U3O8 CORP.

ANNUAL INFORMATION FORM
FOR THE FISCAL YEAR ENDED DECEMBER 31, 2013

March 26, 2014
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GENERAL

Reference is made in this annual information form (“AIF”) to the audited annual consolidated financial statements (the “Financial Statements”) and management’s discussion and analysis for U3O8 Corp. (the “Company”) for the fiscal years ended December 31, 2013 and December 31, 2012 together with the auditor’s report thereon.

The Financial Statements are available on SEDAR at www.sedar.com. Unless otherwise specified, all financial information in this AIF is prepared in accordance with International Financial Reporting Standards (“IFRS”), and references to “US$” are to United States dollars, and references to “$” or “Cdn$” are to Canadian dollars.

Unless otherwise indicated, information in this AIF is presented as at December 31, 2013.

FORWARD-LOOKING STATEMENTS

Except for statements of historical fact relating to the Company, certain information contained in this AIF constitutes “forward-looking information” under Canadian securities legislation. These statements relate to future events or the Company’s future performance. All statements other than statements of historical fact are forward-looking statements. Often, but not always, forward-looking statements can be identified by the use of words such as “plans”, “expects”, “is expected”, “budget”, “scheduled”, “estimates”, “continues”, “forecasts”, “projects”, “predicts”, “intends”, “anticipates” or “believes”, or variations of, or the negatives of, such words and phrases or state that certain actions, events or results “may”, “could”, “would”, “should”, “might” or “will” be taken, occur or be achieved. Forward-looking statements involve known and unknown risks, uncertainties and other factors, which may cause actual results to differ materially from those anticipated in such forward-looking statements. The forward-looking statements in this AIF speak only as of the date of this AIF or as of the date specified in such statement.

The following table outlines certain significant forward-looking statements contained in this AIF and provides the material assumptions used to develop such statements and material risk factors that could cause actual results to differ materially from the forward-looking statements.

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<th>Forward-Looking Statements</th>
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<td>Potential of U3O8 Corp’s properties to contain economic deposits, to become near-term and/or low-cost producers and to add to the existing resource base (including the potential of the Berlin Project to generate US$2.8 billion in revenue) (see “General Development of the Business” and “Material Properties”)</td>
<td>Availability of financing for our projects. Actual results of our exploration, resource goals, metallurgical testing, economic studies and development activities will be favourable. Technical reports prepared in accordance with National Instrument 43-101 (“NI 43-101”) including assumptions in the Preliminary Economic Assessment (“PEA”) on the Berlin Deposit and the technical report on the Laguna Salada Project are correct and comprehensive. Operating, exploration and development costs will be consistent with our expectations. Ability to retain and attract skilled staff. All requisite regulatory and governmental approvals will be received on a timely basis on terms acceptable to U308 Corp. including development of the Argentine deposit in compliance with Chubut Provincial mining law. Social engagement and local acceptance of our projects.</td>
<td>Changes in the capital markets impacting availability of future financings. Uncertainties involved in interpreting geological data and confirming title to acquired properties. Possibility of future exploration results, metallurgical test work, economic studies and development activities will not be consistent with our expectations. Variations from the technical reports including assumptions in the Berlin PEA and the technical report on the Laguna Salada Project. Inability to replicate laboratory and other smaller scale test results on a larger scale. Inability to attract and retain skilled staff. Increases in costs, environmental compliance and changes in environmental, local legislation and regulation, community support and the political and economic climate.</td>
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<td><strong>Forward-Looking Statements</strong></td>
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<td>Economic, political and industry market conditions will be favourable.</td>
<td>Delays in obtaining applicable permits or unavailability of permits. Price volatility of uranium and related commodities impacting the economics of our projects. Changes in Argentina’s proposed usage and availability of nuclear power.</td>
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<td>Potential to increase uranium and vanadium grades by 3-11 times at Laguna Salada by screening (see “General Development of the Business”)</td>
<td>Delays in completing the work being undertaken by external consultants on finalizing the PEA.</td>
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<td>Results from previous small scale metallurgical test work can be replicated on a larger scale.</td>
<td>Inability to replicate laboratory and other smaller scale test results on a larger scale.</td>
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<td>Expected completion of a PEA on the Laguna Salada Deposit (see “General Development of the Business”)</td>
<td>Timing of work to be completed and the ability to retain consultants to finalize the PEA.</td>
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<td>Results from previous small scale metallurgical test work conducted in multiple labs can be replicated on a larger scale. Test results from samples from 35% of the drill hole intercepts throughout the initial resource area are appropriately representative of the whole.</td>
<td>Possibility that the JV will not be formed and terms of agreement will be acceptable to the Company.</td>
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<td>Expected signing of a definitive joint venture (“JV”) agreement with Petrominera Chubut S.E. (“Petrominera”) (see “General Development of the Business”)</td>
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<tr>
<td>Inability to replicate laboratory and other smaller scale test results on a larger scale. Test results from samples from 35% of the drill hole intercepts throughout the initial resource area prove not to be adequately representative of the whole.</td>
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<td>Uranium and suite of other commodities of economic interest at Berlin can be extracted using a ferric iron leach method (see “Material Properties”)</td>
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<tr>
<td>Forward-Looking Statements</td>
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<td>By-product revenues at Berlin could pay for extraction of the uranium and make Berlin a potential zero cash cost uranium producer (see “General Development of the Business” and “Material Properties”)</td>
<td>Assumptions in the Berlin PEA are correct and comprehensive. Actual results of our exploration, resource goals, metallurgical testing, economic studies and development activities will be favourable. Operating, exploration and development costs will be consistent with our expectations. All requisite regulatory and governmental approvals will be received on a timely basis on terms acceptable to U3O8 Corp. Economic, political and industry market conditions will be favourable, including without limitation, the prices for applicable by-products.</td>
<td>Price volatility of uranium and other commodities associated with our deposits impacting the economics of our projects. Variations from the assumptions in the Berlin PEA. Possibility of future exploration results, metallurgical test work, economic studies and development activities will not be consistent with our expectations. Increases in costs, environmental compliance and changes in environmental, other local legislation and regulation and the political and economic climate. Delays in obtaining applicable permits or unavailability of permits.</td>
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<tr>
<td>Potential for higher returns than as set out in the Berlin PEA (see “General Development of the Business”)</td>
<td>Incorporating results from further metallurgical test work will contribute to reducing operating costs and increasing revenue. Economies of scale will be realized as anticipated. Increases in resource estimates.</td>
<td>Possibility of incorporating metallurgical test results will not have the effect of reducing operating costs and increasing revenue. Inability to achieve economies of scale and increase resource estimates.</td>
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<td>Potential to expand the NI 43-101 resources on U3O8 Corp’s existing projects and achieve its growth targets (see “General Development of the Business”)</td>
<td>Availability of financing. Actual results of our exploration, resource goals, metallurgical testing, economic studies and development activities will be favourable. NI 43-101 technical reports are correct and comprehensive. Operating, exploration and development costs will be consistent with our expectations. Ability to retain and attract skilled staff. All requisite regulatory and governmental approvals will be received on a timely basis on terms acceptable to U3O8 Corp. Social engagement and local acceptance of our projects. Economic, political and industry market conditions will be favourable.</td>
<td>Changes in the capital markets impacting availability of future financings. Uncertainties involved in interpreting geological data and confirming title to acquired properties. Possibility of future exploration results, metallurgical test work, economic studies and development activities will not be consistent with our expectations. Variations from the technical reports. Inability to attract and retain skilled staff. Increases in costs, environmental compliance and changes in environmental, local legislation and regulation, community support and the political and economic climate. Delays in obtaining applicable permits or unavailability of permits. Price volatility of uranium and other associated commodities impacting the economics of our projects.</td>
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**Forward-Looking Statements** | **Assumptions** | **Risk Factors**
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Plans, costs, timing and capital for future exploration and development of U3O8 Corp’s properties including the potential impact of complying with existing and proposed laws and regulations (see “General Development of the Business”) | Availability of financing. Actual results of our exploration, resource goals, metallurgical testing, economic studies and development activities will be favourable. Operating, exploration and development costs will be consistent with our expectations. Ability to retain and attract skilled staff. All requisite regulatory and governmental approvals will be received on a timely basis on acceptable terms including developing the Argentine deposit in compliance with Chubut Provincial mining law. Economic, political and industry market conditions will be favourable. | Changes in the capital markets impacting availability of future financings. Uncertainties involved in interpreting geological data and confirming title to acquired properties. Possibility of future exploration results, metallurgical test work and economic studies will not be consistent with our expectations. Inability to attract and retain skilled staff. Increases in costs, environmental compliance and changes in environmental, local legislation and regulation, community support and the political and economic climate. Delays in obtaining applicable permits or unavailability of permits. Price volatility of uranium and other commodities impacting the economics of our projects. |
Management’s outlook regarding future trends (see “General Development of the Business” and “Risk Factors – Global Economic Conditions”) | Availability of financing. Actual results of our exploration, resource goals, metallurgical testing, economic studies and development activities will be favourable. Prices for uranium and other commodities will be favourable to U3O8 Corp. Government regulation in Chubut Province will support development of our Argentine deposit. Fundamentals of the uranium market will be favourable. | Price volatility of uranium and other commodities impacting the economics of our projects, appetite for investing in uranium equities and growth in the nuclear industry. Possibility of future exploration results, metallurgical test work, economic studies and development activities will not be consistent with our expectations. Increases in costs, environmental compliance and changes in economic, political and industry market climate. |

Inherent in forward-looking statements are risks, uncertainties and other factors beyond U3O8 Corp’s ability to predict or control. Please also make reference to those risk factors listed in the “Risk Factors” section below. Readers are cautioned that the above chart is not exhaustive of the factors that may affect the forward-looking statements, and that the underlying assumptions may prove to be incorrect. Actual results and developments are likely to differ, and may differ materially, from those expressed or implied by the forward-looking statements contained in this AIF.

Forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause U3O8 Corp’s actual results, performance or achievements to be materially different from any of its future results, performance or achievements expressed or implied by forward-looking statements. All forward-looking statements herein are qualified by this cautionary statement. Accordingly, readers should not place undue reliance on forward-looking statements. The Company undertakes no obligation to update publicly or otherwise revise any forward-looking statements whether as a result of new information or future events or otherwise, except as may be required by law. If the Company does update one or more forward-looking statements, no inference should be drawn that it will make additional updates with respect to those or other forward-looking statements, unless required by law.
In addition, all disclosure contained herein concerning future plans for the Berlin Project as set forth under the heading “Material Properties” is subject to the assumptions and qualifications set forth in the Berlin Technical Report (as defined herein), which is incorporated herein by reference.

CORPORATE STRUCTURE

Name, Address and Incorporation

U3O8 Corp. was incorporated pursuant to the Business Corporations Act (Ontario) (the “OBCA”) on December 6, 2005. The Company’s registered and head office is at 8 King Street East, Suite 710, Toronto, Ontario, M5C 1B5.

The Company is a reporting issuer under applicable securities legislation in the each of the provinces of Canada other than Quebec. U3O8 Corp’s common shares are listed on the Toronto Stock Exchange (the “TSX”) under the symbol “UWE” and on the OTCQX International platform under the symbol “UWEFF”.

Intercorporate Relationships

Set forth below is a corporate organizational chart of U3O8 Corp., its subsidiaries and investee companies as of the date of this AIF and their respective jurisdictions of incorporation. The Company is a Canadian-based exploration company with projects in Argentina, Colombia and Guyana. The consolidated operations of the Company and its subsidiaries are referred collectively in this AIF as “we”, “our”, the “Company” or “U3O8 Corp.”

*Minexco – U3O8 Corp. holds approximately 8% of Minexco Minerals Corp’s shares outstanding with the potential to increase to 11% upon Guyanese government approval of the transfer of two remaining concessions.

GENERAL DEVELOPMENT OF THE BUSINESS

General

U3O8 Corp. is a Toronto-based company focused on exploration and development of uranium resources and associated commodities in South America. We are advancing a portfolio of resources in Argentina, Colombia and Guyana, all prepared in accordance with National Instrument 43-101 (“NI 43-101”). Each of these deposits is open along trend and/or at depth and have potential for significant resource growth. Through a sequenced growth strategy, we are positioning our Laguna Salada Deposit in Argentina as a potential, near-term uranium producer followed by the Berlin Deposit in Colombia, which will take longer to develop given its large size potential. Our focus on these projects aims to have potential uranium production costs among the lowest quartile in the uranium industry. The Laguna Salada and Berlin deposits are U3O8 Corp’s material properties.
Laguna Salada Deposit, Argentina

U3O8 Corp’s Laguna Salada Project is a near-surface, free-digging deposit in Chubut Province, Argentina. A NI 43-101 Indicated resource of 6.3 million pounds (“Mlb”) at 60ppm U₃O₈ and 57Mlb at 550ppm V₂O₅, and an Inferred resource of 3.8Mlb at 85ppm U₃O₈ and 27Mlb at 590ppm V₂O₅ have been defined on the project. Laguna Salada is being advanced as a potential near-term producer using relatively low-cost mining and processing techniques.

Mineralization occurs up to three metres (“m”) depth in flat-topped mesas. The uranium-vanadium occurs in soft, unconsolidated sandy gravel that requires no blasting or crushing. The preliminary economic assessment (“PEA”) underway on the project is modeling a continuous surface miner that skims off the top of the mesas with the gravel being wet-scrubbed and wet-screened to separate out the fine material that contains the mineralization. The water-washed pebbles and coarse sand would be immediately returned to the mined area. After mining, there would be little evidence that mining had occurred. Uranium grades can be increased between four and 11 times through this simple scrubbing and screening process, resulting in a uranium head grade of 620-670ppm U₃O₈ – similar to the feed grade of operating surficial uranium deposits elsewhere in the world. Inclusion of a hydrocyclone in the system to further process the fine material derived from the screening process results in approximately 80% of the gravel’s original uranium and 19% of its vanadium being concentrated in approximately 5% of the gravel’s original mass. This results in an increase of uranium grades of 15 times from the original grade of the gravel. Vanadium grades increase approximately 3.5 times through the hydrocyclone process. This implies that the average grade of the resource of 60ppm U₃O₈ would generate fines with a grade of 900ppm U₃O₈ and these fines would be alkaline leached.

The PEA being completed on Laguna Salada is based on the initial resource, which will provide the first estimates of capital and operating costs and the potential economic viability of the project.

Open pit mining and processing with cyanide are currently banned in Chubut Province. The continuous surface mining option being assessed in the PEA would see no open pit left after mining. Cyanide is also not used to process the mineralized material; therefore, the mining and processing methods contemplated for Laguna Salada are considered to be in compliance with current Chubut mining law.

