



TECHNICAL REPORT

ON THE

## **SOUTH FALCON EAST PROPERTY**

Northern Saskatchewan

Latitude 57°14' N, Longitude 104°52' W

**Prepared for:**

Tisdale Clean Energy Corp.  
Suite 2200, HSBC Building, 885 West Georgia St.  
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Report Date: February 2, 2023  
Effective Date: December 23, 2022

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SGS Project # P2022-36

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## 1 SUMMARY

SGS Geological Services Inc. (“SGS”) was contracted by Tisdale Clean Energy Corp. (the “Company” or “Tisdale”) to complete a National Instrument 43-101 (“NI 43-101”) Technical Report for the South Falcon East Property (the “Property” or the “Project”) (formerly Way Lake), located in northern Saskatchewan, Canada. The Property is considered an early stage exploration property.

On October 20, 2022, Tisdale announced that it had entered into an option agreement, dated October 19, 2022, with Skyharbour Resources Ltd. (“Skyharbour”), an arms-length party, pursuant to which it has been granted the right to acquire up to a seventy-five percent interest in the South Falcon East Property.

The Property, currently 100% owned by Skyharbour, covers approximately 12,234.23 hectares and lies 18 km outside the Athabasca Basin, approximately 55 km east of the Key Lake Uranium Mine.

Tisdale is in the business of acquiring, exploring and evaluating mineral resource properties, and either joint venturing or exploring and evaluating these properties further or disposing of them when the evaluation is completed. Tisdale’s common shares are listed on the TSX-Venture Exchange (“TSX-V”) under the symbol “TCEC”. The Company is also listed on the OTCQP under the symbol “TCEFF”, and on the Frankfurt Exchange under the symbol “T1KC”. Their current business address is 2200 – 885 West Georgia Street, Vancouver, BC, V6C 3E8.

Allan Armitage, Ph.D., P. Geo., (“Armitage”) of SGS, and Alan Sexton, MSc, P.Geo. (“Sexton”) of GeoVector Management Inc. (“GeoVector”) (the “Authors”) are responsible for the preparation of the current technical report. Armitage and Sexton are independent Qualified Persons as defined by NI 43-101.

### 1.1 Property Description, Location, Access, and Physiography

The Property is located 20 km east of the Proterozoic Athabasca Basin in northern Saskatchewan, Canada. The Property lies approximately 55 km east of Key Lake, 35 km southeast of Moore Lakes, 260 km north of La Ronge and 580 km north of Saskatoon, Saskatchewan. The Property is located in the Northern Mining District of Saskatchewan on 1:50,000 NTS map sheets 74A/14, 74A/15, 74H/01, 74H/02, 74H/03, 74H/07 and 74H/08 and is centered at latitude 57°14’ N and longitude 104°52’ W.

The Property covers 16 contiguous claims which are currently 100% owned by Skyharbour. All claims are in good standing. The total area of the 16 claims is 12,234.23 hectares.

On October 20, 2022, Tisdale announced that it had entered into an option agreement, dated October 19, 2022, with Skyharbour, an arms-length party, pursuant to which it has been granted the right to acquire up to a seventy-five percent interest in the South Falcon East Property.

Under the Option Agreement and assuming the 75% interest is earned, Tisdale will issue Skyharbour 1,111,111 Tisdale shares upfront, fund exploration expenditures totaling CAD \$10,500,000, and pay Skyharbour CAD \$11,100,000 in cash of which \$6,500,000 can be settled for shares in the capital of Tisdale (“Shares”) over the five-year earn-in period.

The South Falcon East project is accessed by float or ski equipped aircraft or by winter road from Key Lake along the historic Key Lake winter road which passes through the southern edge of the Property.

The project area is characterized by gently rolling relief covered by thinly wooded boreal forest. Numerous lakes and ponds generally show a north-easterly elongation imparted by the last glaciation. Vegetation is predominantly thinly distributed black spruce, alder and jack pine with lesser birch, while ground cover comprises mostly reindeer lichen and Labrador tea.

The Property area lies in a sub-arctic climate region. Winters are generally extremely cold and dry with temperatures regularly dropping below -30°C. The cold temperatures allow for a sufficient ice thickness to

support a drill rig generally from mid-January to mid-April. Temperatures in the summer can vary widely with yearly maxima of around 30°C commonly recorded in late July.

Companies from Points North and La Ronge provide general mechanical services, equipment storage and camp supplies. General drill program supplies and equipment for the project are provided by mining and exploration expediting services based out of La Ronge and Saskatoon, Saskatchewan. Camp helpers may be sourced from the local communities of Stanley Mission and Wollaston Lake.

## 1.2 History of Exploration, Drilling

Uranium exploration has been undertaken on the South Falcon East Uranium Project for over 40 years. Numerous and varied programs have been carried out on different portions of the Property, including diamond drill campaigns, airborne and ground geophysics, boulder sampling and prospecting.

JNR Resources Ltd. explored the Property between 2004 and 2011 targeting a low-grade / high-tonnage granitic pegmatite-hosted U-Th-REE deposit. Exploration undertaken on the South Falcon East property has mostly involved airborne and ground geophysics, multi-phase diamond drill campaigns, detailed geochemical sampling of drill core, and ground-based prospecting and geochemical sampling.

A total of 32 diamond drill holes totaling 5,694 m were drilled on the Fraser Lakes Zone B during the 2008 to 2011 period. To date, drilling of this zone has identified an extensive area approximately 1,250 m long by 650 m wide of moderately dipping, multiple stacked uranium and thorium mineralized horizons, which are open to the southwest and east-northeast to a depth of at least 175 m.

The Fraser Lakes Zone B was discovered during the summer 2008 prospecting and drilling (WYL-08-524, 525 and 526). These three holes did not test the optimum target of the graphitic pelitic gneiss and granitic pegmatite contact due to summer ground conditions. However, all three holes did intersect uranium mineralized granitic pegmatite. The best results were from WYL-08-525 which intersected several uranium intervals, with the best zone returning 0.081 wt% U<sub>3</sub>O<sub>8</sub> over 12.0 m from 77.50 to 89.50 m depth down the drill hole. The Fraser Lakes Zone B deposit is currently defined by 32 NQ drill holes totaling 5,694.0 m. The Zone B mineralization has a strike length of 1400 m, trends roughly 240° and dips approximately 30° to the north. In cross-section, the pegmatite-hosted mineralization is tabular in shape. The mineralization ranges from 2 to 20 m in width over a vertical thickness of approximately 175 m.

Diamond drilling in 2009 was carried out between February 13 and March 30. The drilling program consisted of 15 completed (WYL-08-36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49 and 50) and four abandoned (WYL-09-36a, 38a, 43a and 49a) diamond drill holes, totaling 2,700 m. This drilling was following up the three holes drilled at the end of the 2008 summer program.

Multiple intervals of uranium and/or thorium mineralization were intersected in several drill holes. The mineralization is accompanied by rare earth element enrichment and highly anomalous levels of pathfinder elements. Some of the better intersections (Appendix 1) occur in drill holes WYL-09-39, -41 and -50. At a grade cut-off of 0.029% U<sub>3</sub>O<sub>8</sub>, hole #39 returned seven mineralized intervals over a 30-meter down-hole length, including a 0.15-meter intercept of 0.166 wt% U<sub>3</sub>O<sub>8</sub> and 0.112 wt% thorium. The best result from hole #41 was 0.134 wt% U<sub>3</sub>O<sub>8</sub> and 0.77 wt% ThO<sub>2</sub> over 1.0 meter, while the best result from hole #50 was 0.183 wt% U<sub>3</sub>O<sub>8</sub> and 0.062 wt% ThO<sub>2</sub> over 1.0 meter. Hole WYL-09-46 returned multiple intervals of thorium mineralization including 0.109% ThO<sub>2</sub> and 0.013 % U<sub>3</sub>O<sub>8</sub> over 7.0 m. Highly anomalous concentrations of other metals are also present in a number of holes. Hole WYL-09-38 returned 0.117% copper, 0.056% nickel, 0.044% zinc, 0.068% molybdenum and 44 ppm uranium over 6.5 m.

Diamond drilling in 2010 was carried out between February 8 and March 15 by JNR. The drilling program was following up the 2009 drilling program and consisted of 14 completed drill holes totaling 2772.6 m. Eight (WYL-10-51, 56, 57, 58, 61, 62, 63 and 64) of these drill holes totaling 1,463.0 m were completed on the Fraser Lakes Zone B with the remaining six holes (WYL-10-52, 53, 54, 55, 59 and 60) totaling 1309.60 m being drilled along the T-Bone Lake conductor.



Multiple intervals of uranium and/or thorium mineralization were intersected in six of the eight holes that tested the Fraser Lakes Zone B. The better intersections (Appendix 1) occur in drill holes WYL-10-51, -58, -61, -62, and -64. Hole WYL-10-61 returned a grade of 0.057 wt%  $U_3O_8$  over 5 m., including 0.242 wt%  $U_3O_8$  over 0.5 m. WYL-10-58 returned ten uranium mineralized intervals over a 65 -meter downhole length, including a 5.50 meter interval of 0.026 wt%  $U_3O_8$ ; a 3.00 meter interval of 0.041  $U_3O_8$ ; a 1.00 meter interval of 0.041  $U_3O_8$  with 0.046 wt%  $ThO_2$ ; and a 0.50 meter interval of 0.209 wt%  $ThO_2$  with 0.20 wt%  $U_3O_8$ . Drill hole WYL-10-51 returned five mineralized intervals over a 50 meter down-hole length, including a 3.00 meter intercept of 0.0.064 wt%  $U_3O_8$  that included 0.179%  $U_3O_8$  and 0.059 wt%  $ThO_2$  over 0.5 m.

The six holes drilled along the T-Bone Lake Conductor intersected anomalous radioactivity and U mineralization in two of the holes (WYL-10-53 and 55).

Diamond drilling in 2011 was carried out between March 13 and April 17 by JNR. The drilling program was a follow up to the 2010 drilling program and consisted of 10 holes totaling 2,590.0 m. This drilling was completed on the Fraser Lakes Zone B (WYL-11-68, 69, 70 and 71) totaling 1189.0 m, Fraser Lakes North (WYL-11-73 and 74 totaling 436.0 m) and along the T-Bone Lake conductor (WYL-65, 66, 67 and 72 totaling 965.0 m).

Multiple intervals of uranium and/or thorium mineralization were intersected in four new holes (WYL-11-68, 69, 70 and 71) that tested Fraser Lakes Zone B on its east-northeast end. The better U-Th intersections occur in drill holes WYL-11-68, 70 and 71 (Appendix 1). To date, drilling of this zone has identified an extensive area approximately 1,250 m long by 650 m wide of moderately dipping, multiple stacked uranium and thorium mineralized horizons, which are open to the southwest and east-northeast to a depth of at least 175 m.

Anomalous radioactivity was intersected within the Fraser Lakes North area. Drill holes WYL-11-73 and WYL-11-74 yielded low-grade, basement-hosted U-Th mineralization within graphitic pelitic gneisses and granitic pegmatites.

Diamond drilling was carried out between March 17 and April 7, 2015 by Cypress Geoservices Ltd. on behalf of Skyharbour. The drilling program was a follow up to the 2011 drilling program and consisted of 5 holes totaling 1,278 m. This drilling was completed on the Fraser Lakes Zone B (FP15-03, 04 and 05) with three holes totaling 787 m, one hole (FP15-01) totaling 272 m was drilled to test the intersection of the Fraser Lakes antiform nose with the northwest trending T-Bone Lake lineament and one hole (FP15-02) totaling 219 m was drilled to test the eastern limb of the Fraser Lakes Conductor under Fraser Lakes.

Drill holes FP15-03, 04 and 05 tested the east-northeast end of the Fraser Lakes Zone B down-dip to a vertical depth of 250 m and over a 500 m strike length. This zone had been previously tested by three fences of diamond drilling in 2009 and 2011. Multiple intervals of low to moderate grade uranium mineralization, which was accompanied by local thorium were intersected in these three new drill holes. The better U-Th intersections occur in drill hole FP15-05 with 6.0 m of 0.103%  $U_3O_8$ , including 2.0 m of 0.165%  $U_3O_8$  and 0.111%  $ThO_2$ . Drill holes FP15-01 and 02 intersected locally elevated  $U_3O_8$  (up to 0.059%  $U_3O_8$ ) which was associated with anomalous thorium (up to 526 ppm) in these two drill holes. Anomalous levels of copper (250-2760 ppm), lead (225-548 ppm), nickel (250-825 ppm) and vanadium (200-990 ppm), were intersected in all of the 2015 new drill holes.

The mineralization is associated with pegmatite intruding Wollaston Group pelitic and graphitic pelitic gneiss and orthogneiss at/above the Archean-Wollaston contact and is accompanied by brittle to brittle-ductile deformation and varying degrees of clay, chlorite and hematite alteration.

Xcalibur MPH (Canada) Ltd. flew 2,843 line km of airborne gravity gradiometer and magnetics over the South Falcon Point project for Skyharbour in 2022. The survey was successful in identifying a series of NNW-trending Tabernor Faults and 070-degree trending faults, both of which are commonly related to uranium mineralization in the Wollaston Domain when they intersect graphitic structural corridors related to magnetic lows. Several valid drill targets have been interpreted on the Fraser Lakes antiform which is

proximal to the Fraser Lakes Zone B. A series of north-trending Tabbernor features were interpreted from this data as were several N70-trending faults.

Diamond drilling was carried out between March 17 and April 7, 2015 by Cypress Geoservices Ltd. on behalf of Skyharbour. The drilling program was a follow up to the 2011 drilling program and consisted of 5 holes totaling 1,278 m. This drilling was completed on the Fraser Lakes Zone B (FP15-03, 04 and 05) with three holes totaling 787 m, one hole (FP15-01) totaling 272 m was drilled to test the intersection of the Fraser Lakes antiformal nose with the northwest trending T-Bone Lake lineament and one hole (FP15-02) totaling 219 m was drilled to test the eastern limb of the Fraser Lakes Conductor under Fraser Lakes.

Drill holes FP15-03, 04 and 05 tested the east-northeast end of the Fraser Lakes Zone B down-dip to a vertical depth of 250 m and over a 500 m strike length. This zone had been previously tested by three fences of diamond drilling in 2009 and 2011. Multiple intervals of low to moderate uranium mineralization, which was accompanied by local thorium were intersected in these three new drill holes. The better U-Th intersections occur in drill hole FP15-05 with 6.0 m of 0.103%  $U_3O_8$ , including 2.0 m of 0.165%  $U_3O_8$  and 0.111%  $ThO_2$ . Drill holes FP15-01 and 02 intersected locally elevated  $U_3O_8$  (up to 0.059%  $U_3O_8$ ) which was associated with anomalous thorium (up to 526 ppm) in these two drill holes. Anomalous levels of copper (250-2760 ppm), lead (225-548 ppm), nickel (250-825 ppm) and vanadium (200-990 ppm), were intersected in all of the 2015 new drill holes.

### 1.3 Geology and Mineralization

The geologic setting for Fraser Lakes Zone B is within a highly tectonized contact between Archean granitoids and the overlying basal Wollaston Group pelitic metasediments. This tectonized contact, or shear zone, is folded around an Archean granitic dome and is thickest within the NE-plunging antiformal nose. There are multiple generations of granitic pegmatites with the mineralized pegmatites usually being syntectonic, and older, and non-mineralized pegmatites being late-tectonic, and younger. U-Pb age dating of magmatic uraninite has returned ages of 1850-1780 Ma for the mineralized pegmatites. The U-Th-REE mineralized granitic pegmatites that define Zone B occur within an antiformal fold nose that is cut by an east-west dextral ductile-brittle cross-structure and younger NNW-trending and NNE-trending brittle faults. The mineralized pegmatites have been further sub-divided based on mineralogical studies. These studies defined two main groups of granitic pegmatites/leucogranites based on their uranium- thorium (U-Th) versus thorium-rare earth element oxide (Th-REO) contents and their relative position within the antiformal fold nose. The term Group A intrusives refers to the syn- to late- tectonic pegmatites that intrude the northwest limb of the northeast-plunging antiformal fold. The term Group B intrusives refers to the syn- to late-tectonic thorium-REE rich pegmatites that intrude the central portion of the northeast plunging antiformal fold nose.

The Fraser Lakes Zone B was discovered during the summer 2008 prospecting and drilling (WYL-08-524, 525 and 526). These three holes did not test the optimum target of the graphitic pelitic gneiss and granitic pegmatite contact due to summer ground conditions. However, all three holes did intersect uraniferous mineralized granitic pegmatite. The best results were from WYL-08-525 which intersected several uraniferous intervals, with the best zone returning 0.081 wt%  $U_3O_8$  over 12.0 m from 77.50 to 89.50 m depth down the drill hole. The Fraser Lakes Zone B deposit is currently defined by 32 NQ drill holes totaling 5,694.0 m. Zone B mineralization has a strike length of 1400 m, trends roughly 240° and dips approximately 30° to the north. In cross-section, the pegmatite-hosted mineralization is tabular in shape. The mineralization ranges from 2 to 20 m in width over a vertical thickness of approximately 175 m.

The Fraser Lakes Zone B U-Th-REE mineralization is contained within a series of ca. 1800 Ma sub-parallel granitic biotite-quartz-feldspar pegmatite dykes that intruded the tectonic decollement between the Paleoproterozoic Wollaston Group pelitic and graphitic pelitic gneisses and the underlying Archean granitoid orthogneisses and foliated granites. The U-Th-REE mineralization occurs dominantly in fractured and altered pegmatite and is accompanied by varying degrees of clay (illite, dickite and kaolinite), chlorite, hematite, fluorite and sausserite alteration. The mineralization is associated with elevated concentrations of copper, nickel, vanadium, bismuth, zinc, cobalt, lead and molybdenum.



This style of primary uranium mineralization associated with intrusive rocks such as granitic pegmatites and alaskite is commonly referred to as 'Rössing-type' mineralization. Examples of this style of mineralization include the Rössing and Husab uranium mines, and the Valencia deposit, which is currently under development, all of which are in Namibia.

#### 1.4 Mineral Processing, Metallurgical Testing and Recovery Methods

To date, there has been no metallurgical testing on mineralization from the Property.

#### 1.5 Historical Mineral Resource Estimate

In 2012, JNR GeoVector to complete a resource estimate for the Property's Fraser Lakes Zone B. In 2015, GeoVector was commissioned by Skyhabour to update the technical report. The 2012 and 2015 technical reports were written in support of a MRE for the Fraser Lakes Zone B. The Fraser Lake Zone B deposit was reported to contain an Inferred resource, at a base case cut-off grade of 0.01 %  $U_3O_8$ , totalling 6.96 Mlbs of  $U_3O_8$  within 10.4 million tonnes at an average grade of 0.030%  $U_3O_8$ , with significant quantities of rare earth element oxides (REO), specifically  $La_2O_3$ ,  $Ce_2O_3$ ,  $Yb_2O_3$ , and  $Y_2O_3$ . The inferred resource also includes a significant thorium component. Using the base case COG of 0.01%  $U_3O_8$ , the Inferred resource includes 5.34 Mlbs of  $ThO_2$  at an average grade of 0.023%  $ThO_2$ . The MRE had an effective date of March 23rd, 2015.

Although the MRE was at the time classified in accordance with CIM (2014) Definition Standards and was prepared and disclosed in compliance with disclosure requirements for mineral resources or reserves set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2011), the MRE for the Fraser Lakes Zone B is considered historical in nature with respect to Tisdale and Tisdale is not treating the historical resource as current. As the historical MRE was completed in 2012, the historical MRE does not comply with current disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2016) and does not comply with current 2019 CIM Definition Standards - For Mineral Resources and Mineral Reserves, including the critical requirement that all mineral resources "have reasonable prospects for eventual economic extraction". In the Authors opinion, additional work is required, including mineralogical studies, metallurgical studies and engineering studies in order to meet current standards including the critical requirement that all mineral resources have reasonable prospects for eventual economic extraction either by open pit or underground mining methods.

The historical MRE was determined from a database of 1,283 assay results in 32 drill holes totalling 5,694 m of drilling completed by JNR between August 2008 and April 2011. The drill holes are spaced primarily 75 to 250 m apart along a strike length of approximately 1,400 m. The drill holes tested mineralization to a vertical depth up to 175 m. Mineralization varies in thickness from 2 m to over 20 m. Grades for  $U_3O_8$  was interpolated into the blocks by the inverse distance squared ( $ID^2$ ) method. In addition to  $U_3O_8$ , grades for  $ThO_2$  and REO, including  $La_2O_3$ ,  $Ce_2O_3$ ,  $Yb_2O_3$ , and  $Y_2O_3$  have been interpolated into the blocks.

#### 1.6 Recommendations

Based on a review of the technical data and given the prospective nature of the Property, it is the Author's opinion that the Project merits further exploration and that a proposed plan for further work by Tisdale is justified. A proposed work program will help advance the Project and will provide key inputs required to further evaluate the viability of the Project.

Additional work recommended by the Authors includes mineralogical studies, metallurgical studies and engineering studies required to bring the historical mineral resource estimate up to current NI 43-101 standards (2016) and comply with current 2019 CIM Definition Standards - For Mineral Resources and Mineral Reserves.

The Authors are recommending Tisdale conduct further exploration, subject to funding and any other matters which may cause the proposed exploration program to be altered in the normal course of its

business activities or alterations which may affect the program as a result of exploration activities themselves.

### 1.6.1 Proposed Work Program and Budget

A phased approach to the exploration programs and budgets is proposed. The Phase 1 program would be completed during the winter to spring 2023 and would consist of:

- Data compilation into a GIS format
- Integration of the geophysical surveys with all other geoscience data
- Drill target generation.
- Field evaluation of all targets and additional prospecting (spring).

The total cost of the recommended Phase 1 work program by Tisdale is estimated at C\$228,250.

The Phase 2 program would be completed during the summer - winter of 2023-2024 and would consist of approximately 6,500 m of diamond drilling. The majority (90%) of this drilling would be focused on expanding the Fraser Lakes Zone B deposit along strike and at depth. The remaining drill meterage (10%) would be focused on testing new targets generated by the 2023 Phase 1 program.

The total cost of the recommended Phase 2 work program by Tisdale is estimated at C\$1,600,331.

## 2 INTRODUCTION

SGS Geological Services Inc. (“SGS”) was contracted by Tisdale Clean Energy Corp. (the “Company” or “Tisdale”) to complete a National Instrument 43-101 (“NI 43-101”) Technical Report for the South Falcon East Property (the “Property” or the “Project”) (formerly Way Lake), located in northern Saskatchewan, Canada. The Property is considered an early stage exploration property.

On October 20, 2022, Tisdale announced that it had entered into an option agreement, dated October 19, 2022, with Skyharbour Resources Ltd. (“Skyharbour”), an arms-length party, pursuant to which it has been granted the right to acquire up to a seventy-five percent interest in the South Falcon East Property.

The Property, currently 100% owned by Skyharbour, covers approximately 12,234.23 hectares and lies 18 km outside the Athabasca Basin, approximately 55 km east of the Key Lake Uranium Mine.

Tisdale is in the business of acquiring, exploring and evaluating mineral resource properties, and either joint venturing or exploring and evaluating these properties further or disposing of them when the evaluation is completed. Tisdale’s common shares are listed on the TSX-Venture Exchange (“TSX-V”) under the symbol “TCEC”. The Company is also listed on the OTCQB under the symbol “TCEFF”, and on the Frankfurt Exchange under the symbol “T1KC”. Their current business address is 2200 – 885 West Georgia Street, Vancouver, BC, V6C 3E8.

Allan Armitage, Ph.D., P. Geo., (“Armitage”) of SGS, and Alan Sexton, MSc, P.Geo. (“Sexton”) of GeoVector Management Inc. (“GeoVector”) (the “Authors”) are responsible for the preparation of the current technical report. Armitage and Sexton are independent Qualified Persons as defined by NI 43-101.

### 2.1 Sources of Information

The Property was the subject of two NI 43-101 Technical Reports by the Authors in 2012 and 2015:

- *The Property was the subject of a technical report by GeoVector Management Inc. in 2012 titled “Technical Report On The Resource Estimate On The Way Lake Uranium Project, Fraser Lakes Zone B, Northern Saskatchewan” Prepared for JNR Resources Inc. Issued September, 2012, by Allan Armitage, Ph. D., P. Geol., GeoVector Management Inc. and Alan Sexton, M. Sc., P. Geo., GeoVector Management Inc.*
- *The Property was the subject of a second technical report by GeoVector Management Inc. in 2015 titled “Technical Report on the Falcon Point Uranium Project, Northern Saskatchewan” Prepared for Skyharbour Resources Ltd. Report Date: March 20th, 2015, Effective Date: March 20th, 2015, by Allan Armitage, Ph. D., P. Geol., GeoVector Management Inc.*

In addition, the Authors have conducted a cursory review of company news releases and Management’s Discussions and Analysis (“MD&A”) which are posted on SEDAR ([www.sedar.com](http://www.sedar.com)).

SEDAR, “The System for Electronic Document Analysis and Retrieval”, is a filing system developed for the Canadian Securities Administrators to:

- facilitate the electronic filing of securities information as required by Canadian Securities Administrator;
- allow for the public dissemination of Canadian securities information collected in the securities filing process; and
- provide electronic communication between electronic filers, agents and the Canadian Securities Administrator

## 2.2 Site Visits

### 2.2.1 2012 Site visit

Armitage personally inspected the Property and drill core on July 13, 2012, accompanied by JNR's Director of Exploration, Dr. Irvine R. Annesley, who was JNR's qualified person responsible for the technical data from the Property and who had extensive knowledge of the Property. The Property was accessed via fixed-winged aircraft from La Ronge directly to camp. During the visit Armitage reviewed drill core from the 2008 - 2011 drill programs, drill sites and outcrops, camp and core logging facilities and reviewed core logging and sampling procedures. There was no exploration in progress at the time of the 2012 site visit. The core was stored in core racks and easily accessible

As there had been no material scientific or technical work done on the Property between 2012 and 2015, since the last site visit by Armitage, no property visit was conducted by Armitage in 2015 and the 2012 site visit was considered current with respect to the 2015 Skyharbour report.

### 2.2.2 2022 Site Visit

Sexton personally inspected the Property on December 9th, 2022. Prior to the site visit the Sexton reviewed Saskatchewan government assessment reports, NI-43-101 technical geological reports posted on SEDAR and the recent press releases related to the Property.

Sexton conducted a site visit to the Property on December 9th, 2022 accompanied by Chip Flatlander, a geotechnician with JP Enterprises of La Ronge. The Property was accessed via helicopter from La Ronge directly to camp. During the site visit, drill core from diamond drill holes located at the historic camp site (2015) was examined. Sexton examined accompanying drill logs and assay certificates, and personally conducted radioactivity readings on core. The radioactivity readings were taken with a portable RS 120 Super scintillometer and were compared against readings from the drill core's weak to strongly mineralized and unmineralized zones. All readings were representative of the intervals measured and comparable to the historically documented readings noted in the 2015 drill logs.

The Property was not active with respect to exploration at the time of the December site visit, so Sexton was only able to inspect the core storage area and several drill sites. All core was stored in core racks which are still in good shape and easily accessible. The drill collar locations were accessed by helicopter, in particular, drill holes from FP15-03, 04 and 05 on the Fraser Lakes Zone B. Collar co-ordinates were obtained using a hand-held GPS and determined to be within five (5) metres of the reported collar locations.

## 2.3 Effective Date

The Effective Date of the report is December 23, 2022.

## 2.4 Units and Abbreviations

All units of measurement used in this technical report are in metric. All currency is in US dollars (US\$), unless otherwise noted.

**Table 2-1 List of Abbreviations**

\$	Dollar sign	m <sup>2</sup>	Square metres
%	Percent sign	m <sup>3</sup>	Cubic metres
°	Degree	masl	Metres above sea level
°C	Degree Celsius	mm	millimetre
°F	Degree Fahrenheit	mm <sup>2</sup>	square millimetre
µm	micron	mm <sup>3</sup>	cubic millimetre
AA	Atomic absorption	Moz	Million troy ounces
Az	Azimuth	MRE	Mineral Resource Estimate
CAD\$	Canadian dollar	Mt	Million tonnes
Ce <sub>2</sub> O <sub>3</sub>	Cerium oxide	Mlbs	Million pounds
cm	centimetre	NAD 83	North American Datum of 1983
cm <sup>2</sup>	square centimetre	NQ	Drill core size (4.8 cm in diameter)
cm <sup>3</sup>	cubic centimetre	oz	ounce
DDH	Diamond drill hole	ppb	parts per billion
ft	Feet	ppm	parts per million
ft <sup>2</sup>	Square feet	QA	Quality Assurance
ft <sup>3</sup>	Cubic feet	QC	Quality Control
g	Grams	QP	Qualified Person
g/t or gpt	Grams per Tonne	REO	Rare Earth Elements
GPS	Global Positioning System	RQD	Rock quality description
Ha	Hectares	SG	Specific Gravity
HQ	Drill core size (6.3 cm in diameter)	ThO <sub>2</sub>	Thorium dioxide
ICP	Induced coupled plasma	Ton	Short Ton
kg	Kilograms	Tonnes or T	Metric tonnes
km	Kilometres	U <sub>3</sub> O <sub>8</sub>	Yellowcake (Triuranium octoxide)
km <sup>2</sup>	Square kilometre	US\$	US Dollar
La <sub>2</sub> O <sub>3</sub>	Lanthanum oxide	UTM	Universal Transverse Mercator
m	Metres	Y <sub>2</sub> O <sub>3</sub>	Yttrium oxide
		Yb <sub>2</sub> O <sub>3</sub>	Ytterbium oxide

### **3 Reliance on Other Experts**

Verification of information concerning Property status and ownership, which are presented in Section 4 below, have been provided to the Authors by Tisdale (Edward Reisner) and Skyharbour (Dave Billard) by way of E-mails on December 16 and 17, 2022. The Authors only reviewed the land tenure in a preliminary fashion and has not independently verified the legal status or ownership of the Property or any underlying agreements or obligations attached to ownership of the Property. However, the Authors have no reason to doubt that the title situation is other than what is presented in this technical report (Section 4). The Authors are not qualified to express any legal opinion with respect to Property titles or current ownership.

