TECHNICAL REPORT

on the

MOORE LAKE PROPERTY

Northern Saskatchewan, Canada

National Instrument 43-101

NTS 74H-06,07,10,11

UTM NAD83 (Z13) 498,000 mE, 6,366,000mN

Latitude 57^{o} 26’ N, Longitude 105^{o} 26’ W

Prepared for:
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Effective: October 3, 2016

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1.0 SUMMARY

This NI-43-101 Technical Report on the Moore Lake Property was prepared for Skyharbour Resources as an evaluation of the property for its uranium exploration potential. The property comprises 35,705 ha in 12 mineral claims in northern Saskatchewan and lies approximately 55 km northeast and southwest of Cameco Corporation's Key Lake and McArthur River operations. The property is in good standing until at least 2032.

The project is currently owned 100% by Denison Mines Corp., with an underlying 2.5% NSR royalty held by Royal Gold Inc.. On July 17, 2016, Skyharbour Resources Ltd. and Denison Mines Corp. announced an option agreement whereby Skyharbour may acquire a 100-per-cent interest in the Moore Lake property in consideration for the issuance of 18 million common shares and staged cash payments totalling $500,000 over the next five years and financing $3.5-million in exploration expenditures on the Moore Lake project over the same five-year period. Skyharbour will act as project operator. Denison will become a major shareholder in Skyharbour and may at various times during the agreement exercise various buyback options.

The Moore Lake Property is accessible by float or ski equipped aircraft from La Ronge, Missinippe or Points North and lies 15 kilometres east of the extension of Highway 914 which services the Key Lake uranium mill and McArthur River mine . Grid power is available from the power line servicing McArthur River and Key Lake. The climate is considered to be sub-arctic with warm summers and cold winters and exploration activities can be generally carried out all year. The area is typically glacially scoured, with eskarine complexes and drumlins occurring throughout. The elevation of the area is approximately 450 to 550 m above sea level. Immature to mature jackpine, spruce, birch and poplar interspersed with bog occurs through much of the area, with jackpine predominating over the sand plains.

Uranium exploration in the Moore Lakes area has been carried out periodically throughout the past 40 years, with exploration activities carried out by joint ventures in the initial 25 years operated by NORANDA, AGIP, BRINEX and Interuranium Canada Ltd. The earliest work consisted largely of airborne INPUT and ground EM surveys followed up by 22 diamond drill holes. Graphitic metapelitic lithologies in several of the holes were intersected as was fracture controlled pitchblende mineralization (3070 ppm U/0.25 m.) in MT-5. In April of 2000, a joint venture between JNR Resources Inc. and Kennecott Exploration Ltd. intersected uranium mineralization (0.442% eU_3O_8 / 9.20 m.) at what became known as the Maverick Zone. Follow up drilling and geophysics confirmed the presence of a significant structural zone, intense hydrothermal alteration andhighly enriched trace element geochemistry. Other areas of interest included the Raratonga, Puka Puka and Venice. In 2003, JNR optioned the property to International Uranium Corporation (IUC-Denison Mines). A series of aggressive exploration programs were carried out including numerous geophysical programs and 322 diamond drill holes totalling 119,697 metres. The partners extended the main Maverick structural trend over a total strike length of 3.3 km. The main Maverick zone was confirmed to be high grade with a best result of 4.03% eU_3O_8/ 10.0 m including 19.96% eU_3O_8 /1.4 m. in hole ML-61. A major conductive corridor covering the Nutana-West Venice-Venice areas was also identified as were other prospective targets including the Avalon, Esker, Puka Puka and Vollhoffer grids. In February 2013, Denison Mines Corp. acquired JNR and became the sole owner of the property.

The Moore Lake Property is located approximately 15 km west of the eastern margin of the Athabasca Basin and lies along the eastern edge of the Wollaston-Mudjatic Transition Zone (WMTZ) and the eastern Wollaston Domain. The property is unconformably overlain by 200 to 325 metres of Athabasca sandstone The sub-Athabasca crystalline basement rocks on the property consists of Archean granitic gneisses overlain by graphitic and aluminous pelitic gneisses, psammopelitic gneisses, psammites and Hudsonian granites. The dominant structural fabric is northeast trending, cut by several interpreted east- west and 070^0 trending structures.

The main deposit type that is being explored for is a polymetallic, unconformity related, structurally controlled deposit similar to Cameco Corporation's nearby historic Key Lake deposits. **Skyharbour has yet to carry out any exploration on the property** but the Kennecott-JNR-Denison joint ventures have identified zones of mineralization including the main Maverick Zone as well as the "527" Zone and the Maverick NEX "525" Zones. Several other significant zones of potential mineralization also exist on the property. The exploration programs that have been carried out to date appear to have been completed to very high technical and secure standards.

The Maverick Zone occurs over a strike length of 230 metres near the southern end of the 3.3 km northeast trending Maverick Structural Corridor. The zone is comprised of two 7 to 15 metre wide mineralized lenses approximately 60 and 150 metres in length. The exact geometry of the mineralization is not yet defined but it is interpreted to be a sub-horizontal, ribbon-like zone, or series of such zones. The zone is found proximal to the Athabasca unconformity, typically just below and extending below the unconformity, at approximately 275 metres depth. The mineralization is thought to be controlled by a sub-vertical to a steeply dipping dextral strike-slip fault zone that controls the main Maverick Structural Corridor and intersecting moderately dipping graphitic stratigraphy. Intense fracturing and de-silicification, bleaching and clay alteration affect the sandstone over the fault zone. The basement rocks in turn are intensely bleached or clay replaced up to several metres below the unconformity along with sheared, brecciated and gouged intervals in the graphitic units. Some of the better results include: ML-48 - 4.015% U_3O_8 over 4.7 m; ML-55 - 5.14% U_3O_8 over 6.2 m, ML-61- 4.03 e% U_3O_8 over 10.0 m including 19.96 e% U_3O_8 over 1.4 m. and ML-83 11.1 m. of 1.81% U_3O_8, including 3.0 metres of 5.64% U_3O_8, 7.1% nickel and 2.55% cobalt. Approximately 350 metres northeast of the Maverick Zone a similar zone of mineralization, approximately 10 to 15 metres wide and 60 metres long, named the “527” Zone was identified. The best result obtained was from ML-101, 1.53 per cent U_3O_8 /6.6 metres, including 2.22 per cent U_3O_8 over 4.0 metres, These intervals of mineralization were accompanied by highly anomalous Co, Cu, Ni and other pathfinder elements especially B in the sandstone and basement rocks. Despite the positive drilling results to date no reserve or resource calculations have been completed for any of the mineralized zones.

Significant potential exists along the Maverick NEX which occupies the northeastern 1.3 km of the Northeast Maverick Structural Corridor. Three northeast trending sub parallel graphitic conductors over a width of 450 metres were intersected accompanied by local structural disruption, clay alteration and anomalous copper, lead, nickel, zinc, boron, vanadium and uranium. The overlying sandstone column is likewise locally geochemically anomalous and affected by structural disruption, bleaching and desilicification but not to the extent that it is over the Maverick Zone. The best result from the Maverick NEX was 4.5 metres of sandstone mineralization just above the unconformity grading 0.226% U_3O_8 in ML-525.

Several other exploration targets of note occur on the property. They have all been the focus of drilling programs over the past 16 years but remain priority targets and include the following:

- The Esker is a north-northwest trending shear zone extending beyond the northeast end of the currently known limits of the Maverick structural corridor. Geochemically anomalous, altered and structurally disrupted sandstone and basement rocks have been intersected as has weak uranium mineralization up to 0.307 e% U_3O_8 over 1 metre.
- The Nutana area comprises three northeast trending, 3 km long conductors. Multiple locally structurally disrupted and altered graphitic conductors were accompanied by anomalous sandstone and basement geochemistry. The best result obtained was a basement intercept of 0.319 % U3O8 / 0.5 m.
- The West Venice conductors consist of a series of east-north-east trending conductors with a 3 km strike length. Locally faulted and hydrothermally altered graphitic pelitic lithologies were intersected in the basement. Significant sandstone alteration occurs including intercepts of intense specular/secondary hematite. The sandstone and basement tend to be highly geochemically anomalous .
- The Venice area is comprised of three east-west trending conductors 2 to 3 km in length, with associated post Athabasca thrust faulting affecting the sandstone and basement. The sandstone and basement rocks are frequently geochemically anomalous.
- The Puka Puka MLE consists of two east west trending conductors 1.5 km and 3 km in length. Graphitic basement rocks accompanied by locally structurally disrupted sandstones with up to 40 meters of vertical displacement were intersected. The basement and sandstone is geochemically anomalous. with up to 4,280 ppm B. A basement intercept of 1 metre of 0.034% U_3O_8 was reported from this area.

- The Avalon conductor is a 4 km long northeast striking conductor composed of graphitic assemblages affected by post Athabasca faulting, bleaching and clay alteration in the sandstone and basement as well as significant geochemical enrichment. A basement intercept of 0.1% U3O8/3.5 m incl. 0.446/0.5 m was intersected in the central portion of the conductor as were broad zones of radioactivity, 30 to 60 m. into the basement.
- The Rarotonga conductors are a series of folded, 800 to 1,200 metre east-west and north-south conductors. Multiple thrusts of weakly to moderately altered, relatively flat lying and locally faulted graphitic pelitic gneiss units were identified. Geochemical enrichment of the basement rocks is ubiquitous but the sandstone geochemistry remains enigmatic.
- The Vollhoffer target is a series of northeast trending conductors 800 to 2.5 km in length, one of which was drill tested on a broad spacing by six holes. Conductive lithologies and post Athabasca faulting in the sandstone and basement with this conductor were confirmed. Alteration of the sandstone and basement was common as was geochemical enrichment but no significant mineralization was intersected.
- Significant conductors on the Otter Grid (1.5 and 2.5 km in length) and eastward extension of the Puka Puka MLE (up to 1.5 km in length) have yet to be drill tested.

The Moore Lake Project is at an advanced stage of uranium exploration with extensive work having been carried out on numerous target areas property wide, but in particular on the Maverick Structural corridor. In the opinion of the Author, despite the large amount of work carried out to date, there still remains a great deal of exploration potential Given the notoriously small footprint of a typical Athabasca Basin deposit, even in the most heavily explored Maverick areas, significant potential remains for the discovery of additional major zones of mineralization.

The merits of the Moore Lake Property are, in the opinion of the Author, sufficient to justify significant exploration expenditures on the property. Two phases of work consisting of drilling are recommended. The Phase One program should consist of 7 diamond drill holes for a total of 2,500 metres at an estimated cost of $600,000. It would entail twinning one or two high grade holes for the purpose of confirming the character of the high grade mineralization as well as focus on expanding the Maverick main and “527” zones and explore other high priority targets on the Maverick Corridor. The Phase two program would cost $600,000 and be contingent on the results of the Phase One program and likewise consist of 7 diamond drill holes for a total of 2,500 metres. It would focus on expanding the Maverick main and “527” zones and explore other high priority targets on the Maverick Corridor, including the Maverick NEX.

Effective October 3, 2016

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2.0 INTRODUCTION

The Moore Lake Technical Report was prepared for Skyharbour Resources Ltd. to evaluate the potential of the approximately 35,705 ha Moore Lake Property for uranium mineralization. This report is intended to be the fundamental technical document supporting a property option agreement between Skyharbour Resources Ltd. as optionee, and the current owner Denison Mines Corp. The technical report has been written in compliance with National Instrument 43-101 following the guidelines specified by the instrument.

Dave Billard, B.Sc., P.Geo. (the Author) President of Cypress Geoservices Ltd. is the qualified person responsible for the content of this report. Cypress Geoservices is a Saskatoon based firm that provides geoscientific consulting services to the mining industry. Mr. Billard is an independent Qualified Person and wholly responsible for the preparation of this report.

The Moore Lake Technical Report is a compilation of publicly available assessment reports and unpublished reports, supplemented by publicly-available scientific and government publications. The Author, in writing this Report, used sources of information from previous explorers which appear to have been completed in a manner consistent with normal exploration practices. The Author has no reason not to rely on such historic data and information as listed in supporting documents which were used as background information and are referenced in respective sections herein. The Author personally inspected the Moore Lake Property on September 27, 2016. During the visit the Author spent time at the main core storage area and reviewed historic drill core.

3.0 RELIANCE ON OTHER EXPERTS

For the purpose of the Technical Report, the Author completed a tenure data search related to Section 4 “Property Description” on August 25, 2016 utilizing and relying fully on the Government of Saskatchewan government, Mineral Administration Registry Saskatchewan website (MARS) (https://mars.isc.ca/MARSWeb/default.aspx) . However, the limited research by the Author does not express a legal opinion as to the ownership status of the mineral claims.

4.0 PROPERTY DESCRIPTION AND LOCATION

4.1 Property Location

The Moore Lake Property comprises 35,705 ha in the Northern Mining District of Saskatchewan, NTS topographic sheets NTS 074H-6, 7, 10 and 11 (Figure 1). The project lands cover 12 contiguous claims in a northeast trending area approximately 38 km long by 14 km wide, centred approximately around UTM NAD83 (Z13) 498,000 m E, 6,366,000 m N (Latitude 57^{o} 26’ N, Longitude 105° 26' W). The property lies approximately 55 km northeast and 55 km southwest of Cameco Corporation's Key Lake and McArthur River operations respectively. The nearest road access is the extension of Highway 914, approximately 10-15 km to the west, which services Key Lake and McArthur River. The property occurs entirely within the Athabasca Basin of northern Saskatchewan. The city of Saskatoon is approximately 650 km to the south of the property.

4.2 Property Description

The Moore Lake Property comprises twelve mineral claims totalling 35,705 ha that were acquired by ground staking between the years 1998 and 2000 (Figure 2, Table 1). All claims are in good standing at the time of writing until July 2032 at a minimum. The mineral lands are 100% owned by Denison Mines Corp. and the surface is 100% provincially crown owned. There exists a 2.5% NSR royalty originally held by Kennecott Exploration (Rio Tinto Plc.), which can be reduced to 1.25% by paying the sum of $1 million (Canadian). Kennecott sold this royalty to International Royalty Corporation, who subsequently merged with Royal Gold Inc. of Denver, Colorado in 2010. To the best knowledge of the Author, this royalty remains held by Royal Gold Inc.

Table 1: Mineral Disposition Summary

Claim #	Area (ha)	Effective Date	Good Standing
S-106141	2705	6/3/1998	8/31/2037
S-106280	2770	11/22/1999	2/19/2035
S-106304	500	11/22/1999	2/19/2037
S-106393	252	4/13/2000	7/11/2036
S-106601	4564	5/10/2000	8/7/2036
S-106603	4092	5/10/2000	8/7/2034
S-106604	800	5/10/2000	8/7/2036
S-107381	5702	5/7/2004	8/4/2033
S-107391	4350	4/29/2004	7/27/2038
S-107392	4568	4/29/2004	7/27/2032
S-108355	2603	6/3/1998	8/31/2036
S-108356	2799	6/3/1998	8/31/2035
12 Mineral Claims	**35,705**		

Data is current and taken from the MARS system as of August 25, 2016

On July 17, 2016, Skyharbour Resources Ltd. and Denison Mines Corp. announced an option agreement whereby Skyharbour may acquire a 100-per-cent interest in the Moore Lake property in consideration for the issuance of 18 million common shares and staged cash payments totalling $500,000 over the next five years. Skyharbour has also agreed to finance $3.5-million in exploration expenditures on the Moore Lake project over the same five-year period and will act as project operator. Skyharbour must make staged cash payments to Denison and incur expenditures of $3.5-million on the property on or before July 31, 2021, in accordance with the following schedule:

- $50,000 in cash and $500,000 in exploration expenditures on or before July 31, 2017;
- $50,000 in cash and $500,000 in exploration expenditures on or before July 31, 2018;
- $100,000 in cash and $500,000 in exploration expenditures on or before July 31, 2019;
- $100,000 in cash and $1-million in exploration expenditures on or before July 31, 2020;
- $200,000 in cash and $1-million in exploration expenditures on or before July 31, 2021.

Once Skyharbour acquires a 100-per-cent interest in the property, Denison may exercise a buyback option to repurchase a 51-per-cent interest in the property by making an upfront cash payment to Skyharbour of $200,000 and spending $6.75-million in exploration expenditures on the property over the following three-year period. The parties would then form a joint venture. If Denison fails to complete the buyback option, Skyharbour would retain 100-per-cent ownership in the property. Provided this first buyback option is not exercised by Denison, Skyharbour would own 100 per cent of the property and would have an additional five-year period to incur an additional $3-million in exploration expenditures on the project. At this point, Denison may elect to exercise a second buyback option to repurchase a 51-per-cent interest in the property by making an upfront cash payment of $500,000 to Skyharbour and spending $16.5-million in exploration expenditures on the property over the following four-year period. The parties would then form a joint venture. If Denison fails to complete this second buyback option, Skyharbour would retain 100-per-cent ownership in the property. Provided the buyback option was not exercised by Denison and Skyharbour does not complete the additional expenditures within the allotted five-year period, Denison may elect to exercise a buyback option at any time to repurchase a 51-per-cent interest in the property by making an upfront cash payment of $500,000 to Skyharbour and spending at least 2.5 times the expenditures incurred by Skyharbour since the beginning of the option agreement. The parties would then form a joint venture. As part of the option agreement, Denison is entitled to nominate a member to Skyharbour's board of directors, provided Denison maintains a minimum ownership position of 5 per cent. (Skyharbour – Denison news release July 15,2016)

In order to conduct ground work at the property, the operator must be registered with the Saskatchewan government and comply with the Saskatchewan Environment Exploration

Guidelines and hold the appropriate Temporary Work Camp Permit, Forest Product Permit and Aquatic Habitat Protection Permit. The operator must also comply with the Federal Department of Fisheries and Oceans that administers its own Guidelines for the Mineral Exploration Industry. The environmental liabilities associated with the activities to date are consistent with low impact exploration activities. The mitigation measures associated with these impacts are accounted for within the current surface exploration permits and authorizations available from the Crown.

There are no existing surface exploration permits currently in place on the Moore Lake Property. However, they are readily available from the relevant regulatory agencies and the Author does not anticipate any undue delay in obtaining the permits, including delays related to First Nations consultation.

Exploration and mining in Saskatchewan is governed by the Mineral Tenure Registry Regulations, and administered by the Mines Branch of the Saskatchewan Ministry of the Economy. The mineral claims on the Moore Lake property were acquired by ground staking prior to the implementation of the Mineral Administration Registry Saskatchewan online staking system (MARS) but are now administered through the MARS system and are subject to its regulations. A mineral claim does not grant the holder the right to mine minerals except for exploration purposes. Subject to completing necessary expenditure requirements, mineral claims can be maintained for a maximum of twenty one years. Beginning in the second year, and continuing to the tenth anniversary of staking a claim, the annual expenditure required to maintain claim ownership is $15 per ha. In order to mine minerals, the mineral claim must be converted to a mineral lease by applying to the mining recorder. Surface rights for mining operations are Crown owned and require a surface lease from the Province of Saskatchewan. A surface lease is issued for a maximum of 33 years, and may be extended as required.

Figure 1: Property Location Map

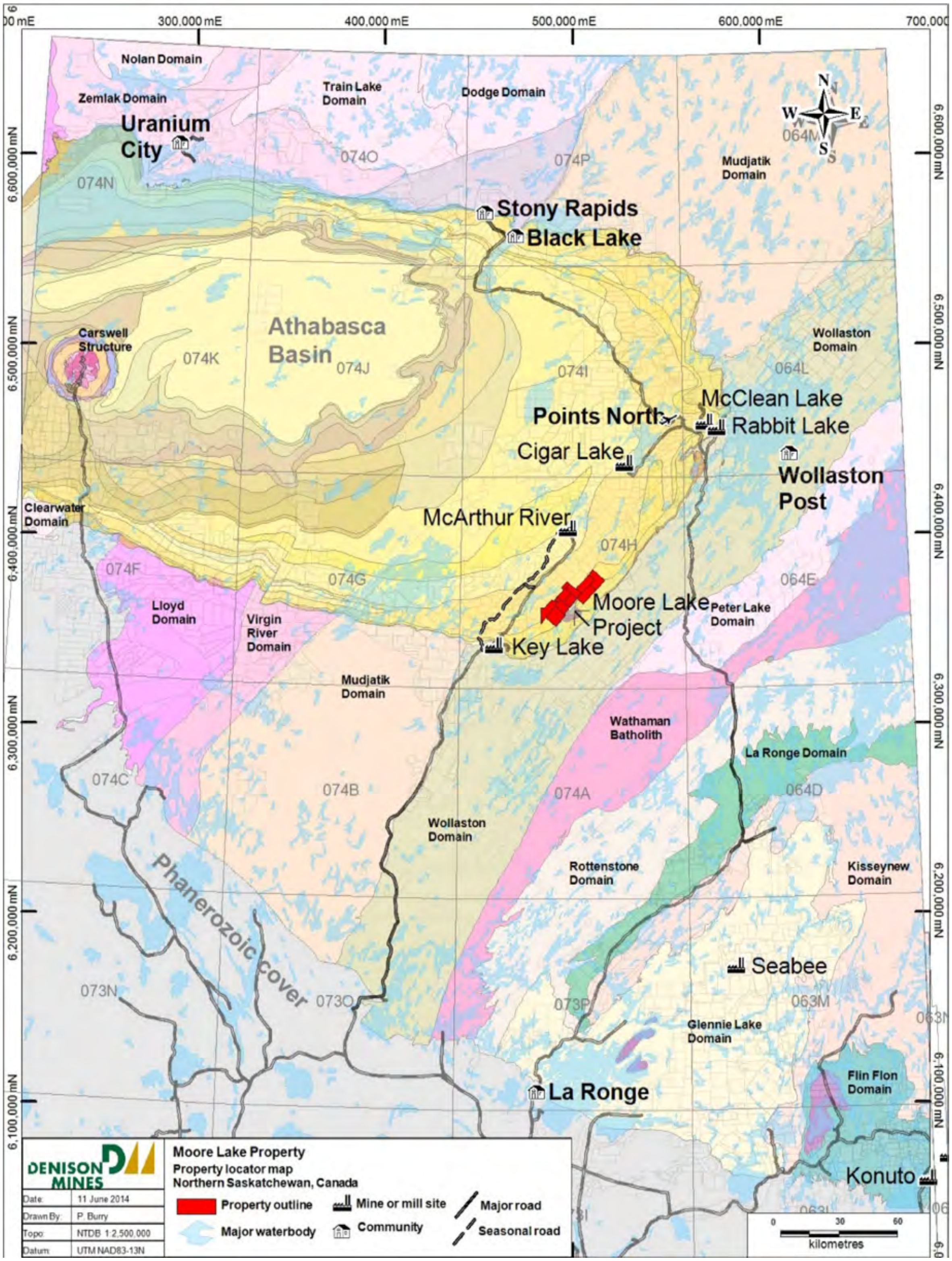
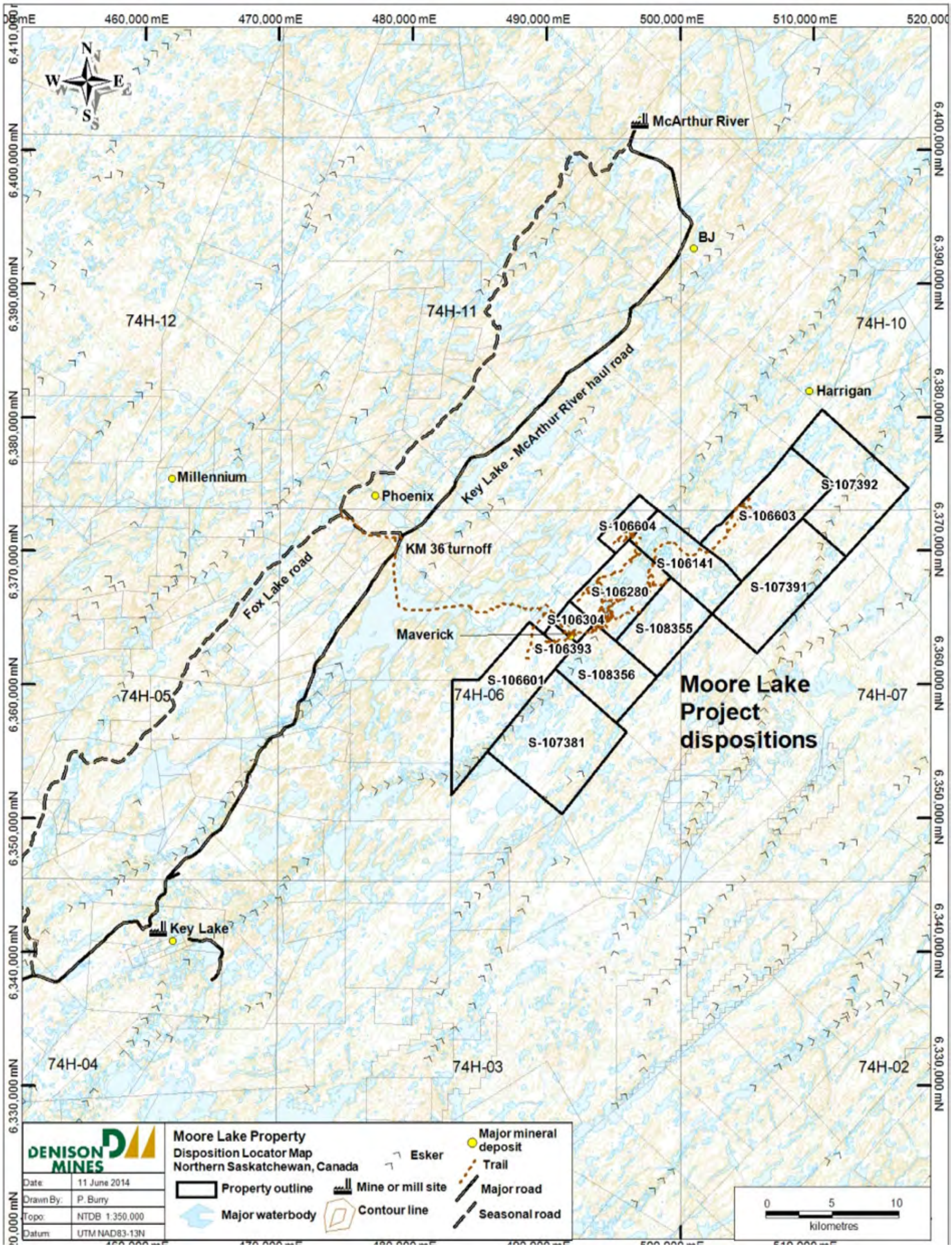


Figure 2: Disposition Location Map



5.0 ACCESSIBILITY, CLIMATE, INFRASTRUCTURE AND PHYSIOGRAPHY

The Moore Lake Property is accessible by float or ski equipped aircraft in summer from La Ronge, Missinippe or Points North 260 kilometres south, 200 kilometres southeast and 110 km northeast respectively. These communities house the only commercial services readily available, with fuel, lodging and aircraft services available. The property lies 15 kilometres east of the all-weather haul road between the McArthur River mine and the Key Lake uranium mill and is accessible in winter from these facilities. All-weather Highway 914 links this road to southern Saskatchewan. Access within the property is by float plane, helicopter, boat and in the winter by snowmobile and ice roads. Exploration crews are typically housed in temporary exploration camps on site. Nursing stations are available at the nearby mine/mill facilities (Key Lake and McArthur River) and the nearest hospital is at La Ronge, approximately 260 km to the southwest.