U3O8 Corp. is also negotiating to joint venture (“JV”) with Petrominera Chubut S.E. (“Petrominera”), the province’s resource company. This proposed partnership would bring together the Laguna Salada Project and adjoining Petrominera concessions and establish the framework under which the Laguna Salada Deposit could be developed.

See also “Materials Properties” and “Risk Factors – Chubut Province Mining Ban”.

Berlin Project, Colombia

U3O8 Corp’s Berlin Project is in Caldas Province of central Colombia, which contains a uranium resource associated with a suite of other commodities in sandstone and limestone. We have defined a maiden NI 43-101 resource of 1.5Mlb Indicated uranium resources as well as Inferred resources of 19.9Mlb of uranium, plus resources of phosphate, vanadium and other metals in a three kilometre (“km”) segment of a 10.5km mineralized trend at Berlin.
Initial metallurgical results returned excellent recoveries including 96% for uranium, 99% for phosphate and 66% for vanadium. While conducted early in the life of the project, a PEA reported positive economics on Berlin based on just one-third of the resource potential defined on the property to date. Our exploration suggests that the entire 10.5km Berlin trend could contain a conceptual uranium target of 60-80Mlb\(^1\). Notably, the PEA showed that the uranium in the Berlin deposit could be produced at zero cash cost thanks to the revenue generated from associated by-products. An increase in the deposit size and optimization of the metallurgical process and mine design should further enhance the economics of the Berlin Project. See also “Material Properties”.

**Kurupung Project, Guyana**

U3O8 Corp’s exploration drilling shows that the Kurupung Project in Guyana is geologically similar to albitite-hosted uranium systems worldwide that typically host 60-130Mlb\(^2\) of uranium with average grades of 0.06%-0.10% \(U_3O_8\), contained in multiple structures. A NI 43-101 resource of 8.4Mlb Indicated at 0.09% \(U_3O_8\) and 7.7Mlb Inferred at 0.08% \(U_3O_8\) has been estimated from four of 10 mineralized structures identified in the Kurupung Project to date. Mineralization remains open in all of the structures. Based on this initial resource and scout drilling, the Kurupung Project may contain a conceptual uranium target of 13-18Mt at a grade of 0.08-0.10% \(U_3O_8\) (30-35Mlb\(^3\)). While new compelling targets that warrant drilling have been identified through exploration, further field work has been curtailed until capital markets improve.


**Grassroots Exploration**

U3O8 Corp. has interests in a number of early-stage uranium properties in Colombia, Argentina and Guyana as well as interests in the following investee companies that have reconnaissance properties:

**South American Rare Earth Corp. (“SAREC”) – 12.7% owned by U3O8 Corp.**

SAREC is a private rare earth company in which U3O8 Corp. also has a 2% net smelter royalty (“NSR”) on SAREC’s Jasimampa property in Santiago del Estero Province, Argentina. U3O8 Corp. is directing exploration activities for SAREC, which is focused on its early-stage Jasimampa Project – a target that shows promise for light rare earths, mainly cerium, lanthanum and neodymium, as well as potentially for phosphate. An airborne geophysics survey has identified two large targets. A non-cash impairment charge of the Company’s non-core investment in SAREC has been recognized as nil in light of the ongoing uncertain market climate for rare earth projects and further exploration on Jasimampa has been put on hold.

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\(^1\) Based on the resource and scout drilling, there is a conceptual uranium target of 27-36 million tonnes (“Mt”) at 0.09% to 0.11% \(U_3O_8\) (~60-80Mlb \(U_3O_8\)) on the entire 10.5km of the Berlin trend. Potential quantity and grades are conceptual in nature. There has been insufficient exploration to define a mineral resource north of the current Berlin resource area, and it is uncertain if further exploration will result in additional mineral resources being delineated on the property.

\(^2\) Comparison of the Kurupung Project with other uranium deposits is conceptual in nature. There is no certainty that further exploration on the Kurupung will result in the delineation of a similar size mineral resource.

\(^3\) Potential quantity and grades are conceptual in nature. There has been insufficient exploration to define a mineral resource beyond the current Kurupung resource, and it is uncertain if further exploration will result in additional mineral resources being delineated on the property.
Minexco Minerals Corp. (“Minexco”) – 8% owned by U3O8 Corp. 4

The interest in Minexco provides U3O8 Corp’s shareholders with exposure to promising reconnaissance targets for gold and iron-oxide-copper-gold. Funded by Minexco, reconnaissance exploration is being carried out by a unit of U3O8 Corp’s Guyana team on a contract basis.

See “Description of Business”.

Three Year History

2011

In February, 2011, U3O8 Corp. raised gross proceeds of $20.5 million in a bought deal private placement of 24,150,000 units at $0.85 per unit. Each unit consisted of one common share and one-half of one warrant. Each whole warrant entitled the holder to acquire one additional common share at $1.00 for two years, which warrants expired in February 2013.

In March 2011, U3O8 Corp. spun out its non-core Jasimampa rare earth property in Santiago del Estero Province, Argentina into a new private company, SAREC. Subsequently in May 2011, gross proceeds of $4.5 million were raised for SAREC in a private placement of 22,577,900 units at $0.20 per unit. Each unit consists of one common share of SAREC and one-half of a warrant. Each full warrant is exercisable into one SAREC common share at $0.30 for a period ending on the earlier of (i) 24 months following the public listing of the SAREC common shares; and (ii) May 18, 2016.

In April 2011, U3O8 Corp. reported an initial uranium-vanadium NI 43-101 resource estimate on its Laguna Salada Project in Argentina. Subsequently in September 2011, metallurgical test results showed that the upgraded fine metal-rich material in the Guanaco area (which accounts for 90% of the deposit) can be extracted with alkaline reagents achieving maximum recoveries of 94% for uranium and 51% for vanadium in a leach time of only four hours.

In August, 2011, U3O8 Corp. announced the appointments of Hugo Bastias to Executive Vice President, Elpidio Reis to Chief Operating Officer and Gabriel Bastias to Vice President of Exploration – key roles in supporting our rapid resource growth plans while positioning the Company to move forward with scoping studies.

2012

In January 2012, U3O8 Corp. reported an initial multi-commodity NI 43-101 resource estimate on its Berlin Project in Colombia. In addition, initial metallurgical test results derived from a two-step ferric leach process returned extraction rates of 96% for uranium, 99% for phosphate, 66% for vanadium, 86% for yttrium (a heavy rare earth); 60% for neodymium (a rare earth key in the making of powerful magnets particularly well suited to electric motors and generators), 96% for zinc, 66% for nickel, 51% for molybdenum and 33% for rhenium.

In February 2012, U3O8 Corp. raised gross proceeds of $11.5 million in a bought deal private placement of 19,205,000 units at $0.60 per unit. Each unit consisted of one common share and one-half of one warrant. One whole warrant entitled the holder to acquire one additional common share at a price of $0.80 for a 2-year period, which warrants expired in February 2014.

4U3O8 Corp. holds approximately 8% of Minexco’s shares outstanding with the potential to increase to 11% upon government approval of the transfer of two remaining concessions.
In April 2012, we acquired three mineral concessions from Pacific Bay Minerals Ltd. ("Pacific Bay"), which are contiguous with U3O8 Corp’s Cerro Solo East concessions adjacent to the state-owned Cerro Solo uranium deposit in Chubut Province, Argentina. As consideration for the properties, U3O8 Corp. issued 1.5 million common shares valued at $720,000 and paid $100,000 in cash to Pacific Bay. Pacific Bay retains a 2% NSR purchasable by U3O8 Corp. for $3 million at any time.

In May 2012 and August 2012, U3O8 Corp. began trading on the OTCQX International in the U.S. (symbol: UWEFF) and graduated to the main board on the TSX respectively. The OTQCX listing makes it easier for U.S. investors to trade our shares and helps to our broaden investor reach.

In May 2012, U3O8 Corp. doubled the NI 43-101 uranium estimate on its Kurupung Project in Guyana based on four of the 10 mineralized structures identified to date.

In December 2012, U3O8 Corp. raised gross proceeds of $846,194 by issuing 3,846,337 units at $0.22 per unit. Each unit consists of one common share and one-half of a warrant. One whole warrant entitles the holder to acquire one additional common share at $0.30 for a period of two years.

In December 2012, a PEA confirmed positive economics on the maiden uranium resource delineated on 3km of the 10.5 km Berlin trend in Colombia for a 15-year mine life from a 500,000 tonne (“t”) per year underground mine. Exploration drilling in 2012 has shown that similar mineralization and grades extend over an additional 3.3km north of the current deposit and this area is ready for resource drilling. Trenching has revealed uranium occurrences on the remainder of the trend. A larger resource should further enhance the project economics. See “Material Properties”.

2013

In January 2013, U3O8 Corp. raised gross proceeds of $2,315,500 by issuing 10,525,000 units at $0.22 per unit. Each unit consists of one common share and one-half of a warrant. One whole warrant entitles the holder to acquire one additional common share at $0.30 for a period of two years. Of the total proceeds, $2.2 million was satisfied by the issuance to U3O8 Corp. of common shares in Pinetree Capital Ltd. (“Pinetree”) (TSX: PNP).

In April 2013, gross proceeds of $405,000 were raised in a non-brokered private placement through the issue of 2,025,000 units at $0.20 per unit. Each unit consists of one common share and one-half of a warrant. Each whole warrant entitles the holder to purchase one additional common share at $0.30 per share for a 2-year period.

In February 2013, the Berlin PEA was filed, which showed that the uranium could be produced at $0 per pound ("lb") thanks to the revenue from the associated by-products of phosphate, vanadium, nickel, rare earths and other metals covering the costs of extracting the uranium. The PEA valued Berlin at a net present value (“NPV”) of US$223 million at a 10% discount with an internal rate of return (“IRR”) of 19%.

In May 2013, U3O8 Corp. acquired Calypso Uranium Corp. (“Calypso”), which extended our strategic land position around Argentina’s two largest known uranium deposits, Cerro Solo and Sierra Pintada, and sets up a strong pipeline of projects for exploration after our Laguna Salada Deposit. The transaction also added about $3.3 million in cash. As consideration, the Company issued 20,252,327 common shares in U3O8 Corp. to Calypso shareholders.

Based on the initial NI 43-101 resource estimate and positive metal recoveries reported to date, a PEA was commenced in 2013 on U3O8 Corp’s Laguna Salada Deposit in Argentina towards the goal of showing that this project could be a near-term, low-cost uranium producer. To this end, in August 2013, we also announced the signing of a LOI to JV with Petrominera, Chubut’s resource company, that would bring together Petrominera’s mineral concessions onto which we believe our deposit extends to create an enlarged Laguna Salada Project as well as laying down a framework under which the Laguna Salada Deposit could be developed.
In November and December 2013, U3O8 Corp. reported on two new mineralized areas, which highlight the district-scale potential for Laguna Salada style uranium-vanadium in near-surface, soft gravels in Chubut, Argentina – and with further exploration, these new discoveries could contribute significantly to our current resource in the Laguna Salada region. The La Rosada discovery has the highest uranium-vanadium grades found to date in the district. A second discovery, La Susana, is a potentially large area covering over 100 square kilometres (“km²”) of shallow mineralization located on the southern extension of our Laguna Salada Deposit.

In December 2013, gross proceeds of $350,000 were raised in a non-brokered private placement through the issue of 3,500,000 units at $0.10 per unit. Each unit consists of one common share and one warrant. Each warrant entitles the holder to purchase one additional common share at $0.15 per share for a 5-year period.

U3O8 Corp. is advancing a sequenced growth strategy with the focus on its Argentina deposit given its near-term production profile, followed by its Berlin Deposit in Colombia that will take longer to develop due to its large size potential but could also be a very low-cost uranium producer. However, additional drilling towards expanding the current resource and optimization work on the metallurgy and mine design that are likely to have a positive impact on the economics of the Berlin Project will be deferred until market conditions improve.

2014 to date

In January 2014, U3O8 Corp. granted rights to a 100 hectare (“Ha”) area of its Carina property in Chubut Province, Argentina to an Argentine operator for which U3O8 Corp. will receive annual cash option payments and a 7.5% NSR on the potential production of frac sand for use in the shale oil and gas industry. The Carina property provides U3O8 Corp. with the opportunity to generate income in the short-term while giving its shareholders exposure to a fast-growing market. Although we are evaluating various options for this non-core asset, Carina will likely be vended to a company focused on frac sand to maximize this opportunity.

In January 2014, U3O8 Corp. raised gross proceeds of $400,000 in a non-brokered private placement through the issue of 3,333,333 units at $0.12 per unit. Each unit consists of one common share and one share purchase warrant. Each warrant entitles the holder to purchase one additional common share at $0.21 per share for a 5-year period.

On February 14, 2014, $396,000 in gross proceeds were raised in a non-brokered private placement by the Company whereby 3,600,000 units at $0.11 per unit were issued. Each unit comprises of one common share and one share purchase warrant. Each warrant entitles the holder to purchase one additional common share at $0.18 per share for a 5-year period.

On February 28, 2014, gross proceeds of approximately $840,200 were raised by the Company through the issue of 6,463,070 units at $0.13 per unit in a first tranche of an oversubscribed offering for an aggregate of approximately $1,150,000. The balance of $309,840 was completed on March 13, 2014 by issuing an additional 2,383,384 units. Each unit consists of one common share and one share purchase warrant, of which each warrant entitles the holder to purchase one additional share at $0.18 for a 2-year period.

U3O8 Corp’s focus is to complete the PEA on the Laguna Salada Deposit in Argentina and also negotiating a definitive agreement to partner with the Chubut provincial resource company – key milestones targeted towards positioning Laguna Salada as a project that could be moved into production using low-cost mining and processing methods and within a relatively short timeframe. In addition, the plan is to advance other discoveries in the district to expand the current resource and commence pilot plant work towards a feasibility study on Laguna Salada.

Further exploration and work will be undertaken on the Company’s Colombia deposit and other projects towards the goal of expanding our resource portfolio as capital markets improve.

Technical Disclosure

Unless otherwise specified, all disclosure of a scientific or technical nature contained in this AIF has been prepared by or under the supervision of Dr. Richard Spencer, the President and Chief Executive Officer (“CEO”) of U3O8 Corp. and a qualified person (“QP”) within the meaning of NI 43-101.
DESCRIPTION OF BUSINESS

General

U3O8 Corp. is a Toronto-based resource company focused on exploration and development of uranium resources and related “green commodities” in South America. Our objective is to advance projects in Argentina, Colombia and Guyana that could significantly grow our portfolio of mineral resources and lead to potentially economically viable deposits towards potential development. We hold a 100% interest in our principal properties, the Laguna Salada and Berlin deposits. See “Material Properties”.