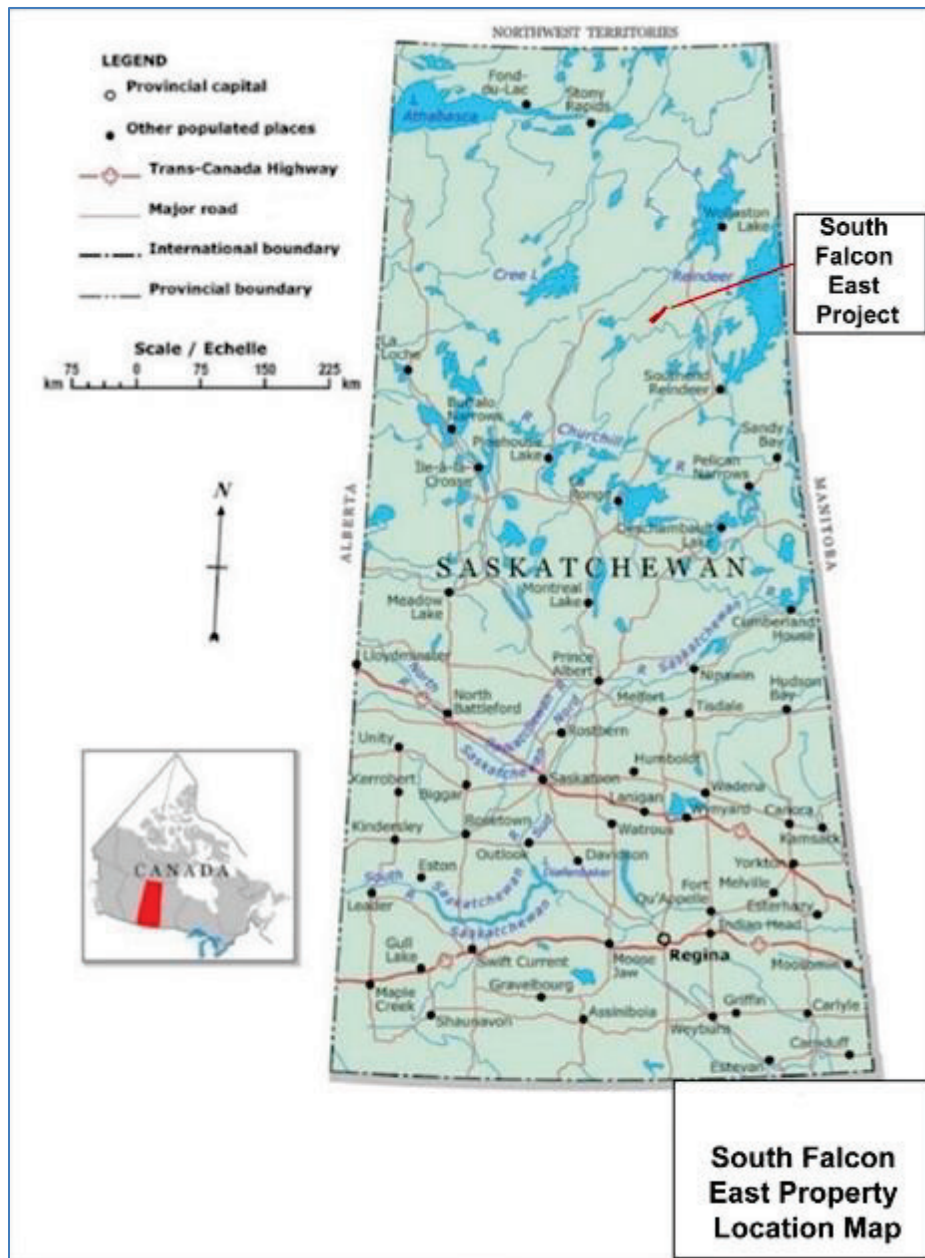


## 4 PROPERTY DESCRIPTION AND LOCATION

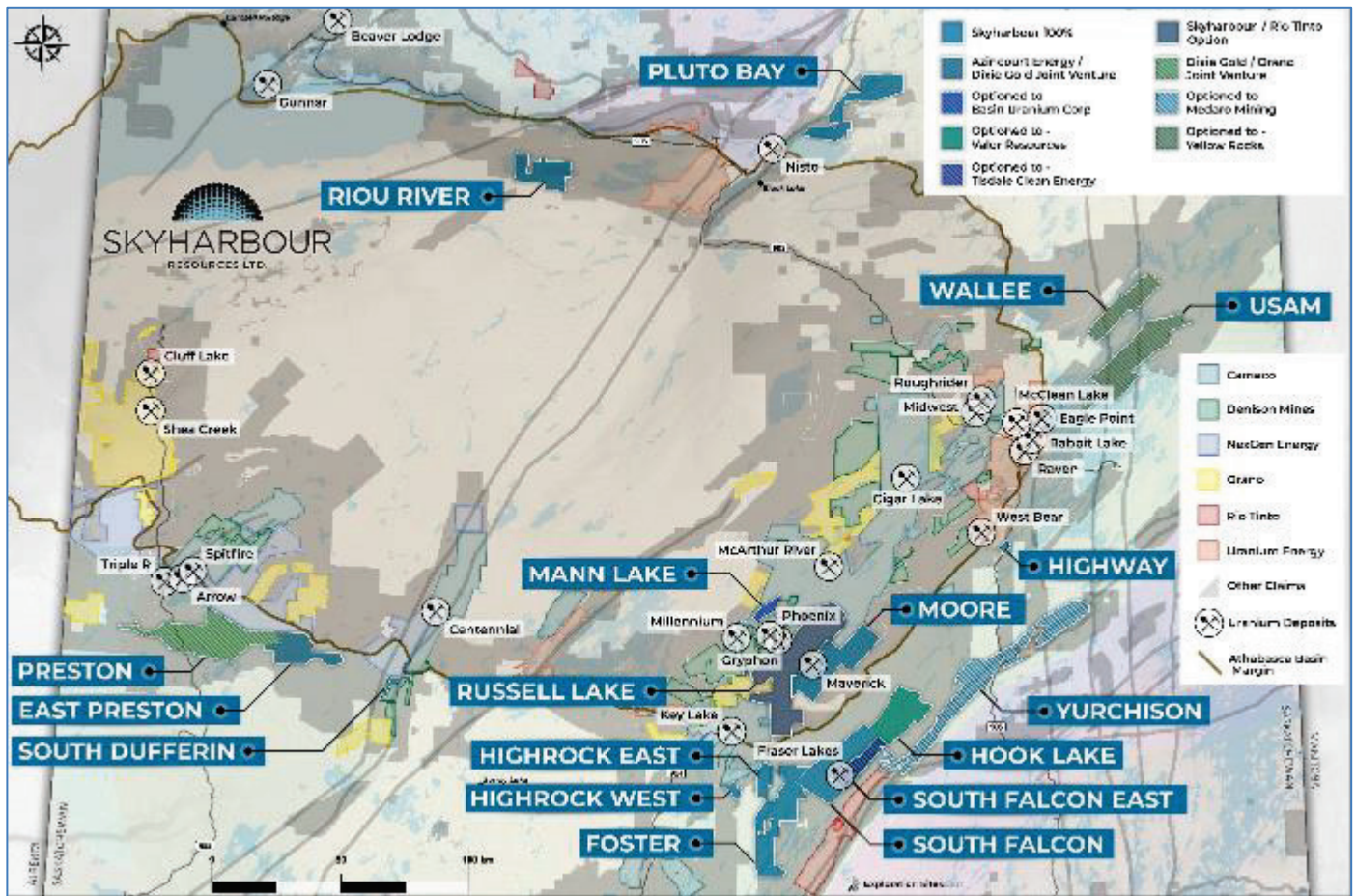
### 4.1 Property Location

The Property is located 20 km east of the Proterozoic Athabasca Basin in northern Saskatchewan, Canada (Figure 4.1; Figure 4.2). The Property lies approximately 55 km east of Key Lake, 35 km southeast of Moore Lakes, 260 km north of La Ronge and 580 km north of Saskatoon, Saskatchewan. The Property is located in the Northern Mining District of Saskatchewan on 1:50,000 NTS map sheets 74A/14, 74A/15, 74H/01, 74H/02, 74H/03, 74H/07 and 74H/08 and is centered at latitude 57°14' N and longitude 104°52' W.

**Figure 4-1 Property Location Map**



**Figure 4-2 Location of the South Falcon East Property in Northern Saskatchewan**

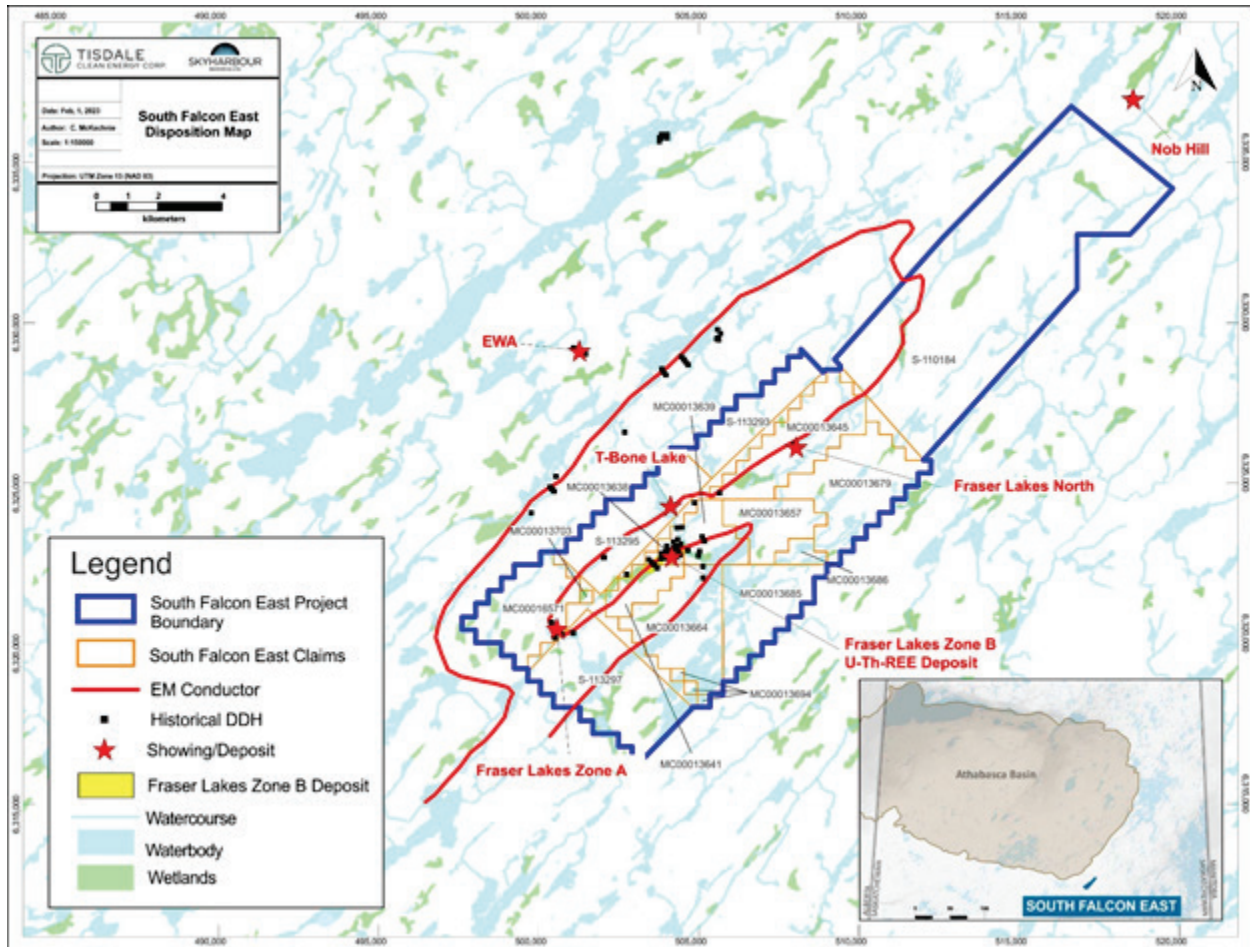




## 4.2 Property Description

The Property covers 16 contiguous claims (Figure 4-3; Table 4-1) which are currently 100% owned by Skyharbour. All Claims are in good standing. The total area of the 16 claims is 12,234.23 hectares, without including the area of partial cells attributed to legacy claims S-110184, S-113293, S-113295, and S-113297.

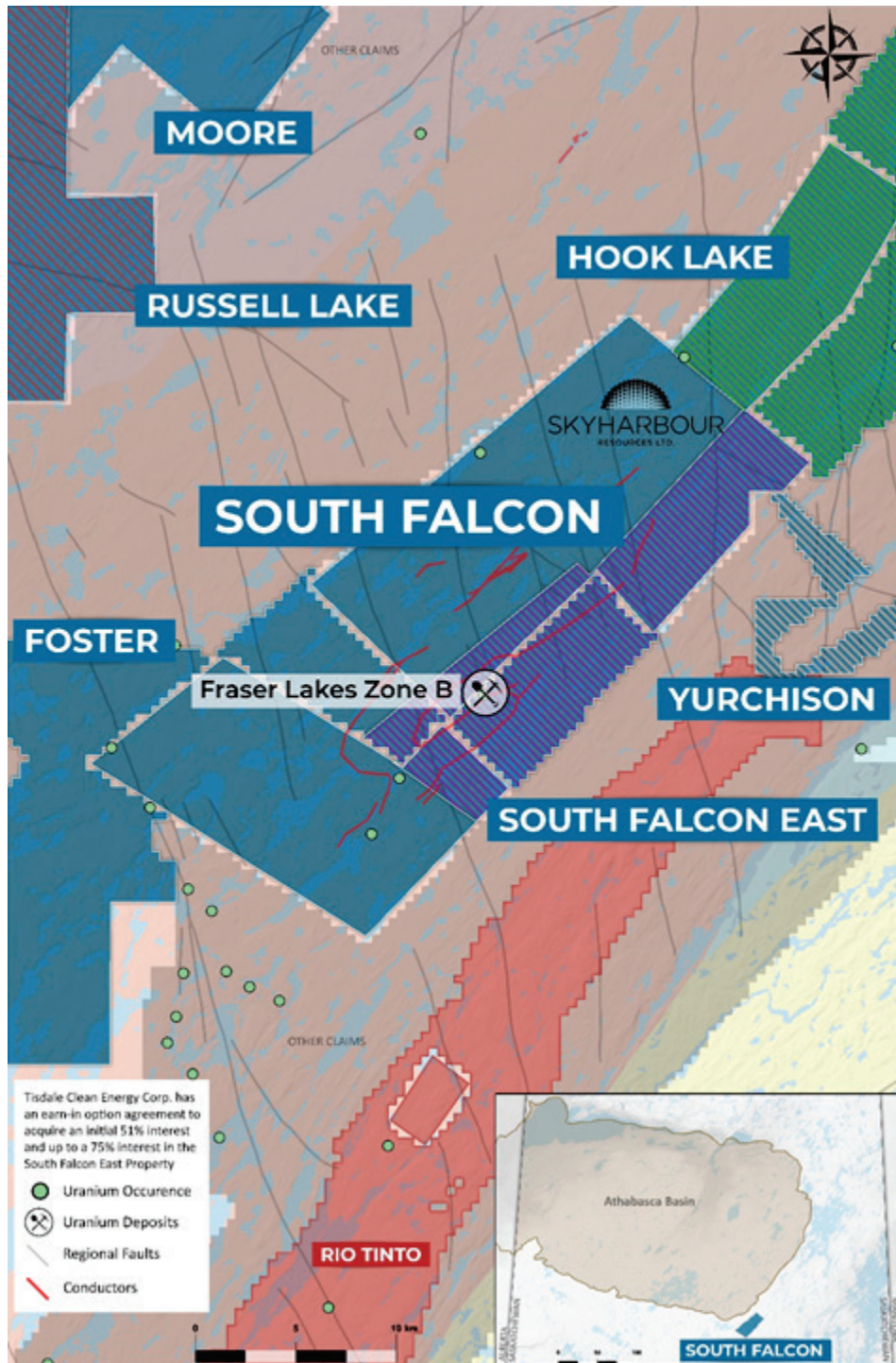
**Figure 4-3 South Falcon East Property Disposition Location Map**



**Table 4-1 South Falcon East Property Disposition Information**

Disposition #	Type	Status	Holder(s)	Total Area	Effective Date	Good Standing Date	Work Req	Avail Expenditures
S-113293	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	519.122	8/31/2006	8/31/2023	\$12,978.05	\$13,519.22
S-113295	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	823.919	8/31/2006	8/31/2023	\$20,597.98	\$67,867.48
S-110184	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	4478	11/9/2006	10/16/2023	\$111,950.00	\$32,722.26
S-113297	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	1157.767	10/17/2006	10/17/2023	\$28,944.18	\$4,323.70
MC00013638	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	49.304	2/26/2020	5/27/2025	\$739.56	\$1,843.98
MC00013685	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	711.617	2/28/2020	5/29/2025	\$10,674.26	\$21,387.38
MC00013686	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	97.797	2/28/2020	5/29/2025	\$1,466.96	\$3,015.18
MC00013679	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	954.948	2/28/2020	5/29/2025	\$14,324.22	\$29,634.48
MC00013694	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	49.352	2/28/2020	5/29/2025	\$740.28	\$1,843.98
MC00013703	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	16.17	2/28/2020	5/29/2026	\$242.55	\$772.25
MC00016571	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	709.972	6/17/2020	9/15/2025	\$10,649.58	\$22,235.78
MC00013645	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	822.134	2/26/2020	5/27/2025	\$12,332.01	\$25,320.35
MC00013664	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	820.855	2/27/2020	5/28/2025	\$12,312.83	\$25,293.13
MC00013641	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	231.256	2/26/2020	5/27/2025	\$3,468.84	\$7,029.30
MC00013639	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	361.239	2/26/2020	5/27/2025	\$5,418.59	\$12,213.73
MC00013657	Mineral Claim	Active	Skyharbour Resources Ltd.   100%	430.778	2/27/2020	5/28/2025	\$6,461.67	\$13,514.10
			<b>Total:</b>	<b>12,234.23</b>				

**Figure 4-4 Nearby Skyharbour Resources Uranium Projects**





### 4.3 Property Ownership

On October 20, 2022, Tisdale announced that it had entered into an option agreement, dated October 19, 2022, with Skyharbour, an arms-length party, pursuant to which it has been granted the right to acquire up to a seventy-five percent interest in the South Falcon East Property.

Under the Option Agreement and assuming the 75% interest is earned, Tisdale will issue Skyharbour 1,111,111 Tisdale shares upfront, fund exploration expenditures totaling CAD \$10,500,000, and pay Skyharbour CAD \$11,100,000 in cash of which \$6,500,000 can be settled for shares in the capital of Tisdale (“Shares”) over the five-year earn-in period.

#### 4.3.1 Terms of the Option Agreement:

Pursuant to the Option Agreement, Tisdale may acquire up to a 75% (seventy-five percent) interest in the Property, in two phases. Initially, Tisdale can acquire a 51% (fifty-one percent) interest in the Property by completing the following payments and incurring the following exploration expenditures on the Property:

- On the closing date (“Closing”), paying CAD \$350,000 and issuing 1,111,111 Shares to Skyharbour upfront;
  - By the eighteen-month anniversary of Closing, completing at least \$1,250,000 in exploration expenditures, and paying Skyharbour \$1,450,000, of which up to \$1,000,000 may be paid in Shares based on the 20-day volume-weighted average closing price calculated on the day of issuance (“VWAP”), at the election of Tisdale;
  - By the second anniversary of Closing, completing an additional \$1,750,000 in exploration expenditures, and paying Skyharbour \$1,800,000, of which up to \$1,000,000 may be paid in Shares based on the VWAP, at the election of Tisdale;
  - By the third anniversary of Closing, completing an additional \$2,500,000 in exploration expenditures, and paying Skyharbour \$2,500,000, of which up to \$1,500,000 may be paid in Shares based on the VWAP, at the election of Tisdale.

After acquiring a 51% interest, Tisdale may increase its interest in the Property to 75% by:

- Completing a payment of \$5,000,000 to Skyharbour by the fourth anniversary of Closing, of which up to \$3,000,000 may be satisfied in Shares based on the VWAP, at the election of Tisdale, and incurring exploration expenditures on the Property of an additional \$2,500,000 in each of the fourth and fifth anniversaries of Closing.

All common shares issued to the Company will be subject to a four-month-and-one-day statutory hold period in accordance with applicable securities laws. No finders’ fees or commissions are owing by Skyharbour in connection with entering into the Option Agreement. Completion of the transactions contemplated by the Option Agreement, and the issuance of any common shares to Skyharbour, remains subject to the approval of the TSX Venture Exchange.

In the event that additional share issuances to Skyharbour would result in Skyharbour owning 10% or more of Tisdale, a cash payment must be made in lieu of the shortfall to prevent Skyharbour becoming a reporting insider of Tisdale. Furthermore, Tisdale will be the operator during the earn-in period with Skyharbour retaining the final approval authority over the proposed work and exploration programs.

In the event that Tisdale spends, in any of the above periods, less than the specified sum, it may pay to the Company the difference between the amount it actually spent and the specified sum before the expiry of that period in full satisfaction of the exploration expenditures to be incurred. In the event that Tisdale spends, in any period, more than the specified sum, the excess shall be carried forward and applied to the exploration expenditures to be incurred in succeeding periods.



Assuming Tisdale exercises the option and acquires an interest in Property, the parties intend to form a joint venture for the ongoing development of the Property. A small portion of the Property is subject to an existing 2% net smelter returns royalty owing to a former owner, and Tisdale has agreed to grant a further 2% royalty to Skyharbour on the remaining bulk of the project area including the Fraser Lakes Zone B deposit. One-half of the royalty (i.e. 1%), to be granted to Skyharbour can be purchased at any time by completing a one-time cash payment of \$1,000,000.

#### 4.3.2 Previous Property Ownership

In May of 2014, Skyharbour announced it had entered into a Purchase Agreement (the “Agreement”) with Denison whereby Skyharbour would acquire Denison’s 100% interests in the Way Lake Uranium Project as well as the Yurchison Lake Project both located on the eastern flank of the Athabasca Basin, Saskatchewan (see Skyharbour news release dated May 30, 2014 which is posted on SEDAR). Under the terms of the Agreement, Skyharbour will pay \$20,000 in cash and issue two million common shares in consideration for Denison’s 100% interest in both projects. The common shares of Skyharbour are issuable upon TSX Venture Exchange approval and will be subject to a hold period of four months and one day from the date of issue. Denison will retain a 2% NSR in the projects of which 1% may be purchased by the Company for \$1,000,000.

Denison acquired the Way Lake property through the acquisition of JNR. In January 2013, Denison announced the closing of its previously announced acquisition of the outstanding common shares of JNR (see Denison news release dated January 31, 2013 which is posted on SEDAR). The transaction was completed pursuant to a plan of arrangement (the “Arrangement”) in accordance with the Business Corporations Act (British Columbia), which was approved by the British Columbia Supreme Court on January 30, 2013. Security holders of JNR approved the Arrangement on January 28, 2013. All conditions of closing were satisfied by both parties.

Pursuant to the Arrangement, the former shareholders of JNR received, for each JNR common share held, 0.073 of a Denison common share (the “Exchange Ratio”). All of the outstanding options and common share purchase warrants of JNR were exchanged for options and warrants to purchase common shares of Denison and were exercisable to acquire that number of common shares of Denison and at an exercise price determined by reference to the Exchange Ratio.

#### 4.4 Environmental Liabilities

There are no mine workings, tailing ponds, waste deposits or other significant natural or man-made features on the claims and consequently the Property is not subject to any liabilities due to previous mining activities that may impact future development of the Property.

#### 4.5 Acquisition of Mineral Dispositions in Saskatchewan

Prior to December 1, 2012, mineral dispositions were located in the field by corner and boundary claim posts which lie along blazed and cut boundary lines. The entire length of the Property boundary has not been surveyed. A legal survey for a claim was not required under the provisions of the Saskatchewan Mineral Disposition Regulations of 1986 nor under the Mineral Tenure Registry Regulations for claims. The Property location is defined on the government claim map.

As of December 1, 2012, mineral dispositions are defined as electronic mineral claims disposition parcels within the Mineral Administration Registry of Saskatchewan (MARS), as per the Mineral Tenure Registry Regulations (formerly The Mineral Disposition Regulations, 1986). MARS is a web-based e-Tenure system for issuing and administering permits, claims and leases.

MARS allows registered users to:

- Acquire mineral dispositions over the internet using a GIS map of Crown mineral ownership

- Transfer dispositions to other registered users
- Divide dispositions using GIS tools
- Submit records of work expenditures using a web form
- Search dispositions and obtain copies of search abstracts
- Group work expenditures among adjoining dispositions
- Convert dispositions from permits to claims
- Convert dispositions from claims to leases
- Convert dispositions from leases to claims
- Access an electronic re-opening board showing Crown mineral lands coming available for new acquisition

Mineral claims registered in Saskatchewan grant the holder the exclusive right to explore for minerals subject to the Mineral Tenure Registry Regulations. A claim does not grant the holder the right to extract, recover, remove or produce minerals from the claim lands except for the following purposes:

- assaying and testing;
- metallurgical, mineralogical or other scientific studies

A holder of a claim may conduct bulk sampling if a holder of a claim provides notice to the minister in an approved form and manner before conducting the bulk sampling; and any minerals recovered during bulk sampling remain the CL Property of the Crown.

#### 4.6 Annual Expenditures

Annual expenditures of \$15.00 per hectare are required for the 2<sup>nd</sup> through tenth years after staking of a claim to retain each disposition, a rate which currently applies to some of the dispositions comprising the Property. This rate increases to \$25.00 per hectare annually after 10 years. Required assessment work for each mineral disposition is listed in Table 1. Total annual assessment expenditure requirements for the entire Property is \$ \$253,301.56. The Property is currently in good standing.

Exploration and mining in Saskatchewan are governed by The Mineral Tenure Registry Regulations, 2012, and administered by the Lands and Mineral Tenure Branch, Minerals, Lands and Resource Policy Division of the Saskatchewan Ministry of the Economy. There are two key land tenure milestones that must be met in order for commercial production to occur in Saskatchewan: (1) conversion of a claim to lease, and (2) granting of a Surface Lease to cover the specific surface area within a lease where mining is to occur.

Prior to The Mineral Tenure Registry Regulations taking effect, the annual expenditure required was twelve dollars per hectare and claims could only be renewed for a maximum of twenty-one years. Now, pursuant to The Mineral Tenure Registry Regulations taking effect 1 December 2012, any claims requiring renewal prior to 1 December 2013 are still renewed at the rate of twelve dollars per hectare. Any claims to be renewed from 1 December 2013 and onwards will be renewed at the new rate of fifteen dollars per hectare. After the tenth work term, claims will be renewed at a new rate of twenty-five dollars per hectare.

#### 4.7 Permits for exploration

Permits for timber removal, work authorization, work camp permits, shoreland alteration, and road construction are required for most exploration programs from the Saskatchewan Ministry of Environment and Saskatchewan Watershed Authority. Necessary permits include a Surface Exploration Permit, a Forest Product Permit, and an Aquatic Habitat Protection Permit. All drilling programs require a Term Water Rights license from the Saskatchewan Watershed Authority. If any exploration work crosses or includes work on water bodies, streams, and rivers, the Department of Fisheries and Oceans and the Coast Guard must be notified. Ice/snow bridges and clear-span bridges do not require approval from the Coast Guard. Permits may take up to three months to obtain from the regulators. Apart from camp permits, fees for these generally total less than \$200 per exploration program annually. Camp permit fees are assessed on total man-day

use per hectare, with a minimum camp size of one hectare assessed. These range from \$750 per hectare for more than 500 man days to \$175 per hectare for less than 100 man days.

Skyharbour currently holds all necessary permits from the Saskatchewan Ministry of Environment and Saskatchewan Watershed Authority that are required to conduct exploration on the Property. The land use permits from the Saskatchewan Ministry of the Environment for completion of drilling and related activities on this property are in place for the January 1, 2023 to June 30, 2024 period.

#### **4.8 Other Relevant Factors**

The Authors are unaware of any other significant factors and risks that may affect access, title, or the right, or ability to perform exploration work recommended for the Property.

## **5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE, AND PHYSIOGRAPHY**

### **5.1 Accessibility**

The Property is accessible by float or ski-equipped fixed wing aircraft or helicopter from La Ronge which is readily available for charter. La Ronge is approximately 380 km north of Saskatoon by road and Transwest Airways and Pronto Airways provide daily flights to La Ronge from the airport in Saskatoon.

Early stage mineral exploration such as prospecting and geological mapping can be performed on the Property from early June to October; diamond drilling can be performed year-round. Access to many of the drill sites can be done by skidoo and skidder, and skidder can be used to move drills mounted on skids during the winter months. However, during the summer and fall drilling campaigns, helicopter support is required for moving the drill rig and personnel.

### **5.2 Local Resources**

Food, fuel and supplies are readily available from Saskatoon and La Ronge. Limited supplies are also available in Points North Landing.

### **5.3 Infrastructure**

Mining operations at Key Lake ceased in 1994, however the Key Lake mill remains active and is currently used to process uranium ore which is transported by truck from the McArthur River mine, a distance of about 70 km. An electrical transmission line linking both the Key Lake and McArthur River mine operations with the provincial power grid is located approximately 12 km south of Fraser Lakes Zone B and 8 km from the southern margin of the South Falcon East property.

Exploration completed on the Property by JNR (2004-200) was conducted out of a base camp set up on Skyharbour's adjacent South Falcon Point property along the Walker River, which is also the location of the core storage for the Property. At present, the temporary work camp has been dismantled, but camp could easily be re-established at the former Walker River site as this site is permitted for a temporary work camp as part of Skyharbour's active exploration permit on the South Falcon and South Falcon East properties. Fresh water is readily obtained from the numerous surrounding lakes.

### **5.4 Climate**

The climate is typical of the continental sub-arctic region of northern Saskatchewan. Summers are short and rather cool, even though daily temperatures can reach above 30°C on occasion. Mean daily maximum temperatures of the warmest months are around 20°C and only three months on average have mean daily temperature of 10°C or more. The average frost-free period is approximately 90 days. The winters are cold and dry with mean daily temperature for the coldest month below minus 20°C. Winter daily temperatures can reach below minus 40°C on occasion.

Freezing of surrounding lakes, in most years, begins in early November and ice breakup occurs around the middle of May. The cold temperatures allow for a sufficient ice thickness to support a drill rig generally from mid-January to mid-April. Exploration on the Property can be conducted year-round despite cold winter conditions.

Average annual total precipitation for the region is approximately 450 mm, of which 70% falls as rain, more than half occurring from June to September. Snow may occur in all months but rarely falls in July or August. The prevailing annual wind direction is from the west.

## 5.5 Physiography

The Property lies within the Boreal ecozone near the contact of the Athabasca Plain ecoregion to the north and the Churchill River Upland ecoregion to the south (Figure 5.1) (Acton et al. 1998).

### **The Churchill River Upland ecoregion**

The Churchill River Upland ecoregion is located along the southern edge of the Precambrian Shield in north-central Saskatchewan and Manitoba. It is marked by cool summers and very cold winters. The mean annual temperature is approximately  $-2.5^{\circ}\text{C}$ . The mean summer temperature is  $12.5^{\circ}\text{C}$  and the mean winter temperature is  $-18.5^{\circ}\text{C}$ . The mean annual precipitation ranges from 400–500 mm.

This ecoregion is classified as having a subhumid high boreal ecoclimate. It forms part of the continuous coniferous boreal forest that extends from northwestern Ontario to Great Slave Lake in the southern Northwest Territories. The predominant vegetation consists of closed stands of black spruce and jack pine with a shrub layer of ericaceous shrubs and a ground cover of mosses and lichens. Black spruce is the climatic climax species. Depending on drainage, surficial material and local climate, trembling aspen, white birch, white spruce, and to a lesser extent balsam fir, occupy significant areas, especially in the eastern section. Bedrock exposures have fewer trees and are covered with lichens. Closed to open stands of stunted black spruce with ericaceous shrubs and a ground cover of sphagnum moss dominate poorly drained peat-filled depressions. Permafrost is distributed throughout the ecoregion, but is only widespread in organic deposits. Although local relief rarely exceeds 25m, ridged to hummocky, massive Archean rocks form steeply sloping uplands and lowlands.