A ready supply of labour is available from communities throughout northern Saskatchewan. Mines in the region typically utilize a one week in – one week out schedule to reduce the negative impacts of creating company town sites. Saskatchewan is the focus of Canada's uranium mining and exploration industry and as such is well positioned to provide whatever services the industry may require. The mineral extractive industry in Saskatchewan has a high level of acceptance and support throughout the provincial population, as well as by local indigenous peoples and municipal governments. The Saskatchewan government is actively supportive of the mining industry in the province of Saskatchewan.

The climate is considered to be sub-arctic with warm summers and cold winters. Summer temperatures may exceed 30^0 C occasionally but are typically in the low to mid 20's, while winter temperatures of -30^0 to -45^0 C are not unusual. During the period of freeze up, from December to April, accessibility in the area is enhanced by frozen muskeg and lakes. Break up typically begins in April and ends approximately mid to late May. The operating season at the Moore Lake Property is close to year round depending on the type of work that is proposed. While geological mapping, prospecting and certain geochemical sampling are only feasible when there is no snow cover, typically between late May to October, other operations such as geophysical surveys and diamond drilling can be completed during the freeze up period stated above. Airborne geophysical surveys can be carried out without regard to season.

The project area is underlain by the Reindeer River-Wollaston Lake watershed which drains into the Churchill River to the southwest and ultimately to the northeast into Hudson Bay. The area is typically glacially scoured, with eskarine complexes and drumlins occurring throughout. Glacially transported and relatively locally derived boulders litter the landscape and outcrop is poorly exposed. The elevation of the area is approximately 450 to 550 m above sea level.

Immature to mature jackpine, spruce, birch and poplar interspersed with bog and lakes occurs through much of the area, with jackpine predominating over the sand plains. A significant part of the area has been affected by fire over the years, with varying ages of burn found throughout.

6.0 HISTORY

Uranium exploration in the Moore Lakes area has been carried out periodically throughout the past 40 years, with exploration activities carried out by joint ventures in the initial 25 years operated by NORANDA, AGIP, BRINEX and Interuranium Canada Ltd.

The earliest work consisted largely of airborne INPUT surveys with ground follow up using VLF-EM, MAX-MIN II and TURAM. Subsequent diamond drilling (6 holes) intersected graphitic metapelitic lithologies and sporadic illite alteration in two holes. In 1986 and subsequent years, Interuranium Canada Limited (Cogema) carried out an airborne GEOTEM survey over the property, followed up by ground EM (UTEM III and EM-37), magnetometer and lake sediment surveys. These surveys identified several basement conductors on the property, several of which Cogema drill tested with 13 holes (3,703 m). Strongly graphitic Aphebian basement lithologies were intersected in five of the holes. Fracture controlled pitchblende mineralization (3070 ppm U/0.25 m.) was intersected below the unconformity in MT-5, while anomalous uranium (up to 343 ppm U_3O_8) and trace elements were intersected in the basement of three other holes.

Evaluation of this historic work prompted a joint venture between JNR Resources Inc. and Kennecott Exploration Ltd. to carry out 48.8 km of Fixed Loop TEM on the property followed up by an initial diamond drilling program of five holes (1,682 m). This drill program identified significant uranium mineralization (0.442% eU_3O_8 / 9.20 m.) at the Maverick zone in drill hole ML-03. Follow up drilling along the Maverick Zone, (9 holes, 2,958 m) in the summer of 2000 confirmed the presence of a significant structural zone and intense hydrothermal system along with highly enriched trace element geochemistry, most notably boron, nickel and uranium.

In the years from 2000 through 2002, the JNR/Kennecott Joint Venture carried out significant airborne and ground geophysical programs followed up by diamond drilling, all of which are encapsulated in Table 2. These programs identified several significant targets on the property in addition to the Maverick zone such as: Raratonga, Puka Puka, Venice and MLE. Drilling on all of these prospects resulted in the drill confirmation of significant geochemical and structural features related to graphitic metasedimentary rocks. The best results obtained were from the Maverick Zone in ML-25, which returned 0.62% U_3O_8 / 9.1 m, below the unconformity, including an interval of 12% U_3O_8 / 0.4 m, several metres below the unconformity, verifying the high grade potential of the Maverick Zone.

Kennecott divested of its uranium exploration properties in Saskatchewan and returned the property to JNR Resources in 2001. In October of 2003, JNR entered into an option agreement with International Uranium Corporation (IUC) of Vancouver and began a series of aggressive exploration programs with JNR Resources as technical managers under the operatorship of IUC. Denison Mines merged with IUC in 1996 and subsequently took over project operatorship and technical management. In February 2013, Denison acquired JNR and became the sole owner of the property. The work carried out by the Kennecott/JNR and IUC/Denison/JNR joint ventures and Denison is extensive and is best summarised below in Table 2.

Table 2: Exploration Summary 2000 to Present

Year	Date	Type of Work	Statistics	Target Area
2000	March 7 to 17	Line Cutting	48.8 km	Maverick
	March 14 to 23	Fixed Loop TEM	48.8 km	Maverick
	April 19 to May 13	Diamond Drilling	5 DDH: 1,682 m	Maverick
	May 14 to 17	CSAMT	8.5 km	Maverick
	May 14 to 17	HLEM	8.5 km	Maverick
	June 7 to 28	Diamond Drilling	5 DDH: 1,699 m	Maverick
	August 3 to 10	Gravity Survey	14.2 km	Maverick
	August 18 to September 1	Diamond Drilling	4 DDH: 1,259 m	Maverick
	November 25 to December 13	Airborne GEOTEM	1529 km	Entire property
2001	February 12 to 27	Line Cutting	81.8 km	Raratonga, Venice, Puka Puka, MLE
	February 20 to March 6	Gravity Survey	39.2 km	Raratonga, Venice, Puka Puka, MLE
	March 6 to 28	TEM	60.9 km	Raratonga, Venice, Puka Puka, MLE
	March 6 to 28	Magnetics	81.8 km	Raratonga, Venice, Puka Puka, MLE
	March 21 to April 12	Diamond Drilling	6 DDH: 1,761.4 m	Raratonga, Venice, Puka Puka
	February 15 to March 12	Diamond Drilling	4 DDH: 1,260 m	Maverick, Puka Puka, MLE

Year	Date	Type of Work	Statistics	Target Area
	May to June	Line Cutting	9 km	Maverick
2002	May to June	Moving Loop TEM	7.8 km	Maverick
	May to June	Fixed Loop TEM	12.6 km	Maverick
	Summer	Petrophysics		Maverick
	July 9 to 25	Diamond Drilling	3 DDH: 997 m	Maverick
2003	No Field Work			
	December 4, 2003 to April 9 2004	Diamond Drilling	19 DDH: 6,722.1 m	Maverick
	February 1 to 10	Line Cutting	27.2 km	Maverick
	February 8 to 18	Fixed Loop TEM	32 km	Maverick
2004	Summer	IKONOS		Property Wide
	June 28 to July 8	Line Cutting	10.75 km	Maverick
	July 1 to 18	Fixed Loop TEM	24 km	Maverick
	June 28 to October 20	Boulder Sampling		Property Wide
	June 28 to October 20	Diamond Drilling	33 DDH: 12,601.9 m	Maverick
	January 22 to April 18	Diamond Drilling	31 DDH: 10,533 m	
	January to March	Gravity Survey	66.8 km	Maverick West
	January to February	Line Cutting	228.8 km	Avalon, Nutana, Puka Puka, Raratonga, Venice, Volhoffer, West Maverick, West Venice
2005	January to March	Fixed Loop TEM	303.2 km	As for linecutting
	January to March	Seismic Survey	23.3 km	Maverick
	June 17 to October 17	Boulder Sampling		Volhoffer Grid
	June 17 to October 17	Soil Geochemistry		Maverick Area
	June 17 to October 17	Diamond Drilling	59 DDH: 22,100 m	West Maverick, Maverick, Maverick Northeast, Maverick

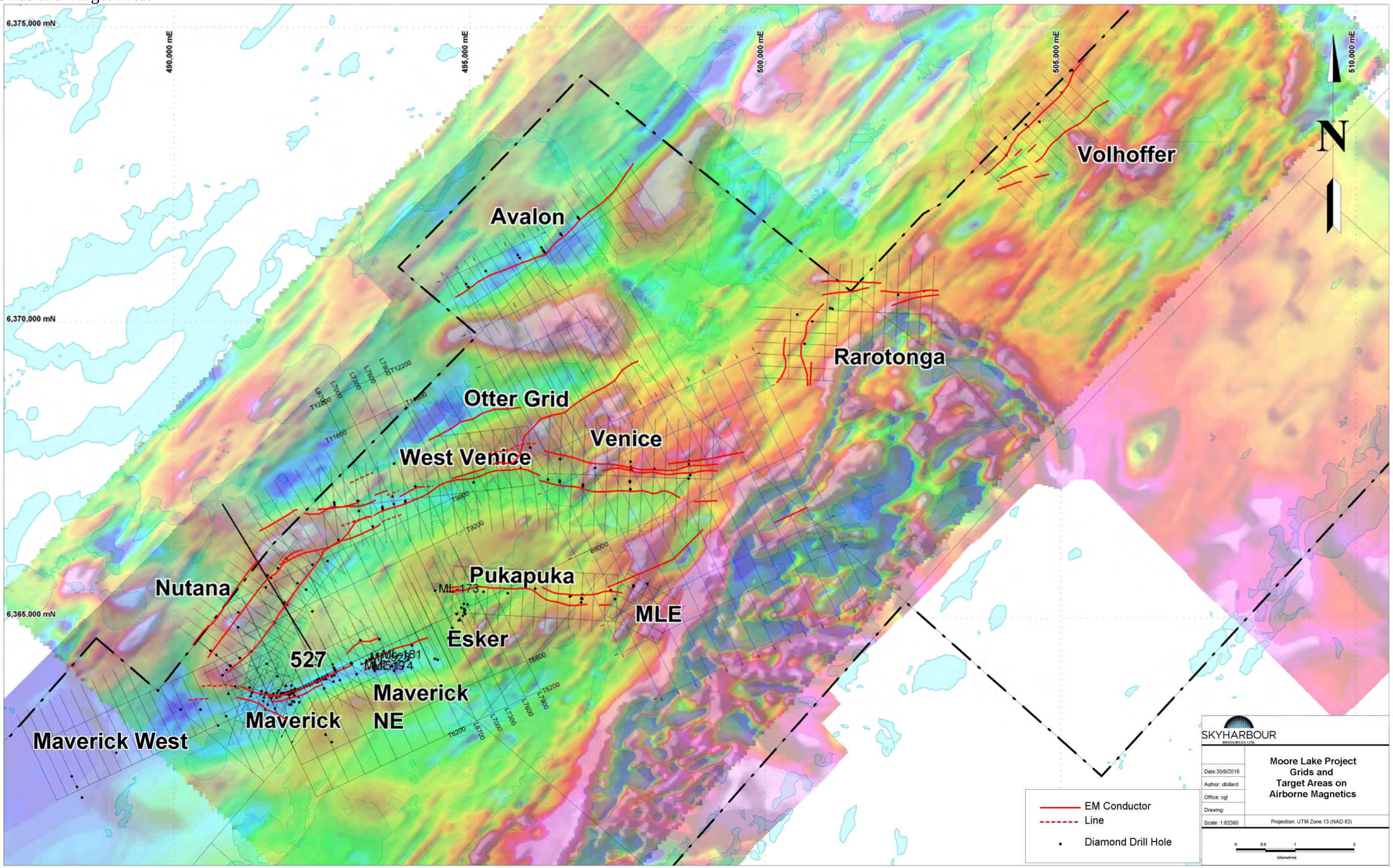
Year	Date	Type of Work	Statistics	Target Area
				Northeast Extension, Nutana, West Venice, Seismic Targets
2006	January 18 to April 11	Diamond Drilling	39 DDH: 14,656.4 m	Venice, Raratonga, Volhoffer, Puka Puka, Nutana, West Maverick, Maverick
	Summer 2006	Line Cutting	22.725	Junction
	June 7 to June 30	Fixed Loop TEM	44.775	Junction
	June 20 to October 11	Diamond Drilling	38 DDH: 14,316.9 m	West Maverick, Maverick, "527", Maverick Northeast, Esker, Avalon, Seismic Targets, Nutana, West Venice
2007	December 2006 to January 2007	AeroTEM III	948.2 km	Property wide
	January 18 to April 2	Diamond Drilling	21 DDH: 7,569 m	West Maverick, West Venice, Venice, Volhoffer
	Winter 2007	Line Cutting	82 km	Otter, Esker
	March 15 to April 18	Fixed Loop TEM	126.35 km	Otter, Esker
	July 3 to July 12	Line Cutting	49.5 km	Maverick
	July 13 to August 1st	DC Resistivity IP	38.8 km	Maverick
	September to October	AeroTEM III	1,512.9 km	Property wide
	October 1 to November 15	Diamond Drilling	6 DDH: 2,336 m	Maverick, Maverick Northeast
2008	February 11 to April 12	Diamond Drilling	5 DDH: 1,751.6m	Maverick West , Maverick
	June 6 to August 25	Diamond Drilling	9 DDH: 3,666.5m	As above
2009	October 4 to October 22	DC Resistivity IP	39.2 km	Maverick West

Year	Date	Type of Work	Statistics	Target Area
2010	March 19 to April 18	DC Resistivity IP	36 km	Esker
2011	January 15 to March 15	Diamond Drilling	8 DDH: 3305 m	Esker, Maverick West
2012	NO EXPLORATION PROGRAM			
2013	January 15 to April 15th	Diamond Drilling DC Resistivity IP	12 DDH: 5106.7 m 51 km	Esker, West Venice, Otter
2014	January 15 to April 15th	Diamond Drilling DC Resistivity IP Moving Loop	11 DDH: 4101 m 36 km	West Venice, Otter, Esker, Venice
2015	January 21st to February 14th	Diamond Drilling	7 DDH: 2,676 m	Maverick, Nutana, Puka Puka
2016	March 2nd to 29th	Slingram Moving Loop	34.4 km	Venice

Drilling and geophysical programs by the JNR/IUC/Denison partners extended the main Maverick structural trend over a total strike length of 3.3 km. This drilling intersected sheared graphitic pelitic gneisses, intense alteration and anomalous to weakly mineralized sandstone and basement rocks with the best results from the main mineralized zone over a strike length of 250 metres in the area between ML-03 and ML-25. Highlights of the drilling include: 4.03% eU_3O_8/ 10.0 m including 19.96% eU_3O_8 /1.4 m. from ML-61, 5.14% U_3O_8/ 6.2 m in ML-55 and 11.1 metres of polymetallic uranium mineralization that assayed 1.81% U_3O_8, including 3.0 metres of 5.64% U_3O_8, 7.1% nickel and 2.55% cobalt. (Figure 3, 7 to 10)

The partners also identified a 10-kilometre long, 500-metre wide conductive corridor north of the Maverick structural trend, extending in a north-northeast to northeast to east-west manner from the southern end of the Nutana grid to the eastern end of the Venice grid. (Figures 3, 11 to 13). Drill testing of the various features along this general trend identified significant trace element geochemistry, graphitic pelitic gneisses and evidence of structural disruption and hydrothermal alteration along its length. Additional targets returned similar positive drilling results at the Avalon, Esker, Puka Puka and Vollhoffer grids. (Figures 3, 14 to 18)

Figure 3: Grids and Target Areas



7.0 GEOLOGY

7.1 Regional Geology

The Moore Lake Property is located approximately 15 km west of the eastern margin of the Athabasca Basin and lies along the eastern edge of the Wollaston-Mudjatic Transition Zone (WMTZ) and the eastern Wollaston Domain, which forms the eastern portion of the sub-Athabasca basement complex. The ensuing text draws extensively from Armitage, 2012.

The Athabasca Basin is of Helikian age and occurs within the southwestern part of the Churchill Structural Province of the Canadian Shield. The 100,000 square km basin is filled with unmetamorphosed sediments dominated by, variably hematized siliciclastic, conglomeratic sandstone. In the western centre of the basin around the Carswell meteorite impact structure a sequence of dolostones and basement granitoids to granitoid gneisses are exposed. A maximum depth of 1,500 m has been established through diamond drilling. The Athabasca Basin is interpreted to have been filled over a 200 Ma period in four major depositional sequences coalescing into a single basin (Ramaekers et al**.,** 2007). The Athabasca Basin unconformably overlies northeast-trending Archean to Paleoproterozoic crystalline basement rocks (Figure 4). The unconformity is relatively flat lying with a gentle dip towards the centre of the basin in the east and a steeper dip in the north, south and west portions of the basin.

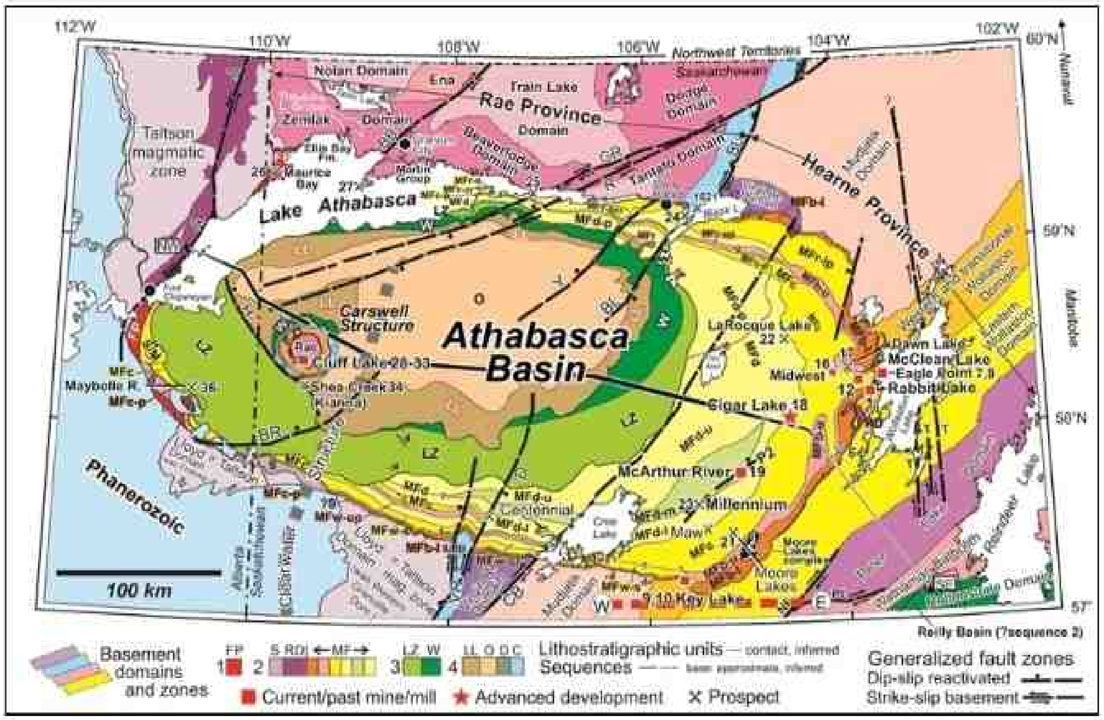
The Archean to Paleoproterozoic crystalline basement underlying the Athabasca Basin forms part of the Churchill craton that was strongly deformed and metamorphosed during the Hudsonian Orogeny (Lewry and Sibbald, 1977, 1980; Annesley, et.al., 1997, 1999, 2005). The crystalline basement is comprised of three major lithotectonic zones; the Talston Magmatic Zone, the Rae Province and the Hearne Province. The basement underlying the Athabasca Basin is primarily the Rae and Hearne Provinces. The Talston Magmatic Zone underlies the Athabasca Basin on its far west side, extends from northern Alberta to Great Slave Lake in the Northwest Territories and is dominated by a variety of plutonic rocks and older basement.

The Rae Province is comprised of five domains as well as a column of material comprising the core of the Carswell meteorite impact structure. The Zemlack Domain is dominantly comprised of highly deformed and metamorphosed migmatic gneisses, the Beaverlodge Domain of greenschist to amphibolite facies supracrustal rocks and meta-igneous rocks and the Tantato Domain is separated into two structural packages termed the lower and upper decks (Hanmer ci al., 1994). The upper deck to the south, is dominated by psammitic to pelitic migmatite with lesser mafic granulite (Hanmer, 1997), whilst the lower deck is comprised of a tonalite batholith to the east and granitoid orthogneiss to the west (Hanmer, 1997). The Lloyd Domain consists mainly of granodioritic orthogneiss with lesser psammo-pelite to pelite, intercalated psammite, quartzite, amphibolites and ultramafics (Lewry and Sibbald, 1977; Card, 2002). Rocks of the Clearwater Domain are largely unexposed but are presumed to be K-feldspar rich granite and granitoid gneiss based on drill core and limited exposure (Sibbald, 1974; Card, 2002). The Carswell impact structure is characterized by a core of granitoid gneiss, pelitic diatexite, pegmatite and mafic gneiss.

The Hearne Province is made up of the Wollaston, Mudjatik and Virgin River domains, including the Mudjatik-Wollaston Transition zone (WMTZ), and the Hearne and Rae provinces are separated by the northeast trending Virgin River shear zone. The Virgin River and Mudjatik domains are lithologically similar, comprised of interbedded psammitic to pelitic gneisses and granitoid gneiss with lesser mafic granulite, quartzite, calc-silicate and iron formation and are separated based on differing structural styles. Linear structures dominate the Virgin River Domain and dome and basin structures dominate the Mudjatik Domain. It has been proposed by Card however, that the distinction between the two domains be largely abandoned (Card, 2012). The Wollaston Domain is separated from the Mudjatik Domain based on an increased proportion of metasedimentary rocks (Yeo and Delaney, 2007) and a change from dome and basin structures to linear structures (Lewry and Sibbald, 1977). The Wollaston Domain is comprised of variably graphitic Paleoproterozoic metasedimentary gneiss and Archean granitoid gneiss.

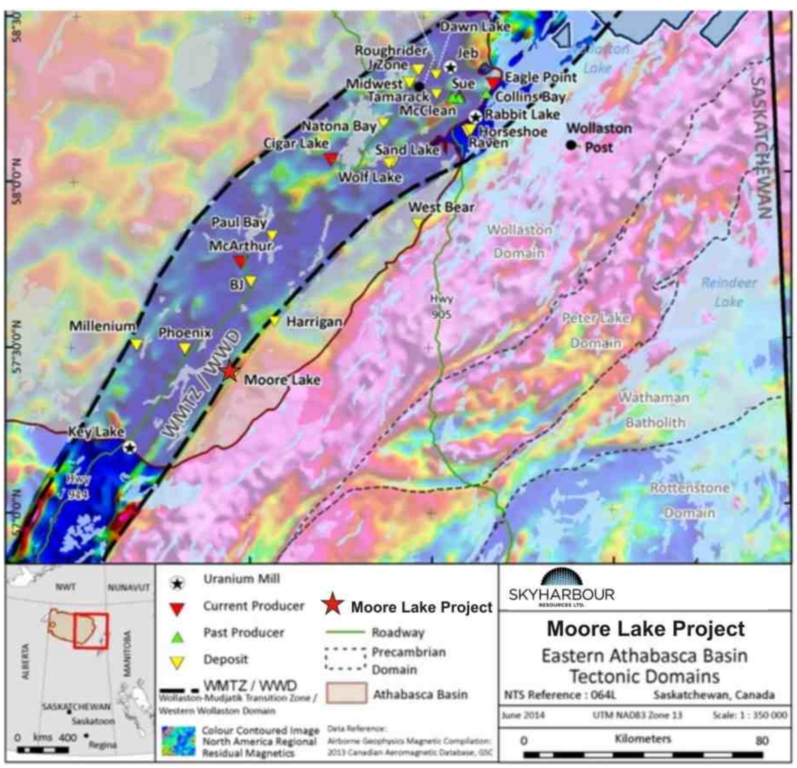
Major fault zones in the basement are generally northeast to east-trending and include the Snowbird tectonic zone, Grease River shear zone, Black Bay fault, Cable Bay shear zone, Beatty River shear zone and Tabbernor fault zone. Faulting causes offsets in all lithologies from Archean to Helikian age. Both normal and reverse faults occur within the Wollaston and Athabasca Groups. The most recognizable faults have a north-northeast trend and belong to the Tabbernor fault system. Northeast-trending faults are present, but are difficult to recognize because of their coincidence with the regional foliation and glacial trends.

Figure 4: Regional Geology, Athabasca Basin and Environs



(from Jefferson et al. 2007)

Figure 5: Eastern Athabasca Basin Tectonic Domains



7.2 Property Geology

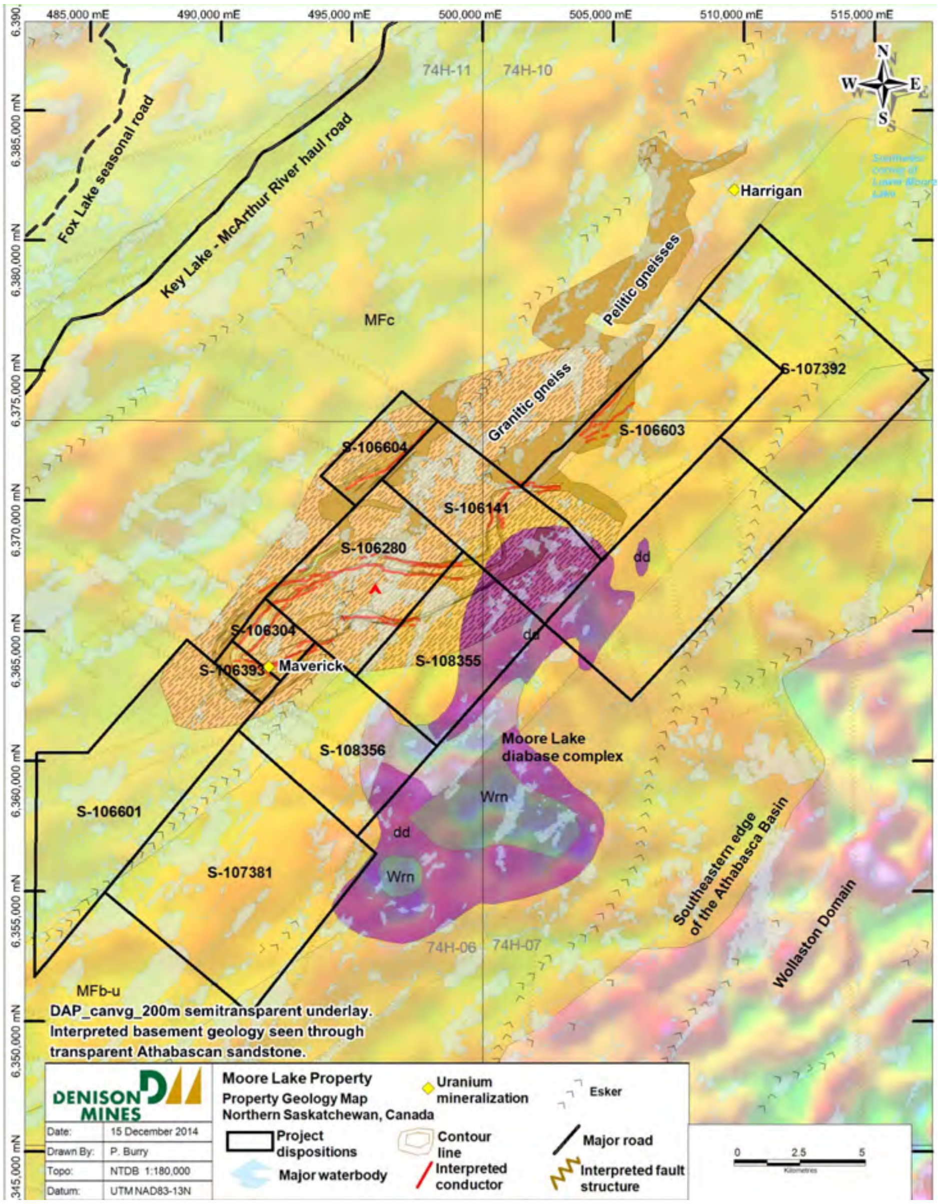
The Moore Lake Uranium Property is located approximately 15 km west of the eastern margin of the Athabasca Basin and straddles the boundary of the Wollaston-Mudjatic Transition Zone and eastern Wollaston Domain, which forms the eastern portion of the sub-Athabasca basement complex (Figure 5). The property is unconformably overlain by Athabasca sandstone, with the exception of the Moore Lake complex on the east-central margin of the property. The Athabasca sandstone varies in thickness on the property from 200 metres to 325 metres with the succession generally thickening southeast to northwest.