Other Assets

U3O8 Corp. also holds (i) a 100% interest in the Kurupung Uranium Project in Guyana; (ii) a 100% interest in its Carina property in Argentina for frac sand potential, and (iii) minority interests in early-stage companies, SAREC in Argentina and Minexco in Guyana, which are exploring for rare earth elements and gold-copper respectively.

Employees

As at December 31, 2013, U3O8 Corp. had 47 employees (36 employees as at the date of this AIF). We are dependent on key executives, including the President and CEO, and a small number of highly skilled executives and personnel with extensive experience in the mineral exploration industry and are complemented by a strong Board of Directors. See “Directors and Officers” and “Risk Factors – Key Personnel”.

Environmental Protection

All phases of U3O8 Corp’s operations are subject to environmental regulation in the various jurisdictions in which it operates, or to Canadian standards, whichever is most rigorous. These regulations mandate, among other things, the maintenance of air and water quality standards and land reclamation. They also set forth limitations on the generation, transportation, storage and disposal of solid and hazardous waste. To date, applicable environmental legislation has had no material financial or operational effects upon the operations of U3O8 Corp.

Nonetheless, we have been pro-actively undertaking environmentally-responsible initiatives to minimize our footprint during exploration. See “Social and Environmental Policies”.

Foreign Operations

The majority of U3O8 Corp’s operations are currently conducted in Argentina, Colombia and Guyana, South America. We endeavour to maintain regular communication with State and mining authorities, local officials, and leaders and residents of our host communities through project reports, briefings, workshops and information sessions as well as site visits. We strive to foster transparency in our operations.

Argentina

U3O8 Corp’s interest in the Laguna Salada Project in Chubut Province, Argentina is held through either exploration or mining permits, both of which confer exclusive rights, and are granted by the Provincial Mining Authority.

Exploration permits are granted for a fixed period of time, based on the extent of the area applied for, and provide the right to explore for specified minerals within a defined area. No renewals or extensions of the exploration term originally granted are allowed. If potentially significant mineralization is discovered during the exploration period, the holder of the exploration right is entitled to apply for a mining permit. The mining permit is for an indefinite term. In order to maintain the exploration and mining permits in good standing, U3O8 Corp. is required to: (i) make an annual payment to the provincial government; (ii) file a working and investment plan, and (iii) submit an environmental impact assessment.
Colombia

The exploration and exploitation of mining resources, such as uranium, are formalized by the execution of a concession contract with the national mining authority pursuant to the mining legislation, Law No 685/01, duly amended by Law 1382 of 2010. U3O8 Corp’s interest in the Berlin Project in Caldas Province, Colombia is held through concession contracts, which are managed by the mining authority of the Caldas Provincial Government (“Mining Authority”). By means of Decree 4134 of November 3, 2011, the Colombian Government created the National Minerals Agency, which assumed responsibility for the granting, execution and administration of concession contracts throughout Colombia in May 2012. The concession contracts for the Berlin Project convey the exclusive right to explore the defined areas for specified minerals. A concession owner has the first right to apply for the inclusion of additional commodities to the original contract.

The concession contracts for the Berlin Project were registered prior to implementation of Law 1382 of 2010. These concessions have a 30-year term, which is automatically extended for 30 additional years. Such first term comprises three phases: (i) exploration – three years with possible extension for eight additional years; (ii) construction – three years for the construction and assembly of the infrastructure, extendable for one additional year; and (iii) exploitation – the remaining years for the exploitation stage, extendable for a further 30 years upon request by the concession holder. Concession contracts granted after February 9, 2010, when Law 1382 of 2010 was issued, have the same initial 30-year term, and can be extended for an additional 20 year term. In addition, the 5-year term for the exploration phase may be extended for a total of 11 years prior to the construction phase. Surface rights, which must be negotiated directly with the landowners, are separate from the exploration or mining rights. Concession contracts are renewed annually, provided that work commitments and property payments due to the Mining Authority are met. An environmental insurance policy must be in effect during the full term of the concession contract. No environmental license is required during the exploration stage; however, all work must be done in accordance with environmental guidelines issued by the Colombian Ministry of Mines and Energy and the Ministry of the Environment.

30 days prior to the expiration of the exploration period, the concession owner is required to file and obtain approval of a working and construction plan and environmental impact assessment from the relevant authorities in order to advance to the construction and assembly phase of the permit.

Guyana

U3O8 Corp’s interest in the Kurupung Project in Guyana is held through prospecting licenses (or prospecting licenses currently awaiting approval) granted by the Guyana Geology & Mines Commission (“GGMC”). A prospecting license confers the exclusive right to explore for specific minerals. Hence, there is precedent for the same geographic area to be held for different commodities by different companies. A prospecting license is granted for three years and may be extended, at the State’s discretion, for two periods of two years. There is precedent for further extensions at the State’s discretion. Licensees are required to: (i) make annual rental payments for each license; (ii) supply quarterly technical activity reports and an audited financial statement; (iii) submit an annual work program; (iv) meet the minimum expenditure requirement; and post an associated performance bond. Should the licensee relinquish part or all of the prospecting license area, he must submit an evaluation report on the work undertaken. Properties held under prospecting licenses are subject to ad hoc monitoring visits by technical staff of the GGMC. At any time during the term of the prospecting license, and for any part or all of the prospecting license area, the licensee may apply for a mining license, which is usually granted for 20 years or the life of the deposit, whichever is sooner. There is precedent for the extension of mining licenses. Application for a mining permit includes a positive feasibility study, mine plan, an environmental impact statement and an environmental management plan.

The current regulations include a provision for the filing of an Exploration Plan to satisfy the requirements of the Guyanese Environmental Protection Agency (“EPA”). This is a new requirement that was being implemented by the EPA and we understand that it is not fully functional as of the date of this AIF. The EPA has requested an exploration plan for review and approval prior to issuing the exploration permit, which we have submitted. A new requirement to be implemented in the near future will require permit holders to file a Deforestation Plan. This legislation is aligned with the Government’s Low Carbon Development Strategy as well as the Carbon Sequestration agreement signed by the Government of Guyana and the Government of Norway.
See “Risk Factors – Foreign Operations”.

**Competition**

The mineral industry is intensely competitive in all its phases. U3O8 Corp. competes with many other mineral exploration companies that have greater financial resources and different approaches to exploration. See “Risk Factors – Competition”.

**Social and Environmental Policies**

Fundamental to U3O8 Corp’s commitment to responsible exploration is respecting the environment in which we are exploring. We work with the host communities located near the exploration projects, to identify projects that could result in sustainable and tangible long-term benefits for the region. To that end, we engage in responsible environmental practices and health and safety programs for our employees and the community. We work jointly with the community to identify practical ways in which quality of life may be improved through better nutrition, water quality, health, education, employment and potential new small business opportunities.

Environmental initiatives include: (i) using man portable rigs that allow access to drill sites by path instead of roads to minimize forest clearing and associated erosion risk; (ii) limiting the number of paths between drill platforms by using an aerial cable system to transport equipment and personnel; (iii) restoring exploration areas with indigenous vegetation; (iv) maintaining a tree nursery to propagate indigenous and endemic species; and (v) appropriate handling of residual water and waste.

Social initiatives include: (i) a central community vegetable garden to promote a healthy diet, training on growing vegetables and assistance with the establishment of home gardens; (ii) help in developing tilapia ponds for the propagation of a good source of protein; (iii) improving potable water quality; (iv) providing transport for the State nurse to reach outlying communities; (v) implementing initiatives and seeking guidance on ways to control local health issues such as malaria and leishmaniasis; (vi) supporting learning through adult literacy, Kindergarten classes and university sponsorship; and (vii) supporting development of agri-businesses and small business ventures through assistance with the development of business plans to facilitate access to government grants and help to evaluate potential new crops and production techniques.

Precautionary measures are practiced for a safe and healthy workplace including successful malaria control, worker radiation monitoring devices, protective gear, controls designed to avoid contamination and implementation of appropriate monitoring procedures.

**MATERIAL PROPERTIES**

U3O8 Corp’s 100% interest in the Laguna Salada Project and Berlin Project represent its material properties.


The Laguna Salada Technical Report was undertaken by Neil Inwood of Coffey Mining Pty Ltd (“Coffey Mining”) at the time of the report along with additional author, John Goode (“Laguna Salada Technical Report Authors”). The Berlin Technical Report was completed under the supervision of Louis de Klerk and Pieter Niemann at Tenova Mining & Minerals, a part of the Techint Group, along with additional authors, Paul Miller, Pedro Vélez and Doug Corley (“Berlin Technical Report Authors”).
The Laguna Salada Technical Report and Berlin Technical Report (together the “Technical Reports”) were written in compliance with disclosure and reporting requirements set forth in NI 43-101. All of the authors are each a QP as defined in NI 43-101 and are independent of U3O8 Corp. See “Interests of Experts”. The following summaries of the Technical Reports are included herein with the consent of the respective authors.

Readers are cautioned that the Technical Reports summaries in this AIF should be read in the context of the qualifying statements, procedures and accompanying discussion within the complete Technical Reports and the summaries provided herein are qualified in their entirety by the Technical Reports. Capitalized and abbreviated terms appearing in the following summaries and not otherwise defined herein shall have the meaning ascribed to such terms in the respective Technical Report.

Laguna Salada Project

Summary


Location

The Laguna Salada Project is located in the central region of the Chubut Province, Argentina approximately 200km SE of the provincial capital, Rawson. The project comprises 17 licenses.

Ownership

Mineral properties that constitute the Laguna Salada Project are owned by U3O8 Corp. through its wholly-owned subsidiary Gaia. The Laguna Salada Project is held by the MMED branch registered in Argentina, a wholly-owned subsidiary of Gaia.

Geology, Mineralization and Resources

Uranium-vanadium mineralization (Table 1.3.1) at Laguna Salada is contained in flat-topped mesas that are 10m to 20m higher than the surrounding plain. The mineralized layer ranges between 0.2m and 1.5m thick, averaging 0.9m thick, and lies at surface to a maximum depth of 3m in unconsolidated sandy gravel. Carnotite, the principal uranium-vanadium mineral at Laguna Salada, occurs as a powdery filling between the sand grains and as a partial rim on pebbles in the gravel. Mineralization remains open in both the Guanaco and Lago Seco areas of Laguna Salada. Exploration of the possible extensions to the project will be deferred until there is clear progress on the proposed lifting of the open-pit mining ban that is currently in effect in Chubut Province.
**Exploration Concept**

U3O8 Corp. is targeting surficial uranium and vanadium in unconsolidated sandy gravel. Drilling through the gravels was not an effective method of exploration within the project area, so mechanized trenching using a backhoe was used.

**Metallurgical**

At Guanaco, wet scrubbing and screen tests indicate that up to 88% of the uranium and 39% of the vanadium can be screened into fines (-150μm) that represent 8% of the mass of the original conglomerate. The effect of wet screening is illustrated as follows:

- A head grade of 46ppm U was beneficiated to 528ppm by wet screening (-150μm fraction) and;
- A head grade of 195ppm V beneficiated to 1,060ppm in the -150μm fines.
- Sulphuric acid leach tests yielded recoveries of 74% for U and 86% for V with an acid addition of 295kg/t and an acid consumption in the fine fraction (8% of the original mass) of ~215kg per tonne of fines.

At Lago Seco, testwork indicates that up to 96% of the uranium and 61% of the vanadium are contained in fines (-150μm) that constitute 26% of the mass of the original conglomerate. The effect of wet screening on Lago Seco conglomerate, which has more fine material, is as follows:

- A head grade of 137ppm U beneficiated to 566ppm U in the -150μm fraction;
- A head grade of 233ppm V beneficiated to 673ppm in the -150μm fraction.
• Sulphuric acid leach tests yielded a recovery of 96% for U and 71% for V with an acid addition of 214kg/t and consumption of ~203kg sulphuric acid per tonne of -150μm fines (26% of the mass of the original gravel).

Exploration Status

The Laguna Salada Project represents an advanced exploration project with Indicated and Inferred resources being defined for both Guanaco and Lago Seco prospects.

Conclusions and Recommendations

Coffey Mining has reviewed the trenching, sampling, assaying and field procedures used by U3O8 Corp. and consider them to be of overall high quality. Further drilling for deeper targets should be undertaken using a combination of drilling methods (e.g. RC, ultrasonic, aircore) with assessment of their effectiveness. Assaying for the drillholes should consider both radiometric and chemical assaying methods.

Berlin Project

Summary

U3O8 Corp. engaged Tenova Mining & Minerals (Australia) Pty Ltd (formerly Bateman Engineering Pty Ltd) (“Tenova”) to undertake an independent PEA on its 100% owned flagship property, the Berlin Project, which is located in Caldas Province of central Colombia.

Subsequent to acquiring the Berlin Project in April 2010, U3O8 Corp. advanced an intensive exploration program, which has resulted in a maiden uranium resource supported by a suite of by-products including phosphate, vanadium, rare earths (yttrium and neodymium) and other metals delineated on one-third of the property to date. The Company has also achieved positive metallurgical results derived from extensive test work conducted by two independent laboratories that show the uranium and the suite of other commodities of economic interest at Berlin can be efficiently and effectively extracted using a ferric iron leach method. The PEA incorporates a complete flow sheet for processing of the Berlin material from beneficiation and extraction to recovery of the individual commodities.

The PEA provides a base case valuation for the project on the initial uranium resource estimated in accordance with NI 43-101 of 1.5Mlb at 0.11% U₃O₈ Indicated and 19.9Mlb at 0.11% U₃O₈ Inferred, defined on 3km of the 10.5 km mineralized trend at Berlin.

The PEA study used the base case uranium price of US$60 per pound (“lb”), which is the average reported price for long-term contracts over the previous 12 months (sources: UxC Consulting, TradeTech). The PEA is based on an average 1.2Mlb of uranium produced annually over a 15-year mine life from a 500,000t per year underground mine. The Berlin Project is expected to yield revenue of approximately US$429/t of mineralized material against an operating cost of US$233/t and generate cumulative cash flow of US$915 million over the mine life. Uranium revenue is cash-flow positive as revenue from the by-products, principally phosphate, vanadium, nickel and yttrium, should more than pay for mining and extraction of the uranium. Berlin’s pre-tax net NPV is US$192 million at a 10% discount with an IRR of 17%. The project would require a capital investment of US$450 million (including sustaining capital of US$43 million and a US$41 million contingency) with a pay-back period of 4.9 years.