Small to large lakes compose 30–40% of the ecoregion and drain northeastward via the Churchill, Nelson and Seal river systems. In the western part of the ecoregion, uplands are covered with discontinuous sandy acidic tills, whereas extensive thin clayey lacustrine deposits and locally prominent, sandy fluvio-glacial uplands are common in the eastern section. Exposed bedrock occurs throughout the ecoregion and is locally prominent. Dystric and Eutric Brunisols are associated with sandy uplands, whereas Gray Luvisols occur on clayey lacustrine uplands and loamy to silty fluvio-glacial deposits. On level and in depressional areas, Gleysolic soils are associated with clayey sediments, whereas Mesisols and Organic Cryosols are associated with shallow to deep peatlands.

A pulpwood and dimension lumber industry operates to a limited extent in the southern part of the ecoregion. Wildlife includes barren-ground caribou, moose, black bear, lynx, wolf, beaver, muskrat, snowshoe hare and red-backed vole. Bird species include raven, common loon, spruce grouse, bald eagle, gray jay, hawk owl, and waterfowl, including ducks and geese. Trapping, hunting, fishing, and tourism are the dominant uses of land in this region. The major communities include Flin Flon and La Ronge. The population of the ecoregion is approximately 28,000.

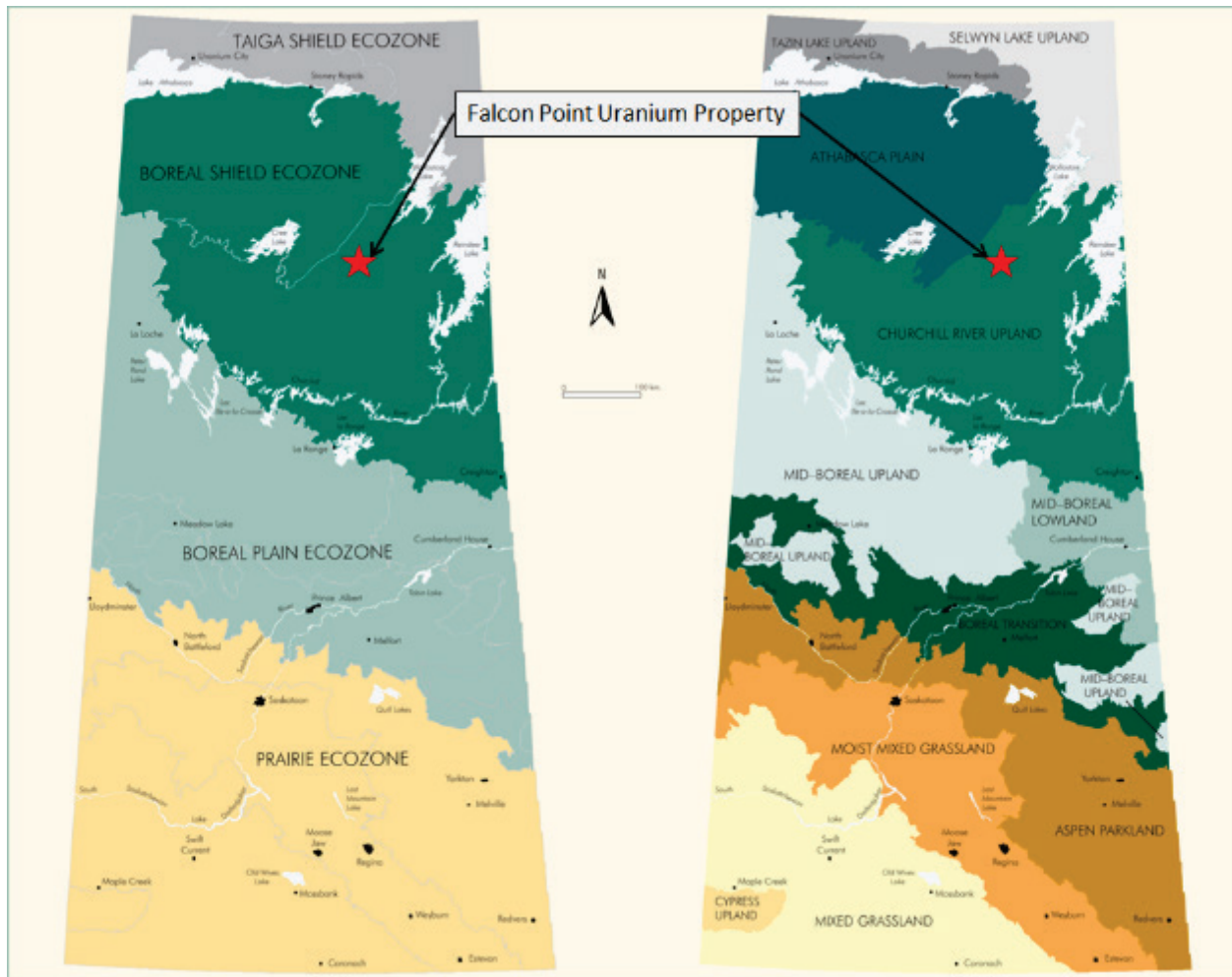
### **The Athabasca ecoregion**

The Athabasca ecoregion extends south from Lake Athabasca to Cree Lake in northwestern Saskatchewan, and is roughly coincident with the flat-lying Proterozoic Athabasca sandstones. It is marked by short cool summers and very cold winters. The mean annual temperature is approximately  $-3.5^{\circ}\text{C}$ . The mean summer temperature is  $12^{\circ}\text{C}$  and the mean winter temperature is  $-20.5^{\circ}\text{C}$ . The mean annual precipitation ranges from 350–450 mm. This ecoregion is classified as having a subhumid high boreal ecoclimate. It forms part of the continuous coniferous boreal forest that extends from northwestern Ontario to Great Slave Lake in the Northwest Territories. Stands of jack pine with an understory of ericaceous shrubs and lichen are dominant. Some paper birch, white spruce, black spruce, balsam fir, and trembling aspen occur on warmer, south-facing sites.

Forest fires are common in the Athabasca ecoregion, and most coniferous stands tend to be young and stunted. Bedrock exposures have few trees and are covered with lichens. Permafrost occurs sporadically throughout the ecoregion. The plain is covered with undulating to ridged fluvio-glacial deposits and sandy, acidic till. Sandy Dystric Brunisols are dominant, whereas Organic Fibrisols and Organic Cryosols are

associated with peat plateaus, palsas and organic veneers. Wetlands are extensive in the western third of the ecoregion. Local areas of eolian sandy Regosols occur along the southern shore of Lake Athabasca. The plain slopes gently and drains northwestward via Lake Athabasca, Slave River, and a network of tributary secondary streams and drainage ways. Small to medium-sized lakes are more numerous to the northeast. Wildlife includes moose, black bear, woodland caribou (important winter range), lynx, wolf, beaver, muskrat, snowshoe hare, waterfowl (including ducks, geese, pelicans, and sandhill cranes), grouse, and other birds. Resources in the southern section of the ecoregion are used for local sawlog forestry. Trapping, hunting, fishing, and industrial activities associated with uranium mining are the dominant uses of land in this ecoregion. Stony Rapids and Cree Lake are the main communities. The population of the ecoregion is approximately 1,100.

**Figure 5-1 Eozones and Ecoregions of Saskatchewan (from Acton et al, 1988).**





## 6 HISTORY

### 6.1 Regional Exploration History

The first major exploration activity in the eastern Athabasca area occurred in 1969 after the discovery of the Rabbit Lake uranium deposit in 1968. The exploration consisted mainly of airborne radiometric, EM and magnetic surveys and ground prospecting.

In the early 1970s only a few companies continued with active exploration in the Athabasca Basin, leading to the discovery of the Collins Bay A (1971), Raven (1972) and Horseshoe (1974) deposits as well as the Key Lake deposit in 1977. After the discovery of the Key Lake deposit, many exploration companies were again active in area until early 1980s. The exploration work included ground and airborne geophysics (EM, magnetic, radiometric), geological mapping, radiometric prospecting, lake sediment sampling, trenching and drilling. This work in the late 1970's and early 1980's led to the discovery of Midwest (1977), West Bear (1977), Collins Bay B and D (1977, 1979), McClean Lake (1977, 1982), Eagle Point (1980) and Cigar Lake (1981) deposits. Continued exploration in the late 1980's led to the discovery of additional deposits in the McLean Lake area in 1988-1989 and the discovery of the McArthur River deposit in 1988.

Exploration activity in the eastern Athabasca basin again was concentrated in the late 1990's and the early 2000's leading to the discovery of the P Patch (1997) and the Millennium (2002) deposits along with several other showings and deposits include JNR's (now Skyharbour) Maverick Zone. Additional exploration in the eastern Athabasca Basin in the later 2000's and early 2010's led to the discovery of the Roughrider (2008), Phoenix (2008), The Heldeth Túé (i.e. J Zone, 2010) and Gryphon (2014) deposits. The most recent discoveries in the eastern Athabasca Basin include the Huskie (2017), Orora (2017), Hurricane (2018) deposits.

### 6.2 Falcon Point Property Exploration History

Uranium exploration has been undertaken on the South Falcon East Uranium Project and in the surrounding areas for over 40 years. Numerous and varied programs have been carried out on different portions of the Property, including diamond drill campaigns, airborne and ground geophysics, boulder sampling and prospecting. A short summary of previous work and more recent work is presented below. A detailed description of work completed by JNR is presented in Sections 9 and 10.

#### **1968:**

In 1968 Eric Partridge identified anomalous copper and molybdenum in pegmatite 700 m west of the central portion of Fraser Lakes (Partridge, 1968).

#### **1969:**

Dynamic Petroleum Products Limited followed up the work done by Eric Partridge with an airborne EM, magnetic and radiometric survey. The survey outlined a moderately strong conductor with a weak radiometric anomaly in the area of the anomalous copper and molybdenum (Foster, 1970).

#### **1971:**

Dynamic Petroleum Products Limited completed prospecting, detailed geological mapping, VLF-EM 16, scintillometer surveys and trenching over the Fraser Lakes showings as a follow up to the 1969 airborne survey. Uraninite, 2 to 3% pyrrhotite, up to 1% chalcopyrite, trace molybdenite, and 3 to 4% magnetite was identified in four trenches. Analytical values from the trenches returned an average of 0.081 wt% U<sub>3</sub>O<sub>8</sub>, 0.064 wt% ThO<sub>2</sub>, 0.003 wt% Ni, 0.024 wt% Cu, 0.005 wt% MoS<sub>2</sub>, 0.023 wt% Pb and 0.13 wt% Zn in grab samples (Ko, 1971).

#### **1978:**

AGIP completed an airborne EM and magnetic INPUT survey, which outlined three arcuate conductors, Zones A, B and C in the southern half of the Property. The survey was followed up by local and regional ground VLF-EM, radiometric, geochemical, prospecting and geological surveys. Regional geologic

mapping and radiometric prospecting located numerous sub-rounded to rounded uraniferous boulders of various lithologies, and one localized zone (30x10 m) of extremely anomalous radioactivity in a swamp near Hook Lake (Zone S) in the northern part (Figure 3) of what was JNR's Way Lake property, which is now within Skyharbour's adjacent Hook Lake Property (Donkers and Tykajlo, 1982).

**1979:**

AGIP completed trenching on Zone S and exposed a large (6x1.5 m) vein of very high-grade uranium mineralization in a shear zone. An average of 28 wt%  $U_3O_8$  and extremely high rare earth values over an interval of 1.5 m were outlined by systematic chip sampling across the vein. The vein was drill tested by six holes, none of which returned any significant uranium mineralization. Three holes were drilled on Zones A and B which intersected graphitic metasediments, faulting and anomalous Cu, Ni, Co and U geochemistry (Donkers and Tykajlo, 1982).

**1980-1983:**

A total of 165 square km of ground work included regional prospecting and mapping and detailed exploration of the S grid by AGIP. The work on the S grid included numerous geological, geochemical, geophysical, radiometric, prospecting and structural surveys as well as the completion of an additional 14 drill holes. Mineralization was intersected in five drill holes with grades ranging from 0.04 wt% U/1.6 m to 1.88 wt% U/1.1 m. AGIP subsequently dropped the property and the property remained dormant until JNR staked their initial claims in 2004 (Donkers and Tykajlo, 1982; Fedorowick, 1984).

### 6.3 Historical Mineral Resource Estimate

In 2012, JNR commissioned GeoVector Management Inc. ("GeoVector") to complete a resource estimate for the Properties Fraser Lakes Zone B (Armitage and Sexton, 2012). In 2015, GeoVector was commissioned by Skyharbour to update the technical report (Armitage, 2015). The 2012 and 2015 technical reports were written in support of a MRE for the Fraser Lakes Zone B. The Fraser Lake Zone B deposit was reported to contain an Inferred resource, at a base case cut-off grade of 0.01%  $U_3O_8$ , totalling 6.96 Mlbs of  $U_3O_8$  within 10.4 million tonnes at an average grade of 0.030%  $U_3O_8$ , with significant quantities of rare earth element oxides (REO), specifically  $La_2O_3$ ,  $Ce_2O_3$ ,  $Yb_2O_3$ , and  $Y_2O_3$ . The inferred resource also includes a significant thorium component. Using the base case COG of 0.01%  $U_3O_8$ , the Inferred resource includes 5.34 Mlbs of  $ThO_2$  at an average grade of 0.023%  $ThO_2$ . The MRE had an effective date of March 23rd, 2015.

Although the MRE was at the time classified in accordance with CIM (2014) Definition Standards and was prepared and disclosed in compliance with disclosure requirements for mineral resources or reserves set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2011), the MRE for the Fraser Lakes Zone B is considered historical in nature with respect to Tisdale and Tisdale is not treating the historical resource as current. As the historical MRE was completed in 2012, the historical MRE does not comply with current disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2016) and does not comply with current 2019 CIM Definition Standards - For Mineral Resources and Mineral Reserves, including the critical requirement that all mineral resources "have reasonable prospects for eventual economic extraction". In the Authors opinion, additional work is required, including mineralogical studies, metallurgical studies and engineering studies in order to meet current standards including the critical requirement that all mineral resources have reasonable prospects for eventual economic extraction either by open pit or underground mining methods.

The historical MRE was determined from a database of 1,283 assay results in 32 drill holes totalling 5,694 m of drilling completed by JNR between August 2008 and April 2011. The drill holes are spaced primarily 75 to 250 m apart along a strike length of approximately 1,400 m. The drill holes tested mineralization to a vertical depth up to 175 m. Mineralization varies in thickness from 2 m to over 20 m. Grades for  $U_3O_8$  was interpolated into the blocks by the inverse distance squared ( $ID^2$ ) method. In addition to  $U_3O_8$ , grades for  $ThO_2$  and REO, including  $La_2O_3$ ,  $Ce_2O_3$ ,  $Yb_2O_3$ , and  $Y_2O_3$  have been interpolated into the blocks.

## 7 GEOLOGICAL SETTING AND MINERALIZATION

### 7.1 Regional Bedrock Geology

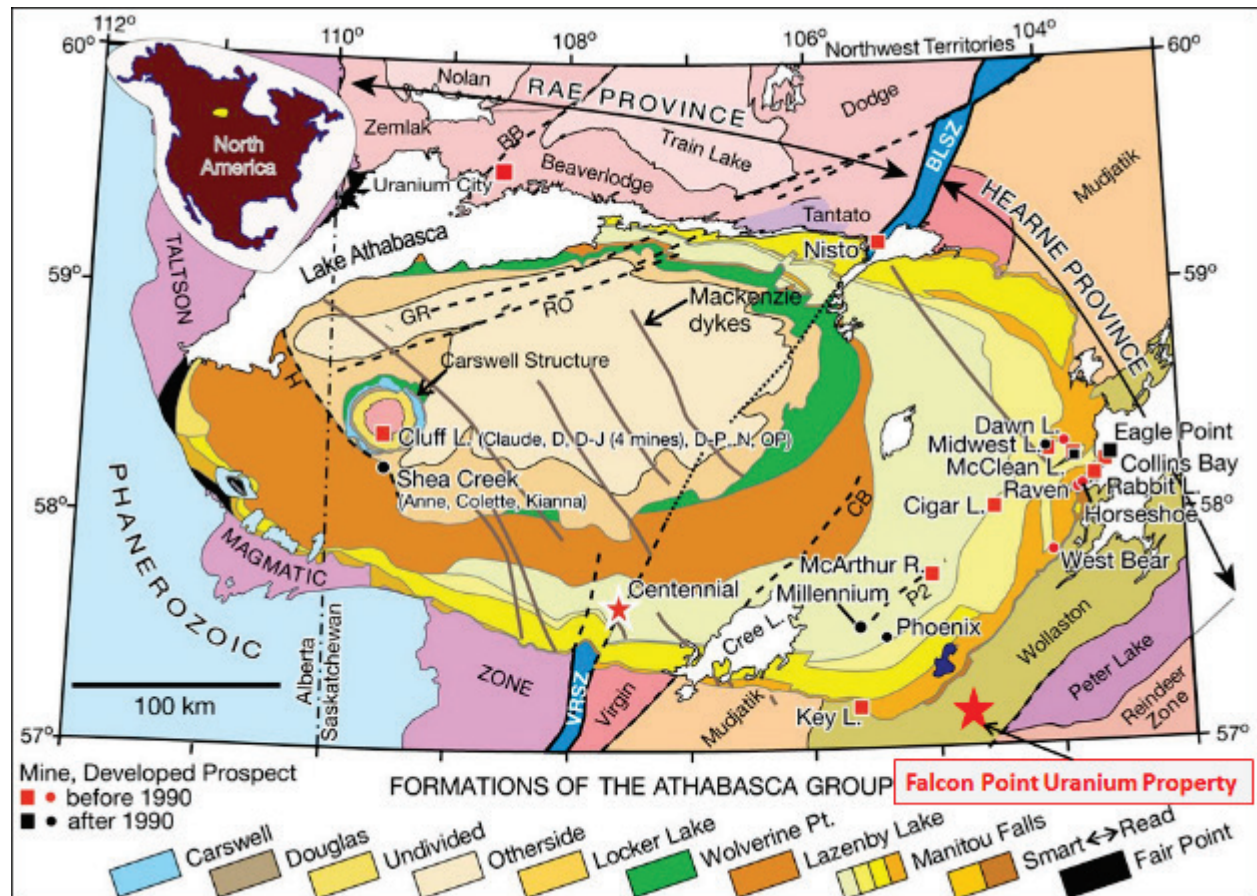
The South Falcon East project is located approximately 25 km southeast of the southeastern margin of the Athabasca Basin (Figure 7.1). The Athabasca Basin is a region extending approximately 450 km east west x 230 km north-south which is underlain by an undeformed clastic sequence of Mesoproterozoic rocks known as the Athabasca Group. These predominantly sandstone units lay unconformably on the deformed and metamorphosed basement rocks of the Cree Lake Zone, which is a component of the Hearne cratonic block. The basement rocks consist of reworked Archean orthogneisses which are overlain by and structurally intercalated with a highly deformed supracrustal Paleoproterozoic sequence known as the Wollaston Group (Annesley and Madore, 2002, Annesley et al 2003, 2005). The Athabasca Group sediments do not exist within the Property area.

The basement rocks which underlie the eastern Athabasca Basin can be divided into four lithostructural sub-domains which are prospective for pegmatite hosted U-Th-REO mineralization (Figure 7.2). These are, from west to east, the Mudjatik Domain, the Wollaston-Mudjatik Transition Zone, the western Wollaston Domain and the eastern Wollaston Domain (Annesley et al. 1997, 2005). The basement rocks within the project area include components from the Mudjatik Domain, the Wollaston-Mudjatik Transition Zone and the western Wollaston Domain. The intense deformation and metamorphism of the basement rocks is a result of the continent to continent collision of the Trans-Hudson Orogen (circa 1.8 Ga) which led to the development of the Wollaston fold-thrust belt. Reactivated basement faults under Athabasca Group sandstone cover are thought to have provided the setting for the large high-grade unconformity-type deposits of the Athabasca Basin region.

The Wollaston Domain consists of predominantly Archean granitic domes with mantling Paleoproterozoic age metasediments. The common northeast-oriented linear fabric, which is most clearly expressed in the western Wollaston Domain, reflects the major northeast-oriented strike-slip movements and deeply in-folded supracrustal packages resulting from oblique collisional tectonics during the early Proterozoic Trans-Hudson Orogen. The relatively nonlinear Mudjatik Domain which is located further to the west, is thought to have been less strongly affected by Hudsonian transpressive tectonics, and is more deeply eroded, hence Paleoproterozoic supracrustals are relatively limited in extent.

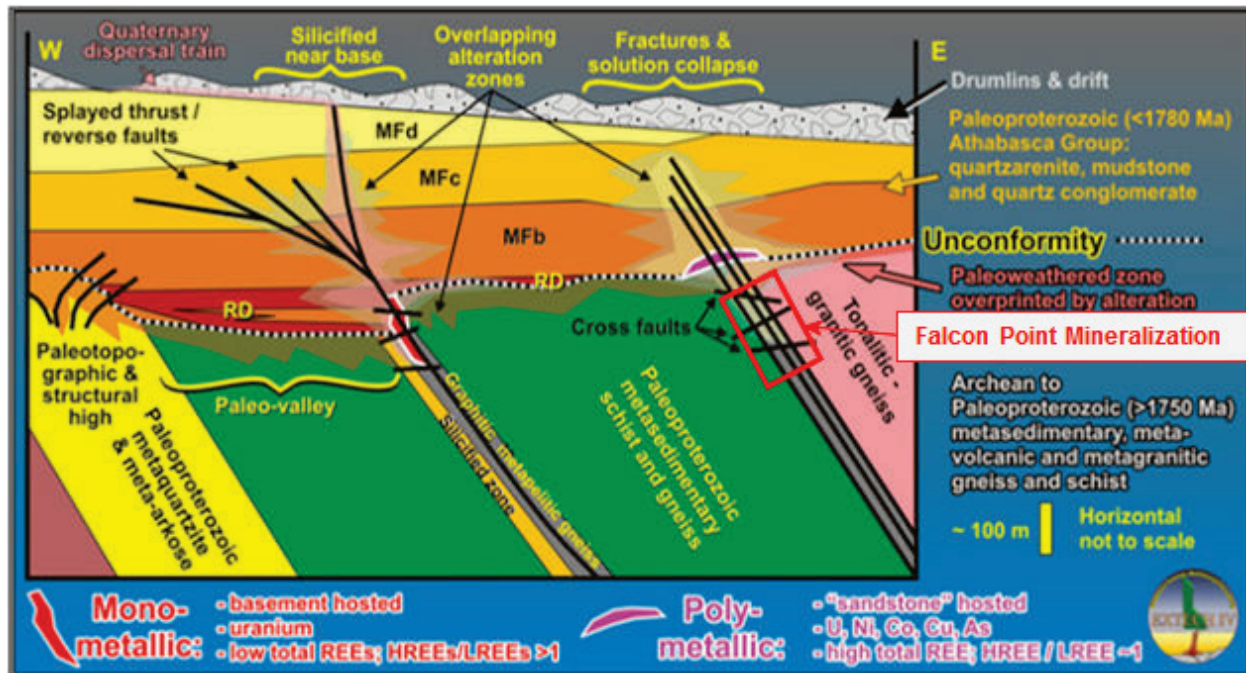
The Paleoproterozoic metasediments are largely composed of graphitic and non-graphitic pelitic and psammo-pelitic gneisses. Calcareous meta-arkoses and quartzites occur increasingly in upper Paleoproterozoic stratigraphy which is predominant in the eastern Wollaston Domain. The softer graphitic units are often accompanied by faulting, particularly where adjacent to relatively rigid basement units such as Archean granites and Paleoproterozoic quartzites. Fault movements, particularly strike-slip movements, enhance the electrical conductivity of graphitic horizons by aligning the graphite grains and promoting electrical continuity. Reactivated basement structures also provide enhanced permeability in the basement and overlying sandstone which promotes fluid flow. Mixing of reducing ground water derived from basement and oxidizing ground water circulating within the overlying sandstone is thought to be a key component in the formation of unconformity uranium deposits. Thus, graphitic basement conductors are commonly targets for unconformity-type uranium mineralization.

**Figure 7-1** Map showing the stratigraphic subdivisions of the Athabasca Group in the Athabasca Basin, underlying Precambrian domains, and major unconformity-related uranium deposits (after Jefferson et al., 2007). The inset figure shows the location of the Athabasca Basin (yellow) in North America. Major brittle reactivated shear zones: BB = Black Bay, BLSZ = Black Lake shear zone, CB = Cable Bay, GR = Grease River, H = Harrison, RO = Robillard, VRSZ = Virgin River shear zone.





**Figure 7-2** Cartoon showing the geological setting for the U-Th-REE mineralized granitic pegmatite's of the Way Lake or Fraser Lakes Zone B (modified from Jefferson et al., 2007)



## 7.2 Paleoproterozoic Basement

The Wollaston Domain consists of a Paleoproterozoic supracrustal sequence known as the Wollaston Group overlying remobilized dome shaped Archean granitoids. Wollaston Group rocks are generally tightly folded along northeast-southwest trending axes. The Wollaston Group stratigraphy consists of a basal pelitic unit which is often graphitic, overlain by a sequence of psammites intercalated with calc-silicates, quartzites, pelitic and psammo-pelitic metasedimentary lithologies. Metamorphic grades range from upper greenschist to lower granulite facies (Annesley et al., 2002, SGS, 2003, McKechnie et al. 2012 b).

The Wollaston Domain (Portella and Annesley, 2000, Annesley et al., 2001, 2002, 2003) can be further subdivided into eastern and western sub-domains. The western Wollaston Domain consists of the lower Wollaston stratigraphy including the basal graphitic pelitic gneisses associated with many uranium deposits. The eastern Wollaston Domain is composed primarily of paragneiss and orthogneiss derived from pelitic to psammitic metasediments and Archean/Hudsonian felsic to intermediate intrusives. The western Wollaston Domain is considered more favourable for exploration for unconformity-type uranium deposits.

The Mudjatik Domain consists of granitoid gneisses containing discontinuous arcuate zones of Wollaston Group equivalent metasediments. Metamorphic grades within the Mudjatik Domain range from upper amphibolite to granulite facies (Annesley et al., 2002, SGS, 2003). Structurally, the basement rocks have been subjected to multiple deformational episodes associated with the Trans-Hudson Orogen. Age estimates for the deformations associated with the Trans-Hudson Orogen are in the 1.80 to 1.84 Ga range (Annesley et al. 1997, 1999, 2002, SGS, 2003).

## 7.3 Archean

The Wollaston Group metasediments are underlain by, or are in structural contact with, Archean granitoid rocks. In the western Wollaston and Mudjatik Domains, these granitic bodies are generally expressed as magnetic highs due to their elevated magnetite content in relation to the very weakly magnetic lower Wollaston Group metasediments (McMullan, et al., 1989). In the eastern Wollaston Domain region, this relationship is generally not clear due to the often similar magnetite contents of the upper Wollaston Group metasediments and granite units.

The Archean granite bodies are thought to form doubly plunging antiformal domes elongated in a northeast-southwest direction. Some nappes also appear to be present, as evidenced by apparently synformal Wollaston Group stratigraphy cored by Archean granites. In the Mudjatik Domain the granitoids are more prevalent than in the Wollaston Domain, and tend to be arcuate rather than elongated. Ages ranging from 2.57 Ga to 2.78 Ga have been reported for the Archean granites of the eastern Athabasca Basin region (Annesley et al., 1997, 1999, 2002).

## 7.4 The Athabasca Group

The Athabasca Basin covers approximately 85,000 square kilometres of northern Saskatchewan (Figure 4) and a small portion of eastern Alberta. Detrital zircon geochronology constrains the age of the basin to between 1,740 and 1,550 Ma. A maximum depth of 1,500 metres has been established through diamond drilling, whereas seismic surveying indicates a maximum depth of approximately 1,700 metres.

The Athabasca Group consists of at least 2.1 km of predominantly fluvial clastic deposits, with some lacustrine and possible marine sediments confined to the uppermost sequences (Pana and Olson, 2009). The remnants of the Athabasca Group define two partly overlapping depositional basins Jackfish and Cree Basins; Figure 6), which have distinct polarities and tectonic regimes. Seven basin-filling rhythms or third-order sequences are defined as laterally extensive, upward-fining packages bound by unconformities, or picked based on selected sedimentological parameters on lithologies where unconformities are difficult to directly identify in drill core. From base to top, they consist of the following units:

The coarse clastics of the Fair Point Sequence are confined to the western portion of the Athabasca Basin and define the Jackfish sub-basin. Sandstone and conglomerate strata that locally occur along the northern shore of Lake Athabasca belong to the Fair Point Sequence. Above Fair Point is a highly erosive unconformity boundary containing localized paleosols.

The clastics of the overlying successor basin are markedly finer. The basal Shea Creek and Lower Manitou Falls sequences are preserved south and east of the Jackfish sub-basin, whereas the overlying Upper Manitou Falls Sequence extended into the area of the former Jackfish sub-basin.

The overlying Lazenby Lake, Wolverine Point and Locker Lake-Carswell sequences were originally more widespread than the underlying sequences. Their upward-fining stacking pattern indicates backstepping (transgression) under relatively high rates of accommodation. These sequences thicken upward and evolve from entirely fluvial to fluvial-lacustrine to fluvial-lacustrine-marine. The Lazenby Lake and Wolverine Point sequences are widespread over large portions of the central and western portions of the Athabasca Basin. The Locker Lake and Otherside formations occur mostly in the central portion of the basin in Saskatchewan and have limited extent in Alberta. The Douglas and Carswell formations are restricted to the periphery of the 356-515 Ma old Carswell meteorite structure in Saskatchewan.

Rapid changes in sequence thickness and basal lithology may be linked to syn-depositional faulting. Detailed stratigraphy of the Athabasca Group may be used to predict where fault zones occur in the western Athabasca Basin and, therefore, indicate potential for uranium mineralized zones.



## 7.5 Property Geology

The Property and uranium showings occur in the eastern Wollaston Domain (Figure 7.1). The claims are underlain by a steeply dipping, northeast-trending, highly folded, medium- to high grade sequence of intercalated Paleoproterozoic Wollaston Group metasediments and Archean orthogneisses, intruded by Hudsonian gabbroids and granitic pegmatites (Figure 7-3, McKechnie et al 2012 a, b, 2013).

The rocks exposed within the project area consist of Archean felsic gneisses unconformably overlain by metamorphosed Paleoproterozoic shelf-type sediments of the Wollaston Group. These rocks are intruded by mafic rocks of gabbroic composition, by massive and weakly foliated leucocratic granite and by several generations of granitic pegmatites. The uranium mineralization identified on the Fraser Lakes Zones A and B property in 2008 is proximal to a 5 kilometer long folded EM conductor that is comprised of Wollaston Group graphitic pelitic gneisses and uraniumiferous granitic pegmatites and leucogranites. The uraniumiferous granitic pegmatites and leucogranites occur within a highly tectonized contact between Archean granitoids and basal Wollaston Group pelitic metasediments. This tectonized contact, or shear zone, is folded around Archean granitic domes and is thickest within NE plunging synformal and antiformal noses. These fold noses are interpreted to have been dilation zones with potential for brittle re-activation and associated fluid flow, alteration and mineralization after deposition of the Athabasca sandstones (Annesley et.al., 2010, McKechnie et al. 2012 a, b, 2013). The uraniumiferous quartz-feldspar-biotite pegmatites and leucogranites contain minor to trace amounts of uraninite, U-Th-REE rich monazite, molybdenite, chalcopyrite, pyrite and ilmenite (McKechnie et al. 2012 a, b, 2013). Locally, dark smoky quartz segregations and veins also occur.