The sub-Athabasca crystalline basement rocks (Figure 6) on the property consists of Archean granitic gneisses overlain by graphitic and aluminous pelitic gneisses, psammopelitic gneisses, psammites in turn variously mantled or intruded by locally per-aluminous granites of Hudsonian age, with the latter being interpreted by some workers to be Arkosic metasedimentary units. Over the southern and western parts of the property, a pattern of alternating east-northeasterly trending aeromagnetic vertical derivative highs and lows with associated EM conductors suggests a series of tight to isoclinal folds or thrust slices. Drilling indicates that the magnetic lows, as would be expected, generally correspond to pelitic gneisses and psammopelites with Archean granite gneiss associated with northeasterly trending magnetic highs. (Burry, 2015)

Most of the historic drilling has been focussed on EM conductors, consequently the basement geology most of the property, is poorly understood. The exception is the east-central part of the property where the Moore Lakes Complex is exposed. The complex comprises two 125-150 m thick, nested, trough-shaped, compositionally layered olivine diabase sills that outcrop over a north-northeasterly-trending, pear-shaped area accompanied by inliers of Athabasca sandstone and Wollaston domain rocks. (MacDougall and Williams, 1993; MacDougall and Maxemiuk, 1995). The Moore Lakes Complex has an Rb/Sr age of 1.1 +/- 0.1 Ga (Armstrong and Ramaekers, 1995, in MacDougall and Williams, 1993). A north-northwest diabase dyke, unrelated to the Moore Lake Complex has been identified by aeromagnetics in the southern part of the property, and is interpreted to be part of the 1.27 Ga Mackenzie Dyke swarm.

The base elevation at Moore Lakes is between 486 to 540 metres above sea level throughout the property. Property geography is evenly split between steep drumlinoid hills, up to 45 metres high, and medium-sized lakes. Several intermittent esker systems wind sinuously through the Moore Lakes property. Eskers are generally flanked by glacio-fluvial sand plains ranging in width from a few hundred metres to almost two kilometres. Boulder rich sandy till is the dominant overburden. The maximum overburden thickness is approximately 45 metres but is usually less than 15 metres.

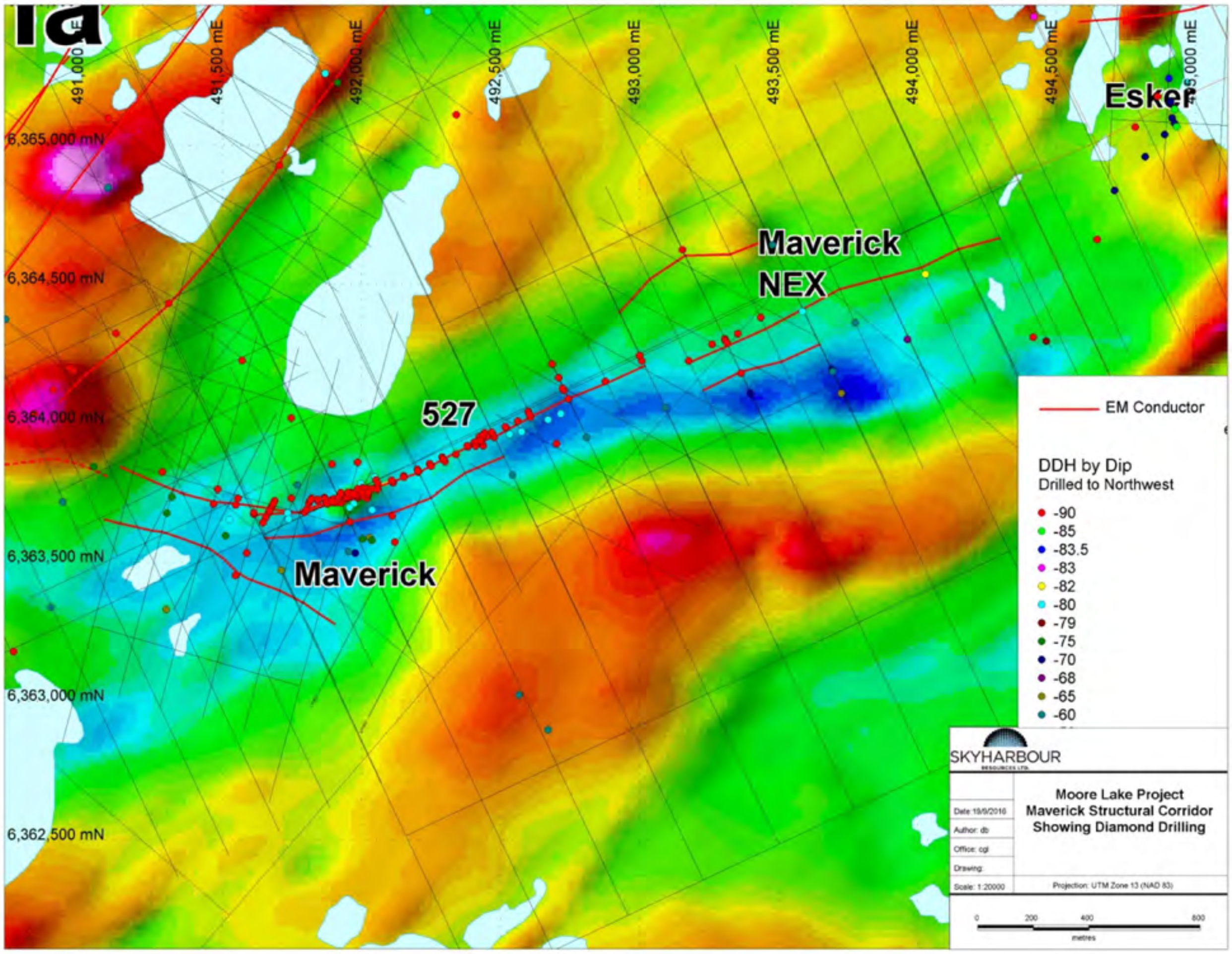
Figure 6: Moore Lake Property Geology



7.3 Mineralization

The main zones of mineralization on the property are associated with the Maverick Structural Corridor and include the main Maverick Zones as well as the “527” Zone and Maverick NEX “525” Zones (Figures 7 to 10)). Several other significant zones of potential mineralization exist on the property and occur within the following areas: Nutana, West Venice, Venice (combined they form a 10 km long lithostructural trend), Esker, Puka Puka-MLE, Avalon, Rarotonga and Vollhoffer (Figure 3,11 to 18).

Figure 7: Maverick Structural Corridor



Maverick Zone

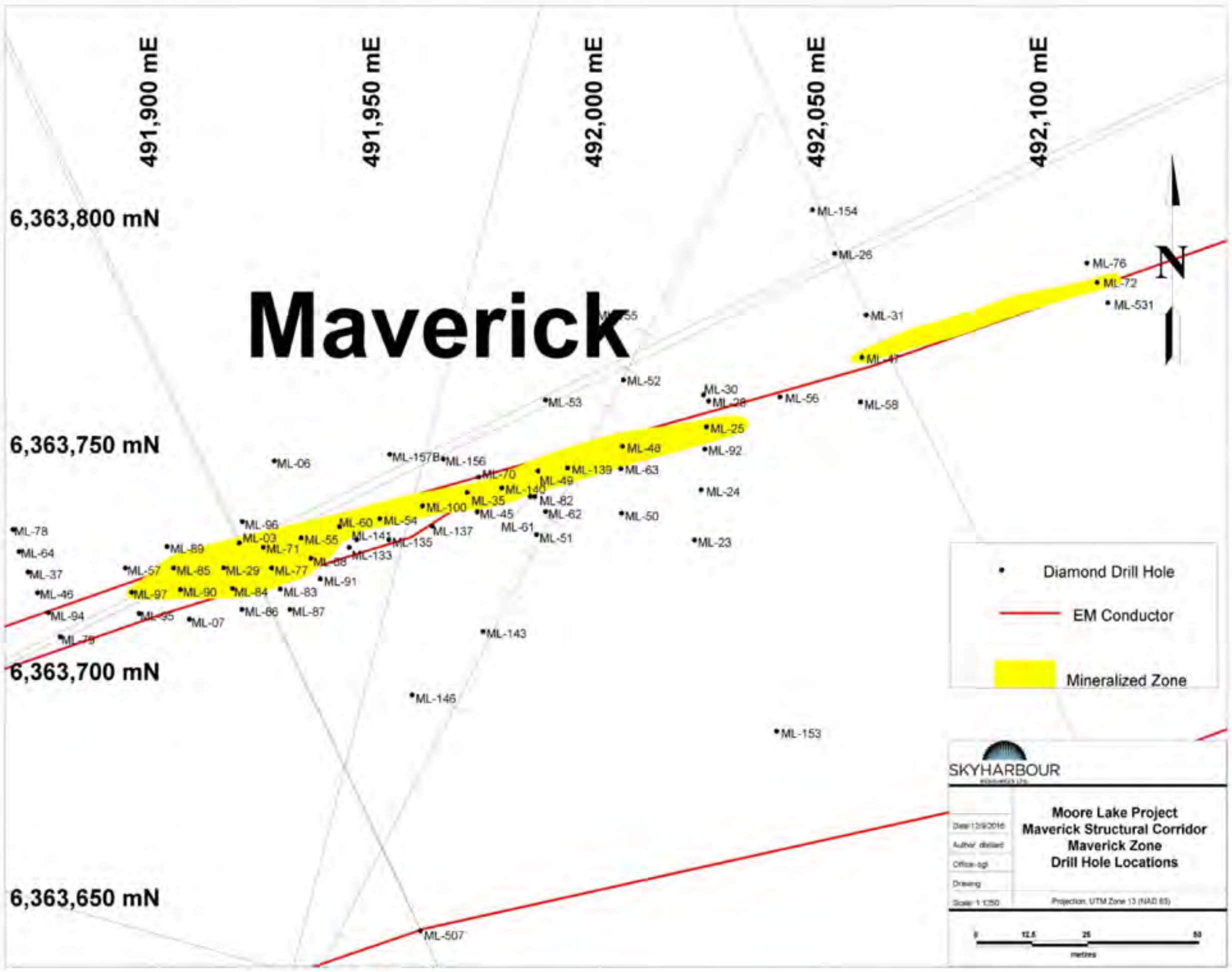
The Maverick Zone and Maverick Structural Corridor are located in the west-central portion of the property. The mineralization was discovered by the Kennecott/JNR joint venture when hole ML-03 intersected 0.442 e% U_3O_8 over 9.2 m. at the Athabasca unconformity, while drill testing a folded EM conductor wrapping around an interpreted Archean Dome. Follow up diamond drilling and geophysical surveys (including TEM, magnetics, gravity, DC Resistivity and a 23.3 km reflection seismic survey) identified the main east to northeast trending Maverick Structural Corridor over a nearly 2 km strike length along with an additional 1.3 km extension to the northeast.

The Maverick Zone manifests itself over a strike length of 230 metres at the southern end of the northeast trending portion of the Maverick Structural Corridor. The zone is comprised of two 7 to 15 metre wide mineralized lenses approximately 60 and 150 metres in length. The exact geometry of the mineralization is not yet defined but it is interpreted to be a sub-horizontal, ribbon-like zone, or series of such zones. The zone is found proximal to the Athabasca unconformity, typically just below and extending below the unconformity for a few metres, but is not restricted to the basement stratigraphy. The mineralization is thought to be controlled by a sub-vertical to steeply dipping dextral strike-slip fault zone which in turn controls the main Maverick Structural Corridor and which intersects the moderately dipping graphitic stratigraphy.

The depth to the Athabasca unconformity and mineralization in this area is found about 275 metres. The sandstone column immediately overlying and up to 140 metres above the unconformity of the Maverick Corridor is intensely fractured and affected by intense de-silicification, bleaching and clay alteration or replacement along with local areas of silicification. In rare occurrences, narrow intervals of disseminated perched uranium mineralization were identified well above the unconformity. The basement rocks in turn are intensely bleached or clay replaced up to several metres below the unconformity along with sheared, brecciated and gouged intervals in the more graphitic units which tend not to alter to any great extent. The graphitic units are typically cordierite and pyrite bearing with localized intervals of “carbonaceous reduced material” which is thought to be so intensely altered such that the crystal lattice of the graphitic lithologies is totally disrupted.

Some of the better results from the Maverick Zone include: ML-29 1.3 e% U3O8 over 7.5 m, with an individual 0.5 m sample that returned 7.91% U_3O_8, 3.65% Ni, 2.8% As, 1.6% Cu, 0.9% Co, 0.35% REE and 5.3g/t Ag.; ML-35 - combined chemical and grade equivalent U_30_8 value of 1% over 11.1 m, including 1.61% over 5.5 m and including 5.3% U3O8 over 1.5 m; ML-48 - 4.015% U_3O_8 over 4.7 m; ML-55 - 5.14% U_3O_8 over 6.2 m and; ML-61- 4.03 e% U_3O_8 over 10.0 m including 19.96 e% U_3O_8 over 1.4 m. ML-83 intersected an 11.1 metre interval of polymetallic uranium mineralization that assayed 1.81% U_3O_8, including a higher-grade 3.0-metre section of 5.64% U_3O_8, 7.1% nickel and 2.55% cobalt. ML-85 returned 1.33% U_3O_8 over 6.4 metres, including 8.5% U_3O_8 over 0.9 metres. ML-90 intersected 6.45 metres of 1.18% U_3O_8, including an interval of 3.07% U_3O_8 over 1.75 metres. In addition to intersecting significant amounts of nickel, cobalt and lead, ML-97 returned 7.75 metres of 2.31% U_3O_8, including a 2.25 metre intercept of 6.73% U_3O_8, which includes 12.4% U_3O_8 over 1.0 metre. ML-100 intersected 2% U_3O_8 over 7.75 metres, including 4.54% U_3O_8 and 3% nickel over 2.75 metres.

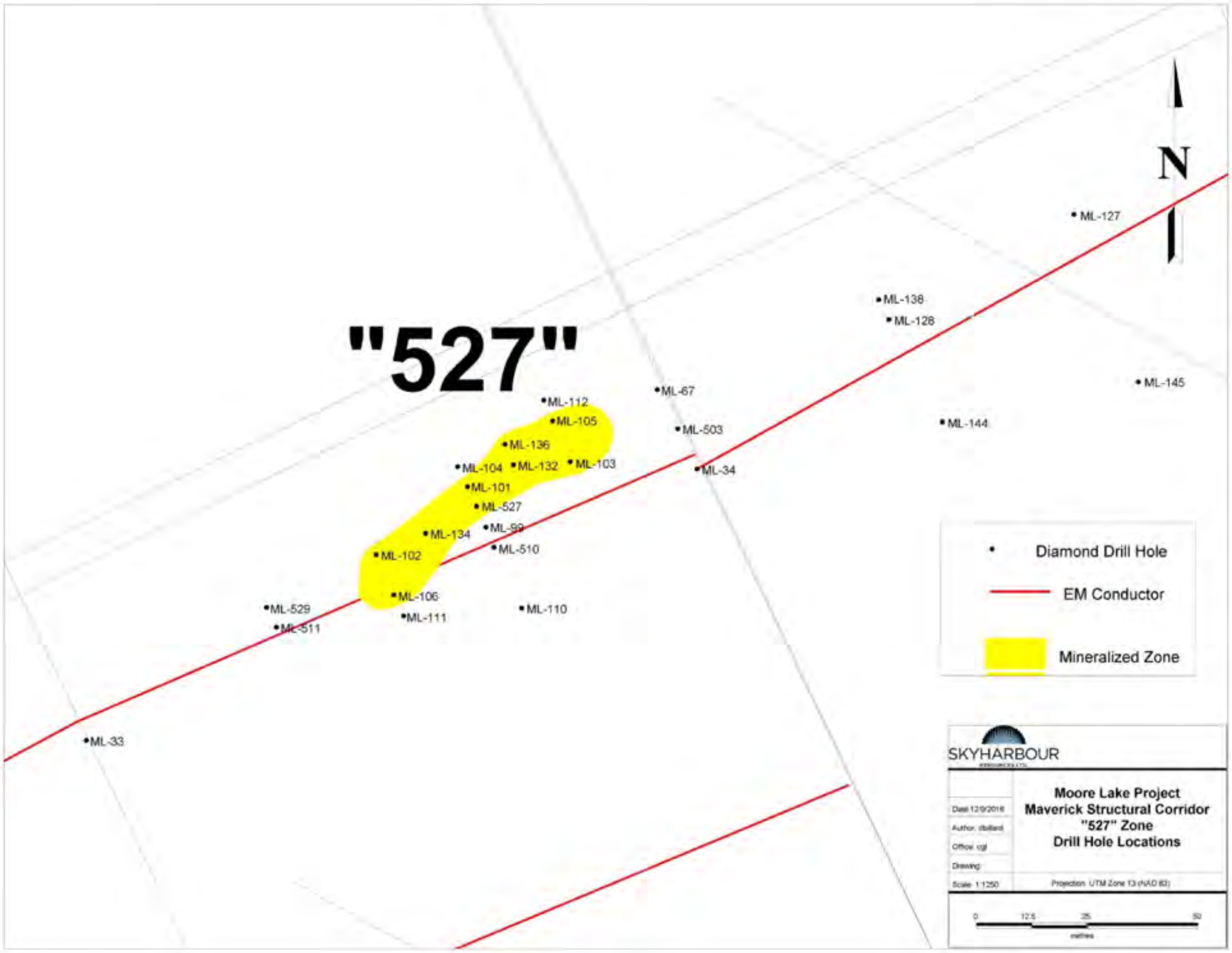
Figure 8: Maverick Zone Drilling



Maverick "527" Zone

Approximately 350 metres northeast of the Maverick Zone a similar zone of mineralization, approximately ten to 15 metres wide and 60 metres long , named the "527" Zone, was identified. Some of the better results from this zone included: ML-527 d 0.41% eU_3O_8 over 6.6 metres including a 1.0-metre intercept of 1.1% eU_3O_8 ML-101, 1.53 per cent U_3O_8 /6.6 metres, including 2.22 per cent U_3O_8 over four metres, ML-106, 0.402% U_3O_8/ 4.5 m. incl. 1.06% U_3O_8 /1.5 m, and ML-136, which returned 0.50% eU3O8 over 7.0 metres. This intersection occurred in the basal sandstone and underlying graphitic pelites. ML-132 intersected two low-grade zones of mineralization. A 2.2-metre intercept straddling the unconformity returned 0.156% eU3O8, while a 2.3-metre intercept within the basement graphitic pelites returned 0.37% eU3O8. These intervals of mineralization were accompanied by highly anomalous Co, Cu, Ni and other pathfinder elements including B in the sandstone and basement rocks.

Figure 9: Maverick "527" Zone Drilling



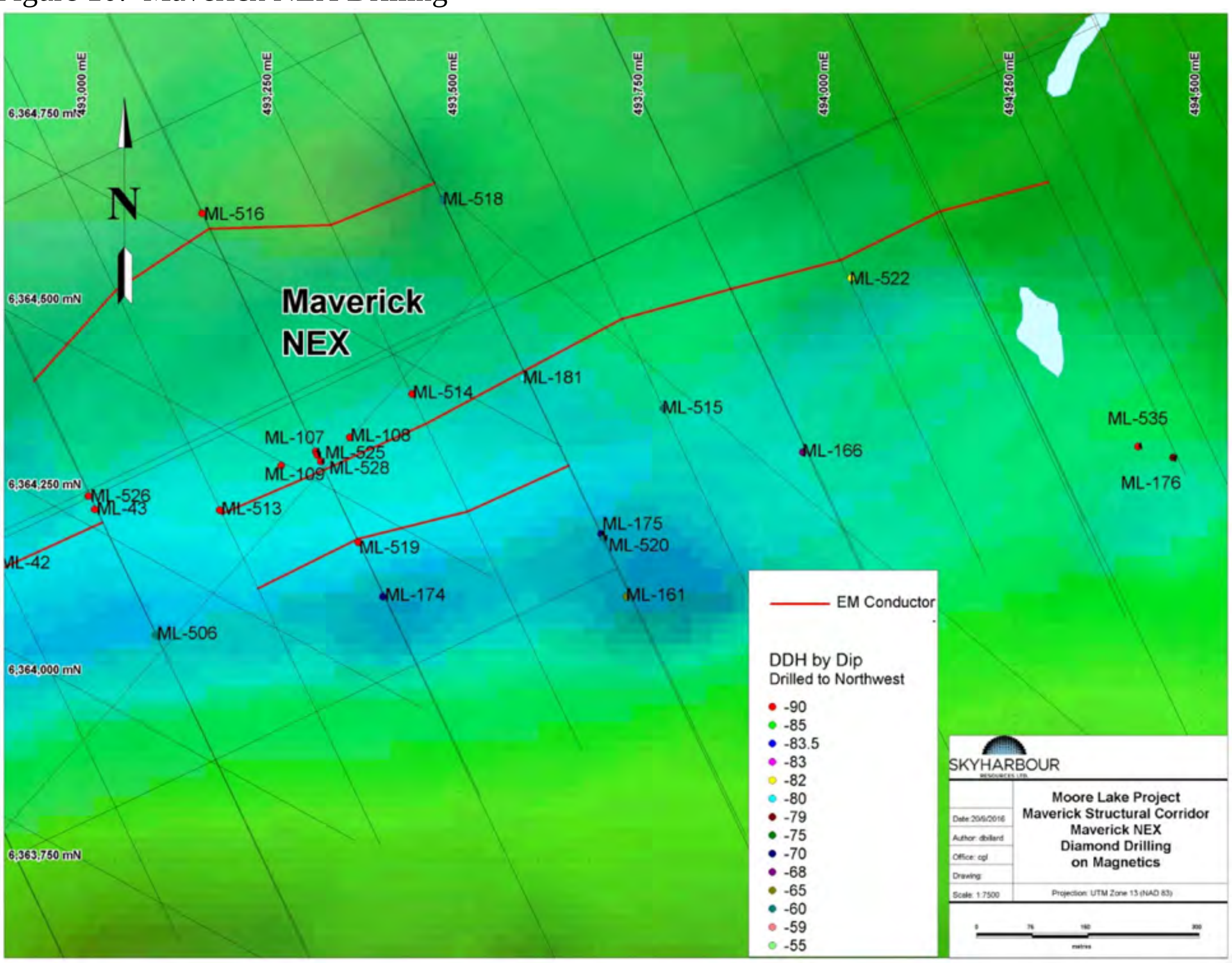
Maverick NEX (Northeast Extension)

The Maverick NEX area was identified by systematic exploration of the strike extension of the Maverick Zone. The target is the northeastern manifestation of the Maverick Structural Corridor and extends another 1.3 km to the Northeast. It is characterized by three geophysically interpreted, northeast trending sub parallel conductors that occur over a width of 450 metres. It is demarcated at its southwestern extent by a significant break in the EM conductive trend that controls the Maverick Structural Corridor. The Athabasca unconformity lies at approximately 300 to 325 metres depth in this area. Of note is a significant east west trending magnetic and resistivity low that lies immediately to the south of the southernmost conductive trend.

The drilling carried out to date has identified a series of moderately southeast dipping, graphitic conductors broadly correlating to the interpreted EM conductors. The conductors and their associated lithologies are locally structurally disrupted and clay altered and are anomalous in copper, lead, nickel, zinc, boron, vanadium and uranium. The sandstone column is likewise locally geochemically anomalous in pathfinder elements and accompanied by an illitic clay signature. The sandstone column is locally affected by structural disruption, bleaching and desilicification but not to the extent that it is over the Maverick Zone. The zones of mineralization that have been identified to date on this target do not have a defined geometry and are of limited extent but it is anticipated that they would have the same physical characteristics as the Maverick Zone.

The best mineralization obtained was from ML-525 which returned 0.226% U_3O_8 over 4.5 metres in the sandstone immediately above the unconformity. The mineralization is accompanied by enrichment in the major pathfinder elements. ML-525 is a hanging wall hole and intersected a broad, 30 metre wide package of altered graphitic pelitic gneisses in the basement. A follow up hole ML-528 was collared 5 metres south of ML-525 and intersected 0.5 metres of weak mineralization (0.151% U_3O_8) at the unconformity, followed by 40 metres of altered graphitic pelites. The limited follow-up did not intersect additional mineralization.