Capital and operating costs were also estimated for an alternative case in which the mineralized material is not beneficiated using acetic acid before undergoing leaching by an acidic ferric iron leach, termed the non-acetic option. In the non-acetic option, capital expenditures would decrease to US$441 million (including sustaining capital and a US$41 million contingency). Revenue would decrease to US$406/t as no revenue would be generated from the gypsum produced as a by-product in the acetic step, against a lower operating cost of US$201/t. The non-acetic alternative is modestly more economic yielding an NPV of US$223 million at a 10% discount with an IRR of 19%.
An increase in resources should enhance the economics of the project for both base cases by extending the life of the mine and/or increasing the mining rate. Although the PEA indicates robust economics on the initial resource, given the large size potential of the Berlin deposit, recommendations are to concentrate first on expanding the size of the resource over the entire 10.5 km trend, and then upgrading of resources from Inferred to Indicated category towards advancing to pre-feasibility. In addition, ongoing metallurgical test work should continue to confirm, build on and refine the process to further reduce capital and operating costs that may have a positive impact on project economics. Hydrological and geotechnical studies are also recommended for incorporation in future conceptual mine designs.

The Berlin Technical Report has been prepared in compliance with NI 43-101 and Form 43-101F1. The PEA is preliminary in nature as it includes Inferred mineral resources that are considered too speculative geologically for economic consideration that would enable them to be classified as mineral reserves. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that the results obtained from the PEA will be realized.

Project Description

The Berlin Project is an advanced exploration project in Caldas Province, Colombia with defined Inferred and Indicated mineral resources of uranium, phosphate, vanadium, rare earths and other commodities contained within the same mineralized layer. The property is located about 80km northeast of the provincial capital, Manizales, and approximately 150km northwest of the national capital, Bogota. The project covers an area of 12,665Ha comprising five contiguous concessions, which are 100% owned by U3O8 Corp. through its wholly-owned subsidiary Gaia Energy Investments Ltd. (“Gaia Energy”). Two of the properties (664-17 and 736-17) within the Berlin Project are in the process of being transferred to Gaia Energy from AngloGold Ashanti Limited.

Geology and Mineralization

The Berlin Project lies on the eastern flank of the Cordillera Central where remnants of a mid-Mesozoic fluvio-marine sedimentary sequence overlie basement schists of the Cajamarca Complex. The sedimentary sequence that contains the mineralized unit at Berlin defines an upward-fining progression. This transgressive continental to marine sequence forms part of a large basin that extends from Colombia through Ecuador into Peru and the black shales constitute an important source bed for hydrocarbons in the region. The Colombian Andes developed in response to roughly east-west shortening in the mid-Pleistocene. Related deformation in the Berlin area resulted in the formation of the syncline that hosts the mineralization in the project area.

The Cretaceous strata form a 10.5km long, canoe-shaped fold (syncline) at Berlin. Folding of the lower Cretaceous sedimentary sequence at Berlin is assumed to have taken place in response to inversion of the basin which started in the Paleogene. The large extent of the alaskite batholith on the west, and the location of smaller alaskite batholiths on the east flank of the syncline at Berlin are believed to have played a key role in the mineralization of the sedimentary units at Berlin.

The Berlin Project is located within the zone of influence of the Palestina Fault System that forms the western bounding structure to the Cretaceous sequence in the Berlin area. The fault strikes 010° to 020° and can be traced over a distance of more than 400km. The eastern margin of the Cretaceous sequence in the Berlin area is marked by the San Diego Fault that is a north-striking splay that merges with the Palestina Fault near the northern tip of the Cretaceous sequence at Berlin.

The mineralized unit encountered in the drilling to date on the Berlin Project is in a sedimentary layer that lies beneath an organic-rich, black shale. The mineralized layer changes in composition from a sandstone in the near-surface oxidized zone to a carbonate rock in the unoxidized zone at depth. Mineralization lies at the top of this variable unit. Mineralization in the other commodities such as phosphate, vanadium and yttrium occurs in the same uranium-bearing layer.
Drilling has confirmed that mineralization encountered in trenches at surface extends to depth where it follows the asymmetric “U”-like cross-sectional shape of the fold. Microscopic study of drill core samples shows that uranium occurs mainly as the mineral uraninite that has a close association with organic carbon. The majority of the phosphate occurs as fine, crystalline fluorapatite \((\text{Ca}_5(\text{PO}_4)_2\text{F})\) masses in the sandstone, carbonate-bearing siltstone and carbonate rock. Most of the metals of potentially economic interest occur as phosphate minerals, or are associated with fluorapatite.

The mineralized unit has an average thickness of three metres (“m”) in the maiden resource area. Immediately north of the resource area, the mineralized unit thins in a 500m wide swath that extends across the syncline. North of this, the mineralized unit thickens and attains of exceeds the average thickness of the mineralized zone in the resource area.

The Berlin Project has shown remarkable geological continuity with the mineralization consistently intersected in a specific and easily identifiable limestone-sandstone unit in both the exploration and resource areas. The mineralized layer is sandwiched between conspicuous marker units that can be traced throughout the 6.3km of the 10.5km Berlin trend that has been drilled to date.

**Status of Exploration**

Prior exploration on the Berlin Project was conducted by the French company, Minatome, between 1978-1981 and culminated in the drilling of 11 bore holes for a total of 2,136m, the excavation of 20 trenches and three adits. Minatome made a historic resource estimate of 12.9Mt at 0.13% \(\text{U}_3\text{O}_8\) (38Mlb \(\text{U}_3\text{O}_8\)) on the southern 4.4km of the 10.5km long keel-shaped fold at Berlin (Castaño, 1981). Minatome’s historic estimate was not done in accordance with NI 43-101; and therefore, should not be construed as a current mineral resource, but is merely included for historical context of the project. Historic work did not include estimates for commodities other than uranium. Historic data from trenching also showed that anomalous grades of uranium continue along strike to the north.

U3O8 Corp. began exploration on the Berlin Project when it acquired the property in April 2010. Due to the stratiform nature of the mineralization at Berlin, the principal objective was to define the extent and consistency of the known mineralized layer through trenching and drilling. The project is in steep terrain in which trenches are excavated by hand in areas where the mineralization comes to surface and drilling is conducted from platforms cut into hillsides.

Trench sites were identified using historic data and geological maps from the Minatome exploration that indicated areas of outcropping mineralization. The majority of the trenches are located on the more accessible southern part and eastern flank of the syncline, where mineralization has been shown to occur over a strike distance of 8.5km. To date, 38 trenches have been excavated and assay results support follow up with drilling along the entire 10.5km trend at Berlin.

U3O8 Corp’s 2010-2011 drill program culminated in the drilling of 82 bore holes for 18,523m from which the initial Inferred and Indicated mineral resources were defined on the southern 3km of the 10.5km mineralized trend at Berlin. Additional wide-spaced exploration drilling of 15 holes for 6,445m of which 11 intersected mineralization, has shown similar grades of uranium and the other elements that extend over a further 3.3km of the trend and this area is ready for infill drilling. Trenching shows that the remaining 4.2km of the Berlin trend is mineralized and this portion has yet to be drilled.

Further exploration drilling is planned to show the size potential of the entire Berlin trend, to be followed by infill drilling in due course towards the goal of increasing the current mineral resource.

**Mineral Resource Estimates**

The PEA is based on a NI 43-101 resource estimate prepared by Coffey Mining and reported in the March 2, 2012 technical report. The initial resource estimate on the Berlin deposit was delineated on a 3km sector of a 10.5km mineralized trend. Mineral resources were estimated for uranium, phosphate, vanadium, yttrium, neodymium, nickel, molybdenum, rhenium and silver contained within the 0.04% \(\text{U}_3\text{O}_8\) mineralized shell (Coffey Mining, 2012).
As a result of the metallurgical test work, Coffey Mining was requested to estimate resources for zinc and calcite using the same model applied in the 2012 resource estimate (Coffey Mining, 2012), which have been included in the Berlin Technical Report. Metallurgical testing showed that zinc is efficiently extracted by the acidic ferric iron leach and easily recovered at little additional cost, and hence, although the grade of zinc in the mineralized material is not high, it provides a modest, positive contribution to revenue. Gypsum is an additional by-product generated from calcite when acetic acid is used in the beneficiation step of the metallurgical process on the Berlin Project. Therefore, a resource was estimated in order to incorporate gypsum revenue in the cash flow model for this PEA.

A recommended cut-off grade of 0.04% U₃O₈ has been used for the reported resource estimates summarized in Table 1-1.

### Table 1-1: Resource estimate summary for uranium and other commodities in the Berlin deposit at a cut-off grade of 0.04% U₃O₈

<table>
<thead>
<tr>
<th>Ni 43-101 Resource</th>
<th>Indicated</th>
<th>Inferred</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uranium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade (Mlb)</td>
<td>0.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Neodymium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade (t)</td>
<td>0.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Nickel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade (Mlb)</td>
<td>0.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Molybdenum</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade (Mlb)</td>
<td>0.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Rhenium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade (t)</td>
<td>0.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Silver</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade (Moz)</td>
<td>0.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Zinc</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade (Mlb)</td>
<td>0.6</td>
<td>8.1</td>
</tr>
<tr>
<td>Calcite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade (Mt)</td>
<td>0.6</td>
<td>8.1</td>
</tr>
</tbody>
</table>

No mineral reserve estimate has been undertaken for the Berlin Project at the date of this PEA.

**Mining Methods**

The PEA is based on an underground mine on the maiden resource and assumes that approximately 80% of the resource is mined with 20% left as pillars for mine support. After a first year mine production of 250,000t of mineralized material, the mine would ramp up to a production rate of 500,000t during a 15-year mine life. Planned daily output from the operation is 1,430t of mineralized material and 715t of waste.

Mineralization at Berlin lies in a specific layer that is “U”-shaped in cross section. The steeply inclined parts of the deposit require mining by cut and fill methods while the shallowly inclined parts use room and pillar mining techniques. Mine access is from a portal located at an elevation of 805m above mean sea level (“amsl”) via a 760m ramp at a 15% inclination.

Crushing and milling would be done in an underground chamber so that dust can be controlled to the highest safety standards. Initial tests show that the mineralized material is amenable to semi-autogenous grinding (“SAG”). In the base-case scenario in which mineralized material is treated with an acetic acid pre-leach, the volume of tailing is reduced to the extent that they could all be accommodated as backfill in the underground mine. In the alternative process, which eliminates the acetic acid pre-leach step, excess tailing would gravitate to a long-term storage facility located approximately 14km from the mine site.
Recovery Methods

A conceptual flow sheet was developed from extensive metallurgical test work on intercepts from 35% of all bore holes drilled in the initial resource area at Berlin. The process route has been designed to efficiently extract multiple commodities, to be versatile in terms of reagent consumption, to be compatible with standard recovery methods and to create an environmentally benign tailing. The three main components of this process are:

1. Beneficiation of the crushed mineralized material using acetic acid (vinegar) to remove calcite and concentrate the valuable commodities into 40-47% of the original mass, which makes the subsequent extraction and recovery processes more efficient, reduces capital and operating costs and decreases the volume of tailings by 50-60%;

2. Extraction of the metals and phosphate into a pregnant liquor solution (“PLS”) by an acidic ferric iron leach method. The rates of extraction achieved for each metal and phosphate is shown in Table 1-2; and

3. Recovery of the individual elements from the PLS by ion exchange (“IX”), solvent extraction (“SX”) and direct precipitation.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Extraction %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uranium</td>
<td>96.1</td>
</tr>
<tr>
<td>Phosphate</td>
<td>98.9</td>
</tr>
<tr>
<td>Vanadium</td>
<td>66.3</td>
</tr>
<tr>
<td>Yttrium</td>
<td>86.1</td>
</tr>
<tr>
<td>Neodymium</td>
<td>59.6</td>
</tr>
<tr>
<td>Nickel</td>
<td>65.9</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>51.4</td>
</tr>
<tr>
<td>Rhenium</td>
<td>32.8</td>
</tr>
<tr>
<td>Zinc</td>
<td>95.9</td>
</tr>
<tr>
<td>Silver</td>
<td>25.0</td>
</tr>
</tbody>
</table>

Table 1-2: Extraction rates of the metals and phosphate from the Berlin deposit

Project Infrastructure

The Berlin Project is in Caldas Province of central Colombia, and is favourably located between the country’s largest cities – 140km from Bogota and 100km from Medellin. The town of La Dorada is 60km east of the project and lies on the principal paved road between Bogota and Medellin. La Dorada provides port facilities on the Magdalena River, which is navigable by barge to the coastal port of Barranquilla. Barranquilla is the largest port in Colombia and provides access to the export destinations of the Caribbean, Central America, the southern U.S. and northern South America. A defunct railway line also runs from La Dorada to the port town of Santa Marta on the Caribbean coast. The Colombian government is reported to be planning to have the railway line operational in 2015, which would offer an alternative link between the project and the Caribbean coast.

Large volumes of quality water are available in the project area, although majority of the water used in the operation would come from the underground mine. The PEA indicates that about 75% of the required electricity for the plant can be produced from heat generated from a sulphuric acid plant that forms an integral part of the processing facility. The plant could supply about 46% of the power requirement for the entire Berlin operation. In addition, the project is planned to be linked to the 395 megawatt La Miel hydroelectric dam located about 12km from the Berlin Project. La Miel would serve as an additional power source.
Preliminary Economic Assessment

Based on the 12 month trailing average long-term uranium price of approximately US$60/lb, the PEA provides an independent valuation of a base case on the initial mineral resource defined to date on 3km of the 10.5km mineralized trend at Berlin.

The Berlin Project is expected to generate US$3.0 billion in revenue with free cash flow of US$915 million over the 15 year life of the mine. Highlights of the PEA are summarized in Table 1-3.

<table>
<thead>
<tr>
<th></th>
<th>Pre-tax, base case at US$60/lb uranium price, in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual mill throughput</td>
<td>500,000t</td>
</tr>
<tr>
<td>Total uranium produced</td>
<td>16.3Mlb</td>
</tr>
<tr>
<td>Annual uranium production</td>
<td>1.2Mlb</td>
</tr>
<tr>
<td>Mine life</td>
<td>15 years</td>
</tr>
<tr>
<td>Cumulative free cash flow</td>
<td>$915 million</td>
</tr>
<tr>
<td>NPV at 10% discount</td>
<td>$192 million</td>
</tr>
<tr>
<td>IRR</td>
<td>17%</td>
</tr>
<tr>
<td>Pay-back period</td>
<td>4.9 years</td>
</tr>
<tr>
<td>Cash cost per lb of U₃O₈, net of by-products</td>
<td>&lt;$0/lb</td>
</tr>
<tr>
<td>Capital investment</td>
<td></td>
</tr>
<tr>
<td>Initial capital</td>
<td>$366 million</td>
</tr>
<tr>
<td>Sustaining capital</td>
<td>$43 million</td>
</tr>
<tr>
<td>10% contingency</td>
<td>$41 million</td>
</tr>
<tr>
<td>Total Capital</td>
<td>$450 million</td>
</tr>
</tbody>
</table>

The PEA is preliminary in nature as it includes Inferred mineral resources that are considered too speculative geologically for economic consideration that would enable them to be classified as mineral reserves. Mineral resources are not mineral reserves and have not demonstrated economic viability. There is no certainty that the results of the PEA will be realized.