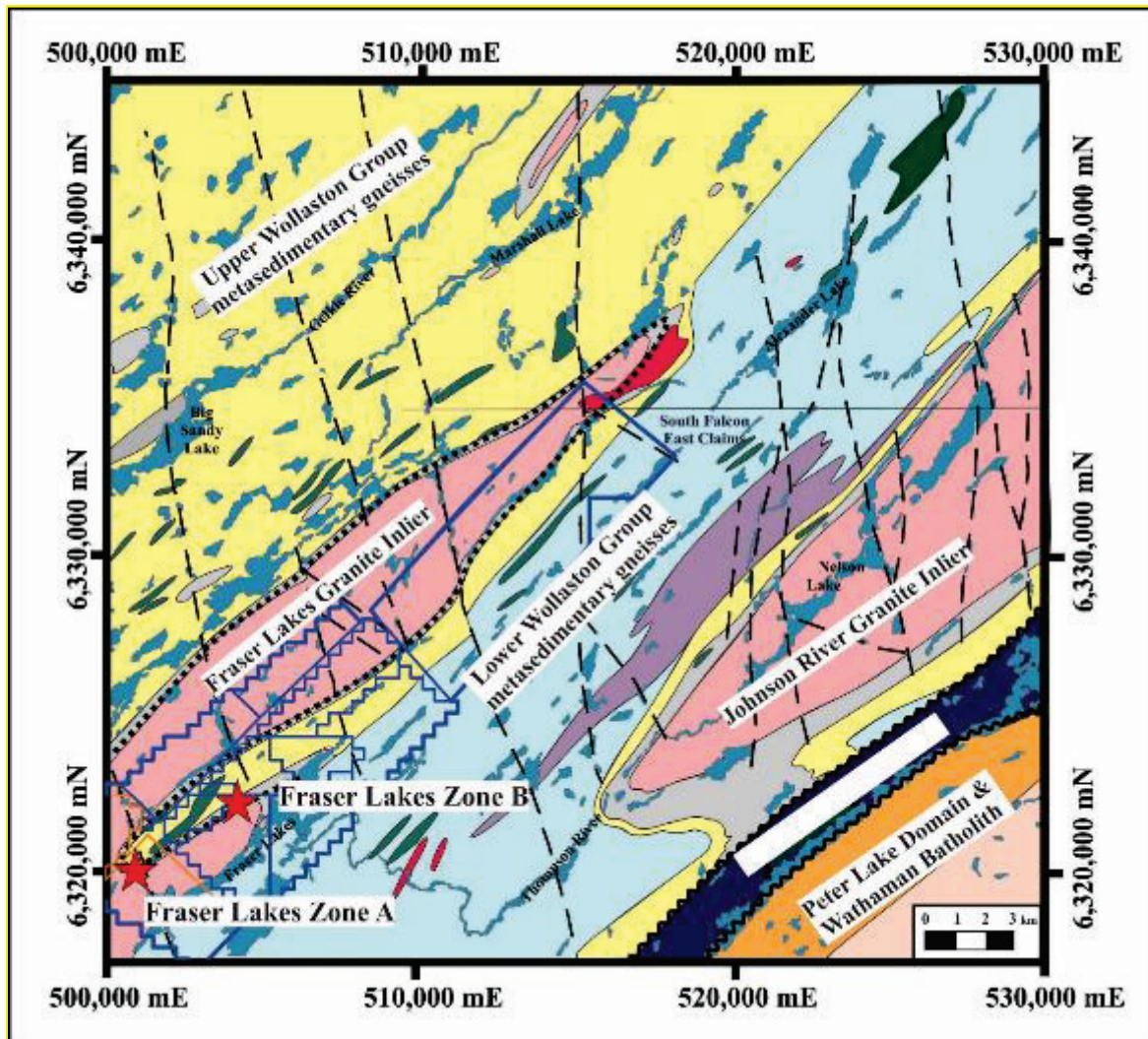
The Fraser Lakes Zone B comprises numerous outcrop showings along the northern extent of a folded EM conductor. Nearly 70 individual mineralized outcrops have been identified over a 500 meter wide by 1.5 kilometer long area within an antiformal fold nose that is cut by an east-west-trending dextral ductile-brittle cross-structure and younger NNW-trending and NNE-trending brittle faults.

The Fraser Lakes Zone A uranium showings occur along the southern extent of the folded EM conductor within a re-activated synformal fold nose associated with Wollaston Group graphitic pelitic gneisses and uraniumiferous leucogranites.

Faulting is abundant within the area and is recognized by topographic lineaments and by magnetic discontinuities. The most obvious fault set strikes north-northwest. Another fault set, trending almost parallel to the dominant foliation (050°), is suggested by the presence of linear topographic features. Two deformational events are recognized in the rocks in the area. The first deformation caused doming of the Archean basement without penetration of the overlying metasediments. This deformation produced a schistosity or gneissosity in the Archean basement rocks and overlying Paleoproterozoic metasediments. The second deformational event caused flattening of the Archean inliers into northeasterly-trending domes and produced tight isoclinal folds in the overlying metasediments. These folds are doubly plunging synforms and antiforms with sub-vertically dipping axial surfaces.

The area was subjected to upper amphibolite to lower granulite facies metamorphism during the Hudsonian Orogeny. This is indicated by the presence of biotite, cordierite, sillimanite, Ti-rich tourmaline, diopside, almandine garnet, spinel and locally hypersthene in the pelitic metasediments (McKechnie et al. 2012 b, 2013).

**Figure 7-3** Geology of the Fraser Lakes Zone B Area; blue outlines are the South Falcon East property boundaries which are still in good standing



## 7.6 Quaternary Geology

The Archean and Paleoproterozoic rocks of the project area are mantled by varying thicknesses of glacial and fluvio-glacial deposits. The glacial direction is approximately 030°. Lodgement till is ubiquitous in areas of outcrop. The till consists of angular boulders set in a matrix of silt and clay. Overlying lodgement till is a variable thickness of ablation till. In places this layer is several metres thick and covers an area of several square km. The ablation till is distinguished from the lodgement till by a greater roundness and lithological heterogeneity of the boulders. The matrix contains less clay and more sand than the lodgement till. Fluvio-glacial deposits consisting of eskers and outwash plains overlie the ablation or lodgement till layers. The eskers and outwash plains are respectively proximal and distal facies of the same process. Deposits occurring throughout the project area have an affinity with northeast-trending topographic lineaments.

## 7.7 Mineralization

### 7.7.1 Fraser Lakes Zone B

The Fraser Lakes Zone B was discovered during the summer 2008 prospecting and drilling program. Three holes, WYL-08-524, 525 and 526 intersected uraniferous mineralized granitic pegmatite. The best results were from WYL-08-525 which intersected several uraniferous intervals, with the best zone returning 0.081 wt% U<sub>3</sub>O<sub>8</sub> over 12.0 m from 77.50 to 89.50 m depth down the drill hole.

The Fraser Lakes Zone B deposit is currently defined by 32 NQ drill holes totaling 5,694.0 m. The Zone B mineralization has a strike length of 1400 m, trends roughly 240° and dips approximately 30° to the north. In cross-section, the pegmatite hosted mineralization is tabular in shape. The Zone B mineralization ranges from 2 to 20 m in width over a vertical thickness of approximately 175 m.

The geologic setting for Fraser Lakes Zone B is within a highly tectonized contact between Archean granitoids and the overlying basal Wollaston Group pelitic metasediments. This tectonized contact, or shear zone, is folded around Archean granitic domes and is thickest within the NE-plunging antiformal nose.

The Fraser Lakes Zone B shows up as clearly visible radiometric highs adjacent to a conductive zone identified from airborne EM data. Interpretation of the airborne magnetic surveys has outlined several ductile-brittle and brittle structures that crosscut the Fraser Lakes Zone B.

### 7.7.2 Macroscopic Features

The Wollaston Group psammopelitic and pelitic gneisses of the Fraser Lakes Zone B are intruded by veins, sheets and dykes of radioactive granitic pegmatites/leucogranite. The intrusive rock types are medium-grained to pegmatitic with variable amounts of quartz, feldspar and biotite. The accessory minerals consist of trace to minor amounts of garnet, fluorite, sphalerite, molybdenite, chalcocopyrite, pyrite, magnetite and ilmenite (McKechnie, et al., 2012 a, b, 2013). Locally, dark smoky quartz segregations and veins occur within the mineralized intervals.

There are multiple generations of granitic pegmatites with the mineralized pegmatites usually being syntectonic and older, and non-mineralized pegmatites being late-tectonic, and younger. U-Pb age dating of magmatic uraninite has returned ages of 1850-1780 Ma for the mineralized pegmatites (McKechnie et al. 2012 a; Mercadier et al. 2013). The U-Th-REE mineralized granitic pegmatites that define Zone B occur within an antiformal fold nose that is cut by an east-west dextral ductile-brittle cross-structure and younger NNW trending and NNE trending brittle faults. The mineralized pegmatites have been further sub-divided based on mineralogical studies (McKechnie et al., 2012 a, 2013). These studies defined two main groups of granitic pegmatites/ leucogranites based on their uranium-thorium (U-Th) versus thorium-rare earth element oxides (Th-REE) contents and their relative position within the antiformal fold nose. The term Group A intrusives refers to the syn- to late-tectonic pegmatites that intrude the northwest limb of the northeast-plunging antiformal fold. The term Group B intrusives refers to the syn- to late-tectonic thorium-REE rich pegmatites that intrude the central portion of the northeast plunging antiformal fold nose.

The U-Th-REE mineralization occurs both in macroscopically fresh and in fractured and altered pegmatite. The dominant hydrothermal alteration observed is clay minerals (illite, dickite and kaolinite), chlorite, hematite, fluorite, sausserite and locally biotite-rich patches. The U-Th-REE mineralization is associated with elevated concentrations of copper, nickel, vanadium, bismuth, zinc, cobalt, lead and molybdenum.

### 7.7.3 Microscopic Features

During the summers of 2009 and 2010 a suite of mineralized core samples was collected from Zone B for petrographic and scanning electron microscope (SEM) analysis. The detailed thin section descriptions and SEM results are part of a M.Sc. thesis completed by Christine McKechnie at the University of Saskatchewan (McKechnie et.al., 2012a, b, 2013; Mercadier et. al. 2013). To date this research has determined that the primary magmatic U-Th-REE mineralogy of the uraniferous Group A syn- to late-tectonic uraniferous pegmatites consists of abundant uraninite, uranoan thorite, zircon and minor allanite; and the Group B syn- to late-tectonic thorium-REO rich pegmatites contain abundant monazite with lesser amounts of zircon, uranoan thorite, thorite, allanite and xenotime. Overprinting the primary mineralization is a variety of secondary U-Th-REE hydrothermal minerals including various uranium secondary minerals thorite-zircon-xenotime solid solution members that are found in association with galena and pyrite and other minerals. The U-Th-REE mineralization occurs as a variety of inherited grains from the pegmatite melt sources, primary magmatic crystals, rims on silicate grains, and as fracture fillings (McKechnie et al. 2012 a, 2013).

## 8 DEPOSIT TYPES

The Fraser Lakes Zone B uranium, thorium and rare earth oxide (REO) mineralization is associated with a series of ca. 1800 Ma sub-parallel granitic biotite-quartz-feldspar pegmatite dykes entrained within the tectonic decollement between Wollaston Group pelitic and graphitic pelitic gneisses of Paleoproterozoic age and underlying Archean granitoid orthogneisses and foliated granites. Mineralization is accompanied by brittle to brittle-ductile deformation and varying degrees of clay, chlorite and hematite alteration (McKechnie et al. 2012 a, b, 2013). This style of primary uranium mineralization associated with intrusive rocks such as granitic pegmatites and alaskite is commonly referred to as 'Rössing type' mineralization. Examples of this style of mineralization include the Rössing and Husab uranium mines, and the Valencia deposit, which is currently under development, all of which are in Namibia (Figure 8.1).

The Rössing deposit is located in the Namib Desert, in western central Namibia (IAEA, 2009, Kinnard and Nex 2007, Berning et.al., 1976). Rössing is located on the south-western flank of a regional oval NE-SW trending dome, about 2 km from the contact of a gneissic Proterozoic basement and meta-sediments (schist and graphite- and sulphide-rich marble originated from continental plate-form sediments of the Damara Supergroup that deposited between 800 and 1,000 Ma). There are many alaskite bodies in the Rössing area.

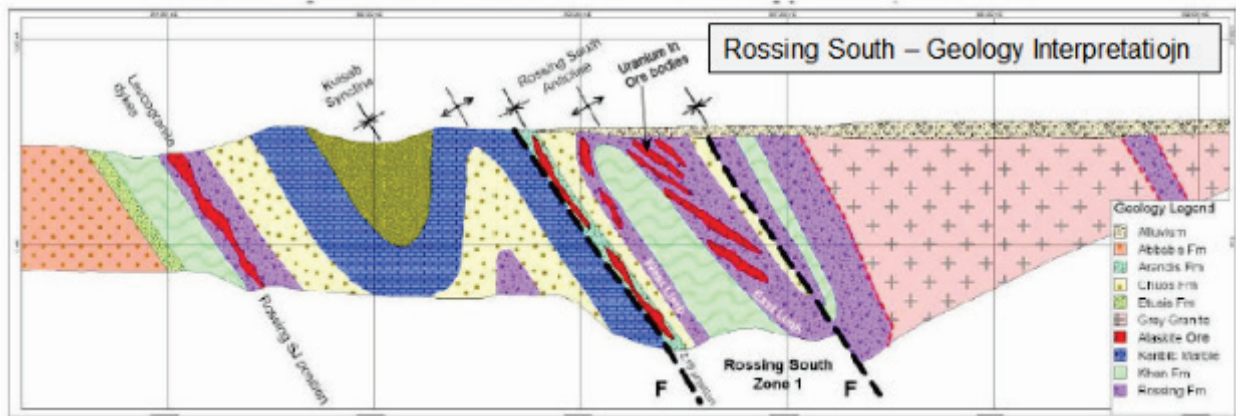
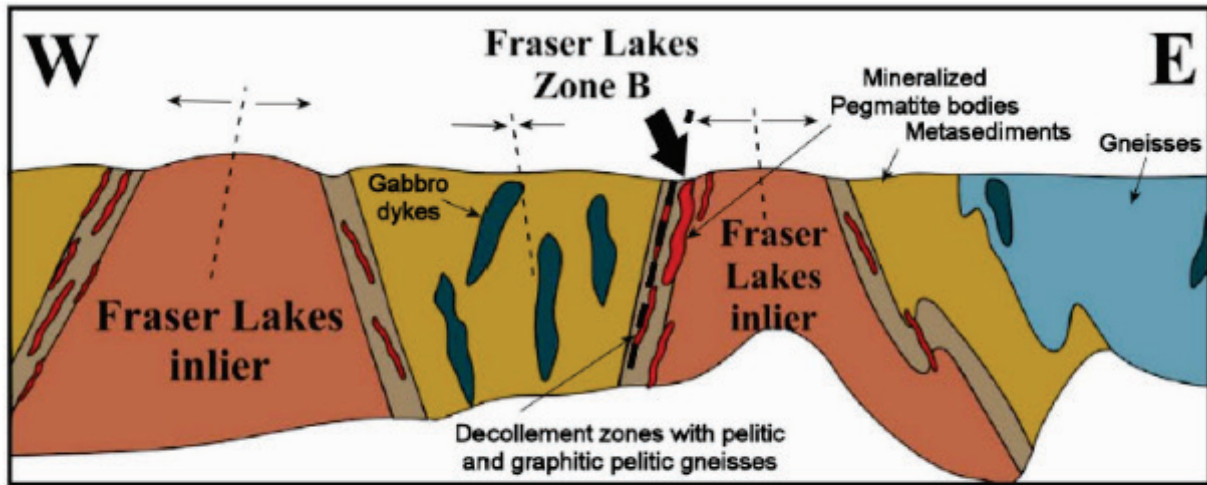
The main constituents of the Rössing host rocks are quartz, microcline, microcline-perthite, and biotite. Textures are mainly of the pegmatite-type with occurrences of aplite, granite and graphitic fabrics. The ore minerals at Rössing include primary, variably thoriferous uraninite as micron to 0.3 mm-sized inclusions in quartz, feldspars and biotite, in intergranular spaces and in veinlets; betafite; uranothorite; and hexavalent uranium minerals, predominantly yellowish beta-uranophane. Associated minerals include monazite, zircon, apatite, thorite, titanite, pyrite, chalcocopyrite, bornite, molybdenite, arsenopyrite, magnetite, hematite, ilmenite, and fluorite (Kinnard and Nex 2007, Berning et. al. 1976). U/Th ratios in the mineralization vary from <0.1 to >30 (Kinnard and Nex 2007).

Individual ore shoots in the Rössing area may be several tens of metres to several hundred metres (i.e. 700 m) long and several tens to 600 m wide. Mineable ore has been proven to a depth of approximately 300 m (lowest level of the open pit) but drilling has intersected ore grades to a depth of at least 700 m.

The geodynamic settings of intrusive deposit types such as Rössing correspond to syn- to post-orogenic intrusions within intra-cratonic mobile belts. They are commonly in sharp contact with the surrounding rocks and have narrow contact metamorphic aureoles. Uranium-rich alaskite, quartz-monzonite, granite and associated pegmatites are generally considered the product of granitization of uraniumiferous crustal material (partial melting of sedimentary and volcanic rocks). The Rössing deposit is attributed more to ultrametamorphic-anatectic processes whereas for granite-monzonite deposit types, magmatic differentiation with uranium retained in late-stage phases is favoured. The content of U, Th, REE, and other metals in the various granitic facies is considered to be a function of their original abundance in the precursor metasediments (Kinnard and Nex 2007).



**Figure 8-1 Comparison of the Fraser Lakes Zone B to the Rössing South Deposit in Namibia, an Example of a Rössing Type Uranium Deposit**



## 9 EXPLORATION

The following is a description of the exploration activities completed on the Property by JNR between 2004 and 2011 and Skyharbour between 2015 and 2022. Tisdale has yet to complete exploration on the Property.

### 9.1 2004 Exploration Program

JNR staked the original three claims over the Hook Lake showing (Figure 4-3) and carried out a limited prospecting and geological mapping program on the Property. This work covered the Hook, Big Sandy, Beckett, and Alexander Lake areas on claim numbers S110198, S110199, S107395 and S107396. The most significant result (40.1%  $U_3O_8$ ) was obtained from the Hook Lake showing, while elevated uranium values were obtained in all of the other examined areas (Bradley, 2007).

### 9.2 2005 Exploration Program

Fugro Airborne Surveys completed a multi-sensor regional geophysical survey for the Geological Survey of Canada that included the Fraser Lakes area. The gamma-ray spectrometric survey indicated several anomalies over the Fraser Lakes and surrounding areas (Bradley, 2007).

### 9.3 2006 Exploration Program

Geotech Ltd. flew 5,492.4 line km of helicopter-borne VTEM and magnetics over the Way Lake Property for JNR Resources Inc. The survey was successful in identifying more than 65 km of arcuate conductors in the southern portion of the Property, including the Fraser Lakes area. These conductors are interpreted to be folded and faulted in several locations (Bradley, 2007).

### 9.4 2007 Exploration Program

During the 2007 winter season, elevated uranium values were intersected in four diamond drill holes completed at Hook Lake. Four small grids were cut at Walker River, Walker River South, Hook Lake and South Hook Lake. JNR carried out ground HLEM, VLF and magnetics over the four grids. Significant conductors were confirmed on the Walker River and Walker River South grids by these ground surveys on claims S-110156 and S-110157. An additional detailed helicopter-borne VTEM survey was carried out over the northernmost claims (Bradley, 2007a, Bradley, 2008; Bradley 2008a).

A helicopter-supported diamond drilling program was carried out during the summer of 2007. The drilling program consisted of ten diamond drill holes, totaling 1,798 m. Eight of the holes were drilled on the Hook Lake occurrence and two holes tested the newly discovered West Way showing (Figure 3). Elevated uranium values and anomalous pathfinders including As, Co, Mo, Pb and B associated with brittle fracturing and/or ductile brittle shearing were intersected in several of these holes (Bradley, 2007a).

Helicopter-supported prospecting was completed over a large proportion of the Property and a total of 446 samples were collected. Three new uranium prospects were identified at West Way, Nob Hill, and EWA, in the northwestern, central and southwestern areas of the Property respectively (Figure 3). The most significant results came from the West Way showing in the northern portion of the Property where grab samples collected from an outcropping shear zone with actinolite, yellow uranium oxide, and molybdenite/graphite returned values of 0.072 to 0.475 wt%  $U_3O_8$ . These grab samples also returned anomalous levels of pathfinder elements such as As (up to 46.3 ppm), Co (up to 172 ppm), Mo (up to 6670 ppm), Pb (up to 1480 ppm), and B (up to 267 ppm) (Bradley, 2007a).

The Nob Hill showing (Figure 4-3) is located in the east-central part of the Property on claim S-110196. The mineralization discovered at this showing is vein-type and occurs within dilational zones. Grab samples returned values of 0.130 wt% and 0.141 wt%  $U_3O_8$  and up to 634 ppm Pb. The EWA showing is located near the south end of the Property, over a strike length of approximately 85 m. The uranium mineralization occurs within a 10 to 20 meter wide, northeast-trending, sheared pelitic unit accompanied by granitic inliers.

Several grab samples were obtained from the shear zone and returned values of 0.064 to 0.492 wt%  $U_3O_8$  and up to 1300 ppm Pb. The best result was collected from the previously identified Hook Lake area, approximately 85 m northwest of the 2006 discovery. The sample contained anomalous As (80.2 ppm), Bi (157 ppm), Mo (108 ppm), Pb (138,000 ppm), and U (487,000 ppm), along with anomalous rare earth elements (REES) (Bradley, 2007a).

## 9.5 2008 Exploration Program

During the summer of 2008 helicopter-supported prospecting and diamond drilling was carried out over the Property (Bradley, 2008; Bradley 2008a; Cutforth, 2009). Ground prospecting was completed over the southern portion of the Property and a total of 135 grab samples were collected. Forty-eight diamond drill holes totaling 11,985 metres tested the West Way, Hook Lake, Nob Hill and EWA showings. These included the Walker River and Walker River South targets as well as two newly discovered mineralized zones at Fraser Lakes A and B, where numerous mineralized outcrops were identified by prospecting. Highly anomalous uranium and pathfinder element values, accompanied by significant structural disruption, alteration and graphitic metapelitic lithologies were intersected in all of the areas tested by the drilling that summer. At the Fraser Lakes B over 70 individual outcrop occurrences of uranium mineralization were identified over an approximate 1.5 km long by 0.5 km wide area within an antiformal fold nose cut by an east-west dextral ductile-brittle cross-structure. Outcrop grab samples collected during prospecting from the Fraser B area returned values ranging from 0.038 to 0.453 wt%  $U_3O_8$ .

Three drill holes (WYL-08-524, 525 and 526) totaling 740.0 m were completed at the end of the 2008 summer exploration program at Fraser Lakes B. These drill holes intersected individual uranium values of 0.012 to 0.552 wt%  $U_3O_8$ , over true widths of 0.5 to 1.0 m, accompanied by highly anomalous levels of Cu, Co, Pb, Mo associated with structurally disrupted, and altered Wollaston Group graphitic pelitic gneisses, psammopelitic gneisses and pegmatites.

## 9.6 2009 Exploration Program

Diamond drilling was carried out between February 13 and March 30 by JNR. The drilling program consisted of 15 completed and four abandoned diamond drill holes, totaling 2,700 m. This drilling took place at the Fraser Lakes Zone B showing. The mineralization encountered in these drill holes is associated with granitic pegmatites intruding Wollaston Group pelitic and graphitic pelitic gneiss and orthogneiss above the Archean granitic orthogneiss and is accompanied by brittle to brittle-ductile deformation and varying degrees of chlorite, clay mineral, and hematite alteration (Cutforth and Billard, 2010).

## 9.7 2010 Exploration Program

Diamond drilling was carried out between February 8 and March 15 by JNR. The drilling program consisted of 14 completed diamond drill holes totaling 2,772.6 m (Gittings and Annesley, 2011). Eight of these drill holes totaling 1,463.0 m were completed at Fraser Lakes Zone B with the remaining six holes totaling 1309.60 m drilled along the T-Bone Lake Conductor (Figure 3).

## 9.8 2011 Exploration Program

Diamond drilling was carried out between March 13 and April 17 by JNR. The drilling program consisted of 10 diamond drill holes totaling 2,590.0 m. This drilling was completed on the Fraser Lakes Zone B (WYL-11-68, 69, 70 and 71 totaling 1,189.0 m), Fraser Lakes North (WYL-11-73 and 74 totaling 436.0 m) and along the T-Bone Lake Conductor (WYL-11-65, 66, 67 and 72 totaling 965.0 metres).

Multiple intervals of uranium and/or thorium (U-Th) mineralization were intersected in the four new holes (WYL-11-68, -69, -70, and -71) that tested Fraser Lakes Zone B on its east-northeast end. The better U-Th intersections occur in drill holes WYL-11-68, -70 and -71, and are accompanied by highly anomalous concentrations of base metals and rare earth element (REE) enrichment (Gittings and Annesley, 2011).

Anomalous radioactivity was intersected within a new area, Fraser Lakes North, located 5 km northeast of Fraser Lakes Zone B. Drill holes WYL-11-73 and -74 yielded low-grade, basement-hosted U-Th mineralization in graphitic pelitic gneisses and granitic pegmatites (Annesley, 2011).

## 9.9 2015 Exploration Program

Diamond drilling was carried out between March 17 and April 7, 2015 by Cypress Geoservices Ltd. on behalf of Skyharbour (Billard, 2015). The drilling program was a follow up to the 2011 drilling program and consisted of 5 holes totaling 1,278 m. This drilling was completed on the Fraser Lakes Zone B (FP15-03, 04 and 05) with three holes totaling 787 metres, one hole (FP15-01) totaling 272 metres testing the intersection of the Fraser Lakes antiformal nose with the northwest trending T-Bone Lake lineament, and one hole (FP15-02) totaling 219 metres to test the eastern limb of the Fraser Lakes Conductor under Fraser Lakes.

## 9.10 2022 Exploration Program

Xcalibur MPH (Canada) Ltd. flew 2,843 line km of airborne gravity gradiometer and magnetics over the South Falcon Point project for Skyharbour. The survey was successful in identifying a series of NNW-trending Tabbernor Faults and 070°-trending faults, both of which are commonly related to uranium mineralization when they intersect graphitic structural corridors related to magnetic lows. Several valid drill targets have been developed on the Fraser Lakes antiform which is proximal to the Fraser Lakes Zone B (Billard, 2022).

Results of the program are illustrated on Figure 9-1 to Figure 9-5. Figure 9-4 includes historic EM picks from the 2006 VTEM survey flown by JNR superimposed on the Enhanced GDD Fourier Gravity (conformed) from this study. A series of north-trending Tabbernor features were interpreted from this data as were several N70°-trending faults. In Figure 8 the First Vertical Derivative Magnetics also had the EM picks on it along with the respective Tabbernor and N70 features identified from the gravity data, which were superimposed on the Magnetics without any adjustments to be used in comparison.

### 9.10.1 Conclusions

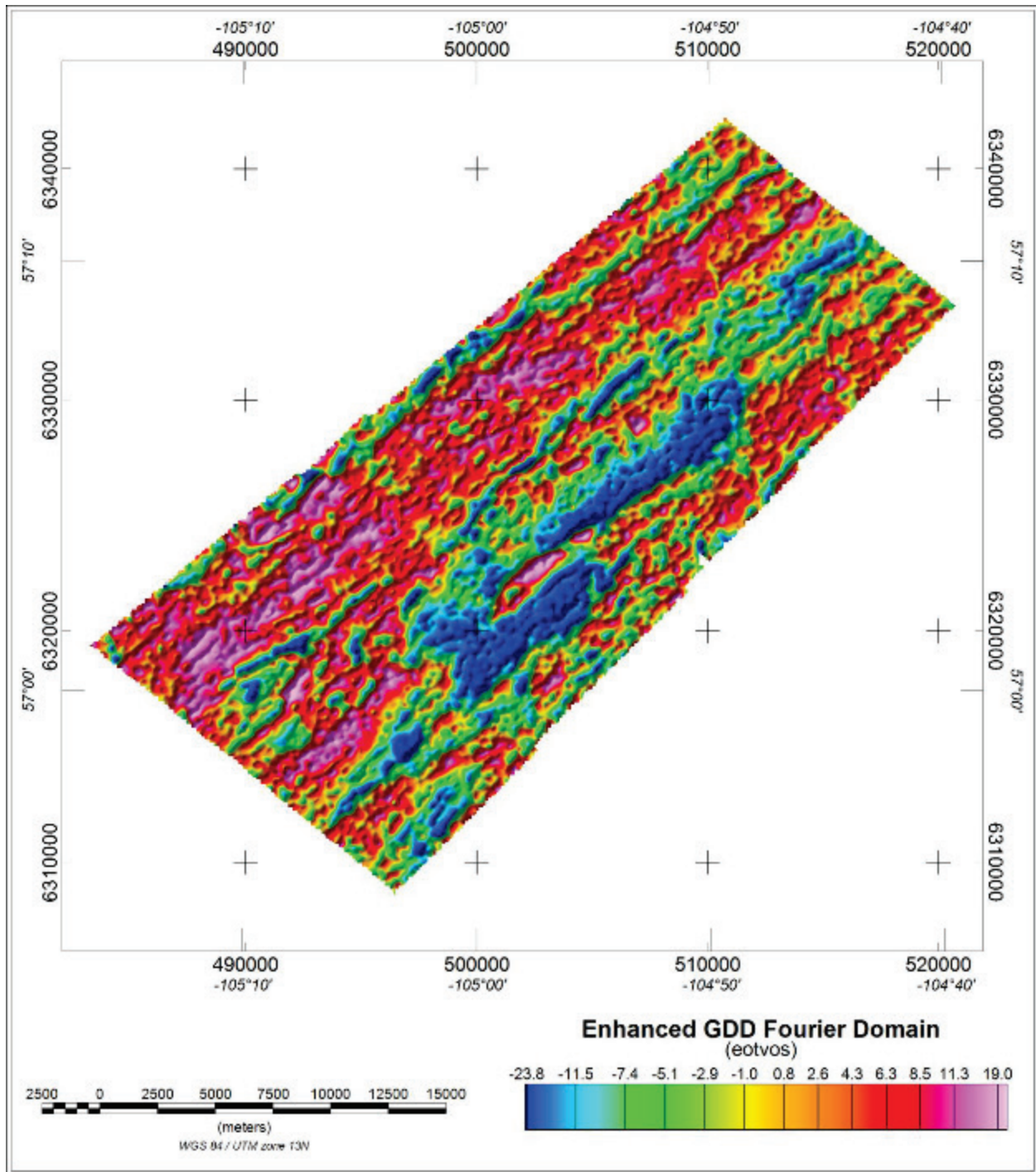
The gravity and magnetic data illustrate the regional northeast trend to the litho-structural fabric underlying the Property (Billard, 2022). There are several gravity and magnetic lows that follow the regional trend these are in turn cut by numerous lineaments. The gravity data also highlights the main cross cutting lineaments that occur on the Property. These are also evident in the magnetic data but are not as prominent. It should also be noted that the structures mapped by the gravity are not always directly comparable to those the magnetic data, but the offsets are to be expected and may be explained by the general geological and physical characteristics of the different data types involved.