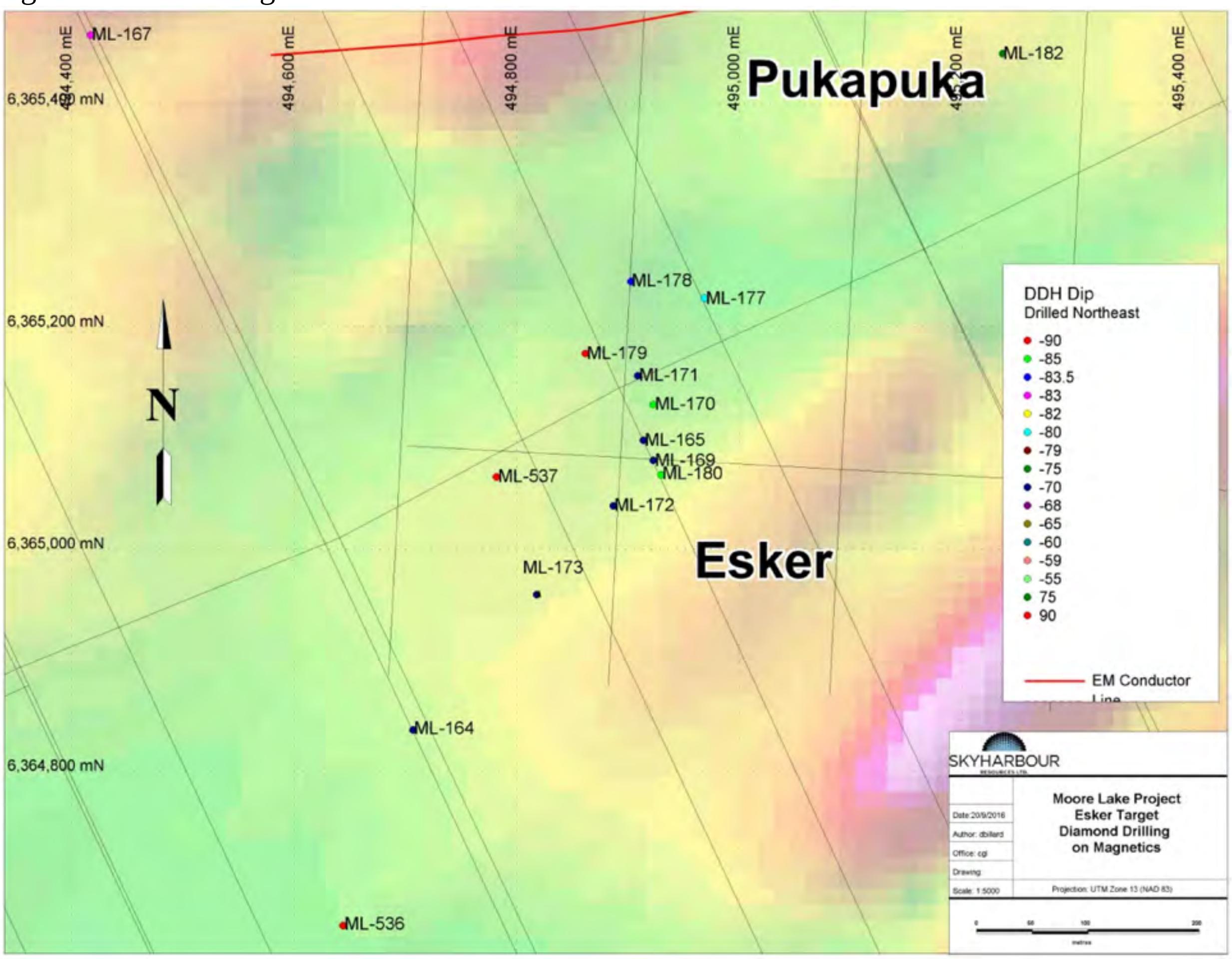
Figure 10: Maverick NEX Drilling



Esker

The Esker area covers an interpreted north-northwest trending shear zone that extends beyond the northeast end of the currently known limits of the Maverick structural corridor. Prior drilling in this area by previous operators intersected geochemically anomalous and structurally disrupted sandstone and basement along with pitchblende mineralization (3070 ppm U/0.25 m) in the basement of MT-5. Follow up drilling by JNR and Denison confirmed the presence of intense structural disruption in the sandstone and basement rocks as well as significant intervals of graphitic pelitic gneisses over a minimum 300 metres of strike length. The basement rocks and illitic sandstone are anomalous in several of the important pathfinder elements such as As, Pb, Cu and Ni, in addition to uranium. The depth to the Athabasca unconformity in this area is at approximately at 270 metres depth. The best mineralization identified to date is from ML-169 which returned 0.307 e% U_3O_8 over 1 metre just below the unconformity.

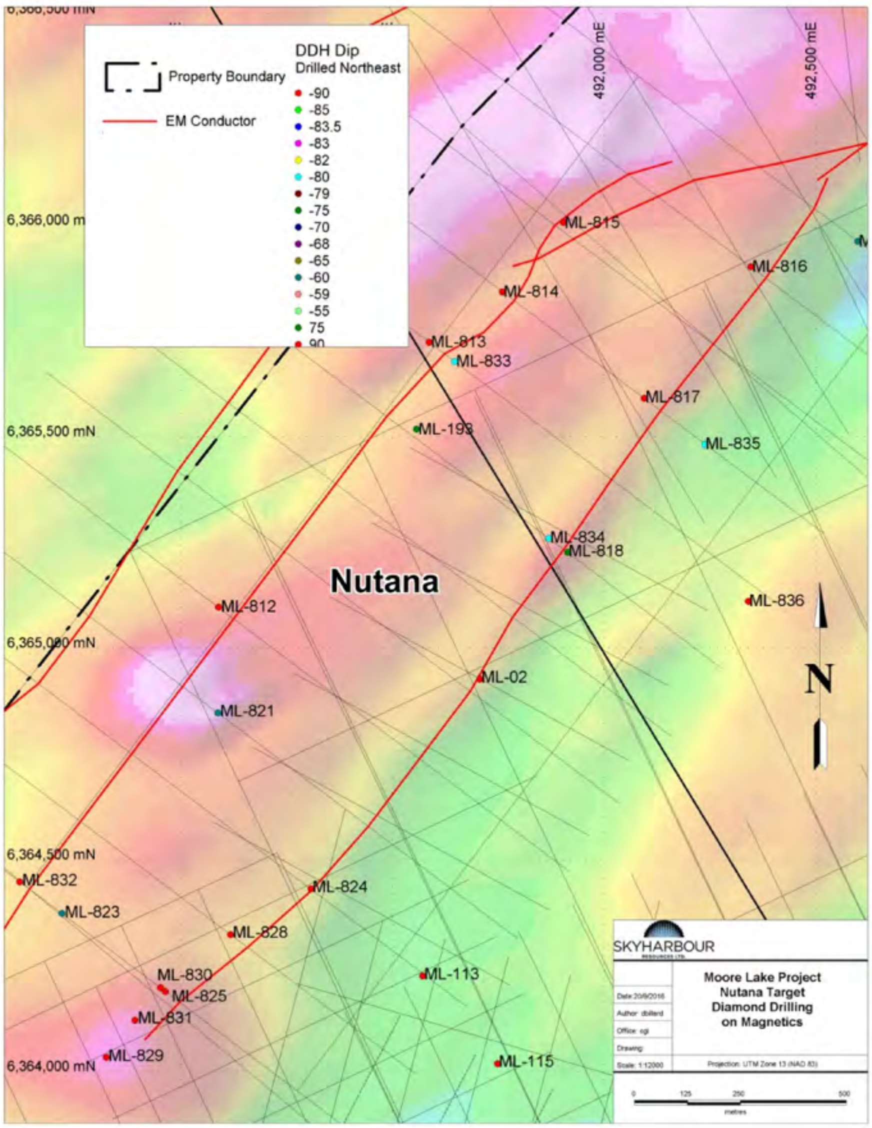
Figure 11: Esker Target



Nutana

The Nutana area comprises 3 km of the southwestern portion of a 10-kilometre long, 500-metre wide conductive corridor comprising the Nutana-West Venice-Venice areas. This conductive system consists of three northeast trending, 3 km long conductors, trending into the West Venice area. Multiple graphitic horizons with varying degrees of structural disruption and alteration in the sandstone and basement have been intersected by the drilling to date. Illite with moderate to strong uranium enrichment +/- dravite or chlorite occurs in the basal 50-100 meters of sandstone in 16 of the holes with anomalous metal geochemistry (U, Pb, Ni, As, V, Zn) in the basal sandstone and basement. The best result obtained was from the southeastern most conductor with a fault in metal enriched graphitic pelite from ML-825 was intersecting 0.319 % U3O8 / 0.5 m.

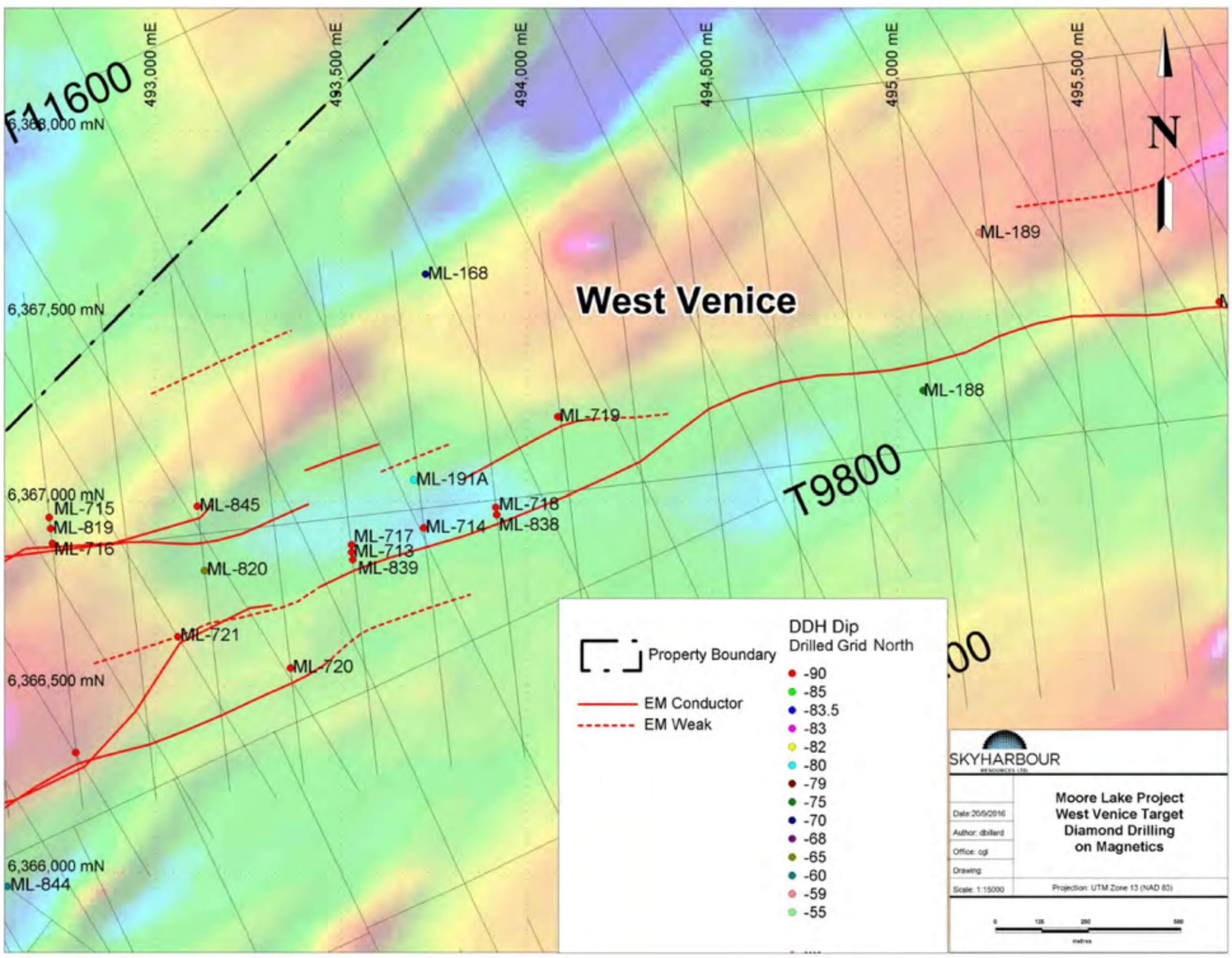
Figure 12: Nutana Target



West Venice

The West Venice conductors consist of a series of east-north-east trending conductors with 3 km strike length cut by a significant east-west structural corridor. About ½ of these lie under lakes and trend into the Nutana and Venice conductive corridors on either end. The initial drilling in the area identified significant unconformity offsets and quartzite ridges to the west as well as anomalous illite, B and metals enrichment in the sandstone and basement. Follow up drilling intersected major intervals of graphitic pelitic rocks accompanied by post Athabasca faulting and significant hydrothermal alteration in the basement. The basal 30 to 60 m of the sandstone are typically strongly bleached, and there are intercepts of intense specular hematite and secondary hematite alteration in the sandstone providing evidence for strong movement of reducing fluids in the sandstone. The basal sandstone is illitic and anomalous in U (up to 4 ppm) in most of the holes. The basement rocks are frequently enriched in several of the pathfinders, U (75 ppm), B (2200 ppm), Cu Ni, Pb, As, V and Co.. Despite the positive mineralizing attributes, no significant uranium mineralization has been identified to date.

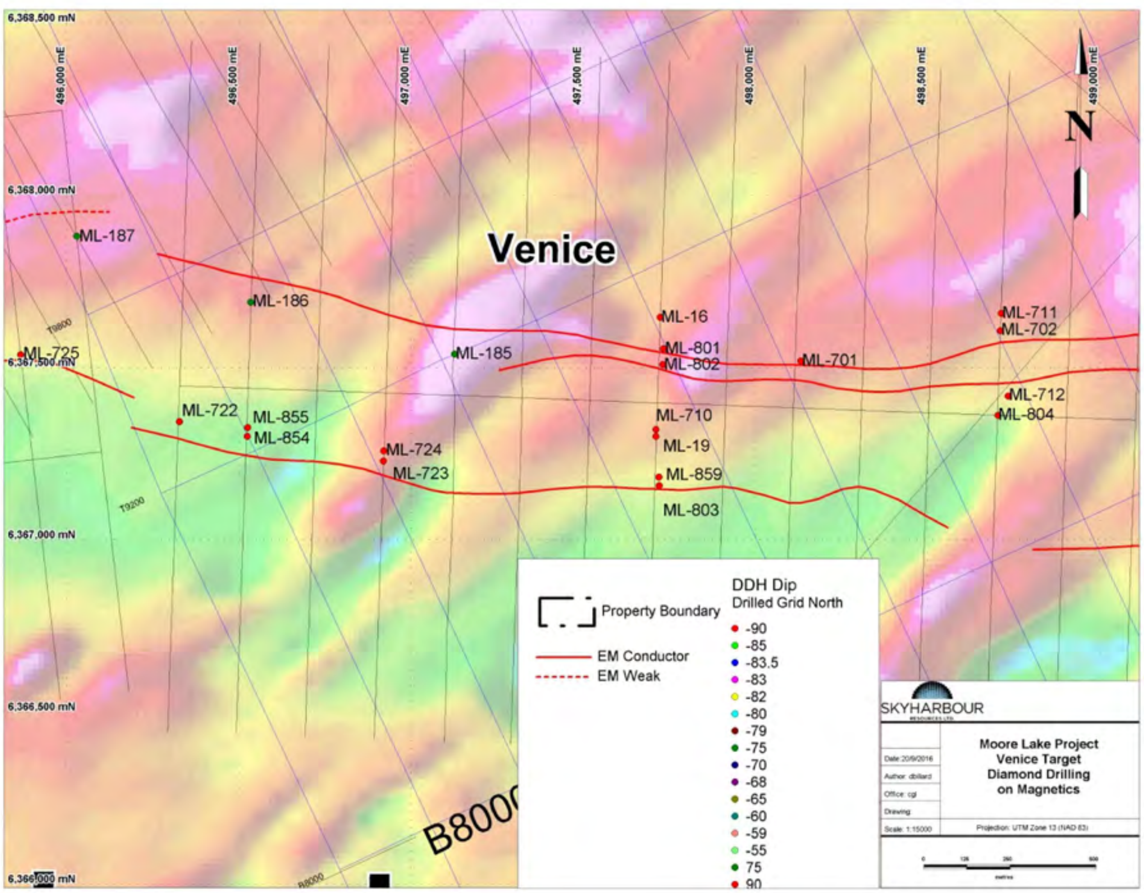
Figure 13: West Venice Target



Venice

The Venice area was initially identified by the JNR-Kennecott joint venture in 2001. Three east-west trending conductors 2 to 3 km in length extend under upper Moore Lake and join the West Venice conductors at their eastern extremity. The conductors are associated with significant zones of reactivated post Athabasca faulting as well as graphitic pelitic gneisses at and well below the unconformity, indicating the presence of multiple conductors and thrust faulting. The basement faulting is typically brittle-ductile and geochemically anomalous. Geochemical enrichment of U (up to 798 ppm in basement), B (793 ppm), Pb, Ni, Cu, V, Mo, Co and Zn occurs in the sandstone and graphitic pelites of many of the holes drilled on the targets. The sandstone column is frequently positively mixed illitic-kaolinitic-chloritic especially in the context of major sandstone faulting in several of the drill holes, but non-prospective dickite does occur in many of the holes that were drilled. There are intervals of graphitic rocks in these holes that are anomalous in U (300 ppm), B (346 ppm) V, Mo, Cu and Ni. Despite the positive mineralizing attributes, no significant uranium mineralization has been identified to date.

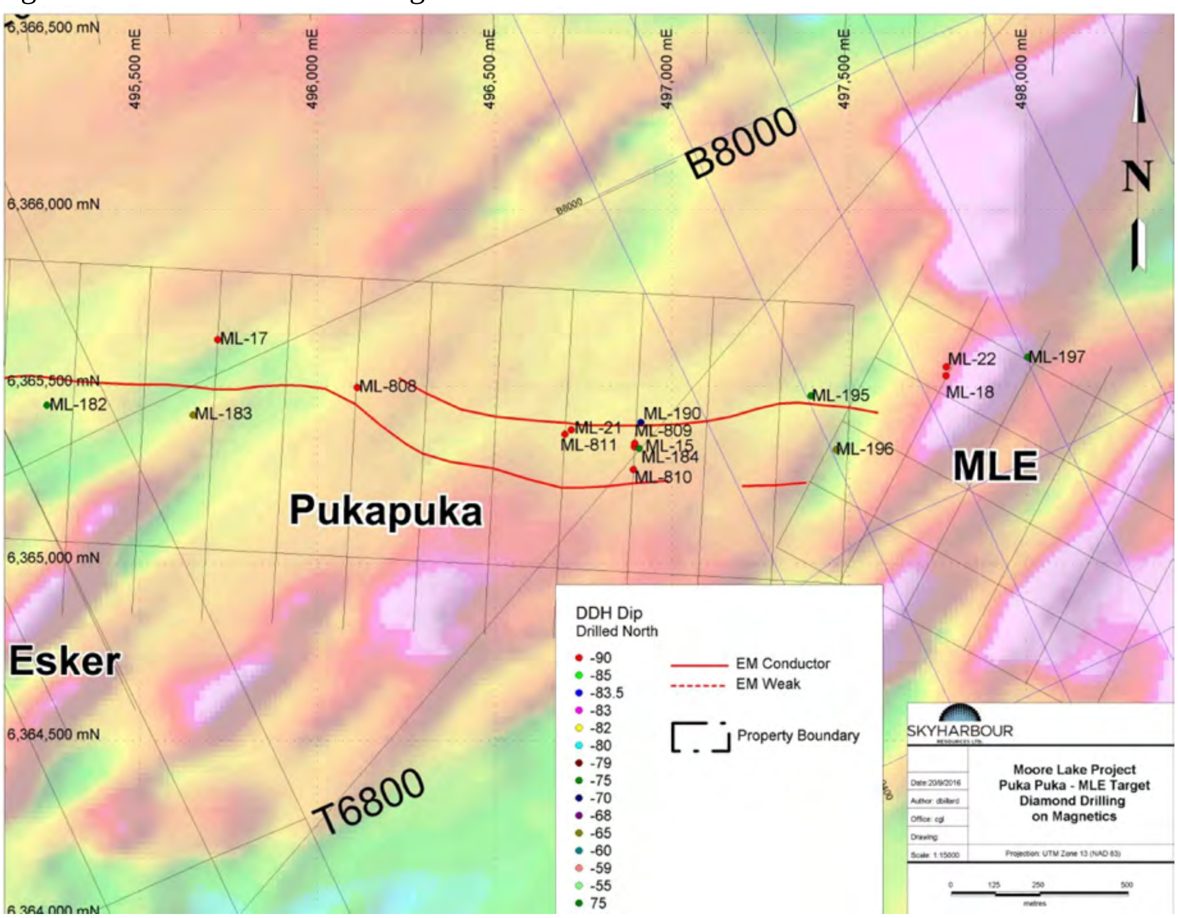
Figure 14: Venice Target



Puka Puka-MLE

The Puka Puka and its eastward extension MLE was another area identified early on by the JNR-Kennecott joint venture. This work identified two east west trending curvilinear conductors 1.5 km and 3 km in length extending under Lower Moore Lakes to the west. The initial drilling identified highly anomalous B values (4280 ppm) and elevated radioactivity in the basement rocks of the Puka Puka and MLE. Follow up drilling by JNR and Denison confirmed the presence of moderately south dipping graphitic basement rocks accompanied by locally structurally disrupted sandstones on the landward portions of the area. The basement rocks were frequently enriched in U (up to 380ppm) along with corresponding Ni, Co, Cu, Pb, Zn, B, V, and Mo. The sandstone column was often mixed illitic and kaolinitic with locally anomalous Ni and Zn. Of special note in the area were variations in the unconformity depth of up to 40 metres between adjacent holes, suggesting significant vertical movement in the area. Drill testing of the westward extension of the Puka Puka under Lower Moore Lake was largely unsuccessful however. The sole uranium intercept was a 1 metre basement intercept of 0.034% U_3O_8 from the central portion of the target.

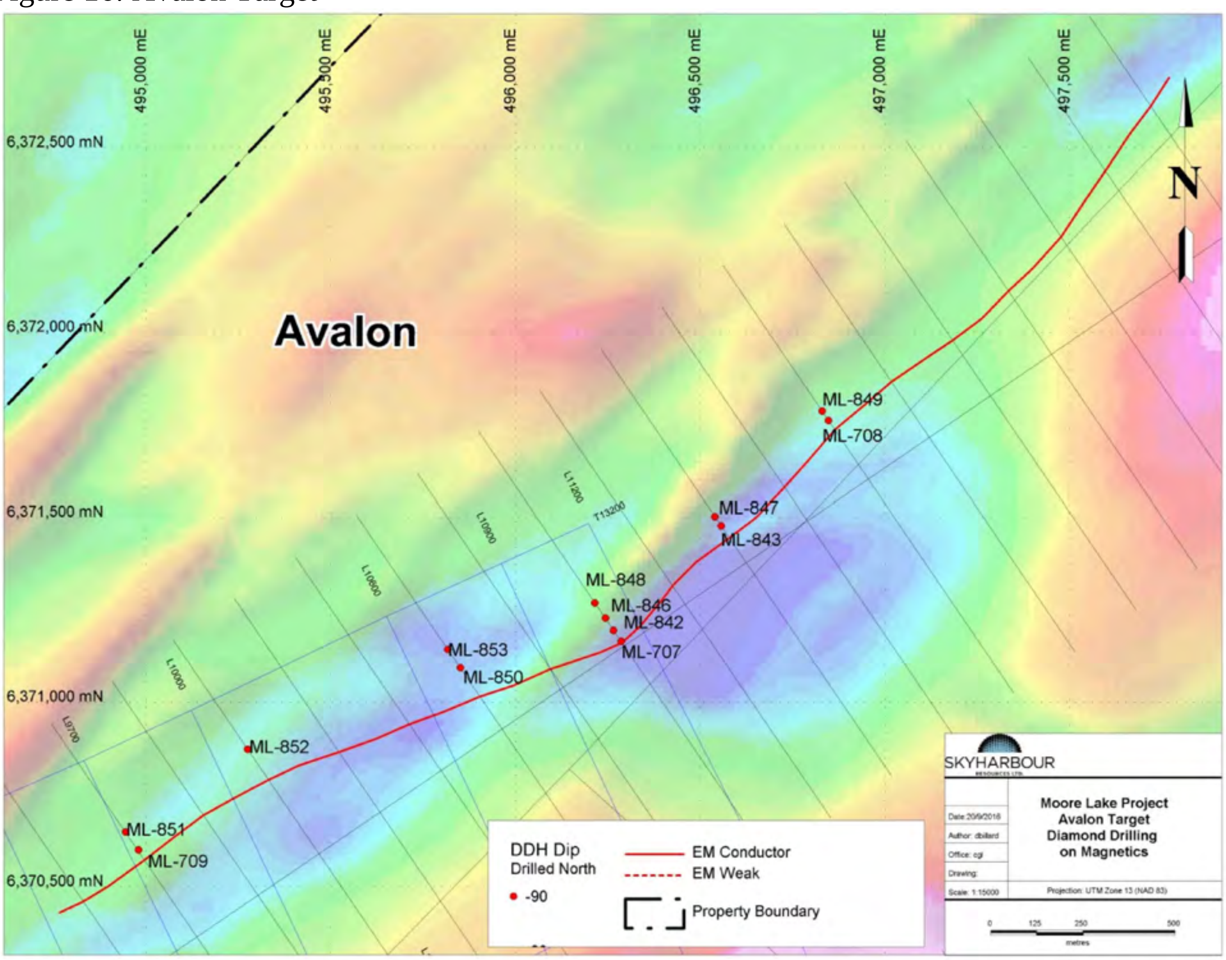
Figure 15: Puka Puka- MLE Target



Avalon

The Avalon conductor consists of a strong northeast trending feature nearly 4 km long, cut by an east-west structural corridor in its central portion. The conductor strikes off of the Moore Lake property on its northern and southern extremities with the northeastern 1.2 km untested by drilling at this time. Strongly graphitic assemblages in the basement are associated with significant post Athabasca faulting and variable amounts of hydrothermal alteration, moderate to strong bleaching and illitic clays over significant intervals in many of the holes drilled. The sandstone alteration is relatively strong with significant amounts of strong bleaching and desilicification, especially near the unconformity. The basal sandstone in the central portion of the conductor is typically enriched in B (up to 1400 ppm), U (up to 10 ppm) and Illite as well as V, Ni and Pb locally. The basement rocks are locally enriched in Co, Ni, V, Zn and U. A low grade uranium intercept of 0.1% U_3O_8/3.5 m incl. 0.446 % U3O8/0.5 m was obtained as were broad zones of radioactivity located 30 to 60 metres beneath the unconformity, associated with up to 0.088% U_3O_8 over 3.0 metres.