Berlin’s pre-tax NPV at a 10% discount is US$192 million. The project’s NPV and IRR are shown at various discount rates and uranium prices in Table 1-4. Berlin NPV’s sensitivity to a plus or minus 10% change in capital and operating expenditures is shown in Table 1-5.

The most significant contributors to revenue defined in the PEA are uranium (33%), phosphate (29%), nickel (14%), vanadium (9%) and yttrium (6%) would represent the most significant contribution to revenue at Berlin. The financial model shows that revenue from the by-products covers the cost of extracting the uranium, resulting in Berlin having a production cash cost of less than US$0 per pound of uranium. Gypsum (5% of revenue) is an additional by-product generated from calcite when acetic acid is used in the beneficiation step of the process. Commodity prices of the other elements used in the PEA are shown in Table 1-6.
An increase in resources is likely to result in a higher IRR from the current 17% by providing flexibility to extend the mine life and/or increase the mining rate.

Table 1-4: Sensitivity analysis of Berlin NPV (in US$ million) to uranium price

<table>
<thead>
<tr>
<th>Uranium Price</th>
<th>$40</th>
<th>$50</th>
<th>$60 (Base Case)</th>
<th>$70</th>
<th>$80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0%</td>
<td>$595</td>
<td>$755</td>
<td>$915</td>
<td>$1,074</td>
<td>$1,234</td>
</tr>
<tr>
<td>5%</td>
<td>$246</td>
<td>$346</td>
<td>$447</td>
<td>$546</td>
<td>$647</td>
</tr>
<tr>
<td>10%</td>
<td>$59</td>
<td>$126</td>
<td>$192</td>
<td>$258</td>
<td>$325</td>
</tr>
<tr>
<td>15%</td>
<td>($45)</td>
<td>$1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRR</td>
<td>12%</td>
<td>15%</td>
<td>17%</td>
<td>20%</td>
<td>22%</td>
</tr>
<tr>
<td>Pay-back period (years)</td>
<td>6.3</td>
<td>5.5</td>
<td>4.9</td>
<td>4.4</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Capital expenditures are less sensitive to discount rate due to the front-end nature of the initial capital costs.

Table 1-5: Berlin NPV (in US$ million) sensitivity to ±10% change in capital and operating costs

<table>
<thead>
<tr>
<th>Discount Rate</th>
<th>Base Case NPV</th>
<th>Effect on NPV of 10% Change in Operating Costs</th>
<th>Effect on NPV of 10% Change in Capital Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>0%</td>
<td>$915</td>
<td>$915 +/- $149</td>
<td>$915 +/- $45</td>
</tr>
<tr>
<td>5%</td>
<td>$447</td>
<td>$447 +/- $93</td>
<td>$447 +/- $40</td>
</tr>
<tr>
<td>10%</td>
<td>$192</td>
<td>$192 +/- $62</td>
<td>$192 +/- $38</td>
</tr>
<tr>
<td>15%</td>
<td>$47</td>
<td>$47 +/- $44</td>
<td>$47 +/- $35</td>
</tr>
</tbody>
</table>

Figures may not add due to rounding.

Table 1-6: Commodity prices used in the revenue estimates for the Berlin PEA

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Price US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>U₃O₈</td>
<td>60/lb</td>
</tr>
<tr>
<td>NH₄VO₃</td>
<td>9/kg</td>
</tr>
<tr>
<td>H₃PO₄ (Phosphoric acid)</td>
<td>1/kg</td>
</tr>
<tr>
<td>Y(OH)₃</td>
<td>50/kg</td>
</tr>
<tr>
<td>NiCO₃</td>
<td>9.25/lb</td>
</tr>
<tr>
<td>Nd(OH)₃</td>
<td>50/kg</td>
</tr>
<tr>
<td>Mo</td>
<td>12/lb</td>
</tr>
<tr>
<td>Zn</td>
<td>0.89/lb</td>
</tr>
<tr>
<td>Gypsum</td>
<td>30/t</td>
</tr>
</tbody>
</table>
Capital Costs

The PEA is based on an annual throughput of 500,000t of mineralized material with a capital investment of US$450 million including US$43 million in sustaining capital and US$41 million contingency (Table 1-7).

<table>
<thead>
<tr>
<th>Items</th>
<th>Capital costs (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>$74</td>
</tr>
<tr>
<td>Process plant</td>
<td>$195</td>
</tr>
<tr>
<td>Infrastructure and tailing management</td>
<td>$71</td>
</tr>
<tr>
<td>Other (EPCM, indirect costs, etc.)</td>
<td>$69</td>
</tr>
<tr>
<td>Contingency</td>
<td>$41</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$450</strong></td>
</tr>
</tbody>
</table>

Operating Costs

Operating costs for the Berlin Project are expected to average US$233/t of mineralized material including royalties and a 10% contingency (Table 1-8).

<table>
<thead>
<tr>
<th>Items</th>
<th>Cost per tonne (US$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue-based royalties</td>
<td>$18</td>
</tr>
<tr>
<td>Mining and dewatering</td>
<td>$60</td>
</tr>
<tr>
<td>Processing</td>
<td>$132</td>
</tr>
<tr>
<td>G&amp;A</td>
<td>$4</td>
</tr>
<tr>
<td>Contingency</td>
<td>$19</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>$233</strong></td>
</tr>
</tbody>
</table>

Non-Acetic Option

Capital and operating costs were also estimated for an alternative case in which the mineralized material is not beneficiated using an acetic acid before undergoing leaching with acidic ferric iron leach, referred to as the non-acetic option. In the non-acetic option, capital expenditures are estimated at US$441 million (including sustaining capital and a US$41 million contingency), which are summarized in Table 1-9. Revenue would be approximately US$406/t of mineralized material as no revenue would be generated from the gypsum as a by-product in the acetic step, against a lower operating cost of US$201/t of mineralized material. At a uranium price of US$60/lb, the non-acetic alternative is modestly more economic yielding an NPV of US$223 million at a 10% discount with an IRR of 19%. The project’s NPV and IRR, assuming a non-acetic option are shown at various discount rates and uranium prices in Table 1-10.
Table 1-9: Summary of capital costs – non-acetic option

<table>
<thead>
<tr>
<th>Items</th>
<th>Capital costs (US$ million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mining</td>
<td>$74</td>
</tr>
<tr>
<td>Process plant</td>
<td>$177</td>
</tr>
<tr>
<td>Infrastructure and tailing management</td>
<td>$84</td>
</tr>
<tr>
<td>Other (EPCM, indirect costs, etc.)</td>
<td>$65</td>
</tr>
<tr>
<td>Contingency</td>
<td>$41</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$441</td>
</tr>
</tbody>
</table>

Table 1-10: Sensitivity analysis of Berlin NPV to uranium price and discount rate – non-acetic option (in US$)

<table>
<thead>
<tr>
<th>Uranium Price</th>
<th>$40</th>
<th>$50</th>
<th>$60 (Base Case)</th>
<th>$70</th>
<th>$80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discount Rate</td>
<td>0%</td>
<td>$663</td>
<td>$822</td>
<td>$982</td>
<td>$1,142</td>
</tr>
<tr>
<td></td>
<td>5%</td>
<td>$291</td>
<td>$391</td>
<td>$491</td>
<td>$591</td>
</tr>
<tr>
<td></td>
<td>10%</td>
<td>$90</td>
<td>$157</td>
<td>$223</td>
<td>$290</td>
</tr>
<tr>
<td></td>
<td>15%</td>
<td>($21)</td>
<td>$24</td>
<td>$71</td>
<td>$117</td>
</tr>
<tr>
<td>IRR</td>
<td>14%</td>
<td>16%</td>
<td>19%</td>
<td>21%</td>
<td>23%</td>
</tr>
<tr>
<td>Payback period (years)</td>
<td>5.9</td>
<td>5.2</td>
<td>4.6</td>
<td>4.2</td>
<td>3.8</td>
</tr>
</tbody>
</table>

Conclusions

Berlin has shown remarkable geological continuity with the mineralization consistently intersected in a specific and easily identifiable limestone-sandstone unit that lies beneath an organic-rich black shale in both the resource and adjacent exploration areas. The mineralized layer is sandwiched between conspicuous marker units that are evident over a strike distance of 6.3km of the Berlin trend.

The mineralized unit at Berlin is similar to the shape of the hull of a canoe and recent drilling has shown that the deepest part of the keel reaches depths of over 700m below surface.

Grades intersected at depth along the keel are similar to assays obtained in trenches where the mineralized layer reaches surface on the eastern side of the fold. With scout drilling having defined the approximate shape of the mineralized unit along a further 3.3km segment of the Berlin trend beyond the current resource area, infill drilling would focus on the shallower parts of the eastern flank towards further resource growth.

Based on the similarity of average grades of the maiden resource with exploration drill results in the northern part of the trend, large increases are expected in resources of the other elements that occur with the uranium, namely: vanadium, phosphate, molybdenum, rhenium, rare earths (yttrium and neodymium) and nickel.

Trenching has added to the understanding of both the nature of mineralization and its continuity. Uranium grades obtained in drilling and trenching completed to date are consistent with that indicated by the historical work. The trench assay results further support the continued drilling of the deposit throughout the 10.5km Berlin trend.
A conceptual flow sheet has been developed from extensive metallurgical test work on intercepts from 34% of all bore holes drilled in the initial resource area at Berlin. The process comprises three main components: (1) beneficiation as a means of concentrating the commodities of value into as small a mass as possible for further processing; (2) extraction of the metals and phosphate by an acidic ferric iron leach method with excellent results; and (3) recovery of the individual elements from solution by IX, SX and direct precipitation.

The mineralization at Berlin is in a limestone that contains about 55% carbonate minerals (calcite) that consume acid that is required to leach the metals and phosphate from the mineralized rock. Beneficiation of the crushed mineralized material using acetic acid removes the calcite and concentrates the valuable commodities into 40-47% of the original mass, which makes the subsequent extraction and recovery process more efficient, reduces capital and operating costs and decreases the volume of tailings by 50-60%.

Financial modelling in the PEA shows that the uranium could be mined and recovered from Berlin at a zero cash cost, thanks to the revenue from the associated commodities.

Capital and operating costs were also estimated for an alternative case in which the mineralized material is not beneficiated using an acetic acid before undergoing acidic ferric iron leach, referred to as the non-acetic option.

It is important to note that the economic viability of the Berlin Project is not dependent on beneficiation by acetic acid and, in fact, the more economically attractive method is direct processing of the run-of-mine material without beneficiation with acetic acid.

Flotation is also being examined as an alternative beneficiation method to acetic acid leach as a means of selective removal of the carbonate from the mineralized material at Berlin. An advantage of using flotation is that the technique uses fewer reagents, although it would not result in a gypsum by-product credit for the project.

The PEA is based on the initial mineral resource defined on 3km of the 10.5km mineralized trend at Berlin and provides a base case from which the economics of the project can be improved as the size of the deposit increases through further resource drilling and as efficiencies are realized from ongoing metallurgical test work.

**Recommendations**

Although the PEA indicates robust economics on the initial resource, recommendations are to concentrate first on expanding the size of the resource over the entire 10.5km trend, and then on upgrading the mineral resource from Inferred to the Indicated category towards advancing to pre-feasibility studies. In addition, ongoing metallurgical test work should continue to test and refine the process and improve the efficiencies of extraction and recovery, which may have a positive impact on the economics of the project.

Based on the technical work completed to date, Tenova’s primary recommendations (budget estimate by U3O8 Corp.) include:

- Wide-spaced exploration drilling of the northern 4.2km of the mineralized trend at Berlin that remains to be explored to fully define the size potential of the Berlin deposit (budget $3.3 million);
- Infill drilling of the 3.3km of the mineralized trend that has already undergone exploration drilling with the aim of increasing the current Inferred mineral resources (budget $6.6 million);
- Infill drilling to upgrade the current and contiguous Inferred resources to the Indicated category (budget $11.0 million);
- On conversion of a significant part of Inferred mineral resources to Indicated, a pre-feasibility study should be undertaken on the potentially larger Berlin deposit; and
Metallurgical test work should continue with the aim of improving and refining the conceptual process. The focus of this test work should be on efficiently beneficiating the mineralized material, which could lead to capital and operating cost savings while maintaining the revenue stream. This test work should be of a level appropriate to pre-feasibility stage studies.

**RISK FACTORS**

An investment in the securities of U3O8 Corp. is highly speculative and involves numerous and significant risks. Such investment should be undertaken only by investors whose financial resources are sufficient to enable them to assume such risks and who have no need for immediate liquidity in their investment. Investors should carefully consider the risk factors described below, which have affected, and which in future are reasonably expected to affect, the Company’s business, financial condition and results of operations, or the trading price of the common shares.

**Exploration, Development and Operating Risks**

Mining and exploration operations generally involve a high degree of risk. U3O8 Corp’s operations are subject to all the hazards and risks normally encountered in the exploration, development and production of uranium and other minerals, including unusual and unexpected geologic formations, seismic activity, rock bursts, cave-ins, flooding and other conditions involved in the drilling and removal of material, any of which could result in damage to, or destruction of, mines and other producing facilities, damage to life or property, environmental damage and possible legal liability. Although adequate precautions to minimize risk will be taken, milling operations are subject to hazards such as equipment failure or failure of retaining dams around tailings disposal areas which may result in environmental pollution and consequent liability.

The exploration for and development of mineral deposits involves significant risks which may not be eliminated even with a combination of careful evaluation, experience and knowledge. While the discovery of uranium and other minerals may result in substantial rewards, few properties that are explored are ultimately developed into producing mines. Major expenses may be required to locate and establish mineral reserves, to develop metallurgical processes, and to construct mining and processing facilities at a particular site. It is impossible to ensure that the exploration or development programs planned by U3O8 Corp. will result in a profitable commercial mining operation. Whether a mineral deposit will be commercially viable depends on a number of factors, some of which are: the particular attributes of the deposit, such as the nature of the minerals that contain the commodities of interest, grade of mineralization and proximity to infrastructure; mineral and metal prices which are cyclical; and government regulations, including regulations relating to prices, taxes, royalties, land tenure, land use, importing and exporting of minerals, and environmental protection. The exact effect of these factors cannot be accurately predicted but the combination of these factors may result in the Company not receiving an adequate return on invested capital.