Analysis of the gravity, magnetic and EM data indicates that there are two main structural trends superimposed on the NE-trending faults and graphitic conductors that lie within the main litho-structural corridors. These consist of a series of NNW-trending Tabbernor Faults and N70°-trending faults, both of which are commonly related to uranium mineralization when they intersect graphitic structural corridors related to magnetic lows. Intersecting features such as these can be conduits and highly prospective fluid pathways for uranium mineralization. They are as such compelling targets.

Additional analysis of the data along with interpretation of the historical data may generate additional targets, however at this time several valid targets for drilling on the Property were identified from this new data. The focus would be on the intersection of NE-trending EM conductors and interpreted Tabbernor and/or N70 Faults as illustrated on the 2 interpretive maps. Of particular note as drill targets are the two evident fold nose's that lie in the eastern south-central region of the Property just north of 6,320,000 m N and east of 500,000 m E.

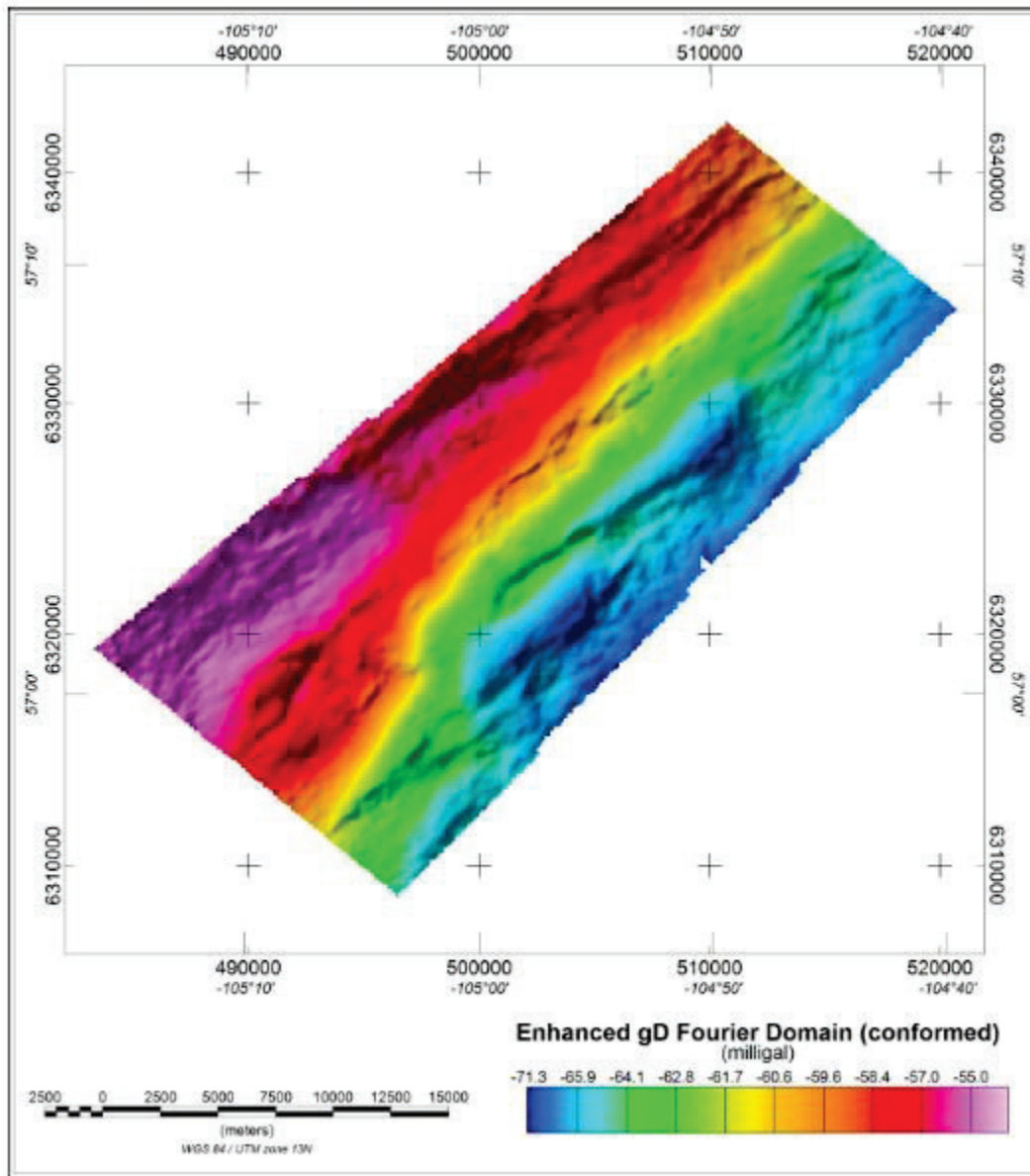


**Figure 9-1 Enhanced GDD Fourier Domain (Billard, 2022)**

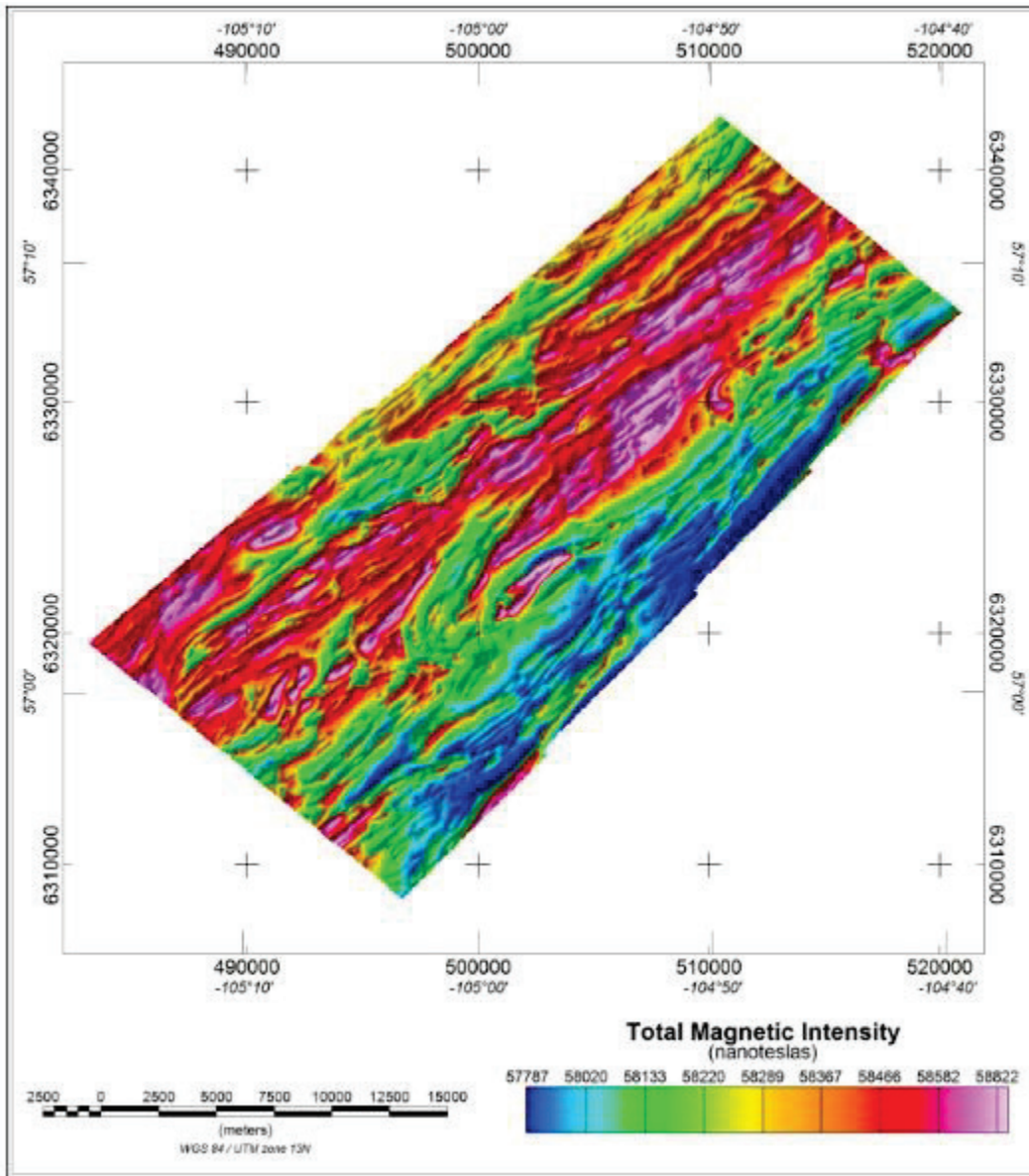




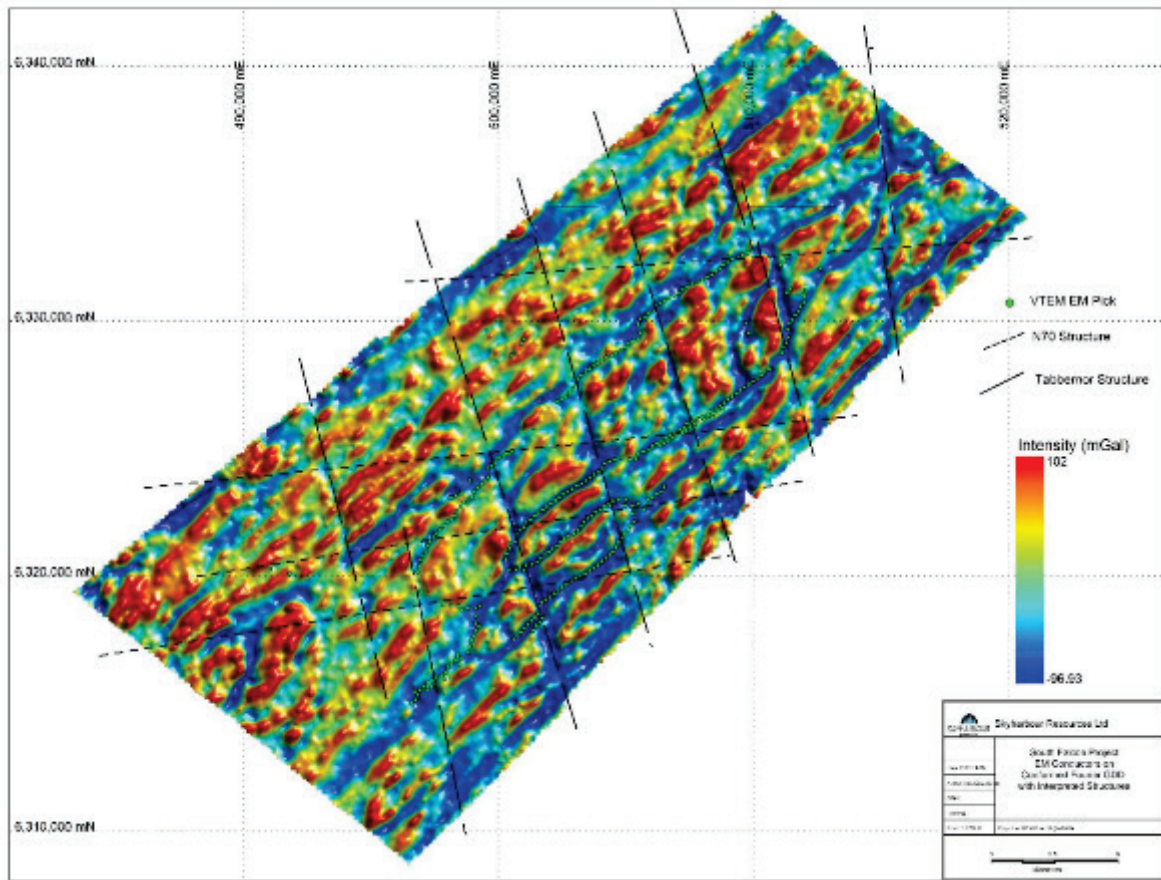
**Figure 9-2 Enhanced gD Fourier Domain (conformed to regional gravity data) (Billard, 2022)**



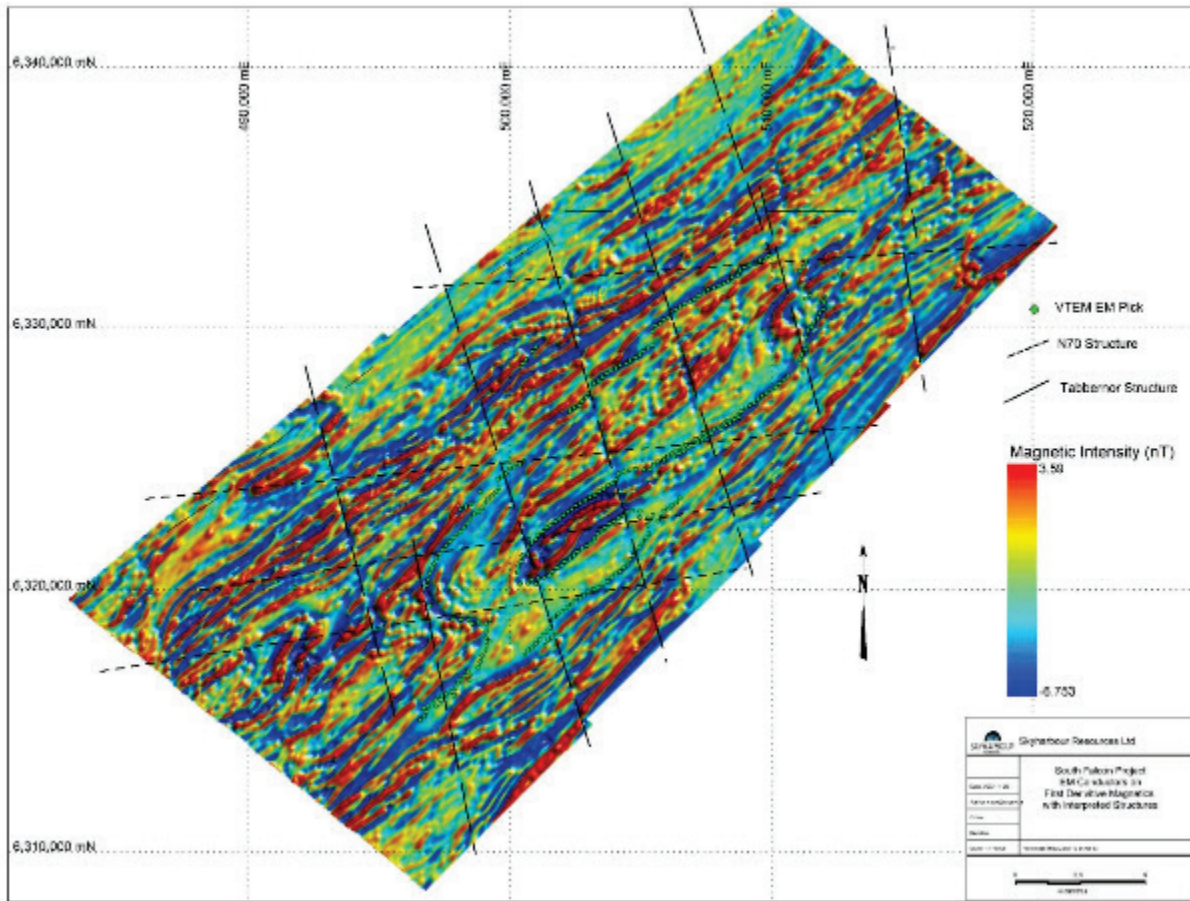
**Figure 9-3 Total Magnetic Intensity (Billard, 2022)**



**Figure 9-4 EM on Enhanced GDD Fourier Domain with Interpreted Structures (Billard, 2022)**



**Figure 9-5 1st Vertical Derivative with Interpreted Structures (Billard, 2022)**





## 10 DRILLING

The following is a description of drilling completed on the Fraser Lakes Zone B to date. To the Authors' knowledge, there is no known drilling, sampling, or recovery factors that could materially impact the accuracy and reliability of the results. Tisdale has yet to complete diamond drilling on the Property.

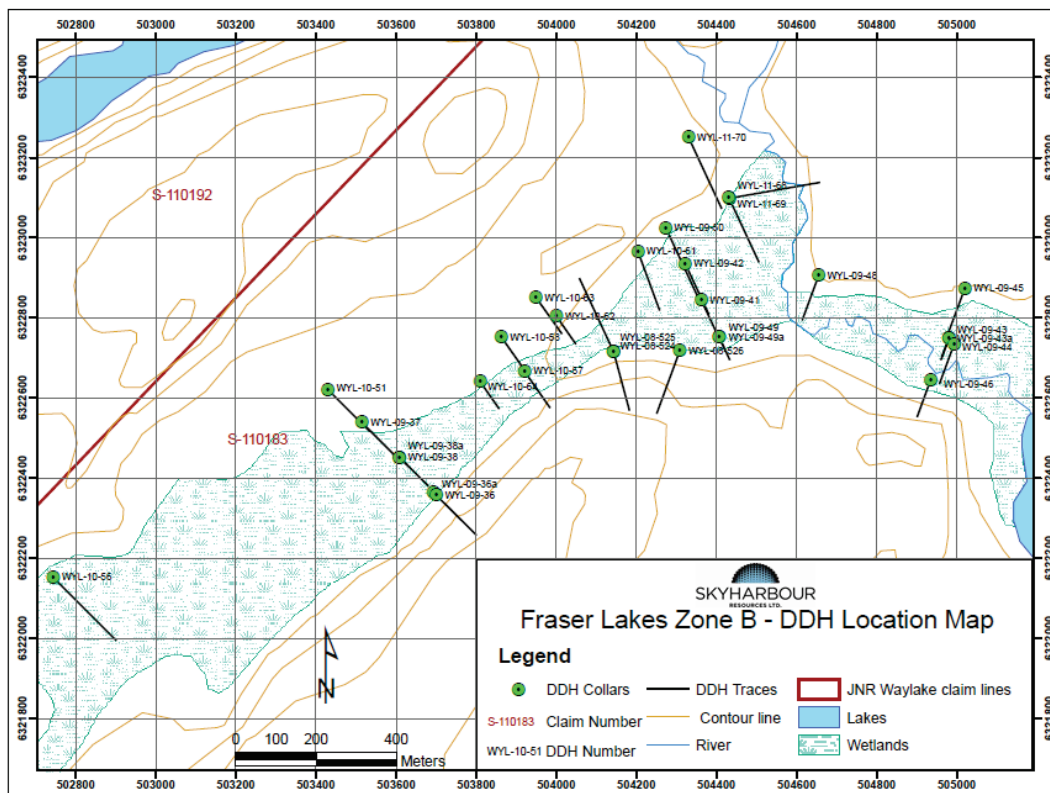
### 10.1 2008 to 2011 Drilling Results on the Fraser Lakes Zone B

A total of 32 diamond drill holes totaling 5,694 m were drilled on the Fraser Lakes Zone B during the 2008 to 2011 period (Table 10-1; Figure 10-1). Dynamic Drilling of La Ronge, northern Saskatchewan was contracted for all of these drilling programs. All holes drilled on the Fraser Lakes Zone B during these programs recovered standard 47.6 mm NQ core for the entire depth. To date, drilling of this zone has identified an extensive area approximately 1,250 m long by 650 m wide of moderately dipping, multiple stacked uranium and thorium mineralized horizons, which are open to the southwest and east-northeast to a depth of at least 175 m. See Table 10-2 for a complete listing of drill holes and Table 10-3 for a listing of significant drill hole results.

**Table 10-1 Fraser Lakes Zone B Drilling Summary 2008 to 2011**

Drill Program	Number of holes drilled	Metres drilled
2008 (Summer)	3	740
2009 (Winter)	16	2,175
2010 (Winter)	10	1,922
2011 (Winter)	3	858
Total	32	5,694

**Figure 10-1 Fraser Lakes Zone B Drill Hole Location Map (Armitage, 2015)**





### 10.1.1 2008 Drilling

Three drill holes (WYL-08-524, 525 and 526) totaling 740.0 m were completed at the end of the 2008 summer exploration program on the new prospecting discovery referred to as the Fraser Lakes Zone B. These drill holes intersected individual uranium values of 0.012 to 0.552 wt%  $U_3O_8$ , over widths of 0.3 to 1.0 m, accompanied by anomalous levels of Cu (up to 1860 ppm), Pb (up to 1120 ppm) and Mo (up to 882 ppm). Associated alteration included clay, hematite, chlorite, sulphides, carbonate, intermittent silicification and biotite-rich patches in altered, fractured, and faulted granitic pegmatite sheets, dykes and veins. The radioactive granitic pegmatites cross-cut Wollaston Group graphitic pelitic gneisses, psammopelitic gneisses and Archean gneisses.

### 10.1.2 2009 Drilling

Diamond drilling was carried out between February 13 and March 30. The drilling program consisted of 15 completed (WYL-08-36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49 and 50) and four abandoned (WYL-09-36a, 38a, 43 a and 49a) diamond drill holes, totaling 2,700 m. This drilling was following up the three holes drilled at the end of the 2008 summer program.

Multiple intervals of uranium and/or thorium mineralization were intersected in several drill holes. This mineralization is accompanied by rare earth element enrichment and highly anomalous levels of pathfinder elements. Some of the better intersections (Appendix 1) occur in drill holes WYL-09-39, -41 and -50. At a grade cutoff of 0.029%  $U_3O_8$ , hole #39 returned seven mineralized intervals over a 30-meter down-hole length, including a 0.15-meter intercept of 0.166 wt%  $U_3O_8$  and 0.112 wt% thorium. The best result from hole #41 was 0.134 wt%  $U_3O_8$  and 0.77 wt% thorium over 1.0 meter, while the best result from hole #50 was 0.183 wt%  $U_3O_8$  and 0.062 wt% thorium over 1.0 meter. Hole WYL-09-46 returned multiple intervals of thorium mineralization including 0.109% thorium and 0.013 %  $U_3O_8$  over 7.0 m. Highly anomalous concentrations of other metals are also present in a number of holes. Hole WYL-09-38 returned 0.117% copper, 0.056% nickel, 0.044% zinc, 0.068% molybdenum and 44 ppm uranium over 6.5 m.

### 10.1.3 2010 Drilling

Diamond drilling was carried out between February 8 and March 15 by JNR. The drilling program was following up the 2009 drilling program and consisted of 14 completed drill holes totaling 2772.6 m. Eight (WYL-10-51, 56, 57, 58, 61, 62, 63 and 64) of these drill holes totaling 1,463.0 m were completed on the Fraser Lakes Zone B with the remaining six holes (WYL-10-52, 53, 54, 55, 59 and 60) totaling 1309.60 m being drilled along the T-Bone Lake conductor.

Multiple intervals of uranium and/or thorium mineralization were intersected in six of the eight holes that tested the Fraser Lakes Zone B. The better intersections (Appendix 1) occur in drill holes WYL-10-51, -58, -61, -62, and -64. Hole WYL-10-61 returned a grade of 0.057 wt%  $U_3O_8$  over 5 m., including 0.242 wt%  $U_3O_8$  over 0.5 m. WYL-10-58 returned ten uranium mineralized intervals over a 65 -meter downhole length, including a 5.50 meter interval of 0.026 wt%  $U_3O_8$ ; a 3.00 meter interval of 0.041  $U_3O_8$ ; a 1.00 meter interval of 0.041  $U_3O_8$  with 0.046 wt%  $ThO_2$ ; and a 0.50 meter interval of 0.209 wt%  $ThO_2$  with 0.20 wt%  $U_3O_8$ . Drill hole WYL-10-51 returned five mineralized intervals over a 50 meter down-hole length, including a 3.00 meter intercept of 0.064 wt%  $U_3O_8$  that included 0.179%  $U_3O_8$  and 0.059 wt%  $ThO_2$  over 0.5 m.

The six holes drilled along the T-Bone Lake Conductor intersected anomalous radioactivity and U mineralization in two of the holes (WYL-10-53 and 55).

### 10.1.4 2011 Drilling

Diamond drilling was carried out between March 13 and April 17 by JNR. The drilling program was a follow up to the 2010 drilling program and consisted of 10 holes totaling 2,590.0 m. This drilling was completed on the Fraser Lakes Zone B (WYL-11-68, 69, 70 and 71) totaling 1189.0 m, Fraser Lakes North (WYL-11-

73 and 74 totaling 436.0 m) and along the T-Bone Lake conductor (WYL-65, 66, 67 and 72 totaling 965.0 m).

Multiple intervals of uranium and/or thorium mineralization were intersected in four new holes (WYL-11-68, 69, 70 and 71) that tested Fraser Lakes Zone B on its east-northeast end. The better U-Th intersections occur in drill holes WYL-11-68, 70 and 71 (Appendix 1). To date, drilling of this zone identified an extensive area approximately 1,250 m long by 650 m wide of moderately dipping, multiple stacked uranium and thorium mineralized horizons, which are open to the southwest and east-northeast to a depth of at least 175 m.

Anomalous radioactivity was intersected within the Fraser Lakes North area. Drill holes WYL-11-73 and WYL-11-74 yielded low-grade, basement-hosted U-Th mineralization within graphitic pelitic gneisses and granitic pegmatites.

**Table 10-2 Listing of Drill Holes Completed by JNR on the Fraser Lakes Zone B**

HOLE-ID	LOCATION X	LOCATION Y	LOCATION Z	LENGTH	AZIMUTH	DIP
WYL-08-524	504143.00	6322715.00	500.00	216.00	165.00	-45
WYL-08-525	504143.00	6322715.00	500.00	287.00	335.00	-45
WYL-08-526	504308.00	6322717.00	503.00	237.00	200.00	-45
WYL-09-36	503700.00	6322357.00	502.00	201.00	135.00	-45
WYL-09-36a	503693.00	6322364.00	502.00	33.20	135.00	-45
WYL-09-37	503515.00	6322538.00	502.00	187.50	135.00	-45
WYL-09-38	503608.00	6322452.00	502.00	159.00	135.00	-50
WYL-09-38a	503608.00	6322452.00	502.00	39.00	135.00	-45
WYL-09-41	504362.00	6322843.00	500.00	150.00	155.00	-45
WYL-09-42	504322.00	6322935.00	500.00	198.00	155.00	-45
WYL-09-43	504980.00	6322749.00	500.00	90.70	200.00	-50
WYL-09-43a	504980.00	6322749.00	500.00	70.70	200.00	-45
WYL-09-44	504993.00	6322734.00	500.00	150.00	200.00	-45
WYL-09-45	505020.00	6322874.00	500.00	180.00	200.00	-45
WYL-09-46	504935.00	6322645.00	500.00	141.00	200.00	-45
WYL-09-48	504655.00	6322906.00	500.00	171.00	200.00	-45
WYL-09-49	504406.00	6322752.00	500.00	91.00	155.00	-45
WYL-09-49a	504406.00	6322752.00	500.00	43.00	155.00	-45
WYL-09-50	504273.00	6323024.00	505.00	270.00	155.00	-45
WYL-10-51	503429.00	6322621.00	503.00	232.20	135.00	-50
WYL-10-52	502034.00	6322684.00	510.00	201.00	135.00	-50
WYL-10-54	502026.00	6322681.00	510.00	258.00	315.00	-50
WYL-10-56	502744.00	6322151.00	504.00	315.00	135.00	-45
WYL-10-57	503921.00	6322665.00	502.00	156.00	145.00	-45
WYL-10-5 8	503863.00	6322752.00	506.00	139.50	145.00	-45
WYL-10-61	504204.00	6322965.00	511.00	222.00	160.00	-45
WYL-10-62	504000.00	6322804.00	500.00	121.00	145.00	-45
WYL-10-63	503949.00	6322851.00	506.00	160.00	145.00	-45

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HOLE-ID	LOCATION X	LOCATION Y	LOCATION Z	LENGTH	AZIMUTH	DIP
WYL-10-64	503810.00	6322640.00	503.00	117.00	145.00	-45
WYL-11-68	504432.00	6323098.00	496.00	325.00	80.00	-45
WYL-11-69	504430.00	6323101.00	496.00	254.50	155.00	-45
WYL-11-70	504330.00	6323250.00	500.00	278.00	155.00	-45

**Table 10-3 Listing of Significant Drill Results from Holes Completed on the Fraser Lakes Zone B**

DDH ID	From (m)	To (m)	Width (m)	% U3O8 (>0.029)	% ThO2 (>0.05)	Other Metals (%)
WYL-37	121.8	124.3	2.5	0.037		
	128.5	130	1.5	0.043		
	152	153	1	0.035		
WYL-38	42	48.5	6.5			Cu-0.117, Ni-0.056, Zn-0.044, Mo-0.0681
WYL-39	58	58.5	0.5	0.038		
	67.35	67.5	0.15	0.166	0.112	
	74	75	1	0.029		
	79	79.5	0.5	0.034		
	83.5	85	1.5	0.044		
	86.5	88	1.5	0.047		
WYL-40	102.5	103	0.5	0.032		
WYL-41	38	39.5	1.5	0.048		
	94	95	1	0.134	0.077	
	96	97.5	1.5	0.062		
WYL-42	114.5	116	1.5	0.029		
	124	125	1	0.034		
	132.5	134.5	2	0.036		
WYL-43	55	56	1	0.03		
WYL-43a	30.5	32.5	2	0.031		
	39	40	1	0.029		
	58	59	1	0.032		
WYL-44	71.3	75.3	4		0.106	
WYL-45	55	61.5	6.5			Ni- 0.049
WYL-46	30.3	33.3	3		0.134	
	34.8	37.3	2.5		0.1	
	42.5	44.5	2		0.064	
WYL-47						Anomalous Cu, Ni, V, Zn
WYL-48	19.9	20.9	1	0.031		
	95	95.5	0.5	0.068		
	97.6	98.1	0.5	0.039		
WYL-49	43.3	43.8	0.5	0.027	0.057	
	61.5	63	1.5		0.074	
WYL-50	158.7	160.2	1.5	0.054		
	161.2	162.7	1.5	0.03		
	191.4	192.4	1	0.04	0.059	
	215.5	217.5	2	0.04		
	232.6	233.6	1	0.183	0.062	
WYL-10-51	163.5	163.75	0.25	0.073	0.05	
	164.15	164.4	0.25	0.054		Ni-0.026, V-0.038

