internal controls over financial reporting and disclosure and to review, evaluate and approve these procedures. At least annually, the Audit Committee shall consider and review with management and the auditors:

(i) the effectiveness of, or weaknesses or deficiencies in: the design or operation of the Corporation's internal controls (including computerized information system controls and security); the overall control environment for managing business risks; and accounting, financial and disclosure controls (including, without limitation, controls over financial reporting), non-financial controls, and legal and regulatory controls and the impact of any identified weaknesses in internal controls on management's conclusions;

(ii) any significant changes in internal controls over financial reporting that are disclosed, or considered for disclosure, including those in the Corporation's periodic regulatory filings;

(iii) any material issues raised by any inquiry or investigation by the Corporation's regulators;

(iv) the Corporation's fraud prevention and detection program, including deficiencies in internal controls that may impact the integrity of financial information, or may expose the Corporation to other significant internal or external fraud losses and the extent of those losses and any disciplinary action in respect of fraud taken against management or other employees who have a significant role in financial reporting; and

(v) any related significant issues and recommendations of the auditors together with management's responses thereto, including the timetable for implementation of recommendations to correct weaknesses in internal controls over financial reporting and disclosure controls.

Compliance with Legal and Regulatory Requirements

The Audit Committee shall review reports from the Corporation's Corporate Secretary and other management members on: legal or compliance matters that may have a material impact on the Corporation; the effectiveness of the Corporation's compliance policies; and any material communications received from regulators. The Audit Committee shall review management's evaluation of and representations relating to compliance with specific applicable law and guidance, and management's plans to remediate any deficiencies identified.

Audit Committee Hotline Whistleblower Procedures

The Audit Committee shall establish procedures for (a) the receipt, retention, and treatment of complaints received by the Corporation regarding accounting, internal accounting controls, or auditing matters; and (b) the confidential, anonymous submission by employees of the Corporation of concerns regarding questionable accounting or auditing matters. Any such complaints or concerns that are received shall be reviewed by the Audit Committee and, if the Audit Committee determines that the matter requires further investigation, it will direct the Chair of the Audit Committee to engage outside advisors, as necessary or appropriate, to investigate the matter and will work with management and the general counsel to reach a satisfactory conclusion.

Audit Committee Disclosure

The Audit Committee shall prepare, review and approve any audit committee disclosures required by Applicable Requirements in the Corporation's disclosure documents.

Delegation

The Audit Committee may, to the extent permissible by Applicable Requirements, designate a sub-committee to review any matter within this mandate as the Audit Committee deems appropriate.

5. No Rights Created

This Mandate is a statement of broad policies and is intended as a component of the flexible governance framework within which the Audit Committee, functions. While it should be interpreted in the context of all applicable laws, regulations and listing requirements, as well as in the context of the Corporation's By-laws, it is not intended to establish any legally binding obligations.

6. Mandate Review

The Committee shall review and update this Mandate annually and present it to the Board for approval.