There is no certainty that the expenditures made by the Company towards the search and evaluation of uranium and other minerals will result in discoveries of commercial quantities of ore or other minerals and that a mining operation will be realized.

**Reliability of Resource Estimates**

There is no certainty that any of the mineral resources on any of U3O8 Corp’s properties will be mined. Until a deposit is actually mined and processed the quantity of mineral resources and grades must be considered as estimated only. In addition, the quantity of mineral resources may vary depending on, among other things, uranium prices. Any material change in quantity of mineral resources, ore grade or stripping ratio may affect the economic viability of any project undertaken by U3O8 Corp. In addition, there can be no assurance that uranium recoveries or other mineral recoveries in small scale laboratory tests will be duplicated in a larger scale test under on-site conditions or during large-scale production.
Fluctuations in uranium and other mineral prices, results of drilling, metallurgical testing and production and the evaluation of studies, reports and plans subsequent to the date of any mineral resource estimate may require revision of such estimate. Any material reductions in estimates of mineral resources could have a material adverse effect on U3O8 Corp’s results of operations and financial condition.

No History of Mineral Production

U3O8 Corp. has never had any interest in mineral producing properties. There is no assurance that commercial quantities of minerals will be discovered at any of the Company’s properties or any future properties, nor is there any assurance that the exploration programs of U3O8 Corp. will yield any positive results. Even if commercial quantities of minerals are discovered, there can be no assurance that any of U3O8 Corp’s properties will ever be brought to a stage where mineral resources can profitably be produced. Factors which may limit the ability of U3O8 Corp to produce mineral resources from its properties include, but are not limited to, the price of the minerals and metals which are currently being explored for, availability of additional capital and financing and the nature of the mineral deposits.

Chubut Provincial Ban on Open-Pit Mining and Cyanide Use

The Company’s Laguna Salada Project is located in Chubut Province, Argentina, in a jurisdiction where there is a ban on open-pit mining and cyanide use. Mining plans for Laguna Salada envision continuous mining that leads to reconstitution of the original topography with the excavated gravel and thus, no open pit will remain after mining. In addition, no cyanide will be used to process the mineralized material. Therefore, the mining and processing contemplated for Laguna Salada are considered by U3O8 Corp. to be in compliance with current mining legislation.

There are no assurances that the open-pit mining ban in Chubut could not materially impact U3O8 Corp’s ability to develop the Laguna Salada Project.

Ownership of Permits and Other Property Interests

Although ownership of the permits and property interests in Guyana, Colombia and Argentina were reviewed by or on behalf of the Company, there may still be undetected defects affecting such properties. Insurance generally is not available for ownership defects, and the Company’s ability to ensure that it has obtained secure claim to individual properties may be severely constrained. In addition, previous non-compliance with the terms of a given permit or concession in Colombia (whether on behalf of the Company or a previous owner) may result in the loss of all property interests in Colombia held by or on behalf of the Company, and may also result in sanctions against the Company which impact upon its ability to operate in Colombia for a specified period of time. Such properties may be subject to prior unregistered liens, agreements, transfers or claims, including native land claims, and title may be affected by, among other things, undetected defects. In addition, we may be unable to explore, and in the future, operate the land subject to such properties as permitted or to enforce its rights with respect to such land.

Insurance and Uninsured Risks

U3O8 Corp’s business is subject to a number of risks and hazards generally, including adverse environmental conditions, industrial accidents, labour disputes, unusual or unexpected geological conditions, ground or slope failures, cave-ins, changes in the regulatory environment and natural phenomena such as inclement weather conditions, floods, earthquakes and volcanic eruptions. Such occurrences could result in damage to mineral properties or production facilities, personal injury or death, environmental damage to our properties or the properties of others, delays in mining and or processing of the mineralized material, monetary losses and possible legal liability.
The Company currently maintains liability insurance and directors’ and officers’ insurance; however, such insurance will not cover all the potential risks associated with a mining and/or exploration operation. The Company may also be unable to maintain insurance to cover these risks at economically feasible premiums. Insurance coverage may not continue to be available or may not be adequate to cover any resulting liability. Moreover, insurance against risks such as environmental pollution or other hazards as a result of exploration and production is not generally available to the Company or to other companies in the mining and exploration industry on acceptable terms. U3O8 Corp. might also become subject to liability for pollution or other hazards which it may not be insured against or which the Company may elect not to insure against because of premium costs or other reasons. Losses from these events may cause the Company to incur significant costs that could have a material adverse effect upon its financial performance and results of operations.

Environmental Risks and Hazards

All phases of U3O8 Corp’s operations are subject to environmental regulation in the various 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 generation, 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 the operations of the Company. Environmental hazards may exist on the properties on which U3O8 Corp. holds interests that are unknown to it at present, and which have been caused by previous or existing owners or operators of the properties.

Government approvals, approval by local communities and or aboriginal people and permits are currently, and may in the future be, required in connection with the operations of the Company. To the extent such approvals are required and are not obtained, the Company’s operations may be curtailed or it may be prohibited from continuing its exploration operations or from proceeding with planned exploration or development of mineral properties.

Failure to comply with applicable laws, regulations and permitting requirements may result in enforcement actions thereunder, 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. Parties engaged in mining operations or in the exploration or development of mineral properties may be required to compensate those suffering loss or damage by reason of the mining or exploration activities and may have civil or criminal fines or penalties imposed for violations of applicable laws or regulations.

Amendments to current laws, regulations and permits governing operations and activities of mining and exploration companies, or more stringent implementation thereof, could have a material adverse impact on the Company and cause increases in exploration expenses, capital expenditures or production costs, or reduction in levels of production at producing properties, or require abandonment or delays in development of new mining or exploration properties.

An accident at a nuclear reactor anywhere in the world could affect the continued acceptance by the public and regulatory authorities of nuclear energy and the future prospects for nuclear generators, which could have a material adverse effect on the Company.

Infrastructure

Mining, processing, development and exploration activities depend on adequate infrastructure. Reliable roads, bridges, power sources and water supply are important determinants that affect capital and operating costs. Unusual or infrequent weather phenomena, sabotage, government or other interference in the maintenance or provision of such infrastructure could adversely affect the operations, financial condition and results of operations of the Company.
Competition

The mining and mineral exploration industry is competitive in all of its phases. The Company faces competition from other mining and exploration companies in connection with the acquisition of properties producing, or capable of producing, uranium, uranium oxide and other minerals. Many of these companies have greater financial resources, operational experience and technical capabilities than the Company. As a result of this competition, U3O8 Corp. may be unable to maintain or acquire attractive mining or exploration properties on terms we consider acceptable or at all. Consequently, the revenues, operations and financial condition of the Company could be materially adversely affected.

Nuclear energy competes with other sources of energy, including oil, natural gas, coal, hydro-electricity and other forms of renewable energy. These other energy 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, as well as the possibility of developing other low cost sources for energy, may result in lower demand for uranium. Furthermore, growth of the uranium and nuclear power industry will depend upon continued and increased acceptance of nuclear technology as a means of generating base load 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.

Additional Capital

The development and exploration of U3O8 Corp’s properties will require substantial additional financing. Capital markets have been challenging for exploration companies and are expected to continue to be volatile. Failure to obtain sufficient financing may result in the delay or indefinite postponement of exploration, development or production on any or all of our properties or a loss of property interest. There can be no assurance that additional capital or other types of financing will be available if needed or that, if available, the terms of such financing will be acceptable to the Company.

Commodity Prices

The price of U3O8 Corp’s common shares, its financial results and exploration, development and mining activities may be significantly and adversely affected by declines in the price of uranium oxide. The price of uranium oxide or other minerals fluctuates widely and is affected by numerous factors beyond the Company’s control such as interest rates, exchange rates, inflation or deflation, fluctuation in the value of the United States Dollar and foreign currencies, global and regional supply and demand, the political and economic conditions of major mineral-producing and uranium-producing countries throughout the world, and the cost of substitutes, inventory levels and carrying charges.

The market prices of uranium are affected by rates of reclaiming and recycling of uranium and rates of production of uranium from mining, and may be affected by a variety of unpredictable international economic, monetary and political considerations, including increased efficiency of nuclear power plants and increased availability of alternative nuclear fuel, such as mixed oxide fuel generated in part from weapons-grade plutonium.

Future serious price declines in the market value of uranium oxide or other minerals could cause continued development of and commercial production from our properties to be impracticable. Depending on the price of uranium oxide and other minerals, any cash flow from future mining operations may not be sufficient and we could be forced to discontinue production, if any, and may lose our interest in, or may be forced to sell, some of our properties. Future production, if any, from the mining properties of the Company is dependent upon the prices of uranium oxide and other minerals being adequate to make these properties economic.
In addition to adversely affecting the Company’s future reserve estimates (if any) and its financial condition, declining commodity prices can impact operations by requiring a reassessment of the feasibility of a particular project. Such a reassessment may be the result of a management decision or may be required under financing arrangements related to a particular project. Even if the project is ultimately determined to be economically viable, the need to conduct such a reassessment may cause substantial delays or may interrupt operations until the reassessment can be completed.

**Labour and Employment Matters**

While U3O8 Corp. has good relations with its employees, these relations may be impacted by changes in the scheme of labour relations which may be introduced by the relevant governmental authorities in whose jurisdictions the Company carries on business. Adverse changes in such legislation may have a material adverse effect on U3O8 Corp’s business, results of operations and financial condition.

**Subsidiaries**

The Company conducts certain of its operations through its subsidiaries, and holds certain of its assets through its subsidiaries. Accordingly, any limitation on the transfer of cash or other assets between the Company and its subsidiaries could restrict the Company’s ability to fund its operations efficiently. Any such limitations, or the perception that such limitations may exist now or in the future, could have an adverse impact on the Company’s valuation and stock price.

**Exchange Rate Fluctuations**

Exchange rate fluctuations may affect U3O8 Corp. Uranium oxide and other minerals are generally sold in US Dollars and our costs are incurred principally in US Dollars, Guyanese Dollars, Colombian Pesos and Argentine Pesos. The relative rate of exchange of the Canadian Dollar to the US Dollar or policy changes regarding the trading of the Guyanese Dollar, Colombian Peso and Argentine Peso can have an impact on the Company’s profitability and cash needs.

**Foreign Operations**

A majority of U3O8 Corp’s operations are currently conducted in Guyana, Colombia and Argentina, South America. U3O8 Corp’s operations are exposed to various levels of political, economic and other risks and uncertainties as they would be if these properties were held in Canada. These risks and uncertainties vary from country to country and include, but are not limited to, currency exchange rates; high rates of inflation; labour unrest; renegotiation or nullification including partial or total expropriation of existing or future concessions, licenses, permits and contracts; changes in taxation policies; restrictions on foreign exchange; and changing political conditions; currency controls and governmental regulations that favour or require the awarding of contracts to local contractors or require foreign contractors to employ citizens of, or purchase supplies from, a particular jurisdiction.

Changes, if any, in mining, exploration or investment policies or shifts in political attitude in Guyana, Colombia and Argentina may adversely affect the operations or profitability of the Company. Operations may be affected in varying degrees by government regulations with respect to, but not limited to, restrictions on production, price controls, export controls, currency remittance, income taxes, foreign investment, maintenance of claims, environmental legislation, land use, land claims of local people, water use and mine safety.

Failure to comply strictly with applicable laws, regulations and local practices relating to mineral right applications and tenure could result in loss, reduction or expropriation of entitlements.

The occurrence of these various factors and uncertainties cannot be accurately predicted and could have an adverse effect on the operations or profitability of the Company.
Government Regulation

The mining, processing, development and mineral exploration activities of the Company are subject to various laws governing prospecting, development, production, taxes, labour standards and occupational health, mine safety, toxic substances, land use, water use, land claims of local people, and other matters. Although the mining and processing operations and exploration and development activities of the Company are currently carried out in accordance with all applicable rules and regulations, no assurance can be given that new rules and regulations will not be enacted or that existing rules and regulations will not be applied in a manner which could limit or curtail exploration, production or development or that new legislation will be introduced or amended on terms that would allow mining where currently prohibited. Amendments to current laws and regulations governing operations and activities of mining and milling or more stringent implementation thereof could have a substantial adverse impact on the Company.

Key Personnel

U3O8 Corp. is dependent upon key executives, including the directors of the Company and a small number of highly qualified and experienced executives and personnel. Due to the relatively small size of the Company, the loss of these individuals or the inability to attract and retain highly qualified employees and advisers could have a material adverse effect on our business and future operations.

Conflicts of Interest

Directors and officers of U3O8 Corp. also serve, or may serve in future, as directors and/or officers of other companies involved in natural resource exploration and development and, consequently, there exists the possibility of such directors and officers being in a position of conflict. Any decision made by any of such directors and officers involving the Company should be made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of U3O8 Corp. and its shareholders. In addition, each of the directors is required to declare and refrain from voting on any matter in which such directors may have a conflict of interest in accordance with the procedures set forth in the Business Corporations Act (Ontario) and other applicable laws.

Market Price of Common Shares

U3O8 Corp’s common shares trade on the TSX and OTCQX International platform. Securities of micro-cap and small-cap companies have experienced substantial volatility in the past and currently, often based on factors unrelated to the financial performance or prospects of the companies involved. These factors include global macroeconomic developments and market perceptions of the attractiveness of particular industries and commodities. The price of the common shares is also likely to be significantly affected by short-term changes in uranium oxide or other mineral prices, a significant shareholder deciding to divest its position or in U3O8 Corp’s financial condition or results of operations as reflected in its quarterly financial reports. Other factors unrelated to U3O8 Corp’s performance that may affect the price of its common shares include the following: the extent of analyst coverage available to investors concerning U3O8 Corp’s business may be limited if investment banks with research capabilities do not follow its securities; lessening in trading volume and general market interest in its securities may affect an investor’s ability to trade significant numbers of common shares; the size of U3O8 Corp’s public float may limit the ability of some institutions to invest in its securities; and a substantial decline in the price of the common shares that persists for a significant period of time could cause its securities, if listed on an exchange, to be delisted from such exchange, further reducing market liquidity.