DDH ID	From (m)	To (m)	Width (m)	% U3O8 (>0.029)	% ThO2 (>0.05)	Other Metals (%)
	165.5	167.5	2			Cu-0.024 Mo-0.005,
	182	186	4			Cu-0.03, Mo-0.013, Ni-0.065, V-0.049
	192	193.1	1.1	0.049		Anomalous Cu, Mo, Ni, V
	203.5	206.5	3	0.064	0.059	Zn-0.02
	215	216	1	0.076		
WYL-10-53	39.5	40.4	0.9	0.055		Anomalous B, Pb, V
WYL-10-57	40	41.5	1.5	0.037		
	43.5	45.5	2	0.038		
	47.5	48.5	1	0.069	0.047	Zn-0.044
	77.25	77.75	0.5	0.033		
WYL-10-58	74.5	79.5	5	(5-193 ppm)		Cu-0.033, Ni-0.020, V-0.015, Zn-0.045
	90.5	91	0.5	0.064		
	91.5	97	5.5	0.026		Anomalous Pb, Th, Zn
	99.5	100.5	1	0.045		Anomalous Pb, Th, Zn
	101	101.5	0.5	0.065		Anomalous Pb, Th, Zn
	107.5	108	0.5	0.039		Anomalous Pb, Th, Zn
	110.5	111	0.5	0.02	0.209	Anomalous Mo, Zn
	112.5	113.5	1	0.034	0.046	Anomalous Mo, Zn
	120.5	123.5	3	0.041		Anomalous Pb, Th
	128	129	1	0.039		Anomalous Pb, Th
WYL-10-61	127.5	128	0.5	0.075		
	128	130.5	2.5			Anomalous Cu, Ni, V
	130.5	135	4.5	0.034		Anomalous Pb, Th
	158	163.5	5.5	0.057	0.056	Mo-0.0141, Pb-0.0153, Zn-0.011
	166.5	167	0.5	0.052		Anomalous Mo, Pb, Th, Zn
WYL-10-62	68.1	68.6	0.5	0.046		Anomalous Cu, Mo, Pb, Th, Zn
	81	85	4	0.051		Mo-0.016, Pb-0.015 Th-0.036, Zn-0.022
	90.5	94.5	4	0.056		Cu-0.033, Pb-0.019 Th-0.038, Zn-0.01
	111.5	112.5	1	0.03		
WYL-10-63	108.7	110.2	1.5	0.03		Anomalous Cu, Pb, Th
WYL-10-64	60.5	62.5	2	0.069	0.046	Anomalous Mo, Pb
	77	78	1			Cu-0.049
	79.5	80.5	1	0.055	0.059	Anomalous Pb
	81.6	82.6	1	0.046		Anomalous Pb, Th
	85.6	86.1	0.5	0.029		Anomalous Pb, Th
	88.7	91.7	3	0.043		Anomalous Pb, Th
WYL-11-68	164	166	2	0.029	0.031	Cu-0.015, V-0.012, Zn-0.013
	172	173	1	0.074	0.088	Cu-0.017, Pb-0.025



DDH ID	From (m)	To (m)	Width (m)	% U3O8 (>0.029)	% ThO2 (>0.05)	Other Metals (%)
	173.5	174.5	1	0.035	0.039	Cu-0.074, Pb-0.011
	209.5	211	1.5	0.028		Anomalous Th, Pb
	212	213.5	1.5	0.05	0.031	Pb-0.015
	232.8	233.5	0.7		0.034	Anomalous U, Cu, Pb, and Zn
	281.6	282.1	0.5	0.076	0.181	Pb-0.02, Zn-0.019
WYL-11- 69	135.5	136.5	1	0.033	0.039	Cu-0.012
	137.5	138	0.5			Cu-0.044, V-0.009, Zn-0.008
WYL-11- 70	99.5	100	0.5		0.051	Anomalous U
	190.5	192.5	1.5			Cu-0.012, Ni-0.03, V- 0.041, Zn-0.065
	198.2	199.2	1	0.098	0.08	Pb-0.024, Zn-0.033
	208	211	3	0.053	0.054	Mo-0.017, Pb-0.018, V-0.01
	212.8	213.8	1	0.038	0.029	Pb-0.014, Zn-0.012
	214	214.5	0.5	0.024		Anomalous Mo, Th
	217.2	217.7	0.5	0.044	0.03	
	218.2	218.7	0.5	0.045	0.04	Mo-0.019
	220.5	221	0.5	0.025	0.023	
	225.4	226.4	1	0.036	0.049	Cu-0.022, Mo-0.013, Zn-0.012
	234.5	236	1.5	0.025	0.021	
260	262	2	0.043	0.027	Anomalous Pb	
WYL-11- 71	144.5	145.5	1		0.046	
	148	149.5	1.5			Anomalous Th, V, Zn
	150.5	151	0.5		0.047	Anomalous Mo, U
	153.5	154.5	1		0.028	
	212	214	2			Cu-0.031, Ni-0.041, V-0.039, Zn-0.02
	216.5	217.5	1			Cu-0.012, Ni-0.03, V- 0.027
	247	252.5	5.5			Cu-0.023, V-0.017, Zn-.014
287.75	288	0.25			Cu-0.51, V-0.015, Zn- .009	
WYL-11- 72	142.5	143.5	1			Ni-0.023, V-0.024, Zn-0.027
WYL-11- 73	135	135.5	0.5		0.022	Anomalous U
	197.5	203	5.5			Cu-0.023, Ni-0.039, V-0.041, Zn-0.061
including	197.5	199	1.5	0.002	0.002	Mo-0.01, Ni-0.049, V- 0.056, Zn-0.176
WYL-11- 74	41	43.5	2.5			Anomalous U, Th
	123	125.5	2.5			Cu-0.011, V-0.016, Zn-.015

### 10.1.5 Drill Hole Spotting

All drill collar locations were spotted using various conventional handheld GPS units. All drill hole locations were planned and recorded using the UTM NAD 83 coordinate system. Drill holes from 2009 onwards (starting with WYL-09-40) were named in sequence starting with the project name WYL (Way Lakes), then the year, followed by sequential drill hole number. For example, WYL-09-40 was the first post-2008 hole drilled on the Fraser Lakes Zone B and was drilled in 2009. Holes requiring a restart were assigned letters after the drill hole number to indicate the number of restarts, with A being one restart, B being two and so on. Hole restarts are a function of either a) exceeding the desired maximum deviation tolerances (measured from down hole orientation surveys); or b) abandoning due to set-up or rock conditions encountered.

### 10.1.6 Down Hole Orientation Surveys

For all drill programs a Reflex EZ-Shot orientation tool was used for down hole surveying in single shot mode. The EZ-Shot has a typical error of  $\pm 0.5^\circ$  for azimuth readings and  $\pm 0.2^\circ$  for dip readings.

### 10.1.7 Geological Logging

Since JNR began drilling on the Property in 2008 the geological logging protocols utilized logging forms on Palm Pilots that were then imported into an Access database and/or directly logged into the Access database. During the 2008-2011 drill programs the comprehensive logging forms used contained drill collar information, downhole surveys, and written rock descriptions, handheld scintillometer readings, numeric alteration intensity, structural measurements and sample information. The logging forms were designed as part of an Access database which allowed for importing of the data into computer modelling software. All drill core was logged by geologists at the former Walker River drilling camp.

### 10.1.8 Geophysical Logging

#### 10.1.8.1 Handheld scintillometer

During the 2008-2015 drilling programs at the Fraser Lakes Zone B, radioactivity from core was measured with a handheld Exploranium RS-125 Super gamma-ray spectrometer. The RS-125 unit uses a large (103 cm<sup>3</sup>), high sensitivity NaI detector crystal to measure incoming radiation and reads up to a maximum of 65,535 cps. For core with background levels of radiation, the maximum reading was recorded every 2 m over the entire length. In mineralized zones, above 60 cps or 2x background, the maximum reading was recorded every 0.25 to 0.5 meter depending on the width of the radioactive zone. Spectrometer readings were recorded in the technical logging sheet for each drill hole.

#### 10.1.8.2 Down hole radiometric surveys

For the 2008-2011 drill programs, the drill holes were surveyed with a Mount Sopris 2000 model winch, MGX console and gamma probe. The single NaI detector crystal gamma probe is connected to either a 200 m or 305 m Mount Sopris fibre optic winch and MGXII digital logging system with laptop. The gamma probe has an accuracy of  $\pm 1\%$  of full scale and can be used in grades of up to 2.00 wt. % equivalent U<sub>3</sub>O<sub>8</sub>.

### 10.1.9 Drill Core Storage and Drill Hole Closure

Once sample splitting was completed, metal tags inscribed with the drill hole number, box number and from / to meterage were stapled on the front of each core box. In the 2008 to 2011 drill programs each drill hole was placed into core racks at the Walker River drilling camp to allow for easy access. Upon completion, each drill hole was cemented at 30 m depth to the top of bedrock regardless of whether or not it was mineralized. All drill holes had the casing removed once drilling was complete.

## 10.2 2015 Drilling

Diamond drilling was carried out between March 17 and April 7, 2015 by Cypress Geoservices Ltd. on behalf of Skyharbour (Billard, 2015). The drilling program was a follow up to the 2011 drilling program and consisted of 5 holes totaling 1,278 m (Table 10-4). This drilling was completed on the Fraser Lakes Zone B (FP15-03, 04 and 05) with three holes totaling 787 m, one hole (FP15-01) totaling 272 m was drilled to test the intersection of the Fraser Lakes antiformal nose with the northwest trending T-Bone Lake lineament and one hole (FP15-02) totaling 219 m was drilled to test the eastern limb of the Fraser Lakes Conductor under Fraser Lakes.

Drill holes FP15-03, 04 and 05 tested the east-northeast end of the Fraser Lakes Zone B down-dip to a vertical depth of 250 m and over a 500 m strike length. This zone had been previously tested by three fences of diamond drilling in 2009 and 2011. Multiple intervals of low to moderate uranium mineralization, which was accompanied by local thorium were intersected in these three new drill holes. The better U-Th intersections occur in drill hole FP15-05 with 6.0 m of 0.103% U<sub>3</sub>O<sub>8</sub>, including 2.0 m of 0.165% U<sub>3</sub>O<sub>8</sub> and 0.111% ThO<sub>2</sub>. Drill holes FP15-01 and 02 intersected locally elevated U<sub>3</sub>O<sub>8</sub> (up to 0.059% U<sub>3</sub>O<sub>8</sub>) which was associated with anomalous thorium (up to 526 ppm) in these two drill holes. Anomalous levels of copper (250-2760 ppm), lead (225-548 ppm), nickel (250-825 ppm) and vanadium (200-990 ppm), were intersected in all of the 2015 new drill holes.

The mineralization is associated with pegmatite intruded into Wollaston Group pelitic and graphitic pelitic gneiss and orthogneiss at and above the Archean-Wollaston contact and is accompanied by brittle to brittle-ductile deformation and varying degrees of clay, chlorite and hematite alteration.

**Table 10-4 2015 Diamond Drilling Program**

Hole	UTM E	UTM N	Elev. (m)	Az.	Dip	EOH (m)
FP-15-01	505121	6322407	500	65	-45	272
FP-15-02	505119	6322043	500	130	-45	219
FP-15-03	504210	6323157	510	155	-55	359
FP-15-04	503995	6323036	508	155	-55	272
FP-15-05	503821	6322808	507	145	-55	156

### 10.2.1 2015 Analysis

The only sample type collected were split samples with selected sections of core longitudinally split and sent for geochemical analysis, in a similar fashion to the samples from the 2008-2011 drill programs. The split samples were sent to the Saskatchewan Research Council for geochemical analysis. Samples were subjected to HF/HNO<sub>3</sub>/HCl<sub>4</sub> (total) digestion and subsequently analysed using SRC's 60 element ICP package (including major oxides and the major trace elements Cu, Ni, Pb, Co, Zn, As). Uranium was analysed by fluorimetry after total digestion and boron was determined by ICP analysis after Na<sub>2</sub>O fusion.

### 10.2.2 Results

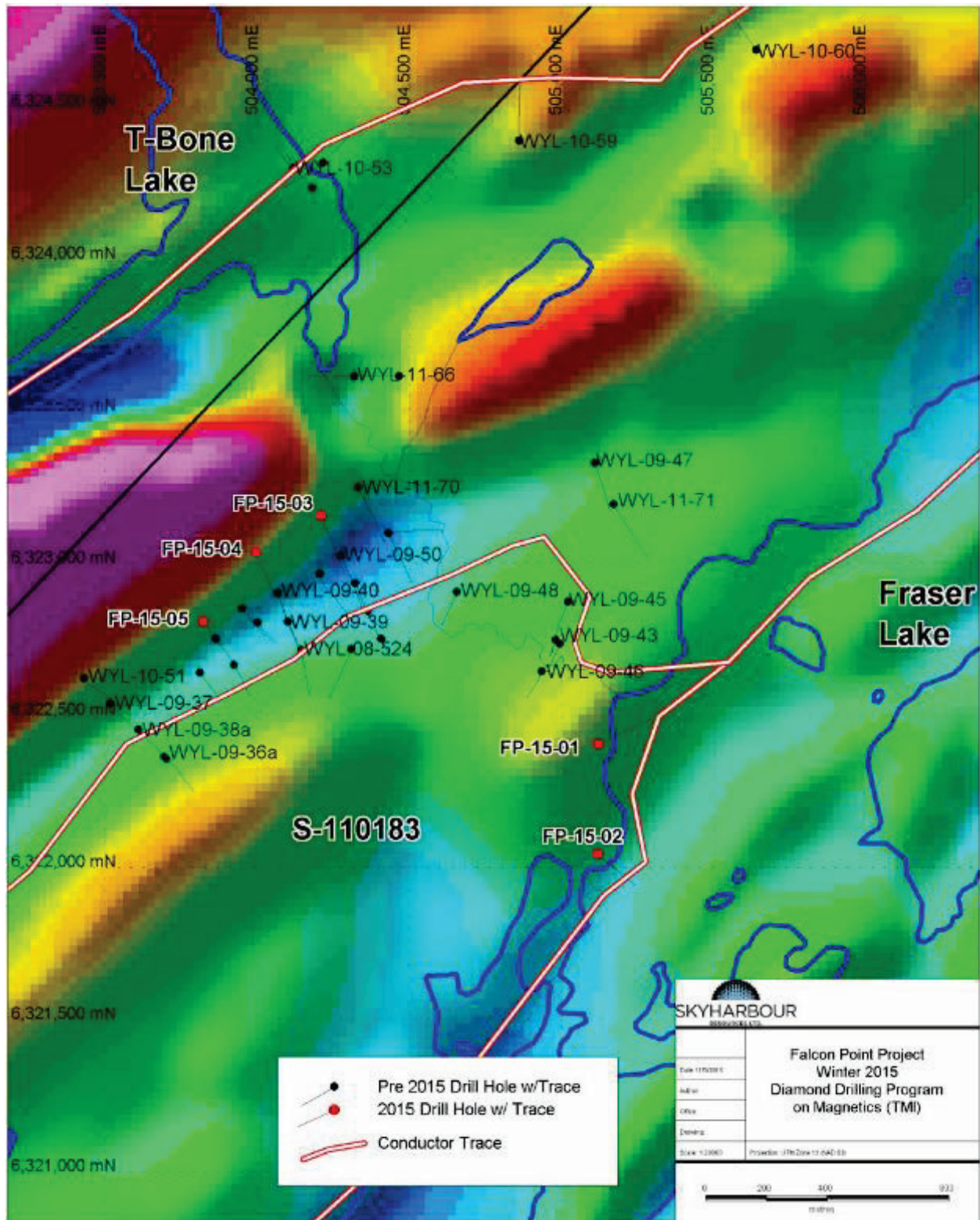
The Fraser Lakes B showings are located near the south end of the Falcon Point property, over a 2.5-kilometre long by 0.5-kilometre wide area within an antiformal fold nose cut by an E-W dextral ductile-brittle cross-structure. The northwest limb near the fold nose, dips to the northwest at approximately 40°.

Drilling was targeted to intersect broad areas of anomalous radioactivity as outlined by extensive prospecting and follow up drilling by JNR. The results of the winter 2015 diamond drilling program are compiled in Table 10-5 and illustrated in Figure 10-3 to Figure 10-5.

**Table 10-5 Significant Drill Results, 2015 Drill Program (Billard, 2015)**

DDH#	From (m)	To (m)	Width (m)	% U <sub>3</sub> O <sub>8</sub>	% ThO <sub>2</sub>	Anomalous Metals
FP-015-01	38.5	39.5	1	0.015		Up to 271 ppm Cu, 188 ppmV
	51.5	53.0	1.5	0.037	0.021	Up to 183 ppm Cu
	55.5	56.0	0.5	0.02	0.022	Up to 250 ppm Mo
	75.5	76.0	0.5	0.014		
	132.5	133	0.5	0.026	0.096	
FP-15-03	277.5	279.5	2.0	0.018		up to 346 ppm Pb
	295.5	298.5	3.0	0.082		
	Incl. 295.5	297.5	2.0	0.100		
FP-15-04	204.5	205.0	0.5	0.094		Up to 863 ppm Mo, 291ppm Pb,
	206.0	206.5	0.5	0.098	0.037	Up to 329 Pb,
	244.0	244.5	0.5	0.070	0.039	Up to 220 Pb,
FP-15-05	134.5	140.5	6.0	0.130	0.084	Up to 245 ppm Mo, 548 ppm Pb,
	Incl 135.0	137.0	2.0	0.165	0.111	
	140.5	142.0	1.5	0.058	0.047	Up to 248 ppm , Mo 465 ppm Pb,
	144.0	145.5	1.5	.047		
	146.0	148.5	2.5	0.172		Up to 248 ppm Mo, 318 ppm Pb

**Figure 10-2 Winter 2015 Diamond Drilling Program (Billard, 2015)**

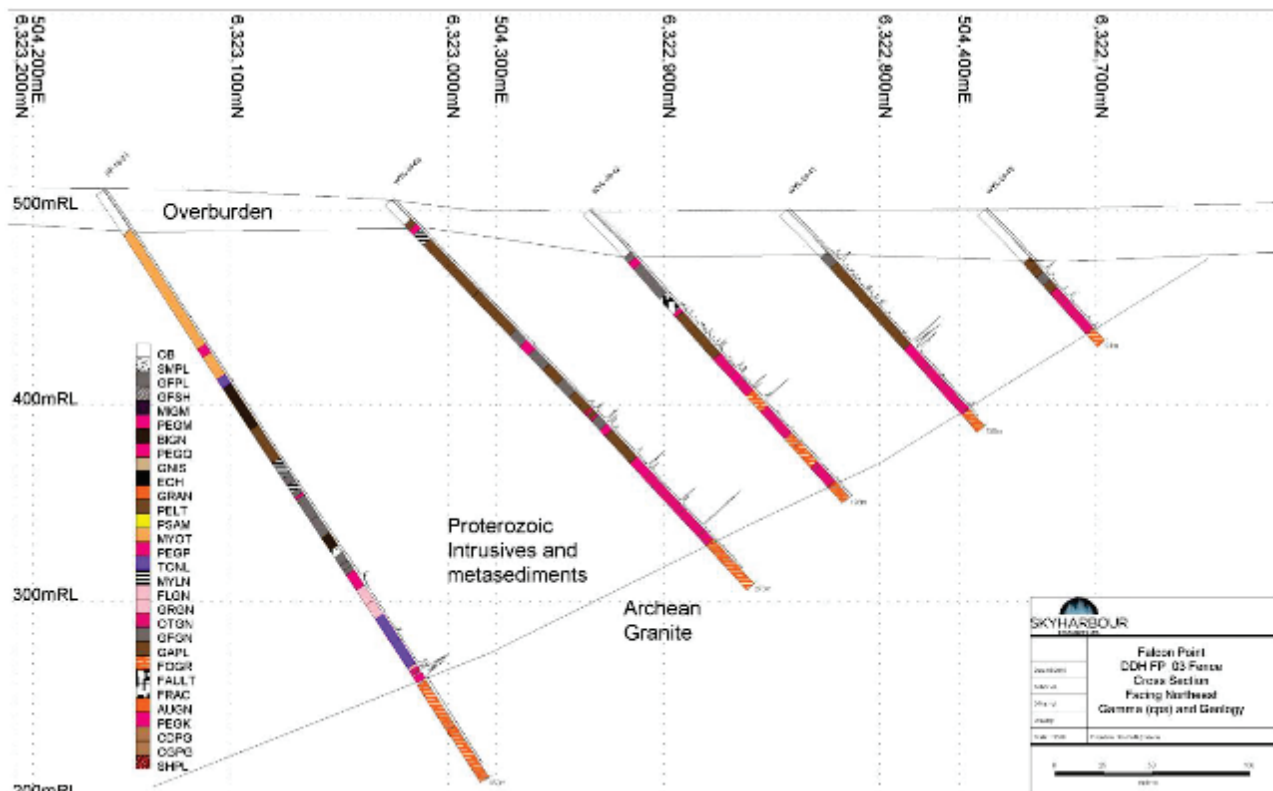




FP-15-03 Fence

Hole FP-15-03 (Figure 10-3) was drilled to test the down dip extent of mineralization intersected in drill holes WYL-09-41, 42 and 50. It intersected variably migmatitic and protomylonitic pelitic gneisses dominated by garnetiferous pelitic gneiss and graphitic pelitic gneiss of the Wollaston group and is underlain by tonalite orthogneiss and foliated Archean granite. Granite pegmatite intrudes into the orthogneiss and pelitic gneisses as sheets of variable thickness, composition and degree of deformation and alteration. Chlorite, hematite and clay alteration associated with brittle deformation occurs intermittently and with variable strength. Radioactivity occurs within pegmatites associated with biotite, hematite or chlorite and a weak brittle overprint. Locally elevated uranium values (up to 0.082% U<sub>3</sub>O<sub>8</sub> over 3.0 metres) accompanied by anomalous thorium (to 335 ppm) and lead (to 346 ppm) occur within these radioactive pegmatites.

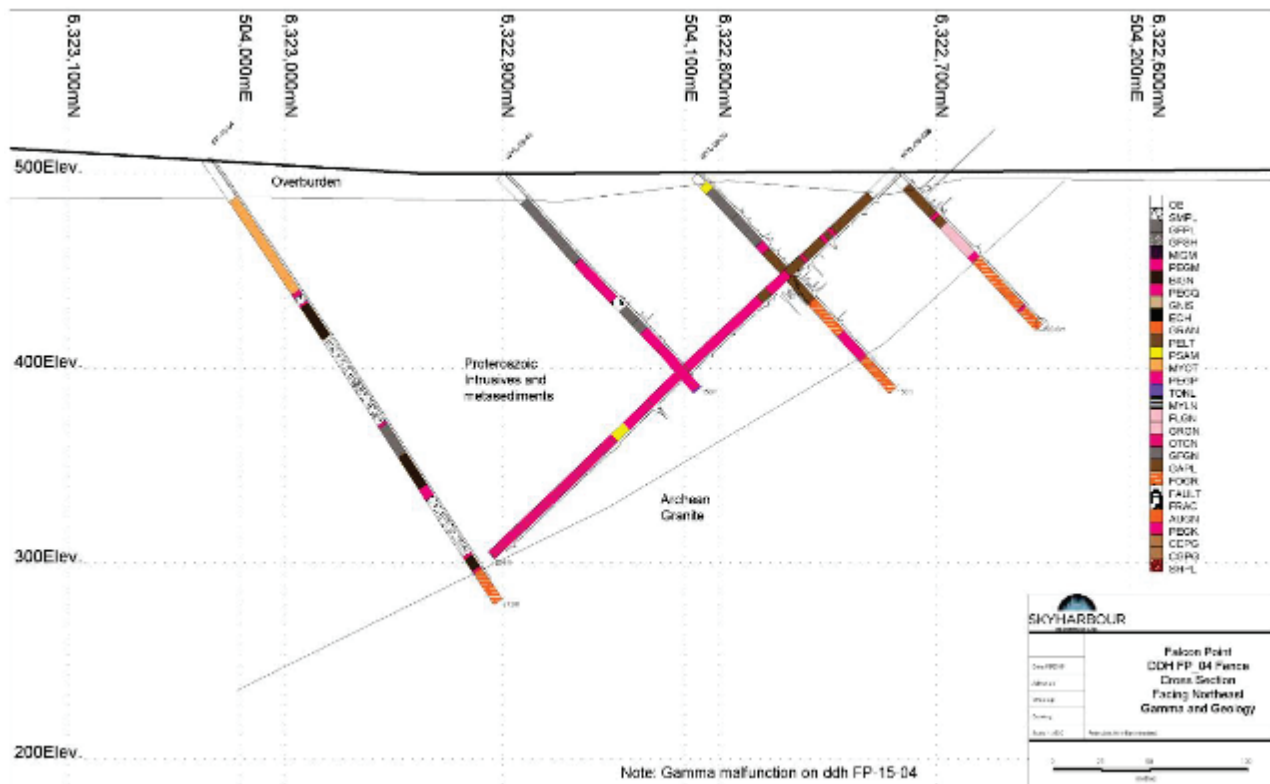
**Figure 10-3 DDH FP-15-03 Fence (Billard, 2015)**



**FP-15-04 Fence**

FP-15-04 (Figure 10-4) was drilled down dip of the fence comprising WYL-08-524, 525 and WYL-09-39 and 40 to test for mineralization at 250 metre vertical depth. It intersected gneissic granite gneisses followed by variably migmatitic and protomylonitic pelitic gneisses of the Wollaston group with garnet biotite pelitic gneiss, frequently cordierite rich and graphitic. The basal 30 metres of the hole is dominated by Hudsonian pegmatites and ending in Archean granites. Typically weak clay, chlorite and hematite alteration along with localized pyrite occurs intermittently and is often associated with brittle deformation. Only weak uranium mineralization (<0.1% U<sub>3</sub>O<sub>8</sub>) over narrow intervals (0.5 m) in granitic pegmatite was intersected. Elevated values for copper (to 325 ppm), molybdenum (to 863 ppm), vanadium (to 213 ppm), lead (to 332 ppm) and zinc (to 1190 ppm) were associated with sulphide-rich intervals within the pelitic gneisses.

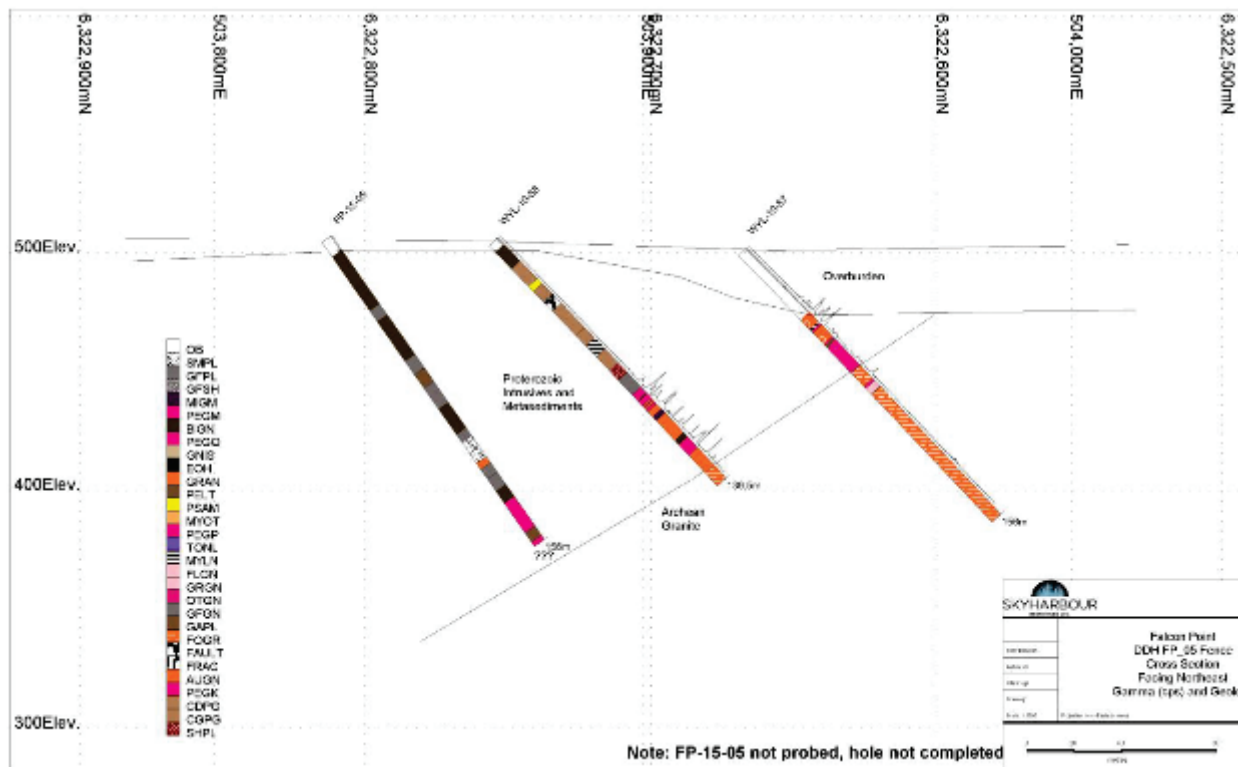
**Figure 10-4 DDH FP-15-04 Drill Fence (Billard, 2015)**



FP-15-05 Fence

Drill hole FP-15-05 was drilled on a fence below WYL-10-57 and 58 to test below the mineralization intersected in these two holes. It intersected variably migmatitic and protomylonitic pelitic gneisses of the Wollaston group with garnet biotite pelitic gneiss, cordierite graphite pelitic gneiss and biotite rich pelitic gneisses predominating in the upper portion of the drill hole. Pyrite as disseminations, clots and stringers is associated with graphitic intervals and areas of brittle deformation within the hole. Compositionally variable pegmatite intrudes the sequence especially after 133.9 metres. Clay, chlorite and hematite alteration of weak intensity occurs intermittently and is often associated with brittle deformation. Ductile deformation is indicated locally throughout by augen minerals. This hole was returned the most significant uranium values of the drilling program. The best result obtained was 6.0 metres of 0.103% U<sub>3</sub>O<sub>8</sub>, including 2.0 metres of 0.165% U<sub>3</sub>O<sub>8</sub> within granitic pegmatites. Elevated values for copper (to 685 ppm), nickel (to 834 ppm), vanadium (to 990 ppm), lead (to 911 ppm) and zinc (to 533 ppm) associated with the pegmatites and pelitic gneisses were intersected as well as up to 0.111% ThO<sub>2</sub> over two metres in the aforementioned uranium mineralized interval.

**Figure 10-5 DDH FP-15-05 Drill Fence (Billard, 2015)**



### 10.2.1 Drill Hole Spotting

All drill collar locations were spotted using various conventional handheld GPS units. All drill hole locations were planned and recorded using the UTM NAD 83 coordinate system. Drill holes were named in sequence starting with the project name FP (Falcon Point) then the year, followed by sequential drill hole number.

### 10.2.2 Down Hole Orientation Surveys

For the 2015 drill program a Reflex EZ-Shot orientation tool was used for down hole surveying in single shot mode. The EZ-Shot has a typical error of  $\pm 0.5^\circ$  for azimuth readings and  $\pm 0.2^\circ$  for dip readings.

### 10.2.3 Geological Logging

For the 2015 drilling program, the geological logging protocols utilized logging forms on Palm Pilots that were then imported into an Access database. The comprehensive logging forms used contained drill collar information, downhole surveys, written rock descriptions, handheld scintillometer readings, numeric alteration intensity, structural measurements and sample information. The logging forms were designed as part of an Access database which allowed for importing of the data into computer modelling software. All drill core was logged by geologists at the former Walker River drilling camp.

### 10.2.4 Geophysical Logging

#### 10.2.4.1 Hand-held scintillometer

During the 2015 drilling program at Fraser Lakes Zone B, radioactivity from core was measured with a handheld Exploranium RS-125 Super gamma-ray spectrometer. The RS-125 unit uses a large ( $103 \text{ cm}^3$ ), high sensitivity NaI detector crystal to measure incoming radiation and reads up to a maximum of 65,535 cps. Spectrometer readings above background were recorded in the technical logging sheet for each drill hole.

#### 10.2.4.2 Down hole radiometric surveys

For the 2015 drill program, drill holes (except for FP-15-05 due to technical problems) were surveyed with a Mount Sopris 2000 model winch, MGX console and gamma probe. The single NaI detector crystal gamma probe is connected to either a 200 m or 305 m Mount Sopris fibre optic winch and Matrix digital logging system with laptop. The gamma probe has an accuracy of  $\pm 1\%$  of full scale and can be used in grades of up to 2.00 wt% equivalent  $\text{U}_3\text{O}_8$ .