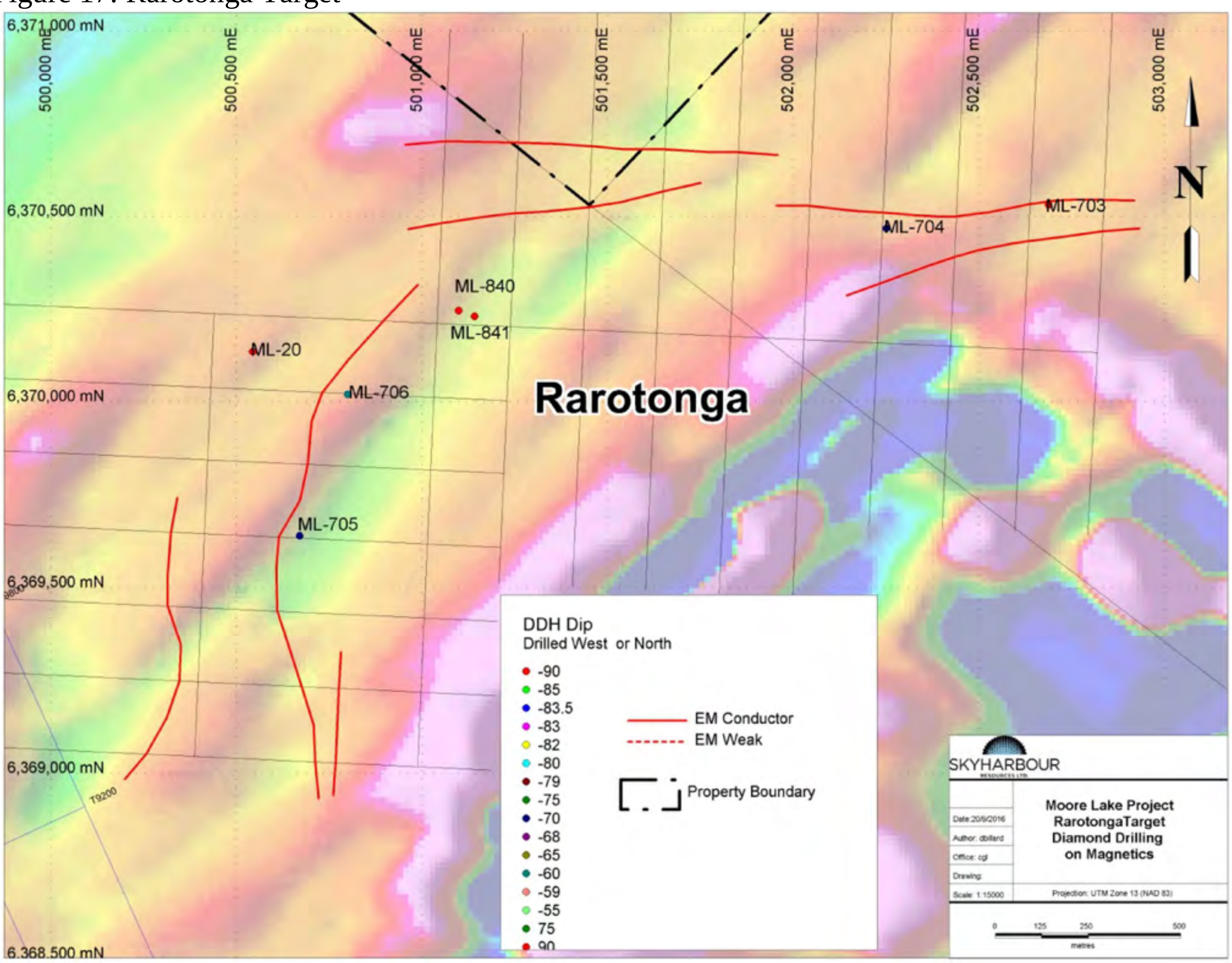
Figure 16: Avalon Target



Rarotonga

The Rarotonga grid was another of the early targets identified by the JNR-Kennecott joint venture. A series of multiple, potentially folded, 800 to 1,200 metre long conductors trend east-west and north-south and occur at a significant bend in the Wheeler River just south of the northern property boundary. The Athabasca unconformity in this area is generally fairly shallow at approximately 210 metres and is locally affected by post Athabasca faulting. Drilling by the various joint ventures intersected multiple thrusts of weakly to moderately altered, relatively flat lying and locally faulted and brecciated graphitic pelitic gneiss units. The sandstone column in the area is locally illitic but relatively weakly anomalous otherwise. Geochemical enrichment of the basement rocks is ubiquitous in most of the holes drilled with significant Cu (up to 1420 ppm), Ni (up to 300 ppm) V, and Mo intersected along with weak uranium mineralization (448 ppm) in one hole. An attempt to redrill a broad zone of elevated radioactivity in graphitic pelitic previously intersected in a 1982 hole was unsuccessful .

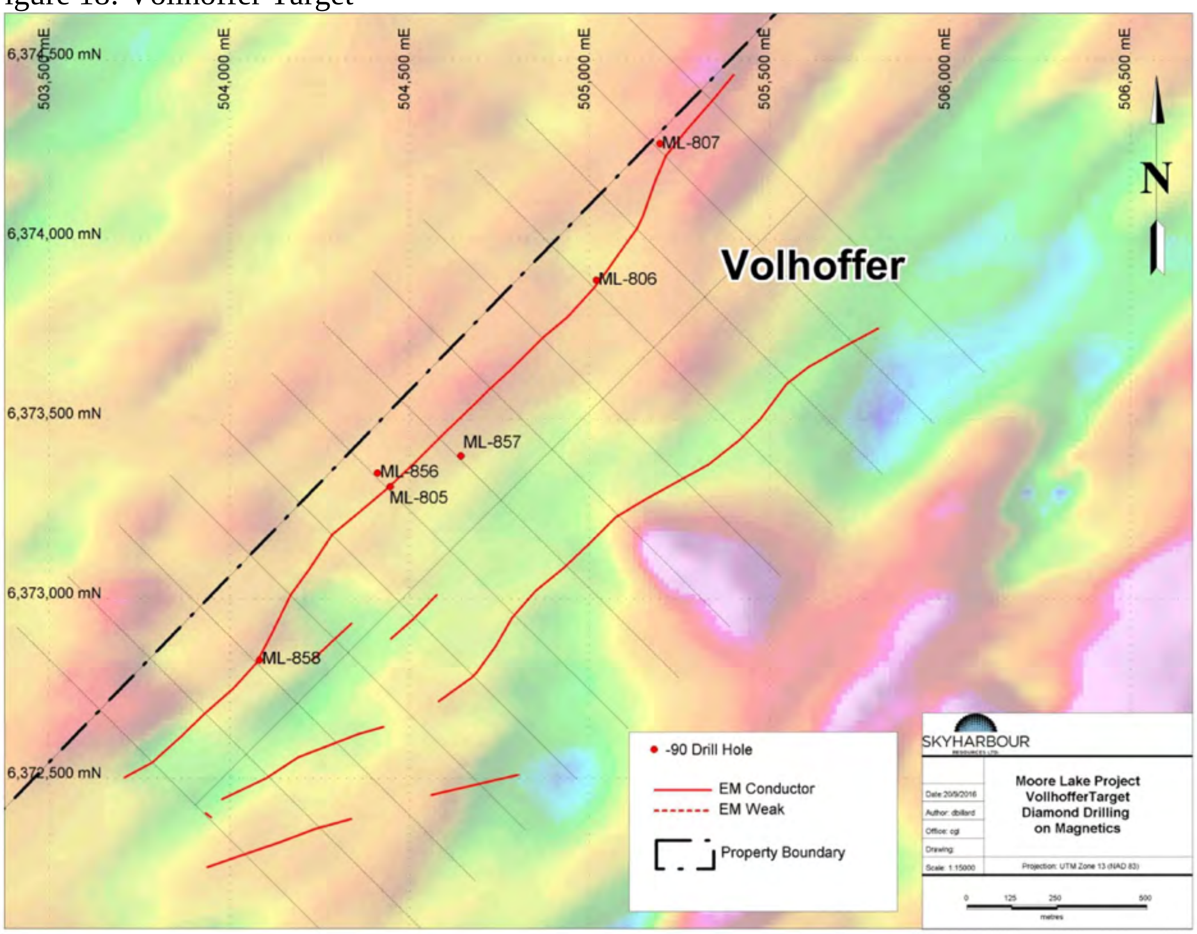
Figure 17: Rarotonga Target



Vollhoffer

The Vollhoffer target was chosen partially as part of the systematic exploration by the JNR – Denison joint venture but also in part as follow-up to encouraging historic holes that had been drilled on the adjacent property. A series of northeast trending conductors 800 to 2.5 km in length were identified by geophysics just east of the northwestern property boundary. The westernmost and longest of these was drill tested on a generally broad spacing by six holes. The drilling confirmed the presence of conductive lithologies and post Athabasca faulting associated with this conductor. An unconformity off-set of 25 metres was identified. Desilicification of the sandstone column accompanied by local fracturing was frequent as was elevated pathfinder geochemistry including Pb, Co, As, Mo, V, and Zn. The basement rocks consisted of graphitic and non-graphitic pelitic gneisses and felsic intrusive rocks affected locally by brittle and brittle ductile faulting and intermittent clay alteration. The basement rocks were frequently anomalous in pathfinder elements such as B (up to 680 ppm), Ni (up to 100 ppm) , V As, Co, Cu and Mo. Despite the presence significant mineralizing features, no significant uranium mineralization was identified.

Figure 18: Vollhoffer Target



8.0 DEPOSIT TYPES

Portions of the following discussion is taken from publically available documents disclosed by the operator of the properties described herein, notably Cameco Corporation through their NI 43-101 Technical Reports available on SEDAR and referenced in the ensuing text and Section 26.1 of this report entitled " Industry References". **The Author has not been able to verify the information that has been provided with respect to any of the deposits described herein. This information is not necessarily indicative of any mineralization that may occur on the Moore Lake Property**.

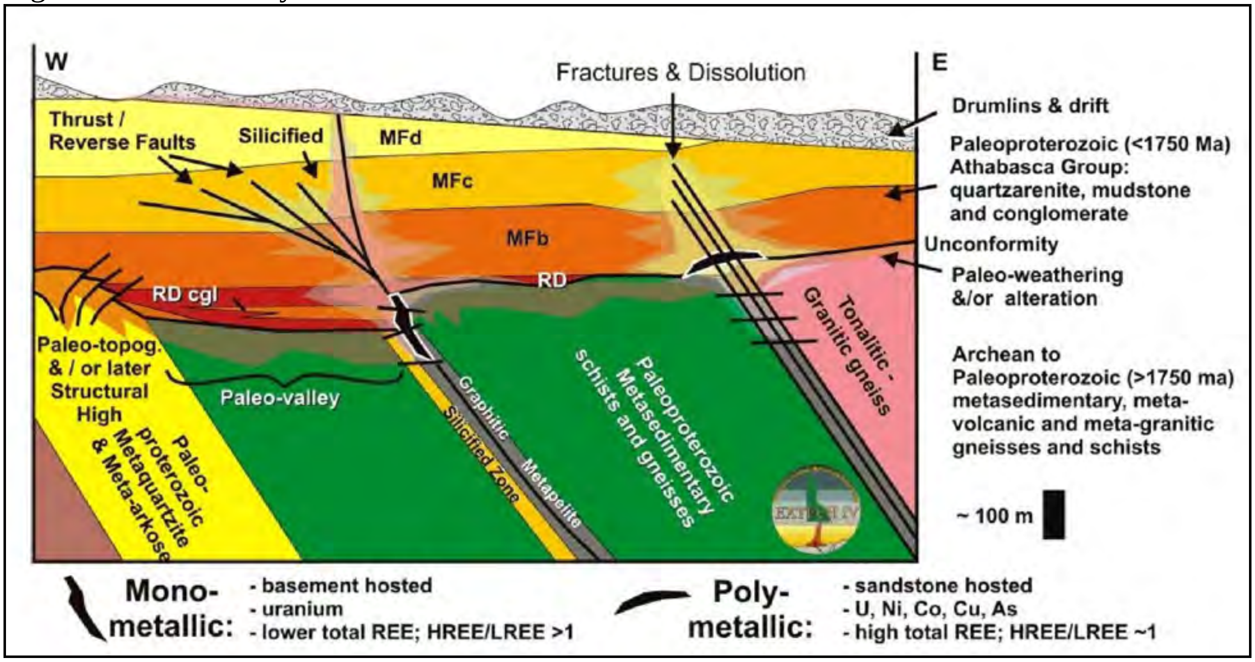
The main deposit type being explored for is an unconformity-related, structurally-controlled deposit similar to those found at Cameco Corporation's nearby McArthur River, Cigar Lake and Key Lake Deposits. Although uranium is the primary exploration focus it should be noted that precious and base metals may also be related to the same structural and hydrothermal features that are related to uranium deposition and therefore the presence of other mineralized deposits should not be discounted.

The Athabasca Basin arguably hosts the world's largest and richest known uranium deposits including McArthur River and Cigar Lake. McArthur River has a proven reserve of 1,195,300 tonnes grading 9.62% U_3O_8 and probable reserve of 199,800 tonnes grading 18.84% U_3O_8 for a total of 336.5 million lbs U_3O_8 proven and probable. Cigar Lake has proven reserves of 226,100 tonnes grading 21.93% U_3O_8 and probable reserves of 375,700 tonnes grading 13.55% U_3O_8 for a total of 221.6 million lbs U_3O_8. (https://www.cameco.com/businesses/uranium-operations/canada/mcarthur-river-key-lake/reserves-and-resources)

The deposits are typically located at the sub-Athabasca unconformity, and are hosted in both the Athabasca Group sandstones above the unconformity, and in the Paleoproterozoic metamorphic supracrustal rocks and intrusives of the Archean Hearne Craton basement. Surficial indicators such as radioactive boulders, geochemical anomalies, and geophysical signatures were responsible for the initial discoveries in the 1960s and 1970s. With the development of these early deposits, an exploration model based on targeting electromagnetic conductors related to graphitic metasedimentary rocks and structural complexity was developed.

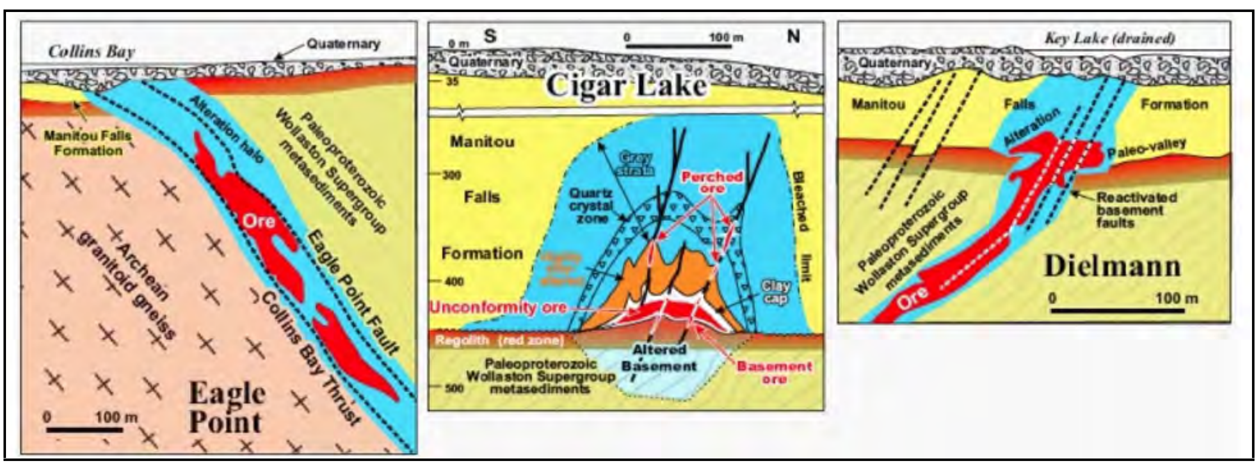
The uraniferous zones are structurally controlled both with relation to the sub-Athabasca unconformity, and the basement fault and fracture-zones. Uranium deposits in the Athabasca Basin that occur in proximity to the Athabasca unconformity can be characterized as polymetallic (U-Ni-Co-Cu, Pb, Zn and Mo) or monometallic (Figure 19; Jefferson et al., 2007). Examples of polymetallic deposits include the Key Lake, Cigar Lake, Collins Bay A, Collins Bay B, McClean, Midwest, Sue and Cluff Lake deposits (Figure 20). Monometallic deposits are completely or partially basement-hosted deposits localized in, or adjacent to, faults in graphitic gneiss and calc-silicate units. Monometallic deposits contain traces of metals besides uranium and include completely basement-hosted deposits developed for up to 500 m below the unconformity or deposits that may extend from the unconformity downward along faults in, or adjacent to, graphitic gneiss and/or calc-silicate units such as the McArthur River and Eagle Point deposits (Jefferson et al., 2007).

Figure 19: Structurally Hosted Athabasca Basin Uranium Model



(from Jefferson et al., 2007)

Figure 20: Comparison of Athabasca Basin Deposits



(from Jefferson et al., 2007: Eagle Point – Basement Hosted Mineralization; Cigar Lake– Sandstone Hosted Mineralization; Key Lake Dielmann– Sandstone and Basement Hosted Mineralization)

9.0 EXPLORATION PROGRAM

The project is in the evaluation stage and as such, **Skyharbour has yet to carry out an exploration program on the property**. Previous operators however, have carried out extensive exploration efforts on the property. The work by these operators is summarized below.

The previous companies conducted extensive geophysical programs on the property, both airborne and ground, in support of drill hole targeting. The programs included airborne Fugro GeoTEM and Aeroquest AeroTEM III surveys from which prospective areas were selected for follow up ground geophysics. Follow–up of the targets of interested was initially restricted to Moving Loop or Fixed Loop EM surveys carried out by Patterson Geophysics of La Ronge and Gravity coverage by MWH Geophysics of Kelowna BC. using variable parameters and utilizing the most up to date equipment readily available to the industry at that time. These programs were carried out throughout the property and took place on all of the target areas that were defined: Maverick, Esker, Puka Puka, MLE, Nutana, Junction, West Venice, Venice, Otter, Avalon, Rarotonga and Vollhoffer. Of special note was a 23.3 km high resolution reflection seismic survey over the Maverick structural corridor by Kinetex Inc. of Calgary, with interpretation by Zoli Hajnal of the University of Saskatchewan.

Subsequent to Denison becoming project manager several DC Resistivity IP programs were completed by Quantec Geoscience of Toronto, Ontario utilizing their Titan 24 system, as was a Slingram Moving Loop EM program by Abitibi Geophysics of Val D’Or Quebec. These latter programs were primarily focused on the Maverick, Esker, Raratonga and Venice grids.

Interpretation of the geophysics and drill targeting prior to the JNR/IUC/Denison period was carried out by internal Kennecott staff. During the period of JNR project management interpretation of results was carried out by Phil Robertshaw of Saskatoon and Ken Sweet of Denver Colorado. Upon Denison becoming project manager Denison’s staff geophysicist, Larry Petrie took over responsibility for geophysical interpretation and planning.

In the opinion of the Author all of the geophysical field work was carried out to a high technical standard as was the planning and interpretation by all of the geophysicists involved.

JNR/Kennecott/IUC/Denison did not carry out any significant surficial exploration beyond geophysics on the property due to the presence of overburden, lakes and pervasive Athabasca Sandstone cover. They did carry out a few localized orientation geochemical surveys including Soil Gas Hydrocarbon and boulder sampling over various parts of the property, however no significant results were identified by the limited amount of work that was carried out.

10.0 Drilling

The project is in the planning and evaluation stages by Skyharbour and therefore no drilling has been carried out to date by them. Extensive drilling was carried out however by the various iterations of the joint ventures by JNR Resources, Kennecott, IUC and Denison. In the opinion of the Author all of the work was carried out to a high level of technical proficiency.

A total of 323 diamond drill holes totalling 119,697 metres have been drilled property wide since 2000. The bulk of the holes were drilled on the Maverick structural corridor, with drilling on the Maverick Zone predominating. Table 3 illustrates the drilling carried out on each target area. The drilling was carried out exclusively by Major-Midwest drilling out of Flin Flon, Manitoba until 2008 and has since been performed by Dominion Drilling of Pleasantdale, Saskatchewan, Driftwood Drilling of Smithers, B.C., and HyTech Drilling of Saskatoon, Saskatchewan. The typical core size used on the property was NQ, although 84 HQ sized hole drilled within the main Maverick Zone in order to maximize core recovery. The bulk of the drill holes were drilled vertically with 84 inclined holes drilled in order to test various structural parameters of the targets.

Drill holes were initially spotted with regard to local grid co-ordinates, however as GPS technology advanced the spotting of drill holes using GPS became more common. Surface surveys of the drill holes, especially in the Maverick Zone were commonly completed using differential GPS with centimetre to sub-metre accuracy. Down hole deviation surveys were completed in all cases by Reflex E-Z Shot downhole instruments at 50 to 100 metre down hole depths. An ACE core orientation tool was used to assist in collecting structural measurements from many of the inclined holes.

Most holes were probed with a Mount Sopris Triple Gamma radiation instrument to calibrate the in-hole mineralization and ultimately permit the calculation grade intervals of U_3O_8. The gamma probes were periodically calibrated at the Saskatchewan Research Council test pits in Saskatoon to ensure accuracy of the calculations. Grade calculations from probing were performed by the previously acknowledged geophysicists.

Core logging and geochemical sampling was in all cases was carried out by field staff of the various companies on site at the time of drilling. Core logging involved visually inspecting the core and recording the various geological parameters to assist in later geological and geochemical interpretation. The core was then scanned by handheld scintillometer (URTEC UG-130 or Radiation Solutions RS-125) to identify anomalous uranium values in the drill core. Sections with elevated radioactivity, effectively two to three times background radiation, were selected for geochemical analysis. Additional samples were collected above and below the mineralized areas that are identified in order to “close-off” the sample intervals. Sample widths were selected according to ranges of radiometric values, with individual samples varying in core length from 0.2 m to 0.7 m., but with 0.5 m. the most common length. All reasonable efforts appear to have been made to ensure that splitting of the core was representative and that no significant sampling biases occur. Core recovery was generally excellent but does not materially affect the reliability of the geochemical analyses, as these were not reported where core recovery is determined to be less than 95%. In cases where core recovery was not optimal, down-hole radiometric probe results were used for grade calculations. Probe results are presented as “grade equivalent” U_3O_8 (e% U3O8) over a sample interval, the intervals being selected arbitrarily according to the strengths of the relative radiometric responses detected in the drill hole. It should be noted that in a direct comparison of probe results versus geochemical results (where core recovery is a minimum of 95%), probe results tend to return lower values than geochemical (“true”) grades. This is due to the methodology employed by the probe, and is widely acknowledged within the Uranium industry.

Table 3 Drill Holes by Area

Area	Holes	Metres
Avalon	13	5,565.65
Esker	11	4,405.70
Maverick	174	63,643.80
Maverick NE	23	9,241.70
Maverick W	8	3,467.50
MLE	3	824.30
Nutana	24	8900.2
Pukapuka	13	4,479.60
Raratonga	7	2,243.60
Venice	19	6,872.00
Vollhoffer	6	1,977.20
West Venice	21	8,075.60
Total	322	119,696.85

Drilling property wide returned encouraging results including intersecting prospective graphitic conductive lithologies, hydrothermal alteration, structural disruption and elevated geochemistry for Uranium and its associated pathfinder elements such as B, Ni, Co, Pb, Cu, V, As and other lesser pathfinders.

The most important mineralization identified by the drilling was over a strike length of 230 metres in the west central portion of the Maverick Zone with lesser amounts of mineralization in the Maverick “527” in the Maverick NEX “525” targets. The exact geometry of the mineralization is not yet defined but it is interpreted to be a sub-horizontal, ribbon-like zone, or series of such zones. Sample lengths may approximate true thickness but that is not yet known. The mineralization is also associated with anomalous to highly anomalous levels of Ag, Ni, Cu, Pb and B. The most significant uranium results to date are listed in Table 2 from vertical holes, except where noted, drilled in the main Maverick Zone with a few holes within other zones such as Esker, Nutana, Venice, Puka Puka, Avalon and Rarotonga. Many of the same attributes found in the Maverick related zones are mirrored in these other areas.