As a result of any of these factors, the market price of U3O8 Corp’s common shares at any given point in time may not accurately reflect the Company’s long-term value. Securities class-action litigation often has been brought against companies following periods of volatility in the market price of their securities. The Company may in the future be the target of similar litigation. Securities litigation could result in substantial costs and damages and divert management’s attention and resources.
Global Economic Conditions

The volatility of global financial markets has had a profound impact on the global economy. Many industries, including the natural resource sector, are impacted by these market conditions. Some of the key impacts of the current financial market turmoil include contraction in credit markets resulting in a widening of credit risk, devaluations and high volatility in global equity, commodity, foreign exchange and precious metal markets, and a lack of market liquidity. A continued or more marked slowdown in the financial markets or other economic conditions, including but not limited to, consumer spending, employment rates, business conditions, inflation, fuel and energy costs, consumer debt levels, lack of available credit, the state of the financial markets, interest rates and tax rates may adversely affect U3O8 Corp. These and other factors may affect U3O8 Corp’s ability to obtain equity or debt financing in the future on terms favourable to the Company or at all. Additionally, any of these factors may cause decreases in the Company’s asset values that may be other than temporary, which may result in impairment losses. If such increased levels of volatility and market turmoil continue, or if more extensive disruptions of the global financial markets occur, the Company’s operations could be adversely impacted and the trading price of its common shares may be adversely affected.

Securities of mining and mineral exploration companies, including U3O8 Corp’s common shares, have experienced substantial volatility in the past, especially during the global financial crisis in 2008 and most recently for uranium equities, due to investor concerns about the nuclear power industry following the damage to reactors at Fukushima in Japan in March, 2011. The price of our securities can be significantly affected by short-term changes in commodity prices, base and precious metal prices or other mineral prices, currency exchange fluctuation and the political environment in the countries in which the Company does business, as well as globally.

Future Sales of Common Shares by Existing Shareholders

Sales of a large number of common shares of U3O8 Corp. in the public markets, or the potential for such sales, have put pressure on and/or could decrease the trading price of such common shares and could impair the Company’s ability to raise capital through future sales of its common shares. U3O8 Corp. has previously completed private placements at prices per share which are from time to time lower than the market price of its common shares. Accordingly, a significant number of U3O8 Corp’s shareholders may have an investment profit in the common shares of the Company that they may seek to liquidate.

DIVIDENDS

The Company has not declared or paid any dividends on its common shares since its incorporation. Any future dividend payment will be made at the discretion of the board of directors, and will depend on the Company’s financial needs to fund its exploration programs and its future growth, and any other factor that the board deems necessary to consider in the circumstances.

DESCRIPTION OF CAPITAL STRUCTURE

U3O8 Corp’s authorized share capital consists of an unlimited number of common shares without par value. As of the date of this AIF, there were 181,707,777 common shares issued and outstanding, 28,442,709 warrants and 12,041,000 stock options, each exercisable to acquire one common share, for 222,191,486 common shares outstanding on a fully diluted basis.

Holders of U3O8 Corp’s common shares are entitled: (i) to receive notice of any shareholder meetings of the Company, and to attend and to cast one vote per common share held at all such meetings; (ii) to receive on a pro-rata basis such dividends, if any, as and when declared by the Company’s board of directors at its discretion from funds legally available, and (iii) upon the liquidation, dissolution or winding up of the Company, to receive on a pro-rata basis the net assets of the Company after payment of debts and other liabilities, in each case subject to the rights, privileges, restrictions and conditions attaching to any other series or class of shares ranking senior in priority to or on a pro-rata basis with the holders of common shares with respect to dividends or liquidation. U3O8 Corp’s common shares: (i) do not have cumulative voting rights with respect to the election of directors and, accordingly, holders of a majority of such common shares entitled to vote in any election of directors may elect all directors standing for election; and (ii) do not carry any pre-emptive, subscription, redemption or conversion rights, nor do they contain any sinking or purchase fund provisions.
MARKET FOR SECURITIES

U3O8 Corp’s common shares are listed and traded on the TSX (symbol: UW) and on the OTCQX International (symbol: UWE). The following table sets forth the high and low market prices and volume of the common shares on the TSX on a monthly basis during the year ended December 31, 2013.

<table>
<thead>
<tr>
<th>Date</th>
<th>High</th>
<th>Low</th>
<th>Volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2013</td>
<td>0.14</td>
<td>0.10</td>
<td>138,400</td>
</tr>
<tr>
<td>November 2013</td>
<td>0.11</td>
<td>0.09</td>
<td>111,200</td>
</tr>
<tr>
<td>October 2013</td>
<td>0.12</td>
<td>0.08</td>
<td>61,300</td>
</tr>
<tr>
<td>September 2013</td>
<td>0.13</td>
<td>0.10</td>
<td>67,500</td>
</tr>
<tr>
<td>August 2013</td>
<td>0.14</td>
<td>0.12</td>
<td>73,800</td>
</tr>
<tr>
<td>July 2013</td>
<td>0.16</td>
<td>0.13</td>
<td>127,700</td>
</tr>
<tr>
<td>June 2013</td>
<td>0.16</td>
<td>0.13</td>
<td>194,300</td>
</tr>
<tr>
<td>May 2013</td>
<td>0.19</td>
<td>0.14</td>
<td>179,600</td>
</tr>
<tr>
<td>April 2013</td>
<td>0.21</td>
<td>0.13</td>
<td>400,100</td>
</tr>
<tr>
<td>March 2013</td>
<td>0.24</td>
<td>0.17</td>
<td>280,200</td>
</tr>
<tr>
<td>February 2013</td>
<td>0.30</td>
<td>0.20</td>
<td>325,300</td>
</tr>
<tr>
<td>January 2013</td>
<td>0.36</td>
<td>0.21</td>
<td>191,500</td>
</tr>
</tbody>
</table>

DIRECTORS AND OFFICERS

The following table sets forth certain information with respect to the current directors and executive officers of U3O8 Corp. Directors hold office until the next annual meeting of shareholders or when their successors are elected or appointed. As of the date of this AIF, the directors and executive officers of U3O8 Corp., as a group, own or have voting control or direction over 46,330,982 common shares or approximately 25.5% of the issued and outstanding common shares(1).

<table>
<thead>
<tr>
<th>Name, Province and Country of Residence</th>
<th>Director or Officer Since</th>
<th>Principal Occupation during the Last Five Years</th>
<th>Common Shares Owned(1)</th>
</tr>
</thead>
</table>
| Richard Spencer Ontario, Canada         | President and CEO since January 2008 | President and CEO of U3O8 Corp. (2008 to present)  
Vice President of Exploration, Crystallex International Corp., a mining company  
(2004 to 2008)                                                                 | 363,100                |
| John Ross Ontario, Canada               | CFO since June 2010       | CFO of U3O8 Corp. (2010 to present)  
CFO of Xtra-Gold Resources Corp, a mineral exploration company (2010 to present)  
CFO of Tri Origin Exploration Ltd., a mineral exploration company (2009 to 2011)  
CFO of Cronus Resources Ltd., a mineral resources company (2007 to 2010)  
CFO of Colossus Minerals Inc., a mineral resources company (2007 to 2009)                                                                 | 618,180                |
<p>| Keith Barron Valais Switzerland          | Director since December 2005 | President, CEO and Director, Aurania Resources Ltd., a mineral exploration company (2013 to present)                                                                 | 16,925,037            |</p>
<table>
<thead>
<tr>
<th>Name, Province and Country of Residence</th>
<th>Director or Officer Since</th>
<th>Principal Occupation during the Last Five Years</th>
<th>Common Shares Owned(1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bryan Coates(2)(3) Quebec, Canada</td>
<td>Director since April 2006</td>
<td>Vice President, Finance and CFO, Osisko Mining Corporation, a mineral resources company (2007 to present)</td>
<td>35,000</td>
</tr>
<tr>
<td>David Constable(2)(3)(4)(5) Ontario, Canada</td>
<td>Director since April 2006</td>
<td>Retired Business Executive (2010 to present)</td>
<td>150,000</td>
</tr>
<tr>
<td>Sheldon Inwentash(6)(7) Ontario, Canada</td>
<td>Director since April 2010</td>
<td>Chairman and CEO of Mega Uranium Ltd., a mineral resources company (2005 to present)</td>
<td>5,036,786</td>
</tr>
<tr>
<td>Name, Province and Country of Residence</td>
<td>Director or Officer Since</td>
<td>Principal Occupation during the Last Five Years</td>
<td>Common Shares Owned(1)</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>---------------------------</td>
<td>-----------------------------------------------</td>
<td>------------------------</td>
</tr>
</tbody>
</table>
| Pablo Marcet (2)(3) Buenos Aires, Argentina | Director since May 2011 | President of Waymar Resources Ltd., a mineral exploration company (2010 to present)  
President of Geo Logic S.A., a management services and consulting company (2003 to present)  
Argentina President of Northern Orion Resources, a mining and mineral exploration company (2003 to 2008) | 179,469 |
| Richard Patricio (2) Ontario, Canada | Director since April 2010 | Executive Vice President, Corporate Affairs of Mega Uranium Ltd., a mineral resources company (2005 to present)  
Vice President, Legal Affairs and Corporate Affairs of Pinetree Capital Ltd., an investment company (2005 to present)  
Vice President, Legal Affairs and Corporate Affairs of Brownstone Energy Inc., an oil and gas company, (2005 to present) | 700,206 |
| Stewart Taylor (4) Brisbane, Australia | Director since April 2010 | President of Mega Uranium Ltd., a mineral resources company (2005 to present)  
Principal of Stewart Taylor & Associates, a geoscientific consulting firm (2010 to present)  
Partner with Taylor Wall & Associates, a geoscientific consulting firm (1998 to 2010) | 48,433 |

(1) Common shares beneficially owned or over which the director or executive officer exercises control or direction not being within the knowledge of the Company has been furnished by the respective directors individually.

(2) Member of the Audit Committee. On August 7, 2013, Mr. Patricio replaced Mr. Marcet.

(3) Member of the Compensation, Corporate Governance and Nominating Committee.

(4) Member of the Safety, Health, Environment, Community and Technical Committee.

(5) From May 2007 to October 2007, Rage Energy Inc. (“Rage”) was subject to a cease trading order for failing to file financial statements. In December 2008, a further cease trade order was issued with respect to the securities of Rage, which order remains in effect as of the date of this AIF. Mr. Constable was appointed as a director of Direct IT Canada Inc., a predecessor to Rage, in March 2000, and continued as a director of Rage until December, 2008.

(6) Mr. Inwentash has control or direction over Pinetree Capital Ltd., which owns 22,274,771 common shares, representing approximately 16.1% of U3O8 Corp’s outstanding common shares as of the date of this AIF.

(7) In October 2002, trading in the shares of Treat Systems Inc. (“Treat”) was halted by the TSXV for failure to meet the exchange’s tier maintenance requirements and for having been designated as an inactive issuer for a period in excess of 18 months. In August 2003, Treat’s shares were listed on the NEX board of the TSXV. In January 2008, Treat completed a “change of business” pursuant to the policies of the TSXV. The company’s name was changed to Mega Silver Inc. and its shares commenced trading on the TSXV on January 31, 2008. Mr. Inwentash was a director of Treat from October 2001 until his resignation in January 2008 concurrently with the completion of the company’s change of business.
Committees of the Board of Directors

The Board of Directors discharges its responsibilities directly and through committees of the Board of Directors, currently consisting of an Audit Committee, Compensation, Corporate Governance and Nominating Committee, and Safety, Health, Environment, Community and Technical Committee.

Audit Committee

The mandate of the Audit Committee is formalized in a written charter. The members of this committee are Messrs. Coates, Constable and Patricio. The Audit Committee’s primary duties and responsibilities are to serve as an independent and objective party to monitor the Company’s financial reporting process and control systems, review and appraise the audit activities of the Company’s independent auditors, financial and senior management, and to review the lines of communication among the independent auditors, financial and senior management, and the Board of Directors for financial reporting and control matters.

Compensation, Corporate Governance and Nominating Committee

The mandate of the Compensation, Corporate Governance and Nominating Committee is formalized in a written charter. The members of this committee are Messrs. Coates, Constable and Marcet, and are responsible for making recommendations to the Board of Directors on all matters relating to the compensation of directors, the members of various other committees of the Board and the senior officers of the Company. For this purpose, this committee reviews all aspects of compensation paid to directors, committee members, management and employees to ensure the Company’s compensation programs are competitive, and that the Company can attract, motivate and retain high calibre individuals. The Compensation, Corporate Governance and Nominating Committee is also responsible for the corporate governance of the Company and the appointment and assessment of directors. Committee meetings are held, as warranted, with respect to officer appointments, corporate governance or other compensation related matters.

Safety, Health, Environment, Community and Technical Committee

The members of this committee are Messrs. Barron, Constable and Taylor, and they provide support and expertise in the areas of workplace safety and health, environmental issues, corporate social responsibility initiatives and technical issues in connection with U3O8 Corp’s day-to-day operations and exploration activities. Committee meetings are held as warranted.

Conflicts of Interest

Directors and officers of U3O8 Corp. also serve, or may serve in future, as directors and/or officers of other companies involved in natural resource exploration and development and, consequently, there exists the possibility of such directors and officers being in a position of conflict. Any decision made by any of such directors and officers involving the Company should be made in accordance with their duties and obligations to deal fairly and in good faith with a view to the best interests of U3O8 Corp. and its shareholders. In addition, each of the directors is required to declare and refrain from voting on any matter in which such directors may have a conflict of interest in accordance with the procedures set forth in the OBCA and other applicable laws.

LEGAL PROCEEDINGS

There are no material pending legal proceedings or regulatory actions to which the Company is a party or of which any of the Company’s properties are subject, nor are any such proceedings or actions currently known by the Company to be contemplated.

INTEREST OF MANAGEMENT AND OTHERS IN MATERIAL TRANSACTIONS

No director, executive officer or significant shareholder of the Company, or any associate or affiliate of the foregoing, has had any material interest, direct or indirect, in any transaction within the three most recently completed financial years or during the current financial year prior to the date of this AIF that has materially affected or would materially affect the Company, other than as set forth below.
On May 14, 2013, U3O8 Corp. acquired all of the common shares of Calypso in exchange for 20,252,327 common shares of U3O8 Corp to former Calypso shareholders. The transaction expanded the Company’s strategic property holdings around Argentina’s largest known uranium deposits and added $3.3 million in cash. Sheldon Inwentash, a director of the Company, also serves as a director and the Chairman and CEO of Pinetree. Immediately prior to the closing of the transaction, Mr. Inwentash and Pinetree, directly and indirectly, owned or controlled an aggregate of (i) 6,756,250 common shares of Calypso (approximately 13.3% of Calypso’s outstanding shares); and (ii) 27,009,057 common shares and 5,900,000 convertible securities of the Company (approximately 19.5% of U3O8 Corp’s outstanding shares on a non-diluted basis at that time).