### 10.2.5 Drill Core Storage and Drill Hole Closure

Once sample splitting was completed, metal tags inscribed with the drill hole number, box number and from / to meterage were stapled on the front of each core box. For the 2015 drill program each drill hole was placed into core racks at the Walker River core logging camp to allow for easy access. Upon completion, each drill hole was cemented at 30 m depth to the top of bedrock regardless of whether or not it was mineralized. All drill holes had the casing removed once drilling was complete.

**Table 10-6 Common Lithological Codes (Billard, 2015)**

SHST	Schist	MFDK	Mafic Dyke
AUGN	Augen Gneiss	MFGN	Mafic Gneiss
BIGN	Biotite Gneiss	MGRN	Microgranite (Hudsonian)
BISH	Biotite Cataclasite/Shear	MIGM	Migmatitic Gneiss
CLAY	Clay dominated interval	MIN	Mineralization
CSIL	Calc silicate	MYLN	Mylonite
CYGG	Clay gouge	MYOT	Mylonitic Orthogneiss
DIAB	Diabase	MZDR	Monzodiorite
DIGN	Dioritic Gneiss (Archean)	OB	Overburden
DIOR	Diorite (Hudsonian)	OIGN	Orthogneiss
DYKE	Dyke	PEGM	Granitic Pegmatite (Hudsonian)
EOH	End of Hole	PELT	Pelitic Gneiss
FAULT	Basement Fault Zone	PSAM	Psammitic Gneiss
FLGN	Felsic Gneiss	QZBX	Quartz Breccia
FLIN	Felsic intrusive	QZIT	Quartzite
FOGR	Foliated Granite	QZVN	Quartz Vein
FRAC	Fracture Zone in basement	REGL	paleo Regolith
GAPL	Garnet Pelitic Gneiss	SHGR	Sheared Granite
GFBX	Graphitic Breccia	SHPL	Sheared Pelitic Gneiss
GFCY	Graphitic Clay	SHZN	Shear Zone
GFGN	Graphitic Gneiss	SLGN	Sillimanite Gneiss
GFGR	Graphitic Granite	SMGN	Sericite mylonitic gneiss
GFPG	Graphitic Pegmatite	SMPL	(meta-) Semipelite
GFPI	Graphitic Pelitic Gneiss	SYFN	Syenite
GFSC	Graphitic Schist	SYGN	Syenite gneiss
GFSH	Graphitic Shear	TONL	Archean Tonalitic Gneiss
GFSP	Graphitic Semipelitic Gneiss	UC	Unconformity
GNIS	Gneiss	WATR	Water
GRAN	Granite	GDGN	Archean Granodioritic Gneiss
GRGN	Archean Granite Gneiss/Foliated Granite	CDPG	Cordierite Pelitic Gneiss
HBGN	Hornblende Gneiss	CGPG	Cordierite Graphite Pelitic Gneiss
HLBX	Healed Breccia in basement	PEGK	Granitic Pegmatite - K-feldspar rich (Hudsonian)
INDK	Intermediate dyke	PEGP	Granitic Pegmatite - Plagioclase rich (Hudsonian)
INTR	Intrusive	PEGQ	Granitic Pegmatite - Quartz rich (Hudsonian)
LC	Lost core	GBRO	Gabbro (Hudsonian)



## 11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

The following is a description of sample preparation, analysis and security for the Fraser Lakes Zone B by JNR and Skyharbour. Information regarding sample preparation, analysis and security for the Skyharbour drilling is limited. Tisdale has yet to complete drilling on the Property.

Samples for all drill programs were shipped to the Saskatchewan Research Council Geoanalytical Laboratories (“SRC”) (an SCC ISO/IEC 17025: 2005 Accredited Facility) located in Saskatoon, Saskatchewan. SRC is licensed by the Canadian Nuclear Safety Commission (CNSC) to safely receive process and archive radioactive samples, and is independent of JNR, Skyharbour and the Authors.

### 11.1 2008 to 2011 Drilling

#### 11.1.1 Sample Preparation

The drilling program was supervised on-site by an experienced geologist with the role of Project Manager. The Project Manager oversaw all quality control aspects from logging, to sampling to shipment of the samples. Drill core was split once geological logging and sample mark-up were completed. All drill core samples were marked out and split at the JNR splitting shack by JNR employees, put into 5-gallon sample pails and sealed and transported to La Ronge, northern Saskatchewan. The samples were then transported directly to SRC. Beyond the marking, splitting and bagging conducted at the project site, JNR employees were not involved in sample preparation. No special security measures are enforced during the transport of core samples apart from those set out by Transport Canada regarding the transport of dangerous goods.

Sample data were recorded either directly into logging forms and/or the Access drill hole database itself, or in typical three-tag sample booklets. When booklets were used, one tag was stapled into the core box at the start of the appropriate sample interval, one tag was placed into the sample bag and the final tag was retained in the sample booklet for future reference. For each sample, the date, drill hole number, project name and sample interval depths were noted in the sample booklet. The data were transcribed to an Access database and stored on the JNR data server. Sample summary files were checked for accuracy against the original sample booklets after the completion of each drill program. The digital sample files also contain alteration and lithology information. Where sample booklets were not used, the sample numbers and intervals were marked on the core boxes using grease pencils and printed sample tags with the sample number were placed into bags, with the sample depths and other information entered directly into the logging forms or the Access drillhole.

All geochemical, assay and bulk density samples were split using a manual core splitter over the intervals noted in the sample booklet and/or the core boxes. Half of the core was placed in a plastic sample bag with the sample tag and taped closed with fibre tape. The other half of the core was returned to the core box in its original orientation for future reference. After the completion of each sample, the core splitter, catchment trays and table were cleaned of any dust or rock debris to avoid contamination. Samples were placed in sequentially numbered 5-gallon plastic pails. Higher grade samples were generally packed into the centre of each pail and surrounded by lower grade or unmineralized core in order to shield the radioactivity emitted.

All drill core samples were evenly and symmetrically split in half in order to try and obtain the most representative sample possible. Mineralized core samples which occur in drill runs with less than 95% core recovery are flagged for review prior to the resource estimation process. Individual samples showing a significant amount of core loss within the interval were removed in order to avoid including samples which may have assay grades artificially increased through the removal of lower-grade matrix material. Recovery through the mineralized zone is generally good however, and assay samples are assumed to adequately represent in situ uranium content.

All geochemical, assay and bulk density core samples were submitted to SRC. Samples are first dried and then sorted according to matrix (sandstone / basement) and then radioactivity level. Red line and ‘1 dot’ samples are sent to the geoanalytical laboratory for processing while samples ‘2 dot’ or higher (> 2,000 cps) are sent to a secure radioactive sample facility for preparation.

Reference pulp samples were included with the samples from each drill hole for ICP-OES and uranium assay analysis. Duplicate samples were routinely analysed as part of the project's quality assurance / quality control (QA/QC) program. Results obtained for the QA/QC samples are compared with the original sample results to monitor data quality.

### 11.1.2 Drill Core Geochemistry Analysis

All geochemistry core samples have been analysed by the ICP1 package offered by SRC, which includes 62 elements determined by Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES). Boron analysis and uranium by fluorimetry (partial digestion) have also been conducted on all samples.

For partial digestion analysis, rock samples are crushed to 60% at -2 mm and a 100-200 g sub sample is split out using a riffler. The sub-sample is further crushed to 90% at -106 microns using a chrome steel grinding mill. The sample is then transferred to a plastic snap top vial. An aliquot of pulp is digested in a mixture of HNO<sub>3</sub>:HCl in a hot water bath for an hour before being diluted by 15 ml of deionised water. The samples are then analysed using a Perkin Elmer ICPOES instrument (model DV4300 or DV5300). For total digestion analysis an aliquot of pulp is digested to dryness in a hot block digester system using a mixture of concentrated HF:HNO<sub>3</sub>:HClO<sub>4</sub>. The residue is then dissolved in 15 ml of dilute HNO<sub>3</sub> and analysed using the same instrument(s) as above.

Samples with low concentrations of uranium (<100 ppm) identified by the partial and/or total ICP analysis are also analysed by fluorimetry. After being analysed by ICP-OES, an aliquot of digested solution is pipetted into a 90% Pt, 10% Rh dish and evaporated. A NaF/LiF pellet is placed on the dish and fused on a special propane rotary burner then cooled to room temperature. The uranium concentration of the sample is then read using a Spectrofluorimeter. Uranium by fluorimetry has a detection limit of 0.1 ppm (total) or 0.02 ppm (partial).

### 11.1.3 Drill Core Assay Analysis

Drill core samples from mineralized zones were sent to SRC for uranium assay. The laboratory offers an ISO/IEC 17025:2005 accredited method for the determination of U<sub>3</sub>O<sub>8</sub> wt% in geological samples. The detection limit is 0.001 wt% U<sub>3</sub>O<sub>8</sub>. Rock samples are crushed to 60% at -2 mm and a 100-200 g sub- sample is split out using a riffler. The sub-sample is further crushed to 90% at -106 microns using a standard puck and ring grinding mill. An aliquot of pulp is digested in a concentrated mixture of HNO<sub>3</sub>:HCl in a hot water bath for an hour before being diluted by deionized water. Samples are then analyzed by a Perkin Elmer ICP-OES instrument (model DV4300 or DV5300).

### 11.1.4 Drill Core Bulk Density Analysis

Drill core samples collected for bulk density measurements were sent to SRC using their wax immersion method. Samples were first weighed as they were received and then submerged in deionized water and re-weighed. The samples are then dried until a constant weight is obtained. The sample is then coated with an impermeable layer of wax and weighed again while submersed in deionized water. Weights are entered into a database and the bulk density of each sample is calculated. Water temperature at the time of weighing is also recorded and used in the bulk density calculation. The detection limit for bulk density measurements by this method is 0.01 g/cm<sup>3</sup>.

### 11.1.5 QA/QC of Geochemistry and Assay Samples

Internal QA/QC was performed by SRC on the drill core samples from the Fraser Lakes Zone B. The in-house SRC QA/QC procedures involve inserting one to two quality control samples of known value with each new batch of 40 geochemical samples. Two reference standards are used by SRC on the Fraser Lakes Zone B drill core; BL2A and BL4A, which have concentrations of 0.502 and 0.147 wt% U<sub>3</sub>O<sub>8</sub>,

respectively. All of the reference materials used by SRC on the Fraser Lakes Zone B drill core are certified and provided by CANMET Mining and Mineral Services.

An internal JNR QA/QC sampling program was initiated during the 2010 winter drill campaign at the Fraser Lakes Zone B. The internal QA/QC program was designed to independently provide confidence in the core sample geochemical results provided by the SRC. Since the  $U_3O_8$  assay values returned from SRC are used in the resource estimation process they therefore require a high degree of accuracy and precision. The internal QA/QC sampling program determines analytical precision through the insertion of sample duplicates and accuracy through the insertion of materials of “known” composition (reference material). Reference standards are inserted into the sample sequence as they were collected in the field and prep and pulp duplicates are taken off core samples that are already submitted, as follows:

- Prep and pulp duplicates: these were taken by the laboratory (SRC) at the clients' (JNR) request from already submitted core samples. Prep duplicates were split from the initial -2 mm crushed sample and pulp duplicates were split off the -106 micron pulp material (i.e. post-grinding). All duplicates are weighed and analysed separately.
- Reference samples: CANMET reference standard BL4A was routinely inserted into drill core shipments by JNR to SRC for  $U_3O_8$  assays.

#### 11.1.6 Drill Core QA/QC Sample Results

Results for the JNR internal standard BL4A are tabulated in Appendix 3. Values returned are all within one standard deviation (0.004 wt%  $U_3O_8$ ) of the standards published value of 0.147 wt%  $U_3O_8$ . The average analysed value is 0.148 wt%  $U_3O_8$ , only 0.001 wt% higher than the expected value, representing a relative deviation of less than 1 % and indicating that the any bias is not significant.

The analytical results for the duplicate samples (Appendix 3) all indicate an acceptable level of repeatability.

The results of the QA/QC program on the Project indicate there are no significant issues with the drill core assay data. The data verification programs undertaken on the data collected from the Project support the geological interpretations, and the analytical and database quality, and therefore data can support mineral resource estimation.

**Table 11-1 Listing of QAQC Results in Holes Completed on the Fraser Lakes Zone B**

*SRM BL4A*

Lab Report	Sample ID	U3O8 (wt%)	Min (+2SD)	Max (-2SD)
G-2008-1351	BL4A	0.149	0.143	0.151
G-2008-1351	BL4A	0.15	0.143	0.151
G-2008-1351	BL4A	0.149	0.143	0.151
G-2008-1351	BL4A	0.148	0.143	0.151
G-2008-1351	BL4A	0.146	0.143	0.151
G-2008-1351	BL4A	0.15	0.143	0.151
G-2008-1351	BL4A	0.147	0.143	0.151
G-2008-1351	BL4A	0.146	0.143	0.151
G-2009-263	BL4A	0.148	0.143	0.151
G-2009-263	BL4A	0.149	0.143	0.151
G-2011-635	BL4A	0.146	0.143	0.151
G-2011-635	BL4A	0.145	0.143	0.151

G-2011-637	BL4A	0.148	0.143	0.151
G-2011-637	BL4A	0.149	0.143	0.151

**Table 11-2 QA/QC Duplicate Samples**

Sample_ID	Hole ID	Year	U <sub>3</sub> O <sub>8</sub> wt%	Sample_ID	Year	U <sub>3</sub> O <sub>8</sub> wt %	% Difference
WYL08524S-142	WYL-08-524	2008	0.017	WYL08524S-142 R	2008	0.016	5.88%
WYL08525S-116	WYL-08-525	2008	0.002	WYL08525S-116 R	2008	0.002	0.00%
WYL08526S-101	WYL-08-526	2008	0.004	WYL08526S-101 R	2008	0.004	0.00%
WYL08526S-131	WYL-08-526	2008	0.016	WYL08526S-131 R	2008	0.016	0.00%
WYL0937S-201	WYL-09-37	2009	0.004	WYL0937S-201 R	2009	0.004	0.00%
WYL0939S-169	WYL-09-39	2009	0.015	WYL0939S-169 R	2009	0.016	-6.67%
WYL0941S-135	WYL-09-41	2009	0.005	WYL0941S-135 R	2009	0.004	20.00%
WYL0941S-142	WYL-09-41	2009	0.094	WYL0941S-142 R	2009	0.093	1.06%
WYL0941S-145	WYL-09-41	2009	0.0005	WYL0941S-145 R	2009	0.0005	0.00%
WYL0943S-114	WYL-09-43a	2009	0.044	WYL0943S-114 R	2009	0.045	-2.27%
WYL0946S-160	WYL-09-46	2009	0.019	WYL0946S-160 R	2009	0.018	5.26%
WYL0948S-171	WYL-09-48	2009	0.021	WYL0948S-171 R	2009	0.022	-4.76%
WYL0950S-112	WYL-09-50	2009	0.015	WYL0950S-112 R	2009	0.014	6.67%
WYL0950S-121	WYL-09-50	2009	0.041	WYL0950S-121 R	2009	0.043	-4.88%
WYL0950S-141	WYL-09-50	2009	0.024	WYL0950S-141 R	2009	0.027	-12.50%
WYL-10-51-S120	WYL-10-51	2010	0.019	WYL-10-51-S120 R	2010	0.019	0.00%
WYL-10-53-S102	WYL-10-53	2010	0.055	WYL-10-53-S102 R	2010	0.055	0.00%
WYL-10-58-S116	WYL-10-58	2010	0.002	WYL-10-58-S116 R	2010	0.002	0.00%
WYL-10-58-S129	WYL-10-58	2010	0.072	WYL-10-58-S129 R	2010	0.075	-4.17%
WYL-10-58-S153	WYL-10-58	2010	0.06	WYL-10-58-S153 R	2010	0.055	8.33%
WYL-10-61-S196	WYL-10-61	2010	0.064	WYL-10-61-S196 R	2010	0.066	-3.13%
WYL-10-64-S117	WYL-10-64	2010	0.029	WYL-10-64-S117 R	2010	0.028	3.45%
WYL-10-64-S123	WYL-10-64	2010	0.031	WYL-10-64-S123 R	2010	0.03	3.23%
WYL-11-69-101	WYL-11-69	2011	0.0005	WYL-11-69-101 R	2011	0.0005	0.00%
WYL-11-69-122	WYL-11-69	2011	0.039	WYL-11-69-122 R	2011	0.038	2.56%
WYL-11-70-S-153	WYL-11-70	2011	0.016	WYL-11-70-S-153 R	2011	0.018	-12.50%
WYL-11-70-S-161	WYL-11-70	2011	0.038	WYL-11-70-S-161 R	2011	0.036	5.26%
WYL-11-71S-147	WYL-11-71	2011	0.028	WYL-11-71S-147 R	2011	0.029	-3.57%

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Sample_ID	Hole ID	Year	U <sub>3</sub> O <sub>8</sub> wt%	Sample_ID	Year	U <sub>3</sub> O <sub>8</sub> wt %	% Difference
	Average		0.0277			0.0277	

## 11.2 2015 Drilling

The only sample type collected were split samples with selected sections of core longitudinally split and sent for geochemical analysis. Sample splitting was done in a similar fashion to that from the 2008-2011 drilling. The split samples were sent to the SRC for geochemical analysis. Samples were subjected to HF/HNO<sub>3</sub>/HCl<sub>4</sub> (total) digestion and subsequently analysed using SRC's 60 element ICP package (including major oxides and the major trace elements Cu, Ni, Pb, Co, Zn, As). Uranium was analysed by fluorimetry after total digestion and boron was determined by ICP analysis after Na<sub>2</sub>O fusion.

### 11.2.1 QP's Comments

It is the Author's opinion, based on a review of all possible information, that the sample preparation, analyses and security used on the Project by JNR and Skyharbour meet acceptable industry standards and the drill data can and has been used for geological and resource modeling, and resource estimation of a mineral resource.



## 12 DATA VERIFICATION

The following section summarise the data verification procedures that were carried out and completed and documented by Armitage for this technical report.

As part of the verification process, Armitage reviewed all geological data and databases as well as past in-house and public technical reports.

As part of the verification process, Armitage reviewed all geological data and databases. Verifications were carried out on drill hole locations (i.e. collar coordinates) and down hole surveys. Armitage conducted verification of the laboratories analytical certificates and validation of the Project digital database for errors or discrepancies. A minimum of 20% of the digital assay records were randomly selected and checked against the laboratory assay certificates. No errors were noted.

Verifications were also carried out on drill hole locations, down hole surveys, lithology, SG and topography information. No errors were identified.

Armitage reviewed all available QA/QC results and Armitage is of the opinion the core and QA/QC sampling completed by previous owners of the Property provide adequate and good verification of the data and Armitage believes the work to have been done within the guidelines of NI 43-101.

The Property is considered by Armitage as an early stage exploration property.

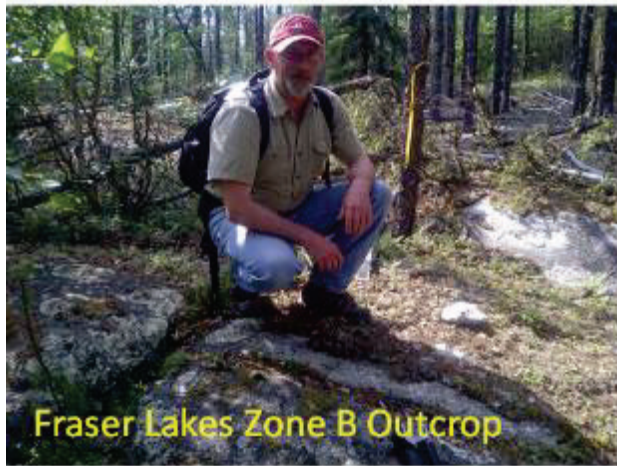
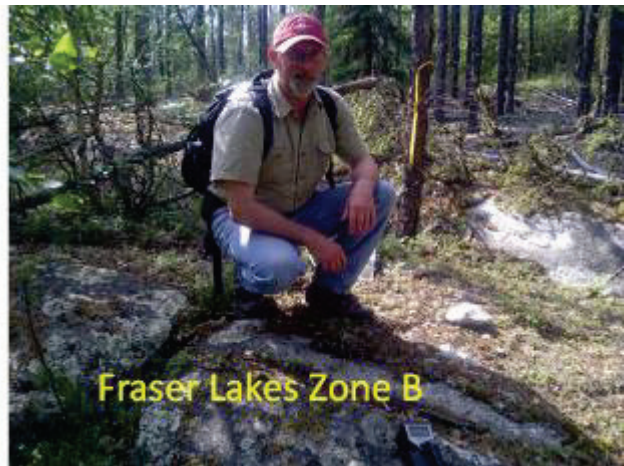
In addition, as described below, both Armitage and Sexton have conducted a site visit to the Property. There is currently no exploration or mining activities on the Property and Tisdale has yet to complete surface exploration on the Property. The recent site visit by Sexton is the most recent site visit conducted by the Author's and the Author's consider the site visit by Sexton current, per Section 6.2 of NI 43-101CP.

### 12.1 2012 Site Visit

Armitage personally inspected the Property and drill core on July 13, 2012, accompanied by JNR's Director of Exploration, Dr. Irvine R. Annesley who was JNR's qualified person responsible for the technical data from the Property and who had extensive knowledge of the Property. The Property was accessed via fixed-winged aircraft from La Ronge directly to camp (Figure 12-1). During the visit Armitage reviewed drill core from the 2008 - 2011 drill programs (Figure 12-1), drill sites and outcrops, camp and core logging facilities and reviewed core logging and sampling procedures. There was no exploration in progress at the time of the 2012 site visit. The core was stored in core racks and easily accessible.

As there had been no material scientific or technical work done on the Property between 2012 and 2015, since the last site visit by Armitage, no Property visit was conducted by Armitage in 2015 and the 2012 site visit was considered current with respect to the 2015 Skyharbour report.

**Figure 12-1 2012 Site Visit by Armitage: Review Of 2008-2011 Drill Core, Drill Sites and Outcrop of Mineralization**







## 12.2 2022 Site Visit

Sexton personally inspected the Property on December 9th, 2022. Prior to the site visit the Sexton reviewed Saskatchewan government assessment reports, NI-43-101 technical geological reports posted on SEDAR and the recent press releases related to the Property.

Sexton conducted a site visit to the Property on December 9th, 2022 accompanied by Chip Flatlander, a geotechnician with JP Enterprises of La Ronge. The Property was accessed via helicopter from La Ronge directly to camp. During the site visit, drill core from diamond drill holes located at the historic Walker River camp site (2015) was examined. Sexton examined accompanying drill logs and assay certificates, and personally conducted radioactivity readings on core. The radioactivity readings were taken with a portable RS 120 Super scintillometer and were compared against readings from the drill core's weak to strongly mineralized and unmineralized zones. All readings were representative of the intervals measured and comparable to the historically documented readings noted in the 2015 drill logs.

The Property was not active with respect to exploration at the time of the December site visit, so Sexton was only able to inspect the core storage area and several drill sites. All core was stored in core racks which are still in good shape and easily accessible. The drill collar locations were accessed by helicopter, in particular, drill holes from FP15-03, 04 and 05 on the Fraser Lakes Zone B. Collar co-ordinates were obtained using a hand-held GPS and determined to be within five (5) metres of the reported collar locations.

### Figure 12-2 2022 Site Visit

Property Drill Core Yard



FP15-05: Collar with GPS



FP15-05: GPS of Collar



FP15-05: 137 to 150 metres





### 12.3 Conclusion

All geological data has been reviewed and verified by the Author as being accurate to the extent possible and to the extent possible all geologic information was reviewed and confirmed. There were no errors or issues identified with the database. Based on a review of all possible information, the Author is of the opinion that the database is of sufficient quality to be used for a mineral resource estimate. However, the database is not being used for a current resource estimate.

### **13 MINERAL PROCESSING AND METALLURGICAL TESTING**

There has been no metallurgical testing on mineralization from the Property.

## **14 MINERAL RESOURCE ESTIMATES**

There are no current Mineral Resource Estimates for the Property with respect to Tisdale.

## **15 MINERAL RESERVE ESTIMATE**

There are no Mineral Reserve Estimates for the Property.

## **16 MINING METHODS**

This section does not apply to the Technical Report.



## **17 RECOVERY METHODS**

This section does not apply to the Technical Report.

## **18 PROJECT INFRASTRUCTURE**

This section does not apply to the Technical Report.

## **19 MARKET STUDIES AND CONTRACTS**

This section does not apply to the Technical Report.

## **20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT**

This section does not apply to the Technical Report.

## **21 CAPITAL AND OPERATING COSTS**

This section does not apply to the Technical Report.



## **22 ECONOMIC ANALYSIS**

This section does not apply to the Technical Report.

## **23 ADJACENT PROPERTIES**

There is no information on properties adjacent to the Property necessary to make the Technical Report understandable and not misleading

## **24 OTHER RELEVANT DATA AND INFORMATION**

There is no other relevant data or information available that is necessary to make the technical report understandable and not misleading. To the Authors' knowledge, there are no significant risks and uncertainties that could reasonably be expected to affect the reliability or confidence in the exploration information.

## 25 INTERPRETATION AND CONCLUSIONS

SGS was contracted by Tisdale to complete a NI 43-101 Technical Report for the South Falcon East Property (formerly Way Lake), located in northern Saskatchewan, Canada. The Property is considered an early stage exploration property.

On October 20, 2022, Tisdale announced that it had entered into an option agreement, dated October 19, 2022, with Skyharbour Resources Ltd., an arms-length party, pursuant to which it has been granted the right to acquire up to a seventy-five percent interest in the South Falcon East Property.

The Property, currently 100% owned by Skyharbour, covers approximately 12,234.23 hectares and lies 18 km outside the Athabasca Basin, approximately 55 km east of the Key Lake Uranium Mine.

Tisdale is in the business of acquiring, exploring and evaluating mineral resource properties, and either joint venturing or exploring and evaluating these properties further or disposing of them when the evaluation is completed. Tisdale's common shares are listed on the TSX-Venture Exchange ("TSX-V") under the symbol "TCEC". The Company is also listed on the OTCQB under the symbol "TCEFF", and on the Frankfurt Exchange under the symbol "T1KC". Their current business address is 2200 – 885 West Georgia Street, Vancouver, BC, V6C 3E8.

Allan Armitage, Ph.D., P. Geo. of SGS, and Alan Sexton, MSc, P.Geo. of GeoVector Management Inc. ("GeoVector") (the "Authors") are responsible for the preparation of the current technical report. Armitage and Sexton are independent Qualified Persons as defined by NI 43-101.

The Property is located 20 km east of the Proterozoic Athabasca Basin in northern Saskatchewan, Canada. The Property lies approximately 55 km east of Key Lake, 35 km southeast of Moore Lakes, 260 km north of La Ronge and 580 km north of Saskatoon, Saskatchewan. The Property is located in the Northern Mining District of Saskatchewan on 1:50,000 NTS map sheets 74A/14, 74A/15, 74H/01, 74H/02, 74H/03, 74H/07 and 74H/08 and is centered at latitude 57°14' N and longitude 104°52' W.

The Property covers 16 contiguous claims which are currently 100% owned by Skyharbour. All claims are in good standing. The total area of the 16 claims is 12,234.23 hectares.

Uranium exploration has been undertaken on the South Falcon East Uranium Project for over 40 years. Numerous and varied programs have been carried out on different portions of the Property, including diamond drill campaigns, airborne and ground geophysics, boulder sampling and prospecting.

JNR Resources Ltd. explored the Property between 2004 and 2011 targeting a low-grade / high-tonnage granitic pegmatite-hosted U-Th-REE deposit. Exploration undertaken on the South Falcon East property has mostly involved airborne and ground geophysics, multi-phase diamond drill campaigns, detailed geochemical sampling of drill core, and ground-based prospecting and geochemical sampling.

A total of 32 diamond drill holes totaling 5,694 m were drilled on the Fraser Lakes Zone B during the 2008 to 2011 period. To date, drilling of this zone has identified an extensive area approximately 1,250 m long by 650 m wide of moderately dipping, multiple stacked uranium and thorium mineralized horizons, which are open to the southwest and east-northeast to a depth of at least 175 m.

The Fraser Lakes Zone B was discovered during the summer 2008 prospecting and drilling (WYL-08-524, 525 and 526). These three holes did not test the optimum target of the graphitic pelitic gneiss and granitic pegmatite contact due to summer ground conditions. However, all three holes did intersect uranium mineralized granitic pegmatite. The best results were from WYL-08-525 which intersected several uranium intervals, with the best zone returning 0.081 wt% U<sub>3</sub>O<sub>8</sub> over 12.0 m from 77.50 to 89.50 m depth down the drill hole. The Fraser Lakes Zone B deposit is currently defined by 32 NQ drill holes totaling 5,694.0 m. The Zone B mineralization has a strike length of 1400 m, trends roughly 240° and dips approximately 30° to the north. In cross-section, the pegmatite-hosted mineralization is tabular in shape. The mineralization ranges from 2 to 20 m in width over a vertical thickness of approximately 175 m.

Diamond drilling in 2009 was carried out between February 13 and March 30. The drilling program consisted of 15 completed (WYL-08-36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49 and 50) and four abandoned (WYL-09-36a, 38a, 43a and 49a) diamond drill holes, totaling 2,700 m. This drilling was following up the three holes drilled at the end of the 2008 summer program.

Multiple intervals of uranium and/or thorium mineralization were intersected in several drill holes. The mineralization is accompanied by rare earth element enrichment and highly anomalous levels of pathfinder elements. Some of the better intersections (Appendix 1) occur in drill holes WYL-09-39, -41 and -50. At a grade cut-off of 0.029%  $U_3O_8$ , hole #39 returned seven mineralized intervals over a 30-meter down-hole length, including a 0.15-meter intercept of 0.166 wt%  $U_3O_8$  and 0.112 wt% thorium. The best result from hole #41 was 0.134 wt%  $U_3O_8$  and 0.77 wt%  $ThO_2$  over 1.0 meter, while the best result from hole #50 was 0.183 wt%  $U_3O_8$  and 0.062 wt%  $ThO_2$  over 1.0 meter. Hole WYL-09-46 returned multiple intervals of thorium mineralization including 0.109%  $ThO_2$  and 0.013 %  $U_3O_8$  over 7.0 m. Highly anomalous concentrations of other metals are also present in a number of holes. Hole WYL-09-38 returned 0.117% copper, 0.056% nickel, 0.044% zinc, 0.068% molybdenum and 44 ppm uranium over 6.5 m.

Diamond drilling in 2010 was carried out between February 8 and March 15 by JNR. The drilling program was following up the 2009 drilling program and consisted of 14 completed drill holes totaling 2772.6 m. Eight (WYL-10-51, 56, 57, 58, 61, 62, 63 and 64) of these drill holes totaling 1,463.0 m were completed on the Fraser Lakes Zone B with the remaining six holes (WYL-10-52, 53, 54, 55, 59 and 60) totaling 1309.60 m being drilled along the T-Bone Lake conductor.