Table 4: Significant Mineralized Intercepts on Property

HOLE	FROM	TO	WIDTH (m) (core length)	GRADE (% U_3O_8)	GT (grade x thickness)	DIP	AREA
ML-03	262.15	271.35	9.2	0.442	4.06*	-90	Maverick
ML-07	270	270.5	0.5	0.02	0.01	-90	Maverick
ML-08	319.35	324.95	5.6	0.067	0.37*	-90	Maverick
ML-10	292.7	292.9	0.2	0.049	0.01	-90	Maverick
ML-11	267.15	269.25	2.1	0.066	0.13	-90	Maverick
ML-14	284.9	285.4	0.5	0.02	0.01	-90	Maverick
ML-18	244.8	245.2	0.4	0.027	0.01	-90	Maverick
ML-19	329	334.4	5.4	0.021	0.11	-90	Maverick
ML-23	315.5	317.6	2.1	0.4	0.84	-90	Maverick
ML-24	295.4	297.7	2.3	0.11	0.25	-90	Maverick
ML-25	278.8	287.9	9.1	0.62	5.64	-90	Maverick
ML-26	62.5	63.3	0.8	0.15	0.12	-90	Maverick
ML-28	283	284.1	1.1	0.068	0.07	-90	Maverick
ML-29	261.55	269.05	7.5	1.3	9.75*	-90	Maverick
ML-30	272.6	275.8	3.2	0.15	0.48	-90	Maverick
ML-31	271.8	273.2	1.4	0.242	0.33	-90	Maverick
ML-32	283.6	285.3	1.7	0.112	0.19	-90	Maverick
ML-33	277.6	280.1	2.5	0.018	0.04	-90	Maverick
ML-34	285.5	287.5	2	0.234	0.46	-90	Maverick
ML-35	262.6	273.7	11.1	1	11.10	-90	Maverick
ML-36	270	273.6	3.6	0.06	0.21	-90	Maverick
ML-37	263	280	17	0.11	1.87*	-90	Maverick
ML-40	300.1	300.6	0.5	0.016	0.00	-90	Maverick
ML-43	306.5	312	5.5	0.015	0.08	-90	Maverick
ML-45	306.95	308.65	1.7	0.021	0.03	-90	Maverick
ML-46	263	266	3	0.041	0.12	-90	Maverick

HOLE	FROM	TO	WIDTH (m) (core length)	GRADE (% U_3O_8)	GT (grade x thickness)	DIP	AREA
ML-47	269	278	9	0.3	2.7*	-90	Maverick
ML-48	269.5	274.2	4.7	4.01	18.84*	-90	Maverick
ML-49	262	266.5	4.5	2.41	10.84	-90	Maverick
ML-50	295	297.5	2.5	0.039	0.09	-90	Maverick
ML-51	276	276.5	0.5	0.14	0.07	-90	Maverick
ML-52	51	55	4	0.031	0.12	-90	Maverick
ML-54	264.5	269.5	5	3.5	17.50	-90	Maverick
ML-55	263	269.2	6.2	5.14	31.86	-90	Maverick
ML-56	280.2	287.7	7.5	0.026	0.19	-90	Maverick
ML-57	265.55	267.45	1.9	0.585	1.11	-90	Maverick
ML-59	269	269.5	0.5	0.055	0.02	-90	Maverick
ML-60	265.48	269.68	4.2	2.2	9.23*	-90	Maverick
ML-61	264.68	274.68	10	4.03	40.3*	-90	Maverick
ML-62	282.1	282.6	0.5	0.411	0.20	-90	Maverick
ML-63	279	282.5	3.5	0.329	1.15	-90	Maverick
ML-64	272	276	4	0.114	0.45	-90	Maverick
ML-67	278	282	4	0.016	0.06	-90	Maverick
ML-68	283.9	291	7.1	0.031	0.22	-90	Maverick
ML-69	289	291	2	0.024	0.04	-90	Maverick
ML-70	264.5	266	1.5	0.418	0.62	-90	Maverick
ML-71	260.05	263.75	3.7	0.28	1.04*	-90	Maverick
ML-72	278	289.3	11.3	0.241	2.72	-90	Maverick
ML-73	274.5	277	2.5	0.036	0.09	-90	Maverick
ML-74	297	299.5	2.5	0.113	0.28	-90	Maverick
ML-75	265.5	272	6.5	0.065	0.42	-90	Maverick
ML-76	274.3	276.3	2	0.043	0.08	-90	Maverick
ML-77	263.5	271.5	8	0.46	3.68	-90	Maverick
ML-78	269	270	1	0.095	0.09	-90	Maverick
ML-79	291.4	291.9	0.5	0.015	0.00	-90	Maverick
ML-80	278.9	279.4	0.5	0.25	0.12	-90	Maverick
ML-81	268.8	271.8	3	0.021	0.06	-90	Maverick
ML-82	268.5	274.5	6	0.096	0.57	-90	Maverick
ML-83	265	276.1	11.1	1.81	20.09	-90	Maverick
ML-84	265.8	270.8	5	0.436	2.18	-90	Maverick
ML-85	265.1	271.5	6.4	1.33	8.51	-90	Maverick
ML-86	269.2	271.7	2.5	0.017	0.04	-90	Maverick
ML-87	281	287	6	0.035	0.21	-90	Maverick
ML-88	265	275.8	10.8	0.351	3.78	-90	Maverick
ML-90	266.05	272.5	6.45	1.18	7.61	-90	Maverick
ML-91	267.1	267.6	0.5	0.042	0.02	-90	Maverick

HOLE	FROM	TO	WIDTH (m) (core length)	GRADE (% U_3O_8)	GT (grade x thickness)	DIP	AREA
ML-92	282	284.5	2.5	0.241	0.60	-90	Maverick
ML-93	285	288.5	3.5	0.468	1.63	-90	Maverick
ML-95	283	287.5	4.5	0.032	0.14	-90	Maverick
ML-96	257	260	3	0.016	0.04	-90	Maverick
ML-97	264.75	272.5	7.75	2.31	17.90	-90	Maverick
ML-98	266	270.5	4.5	0.145	0.65	-90	Maverick
ML-99	285	289	4	0.1	0.40	-90	Maverick
ML-100	262	269.75	7.75	2.002	15.51	-90	Maverick
ML-135	263	267	4	0.822	3.29	-90	Maverick
ML-135	273	275.5	2.5	0.217	0.54	-90	Maverick
ML-137	273	275	2	0.086	0.17	-90	Maverick
ML-139	264.5	273	8.5	1.23	10.46	-90	Maverick
ML-140	262.9	269.4	6.5	3.2	20.80	-90	Maverick
ML-141	278.5	280	1.5	0.671	1.01	-90	Maverick
ML-156	266.75	271.35	4.6	0.661	3.04	-90	Maverick
ML-501	330	335	5	0.26	1.30	-60	Maverick
ML-502	298.5	313	14.5	0.0515	0.74	-60	Maverick
ML-503	281.5	282	0.5	0.049	0.02	-90	Maverick
ML-504	377	377.5	0.5	0.031	0.01	-60	Maverick
ML-505	357.5	359	1.5	0.027	0.04	-60	Maverick
ML-506	357.9	363.4	5.5	0.024	0.13	-60	Maverick
ML-511	285.2	290.7	0.5	0.063	0.34	-90	Maverick
ML-512	271	275.5	4.5	0.04	0.18	-90	Maverick
ML-526	294.4	295.1	0.7	0.725	0.50	-90	Maverick
ML-529	273	278	5	0.026	0.12	-90	Maverick
ML-530	285.5	289	3.5	0.023	0.07	-90	Maverick
ML-531	287	288.5	1.5	0.033	0.05	-90	Maverick
ML-532	299.3	299.8	0.5	0.025	0.01	-90	Maverick
ML-533	281	283	2	0.239	0.47	-90	Maverick
ML-527	276.25	282.85	6.6	0.41	2.70	-90	Maverick 527
ML-132	277.6	279.8	2.2	0.156	0.34*	-90	Maverick 527
ML-132	285.2	287.5	2.3	0.37	0.85*	-90	Maverick 527
ML-134	283.5	288	4.5	0.106	0.48	-90	Maverick 527
ML-136	277.5	284.5	7	0.5	3.50	-90	Maverick 527
ML-101	276.4	283	6.6	1.53	10.10*	-90	Maverick 527
ML-104	275	278.5	0.09	3.5	0.32*	-90	Maverick 527
ML-106	285.1	289.6	4.5	0.402	1.81	-90	Maverick 527
Ml-102	278.5	280	1.25	0.225	0.28	-90	Maverick 527
ML-105	284.5	288.2	3.7	0.24	0.89*	-90	Maverick 527
ML-103	287	288	1	0.295	0.30	-90	Maverick 527

HOLE	FROM	TO	WIDTH (m) (core length)	GRADE (% U_3O_8)	GT (grade x thickness)	DIP	AREA
ML-124	291.5	292	0.5	0.411	0.21	-90	Maverick NEX
ML-128	288	290.5	2.5	0.109	0.27	-90	Maverick NEX
ML-513	334.5	335	0.5	0.085	0.04	-90	Maverick NEX
ML-514	313	313.5	0.5	0.017	0.00	-90	Maverick NEX
ML-519	377.5	378	6	0.028	0.16	-90	Maverick NEX
ML-520	431	434	3	0.024	0.07	-60	Maverick NEX
ML-107	323.5	326.5	3	0.052	0.16	-90	Maverick NE 525
ML-525	289.4	293.9	4.5	0.226	1.01	-60	Maverick NEX 525
ML-528	296.6	297.1	0.5	0.151	0.07	-60	Maverick NEX 525
ML-165	291.85	292.85	1	0.307*	0.31	-70	Esker
ML-169	287.25	288.75	1.5	0.07	0.11	-70	Esker
ML-813	265.8	270.3	4.5	0.019	0.08	-90	Nutana
ML-825	316	316.5	0.5	0.319	0.15	-90	Nutana
ML-707	386.8	390.3	3.5	0.01	0.04	-90	Avalon
ML-850	351.5	354.5	3.0	0.088	0.26	-90	Avalon
ML-809	245.6	246.6	1	0.034	0.03	-90	Puka Puka
ML-705	223	223.5	0.5	0.027	0.01	-90	Rarotonga
ML-702	326	327	1	0.031	0.03	-90	Venice

GT denoted with * indicates grade in e% U_3O_8 calculated from probe results.

11.0 SAMPLE PREPARATION, ANALYSIS AND SECURITY

The project is in the planning stages of exploration and as such, **Skyharbour has yet to collect any samples on the property**. The following describes the general procedures used by previous operators and were described in the various reports reviewed by the author and are considered by the author to be consistent with good industry practice.

The on-site geologist logged the core from each hole geologically and marked the samples to be taken. Once the sample intervals were identified, an exclusive sample number was assigned to each interval. This number and interval was annotated with indelible marker on the wooden core boxes and recorded. All of the selected sample intervals were split longitudinally, using a mechanical splitter, at the core logging facility. One half of the core was placed and sealed in a new plastic sample bag along with a printed sample tag corresponding to the sample number written on the core box. The other half of the core was re-assembled in the core box and stored in a covered storage rack for future reference. The mechanical splitter and sample collection pans were cleaned thoroughly with a brush between each sample. The individual sample bags are sealed into plastic pails and stored in a secure location on-site. Sample pails were transported to the analytical laboratories of the Saskatchewan Research Council (SRC) in Saskatoon, Saskatchewan under the direct supervision of personnel associated with the various companies.

Neither Kennecott or JNR inserted any blanks or standards of their own with the sample batches and instead relied on SRC's internal quality control which consists of two standards and on check analysis with every batch of 40 samples. (Cook, 2005). Denison has employed an extensive QA/QC program, including the systematic use of blanks and duplicates in the sample stream since 2007 (http://www.denisonmines.com/s/Quality_Control_Protocols.asp). Denison's QA/QC program is described in Appendix I.

All analyses were conducted by the SRC, a Standards Council of Canada (CCRMP) certified analytical laboratory. The SRC is certified and operates in accordance with ISO/IEC 17025:2005 (CAN-P-4E), General Requirements for the Competence of Mineral Testing and Calibration Laboratories. SRC has specialized in the field of uranium research and analysis for over 40 years and is Canada's only Canadian Nuclear Safety Commission (CNSC) licensed laboratory for the analysis of Uranium samples. SRC's sample processing and analytical procedures for U_3O_8 have evolved over the past 16 years, with general improvements and technical adjustments made to their procedures and equipment. The general procedure relating to U_3O_8 assay in Appendix II along with the SRC's current schedule of uranium related protocol and analytical services.

In addition to split core samples for uranium assay, two other types of samples were collected:

- Sandstone Composite – several representative (6 to 7 chips, 1-2 cm, each) chips of sandstone are taken throughout each 10-metre interval of sandstone core and sent for geochemical analysis.
- SWIR Samples – a representative chip of core from each 5 m interval in the sandstone and selected basement is collected for SWIR (Short Wave Infra Red) spectroscopy, which was performed in the field.

The geochemical samples sent to SRC were subjected to a variety of digestion methods and subsequently analysed using SRC's 60 element ICP package (including U_3O_8, major oxides and the major trace elements Cu, Ni, Pb, Co, Zn, As. Low levels of uranium (< 100 ppm) are determined by fluorimetry after partial (HNO3-HCL) and total (HF-HNO3- HCLO4) digestion and boron was determined by ICP analysis after Na2O fusion. Levels of uranium >100 ppm were analyzed by ICP after total and partial digestion, while uranium assays are obtained by ICP after Aqua Regia digestion. From the oxide analyses, the total percentages of clay, and relative amounts of illite, kaolinite and chlorite were calculated, as were ratios of Illite/Illite+Kaolinite [I/(I + K)].

The SWIR data was measured in the field by using an Integrated Spectronics PIMA II short wave infra red spectrometer. Once the representative spectra were collected, the results were processed through Integrated Spectronics' Pimaview 3.1 software and proportionate mixtures of clay species (and sub species) were determined. In the 2015 drilling program Denison switched to an ArcOptix Rocket FT-IR Spectrometer with Spectral interpretations performed by AusSpec International to determine proportionate mixtures of clay species and sub species . Since spectral data is quantitative rather than qualitative the use of a new method should make little difference in the results obtained.

12.0 DATA VERIFICATION

At this early stage of exploration on the property, no formal Quality Assurance/Quality Control (QA/QC) protocol has been established by the company.

The Author was not able to carry out any meaningful data verification on the core. In a NI 43-101 compliant report authored by B. Cook of Roscoe Postle and Associates in 2005 it was reported that; *"it was not practical to quarter split the split core so representative 8 cm to 10 cm samples were selected from six assayed intervals, from four different drill holes"* and the author at that time concluded the following *"While the SGS assays indicate uranium content in each of the six samples submitted, there is a significant variance with the original JNR assays in 5 of the 6 samples. The writer attributes this variance to the fact that the RPA samples are not duplicates (i.e. quartered samples of the original interval) but simply 8 cm to 10 cm portions of the original intervals"*.

During the field visit by this Author, another attempt was made to carry out data verification on high grade mineralized zones from ML-83, 97, 139 and 140. It was determined that no meaningful sampling method for data verification was available due to the generally friable nature of the original Maverick Zone mineralization and subsequent atmospheric degradation of the core over the decade since the holes were drilled.

13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

No studies have been carried out.

14.0 MINERAL RESOURCE ESTIMATES

No mineral resource estimates have been carried out.

15.0 ADJACENT PROPERTIES

No advanced exploration properties lie in the immediate vicinity of the Moore Lake project.

16.0 OTHER RELEVANT DATA AND INFORMATION

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

17.0 INTERPRETATIONS AND CONCLUSIONS

The Moore Lake Project is at an advanced stage of uranium exploration with extensive work having been carried out on numerous target areas property wide, but in particular on the Maverick Structural corridor. In the opinion of the Author, despite the large amount of work carried out to date, there still remains a great deal of exploration potential remaining on the project lands.

The main area of interest on the property is a significant northeast trending lithostructural corridor called the Maverick Structural Corridor, which in its entirely extends for a distance of over 3.2 km and hosts the Maverick Main and "527" zones as well as "525" Zone. Several other targets of interest are also located on the project lands including: the Nutana-West Venice-Venice lithostructural Corridor, Esker, Puka Puka–MLE, Avalon, Rarotonga and Vollhoffer areas.

The Maverick Zone manifests itself over a strike length of 230 metres at the southern end of the initial 2 km interval of the Maverick Structural Corridor and is comprised of two 7 to 15 metre wide mineralized lenses approximately 60 and 150 metres in length. The exact geometry of the mineralized zone is not yet defined. The zone is interpreted to be a sub-horizontal, ribbon-like zone, or series of such zones proximal to the Athabasca unconformity. It usually lies just below and extending below the unconformity for a few metres, but is not restricted to the basement stratigraphy. The mineralization is thought to be controlled by a sub-vertical to steeply dipping dextral strike-slip fault zone which in turn controls the main Maverick Structural

Corridor and which intersects the moderately dipping graphitic stratigraphy at an oblique angle. The depth to the Athabasca unconformity is at 275 metres and the sandstone column immediately overlying is intensely fractured and affected by intense de-silicification, bleaching and clay alteration or clay replacement for up to 140 metres above the unconformity. The basement rocks in turn are intensely bleached or clay replaced up to several metres below the unconformity along with sheared, brecciated and gouged intervals. The graphitic units are typically cordierite and pyrite bearing and generally only weakly altered except in localized intervals where the graphite has been so intensely altered that the crystal lattice of the graphite has been destroyed to form “carbonaceous matter”. The mineralization is commonly polymetallic with some of the be the better results illustrative of polymetallic mineralization including: ML-29 1.3 e% U3O8 over 7.5 m, with an individual 0.5 m sample that returned 7.91% U_3O_8, 3.65% Ni, 2.8% As, 1.6% Cu, 0.9% Co, 0.35% REE and 5.3g/t Ag.; ML-83 - 11.1 metres of 1.81% U_3O_8, including a 3.0 metres of 5.64% U_3O_8, 7.1% nickel and 2.55% cobalt and ML-100 which intersected 2% U_3O_8 over 7.75 metres, including 4.54% U_3O_8 and 3% nickel over 2.75 metres. The best uranium interval that was obtained was ML-61- 4.03 e% U_3O_8 over 10.0 m including 19.96 e% U_3O_8 over 1.4 m. The mineralization appears to be closed off to the southwest but some additional potential may exist for extensions of the mineralization to the northeast.

The Maverick “527” Zone lies 350 metres northeast of the main Maverick Zone. The zone is approximately ten to 15 metres wide and 60 metres long and is physically, geologically and geochemically very similar to the main Maverick Zone. Some of the better results from this zone included: ML-527 - 0.41% eU_3O_8 over 6.6 metres including a 1.0-metre intercept of 1.1% eU_3O_8 and ML-101, 1.53 per cent U_3O_8 /6.6 metres, including 2.22 per cent U_3O_8 over four metres. These intervals of mineralization were accompanied by highly anomalous Co, Cu, Ni and other pathfinder elements including B in the sandstone and basement rocks. There remains a possibility that the “527” Zone mineralization remains open to the northeast and southwest.

The Maverick NEX is an extension of the Maverick Structural corridor and is demarcated by a significant break in its conductive EM trend. It extends another 1.3 km to the Northeast and is characterized by three geophysically interpreted, northeast trending sub parallel conductors over a width of 450 metres with a notable magnetic low that lies immediately to the south. The drilling identified a series of moderately southeast dipping, graphitic conductors broadly correlating to the interpreted EM conductors. The conductors and their associated lithologies are locally structurally disrupted and clay altered and are anomalous in copper, lead, nickel, zinc, boron, vanadium and uranium. The sandstone column is likewise locally geochemically anomalous in pathfinder elements and has an illitic clay signature. Structural disruption, bleaching and desilicification variously affect the sandstone column. The zones of mineralization that have been identified to date on this target do not have a defined geometry and are of limited extent but it is anticipated that they would have the same physical characteristics as the Maverick Zone. The best mineralization obtained was from ML-525 which returned 0.226% U_3O_8 over 4.5 metres in the sandstone immediately above the unconformity. The geology and the associated mineralization found within target area is somewhat enigmatic, however significant potential for the discovery of economic mineralization exists for this target.

The Esker area covers an interpreted north-northwest trending shear zone extending from the northeast end of the currently known limits of the Maverick structural corridor. Historic drilling intersected geochemically anomalous and structurally disrupted sandstone and graphitic basement rocks and pitchblende mineralization (3070 ppm U/0.25 m). Follow up drilling by JNR and Denison confirmed these features over a minimum 300 metres of strike length and intersected anomalous levels of U, As, Pb, Cu and Ni in the basement. The sandstone column is likewise geochemically anomalous The best mineralization identified to date was 0.307 e% U_3O_8 over 1 metre just below the unconformity. Significant potential remains for this target.

The Nutana consists of three northeast trending, 3 km long conductors consisting of multiple graphitic horizons with varying degrees of structural disruption and alteration in the sandstone and basement. Anomalous clay and metal geochemistry (illite, B, U, Pb, Ni, As, V, Zn) was intersected in the basal sandstone and basement. The best result obtained was 0.319 % U_3O_8 / 0.5 m., was from a graphitic unit. Drilling on these targets has been relatively diffuse such that numerous prospective targets remain to be tested and significant potential remains.

The West Venice conductors consist of a series of east-north-east trending conductors with 3 km strike length cut by a significant east-west structural corridor. Drilling has intersected major intervals of graphitic pelitic rocks, post Athabasca faulting and significant hydrothermal alteration in the basement. The basal 30 to 60 m of the sandstone are typically strongly bleached, with evidence for strong movements of reducing fluids indicated by intense specular/secondary hematite alteration in the sandstone. The basal sandstone is illitic and anomalous in U in most of the holes. The basement rocks are frequently enriched in several of the pathfinders, U, B , Cu, Ni, Pb, As, V and Co. as well. No significant uranium mineralization has been identified to date, yet the positive geochemistry highlights significant exploration potential for the area.

The Venice area is comprised of three east-west trending conductors 2 to 3 km in length. Graphitic pelitic gneisses accompanied by post Athabasca brittle-ductile faulting and anomalous geochemistry were intersected along with U (up to 798 ppm), B (793 ppm), Pb, Ni, Cu, V, Mo, Co and Zn enrichment in the sandstone and graphitic pelites in of many of the holes. A mixed illitic-kaolinitic-chloritic sandstone geochemical signature is likewise prospective. No significant uranium mineralization has been identified, however significant exploration potential remains

The Puka Puka-MLE consists of two east west trending curvilinear conductors 1.5 km and 3 km in length. Highly anomalous B values (4280 ppm) and elevated radioactivity in the basement rocks of the Puka Puka and MLE were identified by drilling. Later work identified local vertical offsets and post Athabasca faults underlain by south dipping graphitic basement rocks that were frequently enriched in U (up to 380ppm) and corresponding Ni, Co, Cu, Pb, Zn, B, V, and Mo. No significant Uranium mineralization was identified except for 0.034% U_3O_8 over 1 metre from the central portion of the target. The positive geological structural and geochemical attributes of the area illustrate that significant potential remains for the target.

The Avalon conductor consists of a 4 km strong northeast trending feature. Strongly graphitic assemblages associated with significant post Athabasca faulting and variable amounts of hydrothermal alteration with prospective bleaching and illitic clay alteration were intersected. The sandstone alteration is relatively strong with significant amounts of strong bleaching and desilicification, especially near the unconformity. The basal sandstone in the central portion of the conductor is typically enriched in B (up to 1400 ppm), U (up to 10 ppm) and Illite as well as V, Ni and Pb locally and basement rocks in Co, Ni, V, Zn and U. Low grade uranium values were also obtained: 0.1% U_3O_8/3.5 m as were broad zones of radioactivity located 30 to 60 metres beneath the unconformity. The positive uranium exploration signature in conjunction with low grade mineralized zones illustrate that significant potential remains for the Avalon area.

The Rarotonga area is underlain by a series of multiple, potentially folded, 800 to 1,200 metre long conductors trending east-west and north-south. Multiple thrusts of weakly to moderately altered and locally faulted and brecciated graphitic pelitic gneiss units were intersected. Geochemical enrichment of the basement rocks is ubiquitous with significant Cu (up to 1420 ppm), Ni (up to 300 ppm) V, and Mo, along with weak uranium mineralization (448 ppm) in one hole. The area does have potential from a uranium exploration perspective, but is generally a weaker target than the others on the property.

At Vollhoffer a series of northeast trending conductors 800 to 2.5 km. in length. Broadly spaced drilling intersectedconductive graphitic lithologies and post Athabasca faulting, including unconformity offsets up to 25 metres. Desilicification and fracturing of the sandstone column accompanied elevated pathfinder geochemistry including Pb, Co, As, Mo, V, and Zn. The basement rocks were affected locally by brittle and brittle ductile faulting and were intermittently clay altered. The basement rocks were anomalous in pathfinder elements such as B (up to 680 ppm), Ni , V As, Co, Cu and Mo. The relative low density of drilling in addition to many positive mineralizing attributes indicates that this target has significant merit for additional exploration efforts.

Significant conductors on the Otter Grid (1.5 and 2.5 km in length) have yet to be drill tested and remain prospective targets for diamond drilling. In the area comprising the eastward extension of the Puka Puka MLE areas, conductors up to 1.5 km in length remain to be drill tested. Additionally, EM coverage on this eastward extension remains incomplete.

The Moore Lake Project is at an advanced stage of uranium exploration with extensive work carried out on numerous target areas property wide, but in particular on the Maverick Structural corridor. Despite this fact, there still remains a great deal of exploration potential, property-wide, remaining due to the most unique characteristic of an Athabasca uranium deposit, namely their extremely small footprint related to their high grades. There are a host of exploration targets found on the property which should be systematically explored as time permits, however at this point in Skyharbour's exploration efforts the company should restrict their exploration activities to the Maverick Structural Corridor.

There are no significant risks or uncertainties that would reasonably be expected to affect the information that has been collected to date on the property. Although the property is at an advanced stage of exploration it is still unknown what kind of success any future exploration programs may encounter .

18.0 RECOMMENDATIONS

The merits of the Moore Lake Property are, in the opinion of the author, sufficient to justify additional significant exploration expenditures on the property. In this light, the following exploration programs are warranted as illustrated in Table 5 and 6 and in the ensuing text. The programs will entail two phases of work, both consisting of diamond drilling, as sufficient geophysics has been completed on the property for the time being. The work will focus solely on the Maverick Structural Corridor.

Phase One Exploration Program

The Phase One program will consist of diamond drilling in its entirety, as sufficient geophysical data has been collected and interpreted to date. The budgetary requirements for the Phase One exploration program are listed in the following Table 5 with a total estimated cost of $600,000. The budget has been derived by utilizing the exploration costs that are the current industry norm expected in this part of the Athabasca Basin.

The program should consist of 2,500 metres of diamond drilling in 7 diamond drill holes and will focus on the Maverick Zone and the Maverick Structural corridor. The drilling should be based on a full appraisal of the current exploration data with special focus on structural geology in conjunction with geochemistry. This Phase One program should entail twinning one or two high grade holes in the Maverick Zone for the purpose confirming the character of the high grade mineralization. The remainder of the holes would focus on the expansion of the Maverick Main Zone to the northeast , expanding either end of the Maverick "527" zone and to drill testing of other high priority targets on the Maverick Corridor.

Table 5: Phase One Exploration Budget

Activity	Amount	Unit Cost	Total Cost
Diamond Drilling	2,500 metres, 7 holes	$180	$450,000
Geological Services	45 days	$800	$36,000
Geological Assistant	45 days	$300	$13,500
Accommodation	100 days	$180	$18,000
Travel, Transport	estimate		$15,143
Analysis	350 samples	$70	$24,500
Technical services, Reporting	estimate		$15,000
Contingency	@5%		$ 27,857
Total			**$600,000**

The Phase Two program will be contingent of the success of Phase One. The budgetary requirements for the Phase Two exploration program on the main exploration targets are listed in the following Table 6 for a total estimated cost of $600,000. As before, the budget has been derived by utilizing the current exploration costs that are currently expected in this part of the Athabasca Basin.

The program should consist of 2,500 metres of diamond drilling in 7 diamond drill holes and focus primarily on the Maverick Zone and the Maverick Structural corridor. The drilling should be based on a full appraisal of the current exploration data in relation to the new information collected in Phase One. This Phase two program should continue to focus on expansion of the Maverick Main Zone to the northeast , expansion of the Maverick “527” zone and drill testing of other high priority targets on the Maverick Corridor, including drilling of the Maverick NEX.

Table 6: Phase Two Exploration Budget

Activity	Amount	Unit Cost	Total Cost
Diamond Drilling	2,500 metres, 7 holes	$180	$450,000
Geological Services	45 days	$800	$ 36,000
Geological Assistant	45 days	$300	$13,500
Accomodation	100 days	$180	$18,000
Travel, Transport	estimate		$15,143
Analysis	350 samples	$70	$24,500
Technical services, Reporting	estimate		$ 15,000
Contingency	@5%		$ 27,857
Total			**$600,000**

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Certificate of Qualified Person (QP)
Dave Billard, B.Sc., P.Geo.

To Accompany the Report titled "Technical Report on the Moore Lake Property, Northern Saskatchewan, Canada", dated October 3, 2016 (the "Technical Report").

I, Dave Billard, B.Sc., P.Geo. of 115 Bottomley Avenue North, Saskatoon, Saskatchewan, Canada hereby certify that:

1. I am currently a consulting geologist, owner and President of Cypress Geoservices Ltd. a geoscientific consulting firm with offices at 60 - 158 2nd Avenue North, Saskatoon, Saskatchewan, Canada, S7K 2B2

2. I am a graduate of the University of Saskatchewan, having obtained the degree of Bachelor of Science -Advanced in Geology in 1983.

3. I have been continuously employed as a geologist since 1983. I worked with Cameco Corporation in Saskatchewan and the western U.S. from 1986 through 1998 and JNR Resources Inc. from 1999 to 2013, most recently as Vice President Exploration and Chief Operating Officer until JNR's acquisition by Denison Mines in January 2013.

4. I have been involved in mineral exploration for uranium, gold, copper, lead, zinc, and diamonds in Canada (Saskatchewan, British Columbia, Yukon, Newfoundland and Labrador) and the United States (Wyoming, Nebraska, Texas, South Dakota) at the grass roots to advanced exploration stage, including resource estimation for In-situ recoverable uranium deposits in the United States.

5. I am a member of the Association of Professional Engineers and Geoscientists of Saskatchewan (APEGS) and use the title of Professional Geoscientist (P.Geo.)

6. I have read the definition of "Qualified Person" set out in National Instrument 43-101 (NI43-101) 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" for the purposes of NI-43-101.

7. I am responsible for all of the items included in the report, including preparation, compilation of data and contents of the Report titled "*Technical Report on the Moore Lake Property, Northern Saskatchewan, Canada*".