TRANSFER AGENT AND REGISTRAR
The Company’s transfer agent and registrar is TMX Equity Transfer Services, 200 University Avenue, Suite 300, Toronto, ON, M5H 4H1.

MATERIAL CONTRACTS
There are no contracts of the Company, other than contracts entered into in the ordinary course of business, that are material to the Company and that were entered into by the Company within the most recently completed financial year or that have been entered into since the Company’s incorporation in December 6, 2005 and are still in effect.

INTERESTS OF EXPERTS

Names of Experts
Following are the names of each person or company who is named as having prepared or certified a report, valuation, statement or opinion described, included or referred to in a filing made under National Instrument 51-102 by the Company during or relating to the financial year ended December 31, 2013, whose profession or business gives authority to such report, valuation, statement or opinion:

1. KPMG LLP (regarding the Financial Statements and auditor’s report thereon); and

Interests of Experts
KPMG LLP, Chartered Accountants, are U3O8 Corp’s auditors, and have advised the Company that they are independent of the Company within the meaning of the relevant rules and related interpretations prescribed by the relevant professional bodies in Canada and any applicable legislation or regulation.

The Laguna Salada Technical Report Authors and the Berlin Technical Report Authors have advised the Company that they are not and were not, at all relevant times, the registered and/or beneficial owner, directly or indirectly, of any of the outstanding common shares of the Company.

AUDIT COMMITTEE DISCLOSURE
National Instrument 52-110 - Audit Committees (“NI 52-110”) requires the Company to disclose annually in its AIF certain information concerning the constitution of its Audit Committee and its relationship with its independent auditor, as set forth below.

Audit Committee Charter
The Company’s Audit Committee is governed by an Audit Committee charter, the text of which is included in this AIF as Appendix A.

Composition of the Audit Committee
The Company’s Audit Committee is comprised of Messrs. Coates, Constable and Patricio. As defined in NI 52-110, each of the directors is considered to be “independent” and “financially literate”.

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Mr. Coates, Chairman of the Audit Committee, serves as Vice President, Finance and CFO for Osisko Mining Corporation. He has held progressive financial positions within the mining industry, both internationally and domestically, including CFO of leading intermediate gold producers. Mr. Coates received a Bachelor of Commerce (Honours) degree from Laurentian University and is a member of the Chartered Professional Accountants of Ontario.

Mr. Constable was the Vice President, Investor Relations of FNX Mining Company Inc. from 2002 to 2010, retiring after the merger with Quadra Mining Ltd. (merged to become QuadraFNX Mining Ltd. and subsequently acquired by KGHM International Ltd. in 2012). From 2005 to 2006, Mr. Constable served as Vice President Investor Relations and Corporate Affairs for Elko Energy Inc., a private international oil and gas company based in Toronto, Ontario. Mr. Constable also has extensive experience as a director of junior mining companies, including Rockcliff Resources Inc., Woulfe Mining Corp., Tiger Resources Ltd., IMX Resources Ltd. and Sandspring Resources Ltd. Mr. Constable received his Bachelor of Science (Honours) degree in Geology from Mount Allison University and Masters of Business Administration (Honours) degree from Laurentian University. Mr. Constable also holds an ICD.D designation from the Institute of Canadian Directors.

Mr. Patricio is Vice President, Corporate and Legal Affairs at Pinetree and is responsible for merger and acquisition activity, corporate transactions and the administration of Pinetree. In addition, he has overall responsibility for corporate governance and compliance issues. Prior to joining Pinetree, Mr. Patricio practiced law at a top tier law firm in Toronto and worked as in-house General Counsel for a senior TSX-listed company. He is a lawyer qualified to practice in the Province of Ontario and serves as a director and officer for several other listed companies on the TSX and the TSX Venture Exchange.

Pre-Approval Policies and Procedures

The Audit Committee must pre-approve any non-audit services to be provided to the Company or its subsidiaries by the external auditor, with reference to compatibility of the service with the external auditor’s independence as prescribed by securities laws.

Audit Fees

The following chart summarizes the aggregate fees billed by the external auditors of the Company for professional services rendered to the Company during the fiscal years ended December 31, 2013 and 2012 for audit and non-audit related services:

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>Year Ended December 31, 2013</th>
<th>Year Ended December 31, 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Audit Fees (1)</td>
<td>$124,600</td>
<td>$149,500</td>
</tr>
<tr>
<td>Audit-related Fees (2)</td>
<td>18,460</td>
<td>3,400</td>
</tr>
<tr>
<td>Tax Advisory Fees (3)</td>
<td>Nil</td>
<td>3,200</td>
</tr>
<tr>
<td>All other fees</td>
<td>Nil</td>
<td>Nil</td>
</tr>
<tr>
<td>Total</td>
<td>$143,060</td>
<td>$156,100</td>
</tr>
</tbody>
</table>

Notes:

(1) Aggregate fees billed for the Company’s annual and quarterly financial statements and services normally provided by the auditor in connection with the Company’s statutory and regulatory filings.

(2) Aggregate fees billed for assurance and related services that are reasonably related to the performance of the audit or review of the Company’s financial statements and are not reported as “Audit fees”, including: assistance with aspects of tax accounting, attest services not required by state or regulation and consultation regarding financial accounting and reporting standards.

(3) Aggregate fees billed for tax compliance, advice, planning and assistance with tax for specific transactions.
ADDITIONAL INFORMATION

Additional information relating to U3O8 Corp. is available on SEDAR at www.sedar.com. Additional information, including information concerning directors’ and officers’ remuneration and indebtedness, principal holders of the Company’s securities and securities authorized for issuance under equity compensation plans, where applicable, is contained in the management proxy circular of the Company dated May 23, 2012.

Additional financial information is provided in U3O8 Corp’s Financial Statements and Management’s Discussion & Analysis for the financial year ended December 31, 2013.
APPENDIX A

Audit Committee Charter

I. PURPOSE

The Audit Committee (the "Committee") is appointed by the Board of Directors (the "Board") of U3O8 Corp. (the "Corporation") to assist the Board in fulfilling its oversight responsibilities relating to financial accounting and reporting process and internal controls for the Corporation. The Committee’s primary duties and responsibilities are to:

• conduct such reviews and discussions with management and the independent auditors relating to the audit and financial reporting as are deemed appropriate by the Committee;

• assess the integrity of internal controls and financial reporting procedures of the Corporation and ensure implementation of such controls and procedures;

• ensure that there is an appropriate standard of corporate conduct including, if necessary, adopting a corporate code of ethics for senior financial personnel;

• review the quarterly and annual financial statements and management's discussion and analysis of the Corporation's financial position and operating results and report thereon to the Board for approval of same;

• select and monitor the independence and performance of the Corporation's outside auditors (the "Independent Auditors"), including attending at private meetings with the Independent Auditors and reviewing and approving all renewals or dismissals of the Independent Auditors and their remuneration; and

• provide oversight to related party transactions entered into by the Corporation.

The Committee has the authority to conduct any investigation appropriate to its responsibilities, and it may request the Independent Auditors as well as any officer of the Corporation, or outside counsel for the Corporation, to attend a meeting of the Committee or to meet with any members of, or advisors to, the Committee. The Committee shall have unrestricted access to the books and records of the Corporation and has the authority to retain, at the expense of the Corporation, special legal, accounting, or other consultants or experts to assist in the performance of the Committee’s duties. The Committee shall review and assess the adequacy of this Charter annually and submit any proposed revisions to the Board for approval. In fulfilling its responsibilities, the Committee will carry out the specific duties set out in Part III of this Charter.

II. AUTHORITY OF THE AUDIT COMMITTEE

The Committee shall have the authority to:

(a) engage independent counsel and other advisors as it determines necessary to carry out its duties;

(b) set and pay the compensation for advisors employed by the Committee; and

(c) communicate directly with the internal and external auditors.

III. COMPOSITION AND MEETINGS

1. The Committee and its membership shall meet all applicable legal and listing requirements, including, without limitation, those of the Toronto Stock Exchange ("TSX"), the Business Corporations Act (Ontario), all applicable securities regulatory authorities. Each member of the Committee shall be financially literate.

2. The Committee shall be composed of three or more directors as shall be designated by the Board from time to time. The members of the Committee shall appoint from among themselves a member who shall serve as Chair.
3. A majority of the members of the Committee shall be "independent" as defined by securities legislation and the requirements of the TSX.

4. The Committee shall meet at least quarterly, at the discretion of the Chair or a majority of its members, as circumstances dictate or as may be required by applicable legal or listing requirements. A minimum of two and at least 50% of the members of the Committee present either in person or by telephone shall constitute a quorum.

5. If within one hour of the time appointed for a meeting of the Committee, a quorum is not present, the meeting shall stand adjourned to the same hour on the second business day following the date of such meeting at the same place. If at the adjourned meeting a quorum as hereinbefore specified is not present within one hour of the time appointed for such adjourned meeting, the quorum for the adjourned meeting shall consist of the members then present.

6. If and whenever a vacancy shall exist, the remaining members of the Committee may exercise all of its powers and responsibilities so long as a quorum remains in office.

7. The time and place at which meetings of the Committee shall be held, and procedures at such meetings, shall be determined from time to time by, the Committee. A meeting of the Committee may be called by letter, telephone, facsimile, email or other communication equipment, by giving at least 48 hours notice, provided that no notice of a meeting shall be necessary if all of the members are present either in person or by means of conference telephone or if those absent have waived notice or otherwise signified their consent to the holding of such meeting.

8. Any member of the Committee may participate in the meeting of the Committee by means of conference telephone or other communication equipment, and the member participating in a meeting pursuant to this paragraph shall be deemed, for purposes hereof, to be present in person at the meeting.

9. The Committee shall keep minutes of its meetings which shall be submitted to the Board. The Committee may, from time to time, appoint any person who need not be a member, to act as a secretary at any meeting.

10. The Committee may invite such officers, directors and employees of the Corporation and its subsidiaries as it may see fit, from time to time, to attend meetings of the Committee.

11. The Board may at any time amend or rescind any of the provisions hereof, or cancel them entirely, with or without substitution.

12. Any matters to be determined by the Committee shall be decided by a majority of votes cast at a meeting of the Committee called for such purpose. Actions of the Committee may be taken by an instrument or instruments in writing signed by all of the members of the Committee, and such actions shall be effective as though they had been decided by a majority of votes cast at a meeting of the Committee called for such purpose. All decisions or recommendations of the Audit Committee shall require the approval of the Board prior to implementation.

IV RESPONSIBILITIES

A Financial Accounting and Reporting Process and Internal Controls

1. The Committee shall review the annual audited financial statements to satisfy itself that they are presented in accordance with generally accepted accounting principles ("GAAP") and report thereon to the Board and recommend to the Board whether or not same should be approved prior to their being filed with the appropriate regulatory authorities. The Committee shall also review and approve the interim financial statements. With respect to the annual and interim audited financial statements, the Committee shall discuss significant issues regarding accounting principles, practices, and judgments of management with management and the Independent Auditors as and when the Committee deems it appropriate to do so. The Committee shall satisfy itself that the information contained in the annual audited financial statements is not significantly erroneous, misleading or incomplete and that the audit function has been effectively carried out.
2. The Committee shall review management’s internal control report and the evaluation of such report by the Independent Auditors, together with management’s response.

3. The Committee shall review the financial statements, management’s discussion and analysis relating to annual and interim financial statements, annual and interim earnings press releases and any other public disclosure documents that are required to be reviewed by the Committee under any applicable laws before the Corporation publicly discloses this information.

4. The Committee shall be satisfied that adequate procedures are in place for the review of the Corporation’s public disclosure of financial information extracted or derived from the Corporation’s financial statements, other than the public disclosure referred to in subsection (3), and periodically assess the adequacy of these procedures.

5. The Committee shall meet no less frequently than annually with the Independent Auditors and the Chief Financial Officer or, in the absence of a Chief Financial Officer, with the officer of the Corporation in charge of financial matters, to review accounting practices, internal controls and such other matters as the Committee, Chief Financial Officer or, in the absence of a Chief Financial Officer, with the officer of the Corporation in charge of financial matters, deems appropriate.

6. The Committee shall inquire of management and the Independent Auditors about significant risks or exposures, both internal and external, to which the Corporation may be subject, and assess the steps management has taken to minimize such risks.

7. The Committee shall review the post-audit or management letter containing the recommendations of the Independent Auditors and management’s response and subsequent follow-up to any identified weaknesses.

8. The Committee shall ensure that there is an appropriate standard of corporate conduct including, if necessary, adopting a corporate code of ethics for senior financial personnel.

9. The 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.

10. The Committee shall provide oversight to related party transactions entered into by the Corporation.

B Independent Auditors

1. The Committee shall be responsible for recommending the appointment, compensation and oversight of the Independent Auditors and the Independent Auditors shall report directly to the Committee.

2. The Committee shall be directly responsible for overseeing the work of the external auditors, including the resolution of disagreements between management and the external auditors regarding financial reporting.

3. The Committee shall pre-approve all audit and non-audit services not prohibited by law to be provided by the Independent Auditors.

4. The Committee shall monitor and assess the relationship between management and the Independent Auditors and monitor, confirm, support and assure the independence and objectivity of the Independent Auditors. The Committee shall establish procedures to receive and respond to complaints with respect to accounting, internal accounting controls and auditing matters.

5. The Committee shall review the Independent Auditor’s audit plan, including scope, procedures and timing of the audit.
6. The Committee shall review the results of the annual audit with the Independent Auditors, including matters related to the conduct of the audit, and receive and review the auditor’s interim review reports.

7. The Committee shall obtain timely reports from the Independent Auditors describing critical accounting policies and practices, alternative treatments of information within GAAP that were discussed with management, their ramifications, and the Independent Auditors’ preferred treatment and material written communications between the Corporation and the Independent Auditors.

8. The Committee shall review fees paid by the Corporation to the Independent Auditors and other professionals in respect of audit and non-audit services on an annual basis.

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

10. The Committee shall monitor and assess the relationship between management and the external auditors, and monitor and support the independence and objectivity of the external auditors.

C Other Responsibilities

1. The Committee shall also:

   (a) establish procedures for:

      i. the receipt, retention and treatment of complaints regarding accounting, internal controls or auditing matters, or violations to the Corporation’s code of ethics, including reviewing and discussing Whistleblower Policy with management; and

      ii. the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting, internal controls or auditing matters, or violations of the Corporation’s code of ethics; and

   (b) perform any other activities consistent with this Charter and governing law, as the Committee or the Board deems necessary or appropriate.