Multiple intervals of uranium and/or thorium mineralization were intersected in six of the eight holes that tested the Fraser Lakes Zone B. The better intersections (Appendix 1) occur in drill holes WYL-10-51, -58, -61, -62, and -64. Hole WYL-10-61 returned a grade of 0.057 wt%  $U_3O_8$  over 5 m., including 0.242 wt%  $U_3O_8$  over 0.5 m. WYL-10-58 returned ten uranium mineralized intervals over a 65 -meter downhole length, including a 5.50 meter interval of 0.026 wt%  $U_3O_8$ ; a 3.00 meter interval of 0.041  $U_3O_8$ ; a 1.00 meter interval of 0.041  $U_3O_8$  with 0.046 wt%  $ThO_2$ ; and a 0.50 meter interval of 0.209 wt%  $ThO_2$  with 0.20 wt%  $U_3O_8$ . Drill hole WYL-10-51 returned five mineralized intervals over a 50 meter down-hole length, including a 3.00 meter intercept of 0.064 wt%  $U_3O_8$  that included 0.179%  $U_3O_8$  and 0.059 wt%  $ThO_2$  over 0.5 m.

The six holes drilled along the T-Bone Lake Conductor intersected anomalous radioactivity and U mineralization in two of the holes (WYL-10-53 and 55).

Diamond drilling in 2011 was carried out between March 13 and April 17 by JNR. The drilling program was a follow up to the 2010 drilling program and consisted of 10 holes totaling 2,590.0 m. This drilling was completed on the Fraser Lakes Zone B (WYL-11-68, 69, 70 and 71) totaling 1189.0 m, Fraser Lakes North (WYL-11-73 and 74 totaling 436.0 m) and along the T-Bone Lake conductor (WYL-65, 66, 67 and 72 totaling 965.0 m).

Multiple intervals of uranium and/or thorium mineralization were intersected in four new holes (WYL-11-68, 69, 70 and 71) that tested Fraser Lakes Zone B on its east-northeast end. The better U-Th intersections occur in drill holes WYL-11-68, 70 and 71 (Appendix 1). To date, drilling of this zone has identified an extensive area approximately 1,250 m long by 650 m wide of moderately dipping, multiple stacked uranium and thorium mineralized horizons, which are open to the southwest and east-northeast to a depth of at least 175 m.

Anomalous radioactivity was intersected within the Fraser Lakes North area. Drill holes WYL-11-73 and WYL-11-74 yielded low-grade, basement-hosted U-Th mineralization within graphitic pelitic gneisses and granitic pegmatites.

Diamond drilling was carried out between March 17 and April 7, 2015 by Cypress Geoservices Ltd. on behalf of Skyharbour. The drilling program was a follow up to the 2011 drilling program and consisted of 5 holes totaling 1,278 m. This drilling was completed on the Fraser Lakes Zone B (FP15-03, 04 and 05) with three holes totaling 787 m, one hole (FP15-01) totaling 272 m was drilled to test the intersection of the

Fraser Lakes antiformal nose with the northwest trending T-Bone Lake lineament and one hole (FP15-02) totaling 219 m was drilled to test the eastern limb of the Fraser Lakes Conductor under Fraser Lakes.

Drill holes FP15-03, 04 and 05 tested the east-northeast end of the Fraser Lakes Zone B down-dip to a vertical depth of 250 m and over a 500 m strike length. This zone had been previously tested by three fences of diamond drilling in 2009 and 2011. Multiple intervals of low to moderate grade uranium mineralization, which was accompanied by local thorium were intersected in these three new drill holes. The better U-Th intersections occur in drill hole FP15-05 with 6.0 m of 0.103%  $U_3O_8$ , including 2.0 m of 0.165%  $U_3O_8$  and 0.111%  $ThO_2$ . Drill holes FP15-01 and 02 intersected locally elevated  $U_3O_8$  (up to 0.059%  $U_3O_8$ ) which was associated with anomalous thorium (up to 526 ppm) in these two drill holes. Anomalous levels of copper (250-2760 ppm), lead (225-548 ppm), nickel (250-825 ppm) and vanadium (200-990 ppm), were intersected in all of the 2015 new drill holes.

The mineralization is associated with pegmatite intruding Wollaston Group pelitic and graphitic pelitic gneiss and orthogneiss at/above the Archean-Wollaston contact and is accompanied by brittle to brittle-ductile deformation and varying degrees of clay, chlorite and hematite alteration.

Xcalibur MPH (Canada) Ltd. flew 2,843 line km of airborne gravity gradiometer and magnetics over the South Falcon Point project for Skyharbour in 2022. The survey was successful in identifying a series of NNW-trending Tabbernor Faults and 070-degree trending faults, both of which are commonly related to uranium mineralization in the Wollaston Domain when they intersect graphitic structural corridors related to magnetic lows. Several valid drill targets have been interpreted on the Fraser Lakes antiform which is proximal to the Fraser Lakes Zone B. A series of north-trending Tabbernor features were interpreted from this data as were several N70-trending faults.

Diamond drilling was carried out between March 17 and April 7, 2015 by Cypress Geoservices Ltd. on behalf of Skyharbour. The drilling program was a follow up to the 2011 drilling program and consisted of 5 holes totaling 1,278 m. This drilling was completed on the Fraser Lakes Zone B (FP15-03, 04 and 05) with three holes totaling 787 m, one hole (FP15-01) totaling 272 m was drilled to test the intersection of the Fraser Lakes antiformal nose with the northwest trending T-Bone Lake lineament and one hole (FP15-02) totaling 219 m was drilled to test the eastern limb of the Fraser Lakes Conductor under Fraser Lakes.

Drill holes FP15-03, 04 and 05 tested the east-northeast end of the Fraser Lakes Zone B down-dip to a vertical depth of 250 m and over a 500 m strike length. This zone had been previously tested by three fences of diamond drilling in 2009 and 2011. Multiple intervals of low to moderate uranium mineralization, which was accompanied by local thorium were intersected in these three new drill holes. The better U-Th intersections occur in drill hole FP15-05 with 6.0 m of 0.103%  $U_3O_8$ , including 2.0 m of 0.165%  $U_3O_8$  and 0.111%  $ThO_2$ . Drill holes FP15-01 and 02 intersected locally elevated  $U_3O_8$  (up to 0.059%  $U_3O_8$ ) which was associated with anomalous thorium (up to 526 ppm) in these two drill holes. Anomalous levels of copper (250-2760 ppm), lead (225-548 ppm), nickel (250-825 ppm) and vanadium (200-990 ppm), were intersected in all of the 2015 new drill holes.

In 2012, JNR GeoVector to complete a resource estimate for the Property's Fraser Lakes Zone B. In 2015, GeoVector was commissioned by Skyharbour to update the technical report. The 2012 and 2015 technical reports were written in support of a MRE for the Fraser Lakes Zone B. The Fraser Lake Zone B deposit was reported to contain an Inferred resource, at a base case cut-off grade of 0.01 %  $U_3O_8$ , totalling 6.96 Mlbs of  $U_3O_8$  within 10.4 million tonnes at an average grade of 0.030%  $U_3O_8$ , with significant quantities of rare earth element oxides (REO), specifically  $La_2O_3$ ,  $Ce_2O_3$ ,  $Yb_2O_3$ , and  $Y_2O_3$ . The inferred resource also includes a significant thorium component. Using the base case COG of 0.01%  $U_3O_8$ , the Inferred resource includes 5.34 Mlbs of  $ThO_2$  at an average grade of 0.023%  $ThO_2$ . The MRE had an effective date of March 23rd, 2015.

Although the MRE was at the time classified in accordance with CIM (2014) Definition Standards and was prepared and disclosed in compliance with disclosure requirements for mineral resources or reserves set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2011), the MRE for the Fraser Lakes Zone B is considered historical in nature with respect to Tisdale and Tisdale is not treating the historical



resource as current. As the historical MRE was completed in 2012, the historical MRE does not comply with current disclosure requirements for mineral resources set out in the NI 43-101 Standards of Disclosure for Mineral Projects (2016) and does not comply with current 2019 CIM Definition Standards - For Mineral Resources and Mineral Reserves, including the critical requirement that all mineral resources “have reasonable prospects for eventual economic extraction”. In the Authors opinion, additional work is required, including mineralogical studies, metallurgical studies and engineering studies in order to meet current standards including the critical requirement that all mineral resources have reasonable prospects for eventual economic extraction either by open pit or underground mining methods.

The historical MRE was determined from a database of 1,283 assay results in 32 drill holes totalling 5,694 m of drilling completed by JNR between August 2008 and April 2011. The drill holes are spaced primarily 75 to 250 m apart along a strike length of approximately 1,400 m. The drill holes tested mineralization to a vertical depth up to 175 m. Mineralization varies in thickness from 2 m to over 20 m. Grades for  $U_3O_8$  was interpolated into the blocks by the inverse distance squared ( $ID^2$ ) method. In addition to  $U_3O_8$ , grades for  $ThO_2$  and REO, including  $La_2O_3$ ,  $Ce_2O_3$ ,  $Yb_2O_3$ , and  $Y_2O_3$  have been interpolated into the blocks.

## 26 RECOMMENDATIONS

Based on a review of the technical data and given the prospective nature of the Property, it is the Author’s opinion that the Project merits further exploration and that a proposed plan for further work by Tisdale is justified. A proposed work program will help advance the Project and will provide key inputs required to further evaluate the viability of the Project.

Additional work recommended by the Authors includes mineralogical studies, metallurgical studies and engineering studies required to bring the historical mineral resource estimate up to current NI 43-101 standards (2016) and comply with current 2019 CIM Definition Standards - For Mineral Resources and Mineral Reserves, including the critical requirement that all mineral resources “have reasonable prospects for eventual economic extraction”.

The Authors are recommending Tisdale conduct further exploration, subject to funding and any other matters which may cause the proposed exploration program to be altered in the normal course of its business activities or alterations which may affect the program as a result of exploration activities themselves.

### 26.1 Proposed Work Program and Budget

A phased approach to the exploration programs and budgets is outlined in Table 26-1 and Table 26-2. The Phase 1 program would be completed during the winter to spring 2023 and would consist of:

- Data compilation into a GIS format
- Integration of the geophysical surveys with all other geoscience data
- Drill target generation.
- Field evaluation of all targets and additional prospecting (spring).

The Phase 2 program would be completed during the summer - winter of 2023-2024 and would consist of approximately 6,500 m of diamond drilling. The majority (90%) of this drilling would be focused on expanding the Fraser Lakes Zone B deposit along strike and at depth. The remaining drill meterage (10%) would be focused on testing new targets generated by the 2023 Phase 1 program.

**Table 26-1 South Falcon East Property 2023 Phase 1 Exploration Program Budget**

<b>SOUTH FALCON POINT EAST PROPERTY 2023 WINTER – SPRING PROGRAM BUDGET</b>				
	<b>Units</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Comments</b>
Senior Geologist	10	\$700	\$7,000	Winter compilation and targeting
GIS Specialist	10	\$600	\$6,000	Winter compilation and targeting
Truck Rental	1	\$2,500	\$2,500	day rental
Spring Crew travel	4	\$2,500	\$10,000	In / out of Project location for crew of 4
Senior Geologist	1	\$14,000	\$14,000	20 day field program
Geotech / Prospector	1	\$8,000	\$8,000	20 day field program
Junior Geologists	2	\$6,000	\$12,000	20 day field program
<b>CHOPPER CONTRACT</b>	48	\$2,250	\$108,000	Hourly rate includes fuel (wet cost)
<b>GEOCHEM SAMPLES</b>	200	\$80	\$16,000	
<b>SUPPLIES</b>	1	\$4,000	\$4,000	
<b>CAMP COSTS</b>	1	\$20,000	\$20,000	
		<b>SUB-TOTAL</b>	<b>\$207,500</b>	
<b>MANAGEMENT FEES</b>	10%		<b>\$20,750</b>	
		<b>TOTAL</b>	<b>\$228,250</b>	

**Table 26-2 Phase 2: South Falcon East Property 2023 - 2024 Exploration Program Budget**

<b>SOUTH FALCON POINT EAST PROPERTY 2023 – 2024 FALL - WINTER DRILL BUDGET</b>				
	<b>Units</b>	<b>Unit Cost</b>	<b>Total Cost</b>	<b>Comments</b>
<b>MOB / DEMOB</b>				
personnel	2	\$15,000	\$30,000	
equipment	2	\$15,000	\$30,000	
<b>DRILLING</b>	Based on 26 holes averaging 250 m each, with 40m of overburden and 100 m between moves.			
initial set up	200	\$330	\$66,000	
overburden 0 - 15	390	\$88	\$34,320	
overburden 16 - 30	390	\$100	\$39,000	
overburden 31 - 45	234	\$114	\$26,676	
drilling 0 - 150m	2,860	\$80	\$228,800	
drilling 150 - 300m	2,600	\$89	\$231,400	
standby	50	\$245	\$12,250	
trail building, maint.	400	\$330	\$132,000	
travel	120	\$110	\$13,200	
tool rentals	1	\$12,000	\$12,000	reflex, down-hole logging, spectral
equipment rentals	1	\$15,000	\$15,000	trucks, skidder, centrifuge
<b>ACCOMMODATION</b>				
Existing Camp	500	\$350	\$175,000	Camp man, food, camp equipment rental
<b>TRAVEL</b>	1	\$6,000	\$6,000	Forum truck
with truck rental				
<b>FUEL</b>	1	\$140,000	\$140,000	
diesel, gas, propane				
<b>PERSONNEL</b>				
Geo 1	4	\$10,000	\$40,000	
Geotech	60	\$300	\$18,000	
Supervisor	2	\$15,000	\$30,000	
Cook / first aid	60	\$700	\$42,000	
<b>GEOCHEM SAMPLES</b>	800	\$80	\$64,000	
<b>SUPPLIES</b>	1	\$30,000	\$30,000	core boxes, lids, bags, tools, etc.
<b>JP ENTERPRISES</b>	1	\$40,000	\$40,000	expeditor
		<b>SUB-TOTAL</b>	<b>\$1,454,846</b>	
<b>MANAGEMENT FEES</b>	10%		<b>\$145,485</b>	
		<b>TOTAL</b>	<b>\$1,600,331</b>	

## 27 REFERENCES

Armitage, A. and Sexton, A., 2012. Technical Report on the Resource Estimate on the Way Lake Uranium Project, Fraser Lakes Zone B, Northern Saskatchewan. Prepared for JNR Resources Inc. Issued September 2012, by Geovector Management Inc.

Armitage, A., 2015. Technical Report on the Falcon Point Uranium Project, Northern Saskatchewan. Prepared for Skyharbour Resources Ltd. Report Date: March 20th, 2015, Effective Date: March 20th, 2015, by GeoVector Management Inc.

Billard, D., 2015. Skyharbour Resources Ltd., Falcon Point Project, 2015 Winter Diamond Drilling Program, S-110183. NTS 74H 02. Confidential Assessment Report.

Billard, D., 2022. Skyharbour Resources Ltd., South Falcon Point Project, 2022 Airborne Gravity Survey, MAW 3308, MC00013638, MC00013639, MC00013641, MC00013645, MC00013657, MC00013664, MC00013679, MC00013685, MC00013686, MC00013694, MC00013703, MC00014011, MC00014061, S-110182, S-110184, S-110182 S-110192 to 195, S-111681, S-111770. NTS 74H 02, 03, & 74A 14, 15. Confidential Assessment Report.

Bradley, K., 2007. JNR Resources Inc., Way Lake Project, 2006 Airborne Geophysical Program, S-107394, S-107395, S-107396, S-110156, S-110157, S-110182, S-110183, S-110184, S-110191, S-110192, S-110193, S-110194, S-110195, S-110196, S-110197, S-110198, S-110199, NTS74 A 14 & 74 H 02, 03, 07, 08, Confidential Assessment Report.

Bradley, K., 2007a. JNR Resources Inc., Way Lake Project, 2007 Geophysical program, S- 107395, S-107396, S-110191, S-110192, S-110193, NTS 74 H 02, 03, 07, Confidential Assessment Report.

Bradley, K., 2008. JNR Resources Inc., Way Lake Project, October 2007 Magnetometer survey, S-107395, S-107396, NTS 74 H 02 & 07, Confidential Assessment Report.

Bradley, K., 2008a. JNR Resources Inc., Way Lake Project, 2007 VTEM survey, S-107395, S107396, S-110182, NTS 74 A 14, 15 & 74 H 02, 03, 07, 08, Confidential Assessment Report.

Cutforth, C., 2009. JNR Resources Inc., Way Lake Project, 2008 Summer Program, February 2009, S-107395, S-110182, S-110183, S-110184, S-110191, S-110192, S-110193, S-110194, S- 110195, S-110196, S-110199, NTS 74A 14, 15 and 74 H 01, 02, 03, 07, 08, Confidential Assessment Report.

Cutforth, C. and Billard, D., 2010. JNR Resources Inc., Way Lake Project, 2009 Winter Program, February 2010, S-110183, NTS 74H 02, Confidential Assessment Report.

Donkers, J., Tykajlo, R., 1982. MPP 1000, Way Lake Project, 1981 Assessment Report, AGIP - SMDC - Texaco Joint Venture, Unpublished Assessment Report, SEM file # 74 H 02-0025.

Fedorowich, J., 1984. Uranium and Associated Albitite: A Description of Mineralization and Host Rocks, Way Lake, Saskatchewan; University of Saskatchewan, B. Sc. Thesis, pp. 58

Gittings, F. and Annesley, I.R., 2011. JNR Resources Inc., Way Lake Project, 2010 Winter Program, February 2010, S-110183, NTS 74H 02, Confidential Assessment Report.

### General References

Acton, D.F., Padbury, G.A., Stushnoff, C.T., 1998. The Ecoregions of Saskatchewan. Canadian Plains Research Center, University of Regina and Saskatchewan, Environment and Resource Management. 205 p.

Annesley, I.R., Madore, C., and Shi, R., 1997. Thermotectonic evolution of the Wollaston EAGLE Project Area, in Thermotectonic and uranium metallogenic evolution of the Wollaston EAGLE Project area, in Annesley, I.R., Madore, C., Shi, R., and Quirt, D.H., eds. Saskatchewan Research Council, Publication R-1420-2-C-97, p. 1-62.

Annesley, I. R., and Madore, C., 1999. Leucogranites and pegmatites of the sub-Athabasca basement, Saskatchewan: U protore? in Stanley, C.J. et al., eds., Mineral Deposits: Processes to Processing: Balkema, Vol. 1, p. 297-300.

Annesley, I.R and Madore, C., 2002: Thermotectonics of Archean/Paleoproterozoic basement to the eastern Athabasca unconformity-type uranium deposits. In Uranium Deposits: From Their Genesis to Their Environmental Aspects. Edited by B. Kribek and J. Zeman. Czech Geological Survey, Prague, pp. 33-36.

Annesley, I.R., Madore, C., Hajnal Z., 2003: Wollaston-Mudjatik transition zone: its characteristics and influence on the genesis of unconformity-type uranium deposits; in International Conference Uranium Geochemistry 2003, Cuney, M. (ed), p. 55-58.

Annesley, I.R., Madore, C., and Portella, P., 2005. Geology and thermotectonic evolution of the western margin of the Trans-Hudson Orogen: evidence from the eastern sub-Athabasca basement, Saskatchewan: Canadian Journal of Earth Sciences, v. 42, p. 573-597.

Annesley, I.R., Cutforth, C., Billard, D., Kusmirski, R.T., Wasyluk, K., Bogdan, T., Sweet, K. and Ludwig, C., 2010. Fraser Lakes Zones A and B, Way Lake Project, Saskatchewan: Geological, Geophysical and Geochemical Characteristics of Basement-hosted Uranium Mineralization, 4 p.

Berning, J., Cooke, R., Hiemstra, S.A., and Hoffman, U., 1976. The Rössing Uranium Deposit, South West Africa, Economic Geology, vol. 71, pp. 351-368.

Card, C.D., 2002. New investigations of basement to the western Athabasca Basin; in Summary of Investigations 2002, Volume 2, Saskatchewan Geological Survey, Saskatchewan Energy and Mines, Miscellaneous Report 2002-4-2, 17 p.

Forster, R. W., 1970. A geological report on Dynamic Petroleum Products Ltd. Permit No. 1: Saskatchewan Geological Survey Assessment Report 74H02-0007, p. 1-36.

Hanmer, S., Parrish, R., Williams, M., and Kopf, C., 1994. Striding-Athabasca mylonite zone: complex Archean deep crustal deformation in the East Athabasca mylonite triangle, northern Saskatchewan; Canadian Journal of Earth Sciences, v.31, p 1287-1300.

Hanmer, S., 1997. Geology of the Striding-Athabasca mylonite zone, northern Saskatchewan and southeastern District of Mackenzie, northwestern territories; Geological Survey of Canada, Bulletin 501, 92 p.

Hobson, G.D. and MacAulay, H.A., 1969. A seismic reconnaissance survey of the Athabasca Formation, Alberta and Saskatchewan (part 74) (a co-operative venture with the Saskatchewan Department of Mineral Resources); Geological Survey of Canada, Paper 69-18, 23 p.

Hoeve, J. and Sibbald, T.I.I., 1978. On the genesis of Rabbit Lake and other unconformity-type uranium deposits in northern Saskatchewan, Canada; Economic Geology, vol. 73, pp. 1450-1473.

International Atomic Energy Agency (IAEA), 2009. World Distribution of Uranium Deposits 2009 Edition, TECDOC-1629, 117 p.

Kinnaird, J.A., and Nex, P.A.M., 2007, A review of geological controls on uranium mineralisation in sheeted leucogranites within the Damara Orogen, Namibia: Applied Earth Science (Trans. Inst. Min. Metall. B), v. 116: 68-85.

Ko, C.B., 1971. Geological Report on Dynamic Petroleum Products Ltd. CBS 1837, Sask. N.T.S.: 74H-2-SW: Assessment Report, Great Plains Development Company of Canada Ltd., 1-23.

Lewry, J.F., and Sibbald, T.I.I., 1977, Variation in lithology and tectonometamorphic relationships in the Precambrian basement of northern Saskatchewan: Canadian Journal of Earth Sciences, v. 14: 1453-1467.

Lewry, J. and Sibbald, T.I.I., 1977. Variation in lithology and tectonometamorphic relationships in the Precambrian basement of northern Saskatchewan; in Canadian Journal of Earth Sciences v.14, p 1453-1467.

Lewry, J. and Sibbald, T.I.I., 1980. Thermotectonic evolution of the Churchill Province in northern Saskatchewan; in Tectonophysics, v.68, p 45-82.

McKechnie, C., Annesley, I.R., and Ansdell, K.A., 2013. Geological setting, petrology, and geochemistry of granitic pegmatites and leucogranites hosting U-Th-REE mineralization at Fraser Lakes zone B, Wollaston Domain, northern Saskatchewan, Canada: Exploration and Mining Geology, v. 21, p. 1–26.

McKechnie, C.L., Annesley, I.R. & Ansdell, K., 2012 a. Geological setting, petrology and geochemistry of granitic pegmatites hosting the Fraser Lakes Zone B U-Th-REE mineralization, Wollaston Domain, northern Saskatchewan, Canada. Explor. Mining. Geol.

McKechnie, C., Annesley, I.R., and Ansdell, K.A., 2012 b., Mineral chemistry, metamorphic P-T-t path, and thermotectonic implications for the genesis of radioactive abyssal granitic pegmatites. Canadian Mineralogist.

McNicoll, V.J., Theriault, R.J., and McDonough, M.R., 2000. Talston basement gneissic rocks: U-Pb and Nd isotopic constraints on the basement to the Paleoproterozoic Talston magmatic zone, northeastern Alberta; Canadian Journal of Earth Sciences, v.37, no 11, p 1575-1596.

Mercadier, J., Annesley, I.R., McKechnie, C.L., Bogdan, T.S., and Creighton, S., 2013. Magmatic and Metamorphic Uraninite Mineralization in the Western Margin of the Trans-Hudson Orogen (Saskatchewan, Canada): A Uranium Source for Unconformity-Related Uranium Deposits?: Economic Geology, v. 108, p. 1037-1065.

Partridge, E.F., 1968. Prospecting Notes, Alexander-Fraser Lakes Area. Unpublished Field Notes. Sask. Geol. Survey. Assess. Report. 74H02-NE-0002.

Ramaekers, P., Jefferson, C.W., Yeo, G.M., Collier, B., Long, D.G.F., Drever, G., McHardy, S., Jiricka, D., Cutts, C., Wheatley, K., Catuneanu, O., Bernier, S., and Post, R.T., 2007. Revised geological map and stratigraphy of the Athabasca Group, Saskatchewan and Alberta; in EXTECH IV: Geology and Uranium Exploration Technology of the Proterozoic Athabasca Basin., Saskatchewan and Alberta (ed.) C.W. Jefferson and G. Delaney; Geological Survey of Canada, Bulletin 588, pp 155-191.



## 28 DATE AND SIGNATURE PAGE

This report titled “Technical Report on the South Falcon East Property, Northern Saskatchewan” dated February 2, 2023 (the “Technical Report”) for Tisdale Clean Energy Corp. was prepared and signed by the following authors:

The effective date of the report is December 23, 2022  
The date of the report is February 2, 2023.

Signed by:

Qualified Person  
Allan Armitage, Ph.D., P. Geo.,

Company  
SGS Canada Inc. (“SGS”)

Qualified Person  
Alan Sexton, M.Sc., P.Geo.

Company  
GeoVector Management Inc.

February 2, 2023

## **29 CERTIFICATES OF QUALIFIED PERSONS**

## QP CERTIFICATE – ALLAN ARMITAGE

To Accompany the Report titled **“Technical Report on the South Falcon East Property, Northern Saskatchewan” dated February 2, 2023 (the “Technical Report”) for Tisdale Clean Energy Corp.**

I, Allan E. Armitage, Ph. D., P. Geol. of 62 River Front Way, Fredericton, New Brunswick, hereby certify that:

1. I am a Senior Resource Geologist with SGS Canada Inc., 10 de la Seigneurie E blvd., Unit 203 Blainville, QC, Canada, J7C 3V5 ([www.geostat.com](http://www.geostat.com)).
2. I am a graduate of Acadia University having obtained the degree of Bachelor of Science - Honours in Geology in 1989, a graduate of Laurentian University having obtained the degree of Master of Science in Geology in 1992 and a graduate of the University of Western Ontario having obtained a Doctor of Philosophy in Geology in 1998.
3. I have been employed as a geologist for every field season (May - October) from 1987 to 1996. I have been continuously employed as a geologist since March of 1997.
4. I have been involved in mineral exploration and resource modeling at the grass roots to advanced exploration stage, including producing mines, since 1991, including mineral resource estimation and mineral resource and mineral reserve auditing since 2006 in Canada and internationally. I have extensive experience in Archean and Proterozoic lode gold deposits, volcanic and sediment hosted base metal massive sulphide deposits, porphyry copper-gold-silver deposits, low and intermediate sulphidation epithermal gold and silver deposits, magmatic Ni-Cu-PGE deposits, and unconformity- and sandstone-hosted uranium deposits.
5. I am a member of the Association of Professional Engineers, Geologists and Geophysicists of Alberta and use the title of Professional Geologist (P.Geol.) (License No. 64456; 1999), I am a member of the Association of Professional Engineers and Geoscientists of British Columbia and use the designation (P.Geol.) (Licence No. 38144; 2012), and I am a member of Professional Geoscientists of Ontario (PGO) and use the designation (P.Geol.) (Licence No. 2829; 2017), I am a member of the Northwest Territories and Nunavut Association of Professional Engineers and Geoscientists (NAPEG) and use the designation (P.Geol.) (Licence No. L4375, 2019).
6. I have read the definition of "Qualified Person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation of my professional association and past relevant work experience, I fulfill the requirements to be a "Qualified Person".
7. I am an author of this report and responsible for sections 1 to 8, 11 and 13 to 25 and 27. I have reviewed the sections I am responsible for and accept professional responsibility for those sections of this technical report.
8. I conducted a site visit to the Property that is the subject of the Technical Report for a one-day period on July 13, 2012.
9. I have had prior involvement with the Property that is the subject of the Technical Report. I was an author of two technical reports for the Property dated September 24, 2012 for JNR Resources Inc. and dated March 20, 2015 Skyharbour Resources Ltd.
10. I am independent of Tisdale Clean Energy Corp. as defined by Section 1.5 of NI 43-101.
11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.

12. I have read NI 43-101 and Form 43-101F1 (the “Form”), and the Technical Report has been prepared in compliance with NI 43-101 and the Form.

Signed and dated February 2, 2023 at Fredericton, New Brunswick.

***"Original Signed and Sealed"***

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*Allan Armitage, Ph. D., P. Geo., SGS Canada Inc.*

**QP CERTIFICATE – ALAN SEXTON**



To Accompany the Report titled “**Technical Report on the South Falcon East Property, Northern Saskatchewan**” dated **February 2, 2023** (the “**Technical Report**”) for **Tisdale Clean Energy Corp.**

I, Alan J. Sexton, M. Sc., P. Geo. of 41 Barrhaven Crescent, Nepean, Ontario, hereby certify that:

1. I am currently a consulting geologist with GeoVector Management Inc., 10 Green Street Suite 312 Ottawa, Ontario, Canada K2J 3Z6 ([www.geovector.ca](http://www.geovector.ca)).
2. I am a graduate of St. Mary’s University having obtained the degree of Bachelor of Science – Honours in Geology in 1982 and a graduate of Acadia University having obtained the degree of Master of Science in Geology in 1988.
3. I have been employed as a geologist for every field season (May to October) from 1979 to 1984. I have been continuously employed as a geologist since May of 1985.
4. I have been involved in mineral exploration at the grass roots to advanced exploration stage since 1985, including mineral resource estimation and auditing since 2000 in Canada. I have extensive experience in Archean and Proterozoic lode gold deposits, volcanic and sediment hosted base metal massive sulphide deposits, porphyry copper-gold deposits, low and high sulphidation epithermal gold and silver deposits, magmatic Ni-Cu-PGE deposits, granite hosted tin, tungsten, uranium and rare earth element deposits and unconformity- and sandstone-hosted uranium deposits.
5. I am a member of the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories and Nunavut (NAPEGG) and use the title of Professional Geologist (P.Geol.) (License No. L1339; 2002), I am a member of the Association of Professional Engineers and Geoscientists of Newfoundland and Labrador (PEGNL) and use the designation (P.Geol.) (Licence No. 04028; 2002), and I am a member of Professional Geoscientists of Ontario (PGO) and use the designation (P.Geol.) (Licence No. 0563; 2002).
6. I have read the definition of “Qualified Person” set out in National Instrument 43-101 (“NI 43-101”) and certify that by reason of my education, affiliation of my professional associations and past relevant work experience, I fulfill the requirements to be a “Qualified Person.”
7. I am an author of this report and responsible for sections 9, 10, 12 and 26 of the Technical Report. I have reviewed these sections and accept professional responsibility for these sections of this Technical Report.
8. I conducted a site visit to the Property that is the subject of the Technical Report for a one-day period on December 9, 2022.
9. I have had prior involvement with the Property that is the subject of the Technical Report. I was a co-author of a technical report for the Property dated September 24, 2012 for JNR Resources Inc.
10. I am independent of Tisdale Clean Energy Corp. as defined by Section 1.5 of NI 43-101.
11. As of the date of this certificate, to the best of my knowledge, information and belief, the Technical Report contains all scientific and technical information that is required to be disclosed to make the Technical Report not misleading.
12. I have read NI 43-101 and Form 43-101F1 (the “Form”), and the Technical Report has been prepared in compliance with NI 43-101 and the Form.

Signed and dated this 2<sup>nd</sup> day of February 2023 at Ottawa, Ontario.

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***"Original Signed and Sealed"***

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*Alan Sexton, M.Sc., P. Geo., GeoVector Management Inc.*