8. I personally inspected the property and viewed drill core on the property on September, 27, 2016

9. I have had prior involvement with the property that is the subject of the Technical Report as Exploration Manager and Vice President Exploration for JNR Resources in the years 2000 through 2013. I have had no involvement since, with the exception of authoring this Technical Report.

10. I am independent of Skyharbour Resources Ltd. and Denison Mines Corp. and/or any other related company 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.

PROFESSIONAL GEOSCIENTIST
D.L. BILLARD
MEMBER 10372
16 10 03
YR. MN. DAY
SASKATCHEWAN

Glossary of Terms Used

$ – Dollar amount (Canadian Currency)
% – Percent
# - Number
‘ - Minutes
‘’ - Seconds
° - Degrees
°C – Degrees Celsius
> - greater than
< - less than
Ag – Silver
As - Arsenic
B - Boron
B.C. – British Columbia
Cameco – Cameco Corporation
CDN$ – Canadian dollar
cm - centimetres
Cu – Copper
Co. - Cobalt
Corp. -Corporation
DC – direct current
Denison Mines – Denison Mines Corporation
E - East
EM – Electromagnetic
et al. – And others
e%U_3O_8 - equivalent percent uranium oxide
ft –Feet
Fugro – Fugro Airborne Surveys Corp.
g - Gram
GA – Giga-annum (1 billion years)
GeoTEM – airborne TEM survey by Fugro
GPS – Global Positioning System
GSC – Geological Survey of Canada
GRAV – Gravimetric Analysis
ha – hectares (10,000 square metres)
HLEM – Horizontal Loop Electromagnetics
Hz – Hertz
Hwy - highway
in – Inch
Inc. - Incorporated
IP – Induced Polarization
ISO – International Standards Organization
IUC – International Uranium Corporation
JNR – JNR Resources Inc.
K - thousand
Kennecott – Kennecott Canada Exploration Corp.
KEX– Kennecott Canada Exploration Corp.
kg – Kilogram
km – Kilometers
km² – Kilometers Squared
lbs - pounds
line-km- Line kilometres
Ltd. – Limited
LOI – Letter of Intent
m – Meters
MA – mega-annum (1 million years)
Mag - Magnetics
MARS – Mineral Administration Regulations Saskatchewan
m/d – man-day
Mo – molybdenum
Mt – Million tonnes
N - North
NW – North-West
NE – North-East
NAD – North American Datum
NI – National Instrument
Ni - Nickel
NTS – National Topographic System
NSR – Net Smelter Return (royalty)
S - South
SE – South-east
SW – South-West
Sk. - Saskatchewan
SDMR – Saskatchewan Department of Mineral Resources
SEDAR – System for Electronic Document Analysis and Retrieval
SIR – Saskatchewan Industry and Resources

SMDC – Saskatchewan Mining Development Corporation
SMDI – Saskatchewan Mineral Deposit Index
SRC – Saskatchewan Research Council
t - short tons (imperial)
T - tonnes (metric)
the Author – Dave Billard, P.Geo
the Property – the Moore Lake Property
the Report –NI 43-101 Technical Report
TEM – Transient Electomagnetics
TURAM – early type of TEM survey
Pb – Lead
ppb – Parts per billion
ppm – Parts per million
P.Geo. – Professional Geoscientist
QA/QC – Quality Assurance and Quality Control
QC – Quality Control
QT – Qualifying Transaction
QP – Qualified person
Rad - Radiometric
Th - Thorium
UTEM - University of Toronto Time Domain EM
U - uranium
% U - percent uranium (% U x 1.179 = % U_3O_8)
U_3O_8- uranium oxide (yellowcake)
U_3O_8- percent uranium oxide (%U_3O_8 x 0.848 = % U)
Uranerz – Uranerz Energy Corp.
UTM – Universal Transverse Mercator
VLF – Very Low Frequency
W - West
WMTZ – Wollaston-Mudjatic Transition Zone
wt% – Weight percentage
Zn – Zinc
V- Vanadium

Appendix I

Denison Mines Corp. QA/QC Protocols

Exploration & Development

Quality Control Protocols

The following section details the Quality Assurance and Quality Control ("QA/QC") procedures and protocols for all exploration programs operated by Denison.

ATHABASCA EXPLORATION: SAMPLING, ANALYSIS AND DATA VERIFICATION

The following section details procedures and protocols for all Athabasca exploration programs operated by Denison in reference to downhole radiometric surveying, core sampling, sample preparation methods, analytical procedures and the Quality Assurance and Quality Control ("QA/QC") procedures.

Downhole Radiometric Probe Surveying

All drill holes are logged with a downhole radiometric probe to measure the natural gamma radiation, from which an initial indirect estimate of 'equivalent uranium' (eU_3O_8) can be made. The downhole probes are calibrated originally by the manufacturer at test pits with known mineralization in the United States. These probes are also regularly tested in the test pits at a government-owned facility in Saskatoon. In addition, Denison further calibrates the probes with a correlation curve of probe grades versus corresponding high-grade assays on split core as received from the laboratory. At the Wheeler River project, different probes are used depending on the observed grade of mineralization at the unconformity as the standard probes generally become saturated at grades above 20% U_3O_8. Data are typically logged at a speed of 10 m/min down hole and 15 m/min up hole through the drill rods.

Core Sampling, Sample Preparation and Assaying

Drill core samples are collected in the field at dedicated core logging and sampling facilities. The samples are logged, split, bagged and stored in pails for shipment to the laboratory. Because the mineralized drill cores are classified as hazardous materials and are regulated under requirements governing the transport of dangerous goods, Denison staff have been trained in the proper handling and transport of the cores and deliver them from the core facility directly to the laboratory without outside contact.

Denison submits drill core samples for chemical U_3O_8 assay for all mineralized intervals, where core recovery permits. All mineralized core is measured with a scintillometer by removing each piece of drill core from the ambient background, noting the most pertinent reproducible result in counts per second, and carefully returning it to its correct place in the core box. Any core registering over 500 cps is flagged for splitting and sent to the laboratory for assay. Early drill holes were sampled using variable intervals (0.2 m to 1.0 m) however all recent holes have been sampled using 0.5 metre lengths. Barren samples are taken to flank both ends of mineralized intersections, with flank sample lengths at least 0.5 metres on either end - this may be significantly more in areas with strong mineralization. All core samples are split with a hand splitter according to the sample intervals marked on the core. One-half of the core is returned to the core box for future reference and the other half is bagged, tagged, and sealed in a plastic bag. Bags of mineralized samples are sealed for shipping in metal or plastic pails depending on the radioactivity level. In addition, samples are routinely collected from mineralized intersections for bulk dry density determination as required for mineral resource estimation.

All drill core U_3O_8 assays are conducted by the Saskatchewan Research Council ("SRC") using ISO/IEC 17025:2005 accredited method for the determination of U_3O_8. wt%. The assay sample preparation and analytical procedures are as follows:

- Drill core samples are received by the analytical laboratory from Denison in sealed five-gallon plastic or metal pails. Each sample is contained in a sealed plastic bag with a sample tag. A packing slip is enclosed that contains

instructions and a sample number list. Samples are verified against the packing slip. Any extra samples or missing samples are noted and Denison is informed.
- Samples are sorted and processed according to location (sandstone or basement origin) and level of radioactivity
- Sample preparation includes drying, jaw crushing to 60% passing -2 millimetres and pulverizing to 90% passing -106 microns.
- The resultant pulp is digested using aqua-regia and the solution analyzed for U_3O_8 wt% using ICP-OES.

Three other types of drill core samples are collected during routine exploration, the results of which are used to prioritize drill holes for follow-up exploration or determine geochemical and/or alteration vectors toward mineralization, as follows:

1. Composite geochemical samples are collected over approximately 10 metre intervals in the upper Athabasca sandstone and in fresh lithologies beneath the unconformity (basement) and over 5 metre intervals in the basal sandstone and altered basement units. The samples consist of 1 cm to 2 cm disks of core collected at the top or bottom of each row of core in the box over the specified interval. Care is taken not to cross lithological contacts or stratigraphic boundaries. These samples are submitted to SRC for sample preparation and multi-element analysis. The same sample preparation procedures are used as described above for U_3O_8 assay samples. The pulps are analyzed using the ICPMS Exploration Package which includes a total digest (HF:HNO_3:$HClO_4$) and partial digest (HNO_3:HCLl) followed by ICP-MS analysis. Boron values are obtained through NaO_2/$NaCO_3$ fusion followed by ICP-OES.

2. Representative/systematic core disks (one to five centimetres in width) are collected at regular 5 metre to 10 metre intervals throughout the entire length of core until basement lithologies become unaltered. These samples are analyzed for clay minerals using reflectance spectroscopy. Samples for reflectance clay analyses are analyzed by Denison using a PIMA spectrometer or an ArcSpectro FT-NIR ROCKET spectrometer and sent to Rekasa Rocks Inc. (Rekasa) or AusSpec International Ltd. (AusSpec), respectively, for interpretation.

3. Select spot samples are collected from significant geological features (i.e. radiometric anomalies, structure, alteration etc.). Core disks 1 cm to 2 cm thick are collected for reflectance spectroscopy and split core samples are collected for geochemical analysis. The same reflectance spectrometry or geochemical procedures as described above are used.

These sampling types and approaches are typical of uranium exploration and definition drilling programs in the Athabasca Basin. Drill core handling and sampling protocols are in accordance with industry best practices. Once the diamond drill core is geologically logged but before sampling, the core is photographed and the core boxes are labeled with aluminum tags. After sampling, all core is stored in specially constructed core racks out of doors in the event the core needs to be re-logged or re-sampled in the future.

After the analyses are completed, analytical data are securely sent using electronic transmission of the results, by SRC to Denison. The electronic results are secured using WINZIP encryption and password protection. These results are provided as a series of Adobe PDF files containing the official analytical results and a Microsoft Excel spreadsheet file containing only the analytical results. Analytical data received from the lab is imported directly into Denison's local database. The data is subject to validation using triggers built into the local database to identify blank or standard assays that fall outside the accepted limits that require re-analysis. Field duplicates are validated using control charts. The laboratory is notified immediately of any problematic samples or batches and these are re-analyzed. Assay values that fall below the method detection limit (MDL) are reported by the lab as 'less than' values (<MDL). These values are automatically replaced by half MDL by the local database during import. The database is backed up on- and off-site every day.

QAQC

The SRC laboratory has an internal QAQC program dedicated to active evaluation and continual improvement in the internal quality management system. The laboratory is accredited by the Standards Council of Canada as an ISO/IEC 17025 Laboratory for Mineral Analysis Testing and is also accredited ISO/IEC 17025:2005 for the analysis of U_3O_8. The laboratory is licensed by the Canadian Nuclear Safety Commission (CNSC) for possession, transfer, import, export, use, and storage of designated nuclear substances by CNSC Licence Number 01784-1-09.3. As such, the laboratory is closely monitored and inspected by the CNSC for compliance. All analyses are conducted by SRC, which has specialized in the field of uranium research and analysis for over 30 years. SRC is an independent laboratory, and no associate, employee, officer, or director of Denison is, or ever has been, involved in any aspect of sample preparation or analysis on samples. The SRC uses a Laboratory Management System (LMS) for Quality Assurance. The LMS operates in accordance with ISO/IEC 17025:2005 (CAN-P-4E) "General Requirements for the Competence of Mineral Testing and Calibration Laboratories" and is also compliant to CAN-P-1579 "Guidelines for Mineral Analysis Testing Laboratories". The laboratory continues to participate in proficiency testing programs organized by CANMET (CCRMP/PTP-MAL).

The SRC routinely inserts standard reference materials and blanks into batches of the Company's samples as an internal check on accuracy and contamination. Quality control samples (reference materials, blanks, and duplicates) are included with each analytical run, based on the rack sizes associated with the method. Before the results leave the laboratory, the standards, blanks, and split replicates are checked for accuracy, and issued provided the senior scientist is fully satisfied. If for any reason there is a failure in an analysis, the sub-group affected will be re-analyzed, and checked again. A Corrective Action Report will be issued and the problem is investigated fully to ensure that any measures to prevent the re-occurrence can and will be taken. All human and analytical errors are, where possible, eliminated. If the laboratory suspects any bias, the samples are re-analyzed and corrective measures are taken.

Denison has developed several QA/QC procedures and protocols for all exploration projects to independently monitor laboratory performance which include the analysis of uranium standards, blanks, field duplicates and exploration standards, as follows:

Uranium Standards - Due to the radioactive nature of the standard material, insertion of the standard materials is preferable at SRC instead of in the field. During sample processing, the appropriate standard grade is determined, and an aliquot of the appropriate standard is inserted into the analytical stream for each batch of materials assayed. Uranium standards are typically inserted at a minimum rate of 1 in every 40 samples. For the Wheeler River project, Denison uses standards provided by Joint Venture partner Cameco for uranium assays. Six uranium assay standards have been prepared for use in monitoring the accuracy of uranium assays received from the laboratory. In addition, for each assay group, an aliquot of Cameco's blank material is also included in the sample run. In a run of 40 samples, at least one will consist of a Cameco standard and one will consist of a Cameco blank. Accuracy of the analyses and values obtained relative to the standard values, based on the analytical results of the six reference standards used, is acceptable for Mineral Resource estimates.

Blanks - Denison employs a lithological blank composed of quartzite to monitor the potential for contamination during sampling, processing, and analysis. The selected blank consists of a material that contains lower contents of U3O8 than the sample material but is still above the detection limit of the analytical process. Due to the sorting of the samples submitted for assay by SRC based on radioactivity, the blanks employed must be inserted by the SRC after this sorting takes place, in order to ensure that these materials are ubiquitous throughout the range of analytical grades. In effect, if the individual geologists were to submit these samples anonymously, they would invariably be relegated to the minimum radioactive grade level, preventing their inclusion in the higher radioactive grade analyses performed by SRC.

Field Duplicates - The Company regularly submits a variety of duplicate samples in the sample stream as a check on the precision of the analytical lab. Core duplicates are prepared by collecting a second sample of the same interval, through splitting the original sample, or other similar technique, and are submitted as an independent sample. Duplicates are typically submitted at a minimum rate of one per 20 samples in order to obtain a collection rate of 5%. The collection may be further tailored to reflect field variation in specific rock types or horizons.

Exploration Standards -- Denison has prepared three in-house 'exploration standards' to independently monitor laboratory performance during the processing of routine drill core exploration samples. These standards aim to test laboratory accuracy and precision for a variety of trace metals at low levels, as required for Athabasca uranium exploration.

In addition to the QAQC described above, Denison sends one in every 25 U_3O_8 assay samples to the SRC's Delayed Neutron Counting (DNC) laboratory, a separate facility located at SRC Analytical Laboratories in Saskatoon, to compare the uranium values using two different methods, by two separate laboratories. All radioactive samples are monitored and recorded as per CNSC licence 01784-1-09.0. Furthermore, down hole radiometric probe results provide equivalent uranium data (eU_3O_8) that is used internally by the Company for assessing the accuracy of the laboratory U_3O_8 results.

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Appendix II

Saskatchewan Research Council 2016 Services Schedule

(select portions related to Uranium analysis)

SASKATCHEWAN RESEARCH COUNCIL

Geoanalytical Laboratories

2016 Services Schedule

www.src.sk.ca







ISO/IEC 17025: 2005
Accredited Facility

Saskatchewan Research Council

Geoanalytical Laboratories Background

Saskatchewan Research Council has been in business for more than 60 years. Through those years SRC has seen many changes, but the driving force to help improve life in Saskatchewan has never changed.

In 1947 SRC was established as a treasury board Crown Corporation owned by the Province of Saskatchewan. The concept that science and technology could be an instrument to build a better life for Saskatchewan people was very attractive.

By the early 1970's SRC adopted a more client-centered approach to its work. Rather that structuring along academic discipline lines groups were restructured into sectorial units, thus in 1972 the Mining and Minerals Division came into being.

The Mining and Mineral Division of SRC can provide services from mineral exploration, to geochemical analysis and mineral processing.

Contact us to find out more.

The Geoanalytical Laboratories (The Laboratory) is continually expanding its facilities to match the growth in the exploration and mining industry sectors. The Laboratories has recently expanded its facilities in Saskatoon to include:

- A dedicated Uranium / Base Metal analysis laboratory
- Kimberlite Indicator Mineral (KIM) processing and recovery facility
- Radioactive sample preparation facility
- Macro and Micro Diamond Recovery facility
- Dense Media Separation (DMS) facility
- Potash preparation and analysis facility
- XRD and XRF facility
- Electron microprobe and QEMSCAN facility
- Petrographic services

Geoanalytical Laboratories strive to keep up with the growth in industry and the needs of our customers. We invite you to tour our lab to see what makes us stand out from the rest.

Locations and Contacts

Main Laboratory
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Facsimile: +1.306.933.5656
E-mail: geolab@src.sk.ca
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XRF Lead
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❖

Using this Fee Schedule

This fee schedule has been designed to provide all relevant information regarding sample processing at the SRC's Geoanalytical Laboratories. It also summarizes methods, procedures, quality control protocols used, and provides information and links for easy use. The layout of the Fee Schedule is broken into colour-coded sections: Sample Preparation, Exploration Geochemistry, Gold and Precious Metals, Diamond Services, Advanced Microanalysis Centre™, Mineral Processing, and Non-Routine Analyses.

This document is aimed toward exploration geoscientists to provide simple and effective analytical solutions (packages) specific to industry. It is advised that the requester discuss the proposed method for sample analysis or recovery with the Laboratory prior to analysis, so that the final results will be consistent with the objectives of the analytical program. For example, detection limits for some elements can be improved by using alternate methods, depending upon the nature and composition of the sample.

The diversity of services we offer goes well beyond the scope of this document. Highlighted in the fee schedule are routine methods or packages, which are most commonly used, and non-routine methods that are offered subject to availability. We are committed to providing a wide spectrum of services to the exploration and mining industries that are relevant, timely, and cost effective. It is our desire to provide services that are technically up to date, relevant, and worth your investment. Should you require services not listed in this fee schedule please feel free to contact the Laboratory for further assistance.

Pricing policy, liability and other conditions of services are located in the Terms and Conditions section at the end of this document.

Quality Assurance

Quality Management System

The quality management system at the Laboratory operates in accordance with ***ISO/IEC 17025:2005*** (CAN-P-4E), General Requirements for the Competence of Mineral Testing and Calibration Laboratories; and is also compliant to CAN-P-1579, Guidelines for Mineral Analysis Testing Laboratories. The management system and selected methods are accredited by the Standards Council of Canada (Scope of accreditation # 537).

The laboratory is assessed on a regular basis, both internally and externally, to ensure that it continues to meet these requirements. Contact the Laboratory for further information.

SCC Accredited LAB™

ISO/IEC 17025:2005
Accredited LAB
(Laboratory)
SCC Accreditation & Design Mark is an Official Mark of the Standards Council of Canada, used under licence.

Quality Policy:

"It is the purpose of the Management System at the Geoanalytical Laboratories of the Saskatchewan Research Council to provide a high standard of service to all its Customers through good professional practice and Top Management's commitment to quality: by continually assessing and improving the effectiveness of all aspects of the Management System with compliance to ISO/IEC 17025:2005 and CAN-P-1579."

Audit Program

As part of the laboratory's commitment to continually assess the effectiveness of the services it offers its customers, all processes are subject to internal, second party, and third party audits.

- All methods are internally audited by qualified personnel at least once a year.
- The laboratory may also be audited by customers for the processing of their samples on an unscheduled basis.
- The laboratory accreditation body (Standards Council of Canada) conducts regular surveillance audits of the accredited methods.

Quality Assurance Components

There are many components to the Quality Assurance Department at SRC Geoanalytical Laboratories; these reflect the minimum requirements of the ISO/IEC 17025/2005 Standard and include:

- Top management commitment
- Review of customer feedback
- Internal quality audits
- Personnel training and competence
- Supplier evaluations
- Quality Control (QC)
- Participation in proficiency and interlaboratory testing programs (certificates on website)
- Facility and equipment inspection and preventive maintenance
- Corrective and Preventive Action (CAPA) and a continual improvement program

Quality Control

The processes in the Laboratory ensure at least one QC measure is applied to each batch of samples to assure the quality of the results generated. These measures include: sample preparation QC checks; analysis of Certified Reference Material and/or in-house reference materials and standards; preparation and analysis of pulp duplicates, blanks, and replicates; traceable calibration standards for instrumentation; spiking of samples to monitor process recoveries; and QC monitoring.

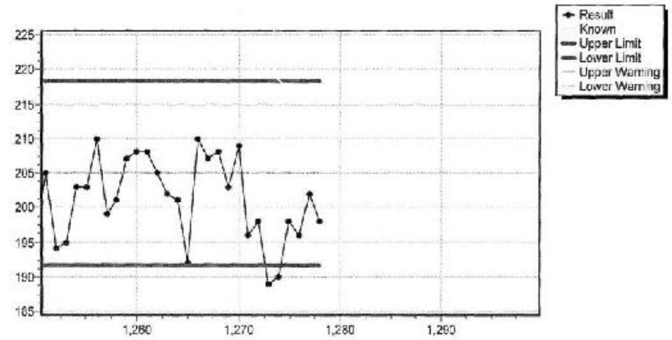
The quality control measures applied to all methods within The Laboratory have been established to ensure they are compliant with the requirements of **ISO/IEC 17025:2005**. The quality control measures which are applied may vary from method to method and are selected on their suitability.

All quality control measures applied at The Laboratory are checked by supervisory and/or quality assurance personnel prior to reporting results. If results are found to be outside quality control limits, actions are taken to ensure that the samples are reprocessed and the required quality limits are met.

Refer to the package/analysis description for a breakdown of specific QC protocol used in individual analyses. **Customers inserting their own quality control samples are advised to review The Laboratory's Quality Control Policy**.

Monitoring Quality

To ensure that the long term quality of each process is maintained the results from all quality control measures and internal quality control testing for each method is monitored.



Control charting is used to determine the continued suitability of the process and to monitor for bias within the results.

Slight changes in quality control results are continually analyzed to ensure that there are no underlying problems with the method and which may reduce confidence in the results.

Ethics and Security

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

High-Security Diamond Facility

The Diamond Services Laboratory has 24-hour video surveillance, independent security monitoring and audited security measures to protect our customers' interest.

Levels of security can be tailored to meet customer requirements, contact The Laboratory for find out more.

Code of Conduct and Ethics

SRC serves all its customers in a professional manner. A strict Code of Conduct and Ethics policy is enforced at SRC for both employees and subcontractors to ensure a high integrity service is applied to sample processing. Our goals relating to the highest level of ethical conduct and professionalism are based on the following principles:

- Honesty of Conduct
- Confidentiality
- Trading
- Outside Activities, Employment and Business Involvement
- Gifts, Entertainment
- Workplace Conduct
- Ownership of Intellectual Property and Records
- Privacy
- Conflict of Interest / Commitment
- Corporate Opportunities
- Political Activities
- Corporate Property
- Disclosure
- Information Technology

Laboratory Safety

Safety in the workplace is the over-riding priority at SRC

The different processes that are performed at the Geoanalytical Laboratories are strictly monitored to ensure the safety of personnel in that area. Depending on requirements, customers may be working on-site as part of a project. Our goal is to ensure that all personnel are given the required tools to keep them safe.

Safety Training

As with most laboratory environments, hazards pose a potential health and safety risk to personnel in the area. All personnel employed by The Laboratory, all subcontractors, and all on-site customers are informed of the potential hazards in The Laboratory and are provided with the appropriate personal protective equipment and training prior to entering hazardous areas. SRC promotes safety training and development programs for laboratory personnel.

Radiation Safety

SRC provides a Canadian Nuclear Safety Commission (CNSC) licensed facility for processing radioactive samples. In some areas of The Laboratory, additional radiation safety training is required as well as the provision of a personal dosimeter to monitor the exposure to radioactive materials. Personnel working at the radioactive sample preparation facility and laboratory are classified as Nuclear Energy Workers (NEW) and have their exposures closely monitored by regulatory agencies.

Transportation Safety

Select personnel at The Laboratory have training in the Transportation of Dangerous Goods (TDG). This skill is vital for the transport of hazardous materials for testing and the chemicals needed to process samples.

Monitoring Safety and Continual Improvement

The Laboratory has an active safety audit program and is also monitored by SRC and external bodies to ensure the continued safety of its employees and personnel on-site. Through audits and risk assessments, The Laboratory strives for continual safety improvements for all its processes.

Sample Preparation

Sample Shipment

Request for analysis forms are available on our website. Please ensure that all samples are clearly marked with waterproof ink.

Please identify matrix type of samples (e.g. sandstone or basement, etc.)

All international shipments must be clearly marked:
"Test samples for analysis. No commercial value."

Chain of Custody

If required, a chain of custody can be established with The Laboratory to ensure the integrity of sample handling. Please contact The Laboratory for further information or complete the Chain of Custody form available on our website.

Radioactive Shipments

Not only do samples arrive by transport from various parts of Canada but also from around the world. If you require information on the shipping of radioactive samples please contact us for the broker information.

The Laboratory is licensed by the Canadian Nuclear Safety Commission (CNSC) to receive, process, and store radioactive materials. Please contact The Laboratory for more information on our licensing.

Sampling Supplies

We purchase large quantities of sampling supplies and provide these to our customers at cost. Sampling supplies available are listed below:

- Plastic bags 6 mil 8 X 13
- Tyvek bags 5½ X 10½
- Plastic bags 6 mil 12 X 20
- Bar-coded sample tags*
- Plastic pails 5 gallon
- Pre-addressed shipping labels*
- Kraft paper bags
- Kimberlite bags one cubic metre (1.5 tonne capacity)

*Provided for your convenience at no charge.
Custom sample tags are available
Contact The Laboratory for prices for sampling supplies.

Email: geolab@src.sk.ca

Sample Preparation

Samples are prepared in facilities specifically designed for each method or process. Key preparation areas are separated from each other to reduce the possibility of cross matrix contamination:

- Sandstone preparation area
- Basement preparation area (low radioactivity)
- Radioactive preparation area (high radioactivity)
- Potash preparation area
- Kimberlite Indicator Mineral preparation area
- Diamond processing and recovery facility

The primary purpose of sample preparation is to produce homogeneous sub-samples that are representative of the material submitted to The Laboratory for analysis. Therefore, preparation is very important to obtaining quality, meaningful results from the analysis.

All samples received at the main lab will be checked upon receipt for radioactivity levels and sorted accordingly. Sample processing is dependent on radioactivity and will be automatically prepared according to defined SRC Geoanalytical Laboratories' procedures.

Sample Preparation Packages

Sandstone Rock / Core

Description	Code
Non-Radioactive - Crush, Split, Agate Grind	C/S/A
Non-Radioactive - Crush, Split, Mild steel Grind	C/S/G

Basement / Mineralized Rock / Core

Description	Code
Non-Radioactive - Crush, Split, Agate Grind	C/S/A
Non-Radioactive - Crush, Split, Mild Steel Grind	C/S/G
Radioactive – Crush, Split, Agate Grind* (low level RA ONLY)	RA/C/S/A
Radioactive – Crush, Split, Mild Steel Grind*	RA/C/S/G
*Radioactive Decontamination Costs (average 4 hours)	RA/DC

Soil and Sediment

Description	Code
Dry, Mortar, Sieve - 180µm	
Dry, Grind	
Wet Sieve - 106µm	
Roller pinning @ -2mm	

Other

Description	Code
Clay Separation Centrifuge	
Micro/Macro Diamond processing (See Page 40)	DIA
KIM processing	KIM2
Extra Split	

Exploration Geochemistry Packages

With over 40 years' experience in servicing the uranium exploration industry, SRC Geoanalytical Laboratories has put together analytical packages that meet the needs of its customers. Personnel at The Laboratory are available to discuss your unique exploration needs. Although founded on the Saskatchewan exploration model, our packages can be transferred to exploration programs around the world. If you would like to discuss your individual exploration needs or selection of packages please contact us.

A range of routine packages and individual analyses are available:

- Multi-element ICP-OES packages
- Multi-element ICP-MS packages
- U_3O_8 Assay (wt%)
- Potash Assay
- Whole Rock analysis (wt% and ppm)
- Rare Earth Element (REE) analysis (wt%)
- Fire Assay
- Carbon & Sulphur analysis (wt%)
- Lead Isotopes

Preparation techniques used at The Laboratory:

- Aqua Regia ($HCl:HNO_3$)
- Partial Digestion ($HNO_3:HCl$)
- Total Digestion ($HF:HNO_3:HClO_4$)
- Lithium Metaborate Fusion
- Special digestions (if required)

Both the aqua regia leach and the partial digestion will not dissolve all of the elements completely. Some elements such as Ag, As, Bi, Cd, Co, Cu, Hg, Mo, Mn, Ni, P, Pb, U, V, and Zn will be very "near" to total dissolution. Other elements are more refractory in nature and will only be partially dissolved.

The tri-acid digestion will completely dissolve most elements since the crystalline matrix of the sample is destroyed. Occluded minerals in the matrix are exposed and dissolved by the acids. Only those elements found in refractory minerals may not be dissolved.

Quality Control:

- In an average set of 40 samples there are at least 2 standards and 1 replicate pulp analysis. All QC results are entered into the Laboratory Information Management System (LIMS).
- The limits for the QC parameters are monitored and all samples which do not meet requirements are flagged for repeat preparation and analysis.
- All QC controls must pass before the results for the sample can be reported. QC results are contained in the final report.

Instruments used at The Laboratory:

- Perkin Elmer ICP-OES (models: Optima 4300DV, 5300DV, 8300DV)
- Perkin Elmer Sciex Elan DRC II ICP-MS
- Perkin Elmer Sciex NexION 300s
- Perkin Elmer Atomic Absorption Spectrometry (AAS)
- LECO Induction Furnace

The laboratory strives to meet your individual needs. Contact us if you require further assistance in the selection of packages or if you have any special requests.

Mulit-Element Uranium Exploration Package (code ICP1)

Total Digestion ICP-OES

Total digestions are performed on an aliquot of sample pulp for the analysis of the requested elements by ICP-OES. The aliquot is digested to dryness in a Teflon tube within a hot block digestion system using a mixture of concentrated HF:HNO_3:$HClO_4$. The residue is dissolved in dilute HNO_3.

Detection Limits

Element	Sandstone DL	Basement DL	Element	Sandstone DL	Basement DL
Al_2O_3	0.01%	0.01%	Nd	1ppm	1ppm
Ba	1ppm	1ppm	Ni	1ppm	1ppm
Be	0.2ppm	0.2ppm	Nb	1ppm	1ppm
Cd	0.2ppm	1ppm	P_2O_5	0.002%	0.01%
CaO	0.01%	0.01%	K_2O	0.002%	0.01%
Ce	1ppm	1ppm	Pr	1ppm	1ppm
Cr	1ppm	1ppm	Sm	0.5ppm	1ppm
Co	1ppm	1ppm	Sc	1ppm	1ppm
Cu	1ppm	1ppm	Ag	0.2ppm	0.2ppm
Dy	0.2ppm	0.2ppm	Na_2O	0.01%	0.01%
Er	0.2ppm	0.2ppm	Sr	1ppm	1ppm
Eu	0.2ppm	0.2ppm	Ta	1ppm	1ppm
Gd	0.5ppm	1ppm	Tb	0.3ppm	1ppm
Ga	1ppm	1ppm	Th	1ppm	1ppm
Hf	0.5ppm	1ppm	Sn	1ppm	1ppm
Ho	0.4ppm	1ppm	TiO_2	0.001%	0.01%
Fe_2O_3	0.01%	0.01%	W	1ppm	1ppm
La	1ppm	1ppm	U	2ppm	2ppm
Pb	1ppm	1ppm	V	1ppm	1ppm
Li	1ppm	1ppm	Yb	0.1ppm	0.1ppm
MgO	0.001%	0.01%	Y	1ppm	1ppm
MnO	0.001%	0.01%	Zn	1ppm	1ppm
Mo	1ppm	1ppm	Zr	1ppm	1ppm

Partial Digestion ICP-OES

Partial digestions are performed on an aliquot of sample for the analysis of the requested elements by ICP-OES. An aliquot of pulp is digested in a test tube in a mixture of HNO_3:HCl, in a hot water bath and then diluted using de-ionized water.

Detection Limits

Element	Sandstone DL	Basement DL	Element	Sandstone DL	Basement DL
As	0.2ppm	1ppm	Ni	0.1ppm	1ppm
Sb	0.2ppm	1ppm	Pb	0.02ppm	1ppm
Bi	0.2ppm	1ppm	Se	0.2ppm	1ppm
Co	0.1ppm	1ppm	Ag	0.1ppm	0.2ppm
Cu	0.1ppm	1ppm	Te	0.2ppm	1ppm
Ge	0.2ppm	1ppm	U	0.5ppm	1ppm
Hg	0.2ppm	1ppm	V	0.1ppm	1ppm
Mo	0.1ppm	1ppm	Zn	0.1ppm	1ppm

Multi-Element Exploration Package (code ICP4)

Total Digestion ICP-OES

Total digestions are performed on an aliquot of sample pulp for the analysis of the requested elements by ICP-OES. The aliquot is digested to dryness in a Teflon tube within a hot block digestion system using a mixture of concentrated $HF:HNO_3:HClO_4$. The residue is dissolved in dilute HNO_3.

Detection Limits

Element	Symbol	Basement DL	Element	Symbol	Basement DL
Aluminum	Al_2O_3	0.01%	Nickel	Ni	1ppm
Barium	Ba	1ppm	Niobium	Nb	1ppm
Beryllium	Be	0.2ppm	Phosphorous	P_2O_5	0.01%
Cadmium	Cd	1ppm	Potassium	K_2O	0.01%
Calcium	CaO	0.01%	Praseodymium	Pr	1ppm
Cerium	Ce	1ppm	Samarium	Sm	1ppm
Chromium	Cr	1ppm	Scandium	Sc	1ppm
Cobalt	Co	1ppm	Silver	Ag	0.2ppm
Copper	Cu	1ppm	Sodium	Na_2O	0.01%
Dysprosium	Dy	0.2ppm	Strontium	Sr	1ppm
Erbium	Er	0.2ppm	Sulphur	S	10ppm
Europium	Eu	0.2ppm	Tantalum	Ta	1ppm
Gadolinium	Gd	1ppm	Terbium	Tb	1ppm
Gallium	Ga	1ppm	Thorium	Th	1ppm
Hafnium	Hf	1ppm	Tin	Sn	1ppm
Holmium	Ho	1ppm	Titanium	TiO_2	0.01%
Iron	Fe_2O_3	0.01%	Tungsten	W	1ppm
Lanthanum	La	1ppm	Uranium	U	2ppm
Lead	Pb	1ppm	Vanadium	V	1ppm
Lithium	Li	1ppm	Ytterbium	Yb	0.1ppm
Magnesium	MgO	0.01%	Yttrium	Y	1ppm
Manganese	MnO	0.01%	Zinc	Zn	1ppm
Molybdenum	Mo	1ppm	Zirconium	Zr	1ppm
Neodymium	Nd	1ppm			

Aqua Regia Digestion ICP-OES

Partial digestions are performed on an aliquot of sample for the analysis of the requested elements by ICP-OES. An aliquot of pulp is digested in a test tube in a mixture of $HCl:HNO_3$, in a hot water bath and then diluted using de-ionized water.

Detection Limits

Element	Sandstone DL	Basement DL	Element	Sandstone DL	Basement DL
Arsenic	As	1ppm	Nickel	Ni	1ppm
Antimony	Sb	1ppm	Selenium	Se	1ppm
Bismuth	Bi	1ppm	Silver	Ag	0.2ppm
Cobalt	Co	1ppm	Sulphur	S	10ppm
Copper	Cu	1ppm	Tellurium	Te	1ppm
Germanium	Ge	1ppm	Uranium	U	1ppm
Lead	Pb	1ppm	Vanadium	V	1ppm
Mercury	Hg	1ppm	Zinc	Zn	1ppm
Molybdenum	Mo				

ICPMS Exploration Package

ICPMS Exploration Package

Generally samples analyzed by this package are non-radioactive, non-mineralized sandstones or basements.

Codes

Sandstone Exploration Package	**ICPMS1**
Basement Exploration Package	**ICPMS2**

The detection limits achievable by ICP-MS for sandstone samples are lower than that for regular ICP-OES analyses. A detection limit of at least 10 times more sensitivity than that from ICP-OES can be achieved for elements such as Cu, Ni, Pb, Zn, Co, V, As, Mo, and U. To aid in the sensitivity of the analysis, ultra-pure acids are used for the ICP-MS digestions. This ensures that the contamination for incompatible elements is reduced and leads to a greater sensitivity during analysis.

The package consists of three separate analyses:

- One ICP-MS analysis on the partial digestion
- One ICP-OES analysis for major and minor elements on the total digestion
- One ICP-MS analysis for trace elements on the total digestion

The ICP-MS detection limits for total analysis will include all elements except the following:
Al_2O_3, CaO, Fe_2O_3, K_2O, MgO, MnO, Na_2O, P_2O_5, TiO_2, Ba, Ce, Cr, La, Li, Sr, and Zr.
These elements will be analyzed only by ICP-OES on the total digestion.
As, Ge, Hg, Sb, Se, and Te will be done on the partial digestion only; these elements are not suited to the total digestion analysis.
In addition, the package includes several extra elements analyzed by ICP-MS on both the partial and total digestions:
Pb isotopes (204, 206, 207, and 208), Cs, and Rb.

Total Digestion

Total digestions are performed on an aliquot of sample pulp. The aliquot is digested to dryness in a Teflon tube within a hot block digestion system using a mixture of concentrated HF:HNO_3:$HClO_4$. The residue is dissolved in dilute HNO_3.

Partial Digestion

Partial digestions are performed on an aliquot of sample pulp. The aliquot is digested in a mixture of concentrated nitric: hydrochloric acid (HNO_3:HCl) in a test tube in a hot water bath, then diluted using de-ionized water.

Quality Control

The following quality control protocols are applied to the package:

- *Instrumental*: Two calibration blanks and two calibration standards.
- *Analytical*: One blank, two QC/QA standards and one replicate (pulp) are fused with each group of samples.

The in-house standards used to monitor the sample analysis are:

- ASR109
- ASR209

Total Digestion

Element	Sandstone DL	Basement DL	Element	Sandstone DL	Basement DL
Al_2O_3	*0.01%	*0.01%	MnO	*0.001%	*0.001%
Ba	*1ppm	*1ppm	Mo	0.02ppm	0.02ppm
Be	0.1ppm	0.1ppm	Nd	0.1ppm	0.1ppm
Bi	0.1ppm	0.1ppm	Ni	0.1ppm	0.1ppm
Cd	0.1ppm	0.1ppm	Nb	0.1ppm	0.1ppm
CaO	*0.01%	*0.01%	P_2O_5	*0.002%	*0.002%
Ce	*0.1ppm	*0.1ppm	K_2O	*0.002%	*0.002%
Cs	0.1ppm	0.1ppm	Pr	0.1ppm	0.1ppm
Cr	*1ppm	*1ppm	Rb	0.1ppm	0.1ppm
Co	0.02ppm	0.02ppm	Sm	0.1ppm	0.1ppm
Cu	0.1ppm	0.1ppm	Sc	0.1ppm	0.1ppm
Dy	0.02ppm	0.02ppm	Ag	0.02ppm	0.02ppm
Er	0.02ppm	0.02ppm	Na_2O	*0.01%	*0.01%
Eu	0.02ppm	0.02ppm	Sr	*1ppm	*1ppm
Gd	0.1ppm	0.1ppm	Ta	0.1ppm	0.1ppm
Ga	0.1ppm	0.1ppm	Tb	0.02ppm	0.02ppm
Hf	0.1ppm	0.1ppm	Th	0.02ppm	0.02ppm
Ho	0.02ppm	0.02ppm	Sn	0.02ppm	0.02ppm
Fe_2O_3	*0.01%	*0.01%	TiO_2	*0.001%	*0.001%
La	*1ppm	*1ppm	W	0.1ppm	0.1ppm
Pb	0.02ppm	0.02ppm	U	0.02ppm	0.02ppm
Pb_{204}	0.01ppm	0.01ppm	V	0.1ppm	0.1ppm
Pb_{206}	0.02ppm	0.02ppm	Yb	0.02ppm	0.02ppm
Pb_{207}	0.02ppm	0.02ppm	Y	0.1ppm	0.1ppm
Pb208	0.02ppm	0.02ppm	Zn	1ppm	1ppm
Li	*1ppm	*1ppm	Zr	*1ppm	*1ppm
MgO	*0.001%	*0.001%			

*Analysis carried out on ICP-OES

Partial Digestion

Element	DL ICPMS1 & 2	Element	DL ICPMS1 & 2	Element	DL ICPMS1 & 2
As	0.01ppm	Hf	0.01ppm	Se	0.1ppm
Ag	0.01ppm	Hg	0.01ppm	Sm	0.01ppm
Sb	0.01ppm	Ho	0.01ppm	Sn	0.01ppm
Be	0.01ppm	Mo	0.01ppm	Ta	0.01ppm
Bi	0.01ppm	Nb	0.01ppm	Tb	0.01ppm
Cd	0.01ppm	Nd	0.01ppm	Te	0.01ppm
Co	0.01ppm	Ni	0.01ppm	Th	0.01ppm
Cs	0.01ppm	Pb	0.02ppm	U	0.01ppm
Cu	0.01ppm	Pb_{204}	0.01ppm	V	0.1ppm
Dy	0.01ppm	Pb_{206}	0.02ppm	W	0.1ppm
Er	0.01ppm	Pb_{207}	0.02ppm	Y	0.01ppm
Eu	0.01ppm	Pb_{208}	0.02ppm	Yb	0.01ppm
Ga	0.01ppm	Pr	0.01ppm	Zn	0.1ppm
Gd	0.01ppm	Rb	0.01ppm	Zr	0.01ppm
Ge	0.01ppm	Sc	0.1ppm		

U3O8 Assay

U_3O_8 wt% Assay

This analyte may also be selected for high uranium samples as part of a comprehensive exploration package.

The laboratory also offers an ***ISO/IEC 17025:2005 accredited method*** for the determination of U_3O_8 wt% in geological samples. The U_3O_8 assay has been developed by The Laboratory to deliver quality assay results for the uranium industry. We are one of the few laboratories in the world that can provide this service.

	Detection Limit
U_3O_8	0.001 Wt%

Method Summary

An aliquot of sample pulp is digested in concentration $HCl:HNO_3$.
The digested volume is then made up to 100 mLs for analysis by ICP-OES.

Quality Control

QC measures and data verification procedures applied include the preparation and analysis of standards, duplicates, and blanks. The selection of standards is based on the radioactivity level of the samples to be analyzed. An additional certified Fe_2O_3 standard is analyzed to correct for interference of iron in the analysis. Instruments are recalibrated after every 20 samples; multiple standards are analyzed after and before each recalibration.

The standards used are:

- BL-4a (CANMET)
- BL-2a (CANMET)
- BL-5 (CANMET)
- SRC U02 (an in-house prepared standard)
- CUP-2 (CANMET)
- UHU-1 (an in-house prepared standard)

SCC Accredited LAB™

This method is ***ISO/IEC 17025:2005*** accredited by the Standards Council of Canada.

ISO/IEC 17025:2005
Accredited LAB
(Laboratory)
SCC Accreditation & Design Mark is an Official Mark of the Standards Council of Canada, used under licence.

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Additional Analyses

The following analyses may also be selected as part of a comprehensive exploration package:

Boron

Method Summary

An aliquot of pulp is fused in a mixture of $NaO_2/NaCO_3$ in a muffle oven. The fused melt is dissolved in DI Water. The fusion solution is analyzed by ICP-OES.

	Detection Limit
Boron	2 ppm

Quality Control

A blank, internal QC standards and one replicate are fused with each group of samples. Equipment calibration standards are made from a 1000 ppm B commercial certified solution.

Uranium by ICP-MS

Method Summary

Total Digestion

An aliquot of pulp sample is digested to dryness in a Teflon tube within a hot block digestion system using a mixture of concentrated $HF:HNO_3:HClO_4$. The residue is dissolved in dilute HNO_3.

Partial Digestion

An aliquot of pulp sample is digested in a mixture of concentrated nitric:hydrochloric acid ($HNO_3:HCl$) in a test tube in a hot water bath, then diluted using de-ionized water.

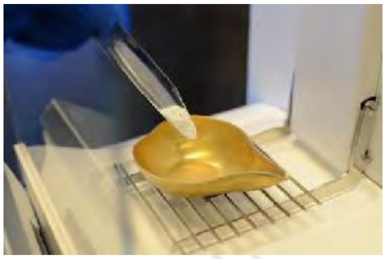
	Detection Limit
Uranium (Total)	0.01ppm
Uranium (Partial)	0.01ppm

Quality Control

In an average set of 40 samples there are at least 2 standards and 1 replicate pulp analysis. The limits for the QC parameters are monitored and all samples which do not meet requirements are flagged for repeat preparation and analysis. QC results are contained in the final report.

Codes
B
U-ICPMS1 (Total)
U-ICPMS2 (Partial)
U-ICPMS3 (Partial) when added to ICP1 or ICP4 Package
U-ICPMS4 (Total) when added to the ICP1 or ICP4 Package

In addition to our regular packages directed at the exploration industry, The Laboratory offers a further range of analyses that addresses specific project needs:



- Carbon (%) analysis (organic and inorganic)
- Sulphur (%) analysis
- Ferrous iron content
- Density measurements (pyknometer method, dry bulk, etc.)
- Loss on Ignition (LOI) and moisture determinations (wt%)
- Lead (Pb) isotope analysis ($_{208/206,\ 207/206,\ 206/204,\ 207/204,\ 208/204}$)

The Laboratory is always searching for new ways in which to serve its customers.

Please contact The Laboratory if you have any special requirements.

CODE	Element	Symbol	Method	Det. Limit
C%	Carbon**	C	LECO Induction Furnace	0.01%
FeO%	Ferrous Iron	FeO	HF/H_2SO_4 titration	0.1%
LOI%	Loss on Ignition	LOI	1000ºC	0.1%
OC%	Organic Carbon	C	LECO Induction Furnace	0.01%
DEN1	Density	DEN1	Pyknometer method	0.01
DEN2	Density	DEN2	Volume Displacement	0.01
DEN3	Density	DEN3	Dry Bulk method	0.01
DEN4	Density	DEN4	Wax & Oven Dry method	0.01
S%	Sulphur**	S	LECO Induction Furnace	0.01%
PbICPMS	Pb Isotopes Pb_{204}, Pb_{206}, Pb_{207}, Pb_{208}	PbISO	ICP-MS	*
*SRM 981 precision available upon request **Carbon and Sulphur (conbined)				

Whole Rock & Trace Element Analysis Package (WR/TR1)

Whole Rock* and Trace Element by Lithium Metaborate Fusion and ICP-OES and ICP-MS analysis

This package offers analysis of 13 analytes by ICP-OES and 48 analytes by ICP-MS. The Trace Element analysis can be carried out as a stand-alone analysis.

Method Summary

An aliquot of sample is fused with lithium metaborate in a graphite crucible. The bead is then dissolved in dilute HNO_3 for analysis by ICP-MS and ICP-OES.

Quality Control

QC measures and data verification procedures applied include the preparation and analysis of 3 standards, a replicate, and a blank.

This package includes Loss on Ignition (LOI).

Detection Limits

Lithium Metaborate Fusion by ICP-OES

Element	Symbol	Detection Limit	Element	Symbol	Detection Limit
Aluminium	Al_2O_3	0.01%	Potassium	K_2O	0.01%
Calcium	CaO	0.01%	Scandium	Sc	2ppm
Chromium	Cr	2ppm	Silica	SiO_2	0.1%
Iron	Fe_2O_3	0.01%	Sodium	Na_2O	0.01%
Magnesium	MgO	0.01%	Titanium	TiO_2	0.01%
Manganese	MnO	0.01%	Vanadium	V	2ppm
Phosphorous	P_2O_3	0.01%			

*This Whole Rock lithium metaborate fusion analysis forms part of the Whole Rock & Trace Element package.

Trace Elements by ICP-MS

Element	Symbol	Detection Limit	Element	Symbol	Detection Limit
Antimony	Sb	1ppm	Mercury	Hg	0.1ppm
Arsenic	As	0.1ppm	Molybdenum	Mo	0.1ppm
Barium	Ba	1ppm	Niobium	Nb	1ppm
Beryllium	Be	0.1ppm	Neodymium	Nd	0.1ppm
Bismuth	Bi	0.1ppm	Nickel	Ni	1ppm
Cadmium	Cd	0.1ppm	Praseodymium	Pr	0.01ppm
Cerium	Ce	1ppm	Rubidium	Rb	0.1ppm
Cesium	Cs	0.1ppm	Selenium	Se	1ppm
Cobalt	Co	0.1ppm	Samarium	Sm	0.01ppm
Copper	Cu	0.1ppm	Silver	Ag	0.1ppm
Dysprosium	Dy	0.01ppm	Strontium	Sr	1ppm
Erbium	Er	0.01ppm	Tantalum	Ta	0.01ppm
Europium	Eu	0.01ppm	Terbium	Tb	0.01ppm
Gadolinium	Gd	0.01ppm	Tellurium	Te	0.1ppm
Gallium	Ga	0.1ppm	Tin	Sn	0.1ppm
Germanium	Ge	0.1ppm	Thorium	Th	0.01ppm
Hafnium	Hf	0.1ppm	Thallium	Tl	0.01ppm
Holmium	Ho	0.01ppm	Thulium	Tm	0.01ppm
Lanthanum	La	1ppm	Tungsten	W	1ppm
Lead	Pb	0.02ppm	Uranium	U	0.01ppm
Lead204	Pb_{204}	0.01ppm	Ytterbium	Yb	0.01ppm
Lead206	Pb_{206}	0.02ppm	Yttrium	Y	0.01ppm
Lead207	Pb_{207}	0.02ppm	Zinc	Zn	1ppm
Lead208	Pb_{208}	0.02ppm	Zirconium	Zr	1ppm
Lutetium	Lu	0.01ppm			

Loss on Ignition (LOI)

An aliquot of pulp is heated to 1000^{o}C and the weight loss is calculated.

Detection Limit

	Detection Limit
Loss on Ignition (LOI)	0.1%

Ore Grade Rare Earth Element Trace Analysis (REE1)

Rare Earth Element Trace Analysis by Lithium Metaborate and ICP-OES Finish

This package offers 21 analytes and is designed for the analysis of refractory REE ores.

Method Summary

An aliquot of sample is fused with lithium metaborate in a graphite crucible. The bead is then dissolved in dilute HNO_3 for analysis by ICP-OES.

Quality Control

Quality control measures applied include the preparation and analysis of three standards, a replicate, and a blank.

Detection Limits

Element	Symbol	Detection Limit	Element	Symbol	Detection Limit
Cerium	Ce	0.002%	Neodymium	Nd	0.002%
Dysprosium	Dy	0.002%	Praseodymium	Pr	0.002%
Erbium	Er	0.002%	Samarium	Sm	0.002%
Europium	Eu	0.002%	Scandium	Sc	0.002%
Gadolinium	Gd	0.002%	Terbium	Tb	0.002%
Gallium	Ga	0.002%	Thorium	Th	0.002%
Hafnium	Hf	0.002%	Thulium	Tm	0.002%
Holmium	Ho	0.002%	Uranium	U	0.002%
Lanthanum	La	0.002%	Ytterbium	Yb	0.002%
Lutetium	Lu	0.002%	Yttrium	Y	0.002%
Niobium	Nb	0.002%			

Trace Grade Rare Earth Analysis (REE2)

Method Summary
An aliquot of sample is fused with lithium metaborate in a graphite crucible. The bead is then dissolved in dilute HNO_3 for analysis by ICP-MS.

Quality Control
Quality control measures applied include the preparation and analysis of three standards, a replicate, and a blank.

Detection Limits

Element	Symbol	Detection Limit	Element	Symbol	Detection Limit
Cerium	Ce	1ppm	Praseodymium	Pr	0.01ppm
Dysprosium	Dy	0.01ppm	Samarium	Sm	0.01ppm
Erbium	Er	0.01ppm	Tantalum	Ta	0.01ppm
Europium	Eu	0.01ppm	Terbium	Tb	0.01ppm
Gadolinium	Gd	0.01ppm	Thorium	Th	0.01ppm
Holmium	Ho	0.01ppm	Thallium	Tl	0.01ppm
Lanthanum	La	1ppm	Thulium	Tm	0.01ppm
Lutetium	Lu	0.01ppm	Uranium	U	0.01ppm
Niobium	Nb	1ppm	Ytterbium	Yb	0.01ppm
Neodymium	Nd	0.1ppm	Yttrium	Y	0.01ppm

Additional Analysis
The following addition analyte may be selected as part of a comprehensive package:

Scandium by Whole Rock Fusion and ICP-OES
An aliquot of sample is fused with lithium metaborate in a graphite crucible. The bead is then dissolved in dilute HNO_3 for analysis by ICP-OES.

Detection Limit

Element	Symbol	Detection Limit
Scandium	Sc	2ppm

Whole Rock Analysis (WR1)

Whole Rock Analysis by Lithium Metaborate Fusion and ICP-OES

This package offers a total rock analysis for 16 analytes.

Method Summary

An aliquot of sample is fused with lithium metaborate in a graphite crucible. The bead is then dissolved in dilute HNO_3 for analysis by ICP-OES.

Detection Limits

Element	Symbol	Detection Limit	Element	Symbol	Detection Limit
Aluminium	Al_2O_3	0.01%	Potassium	K_2O	0.01%
Barium	Ba	2ppm	Scandium	Sc	2ppm
Calcium	CaO	0.01%	Silica	SiO_2	0.1%
Chromium	Cr	2ppm	Sodium	Na_2O	0.01%
Iron	Fe_2O_3	0.01%	Strontium	Sr	2ppm
Magnesium	MgO	0.01%	Titanium	TiO_2	0.01%
Manganese	MnO	0.01%	Yttrium	Y	2ppm
Phosphorous	P_2O_3	0.01%	Zirconium	Zr	2ppm