

**TECHNICAL REPORT  
FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA**

**CLAIMS MC00016570, MC00014061, MC00015063,  
MC00015180, S-110194, S-110195, S-111681,  
S-111770, S-113294, S-113296, & S-113298**

**SASKATCHEWAN, CANADA**

NTS 74H/02 & 74H/03  
NAD83 UTM Zone 13N

**REPORT #: 2223.3139.NSM**

PREPARED FOR:

**NORTH SHORE ENERGY METALS LTD.**

666 BARRARD ST. #1700,  
VANCOUVER, BC, V6C 2X8

AND:

**CLOVER LEAF CAPITAL CORPORATION**

1 – 15782 MARINE DRIVE,  
WHITE ROCK, BC, V4B 1E6

PREPARED BY:

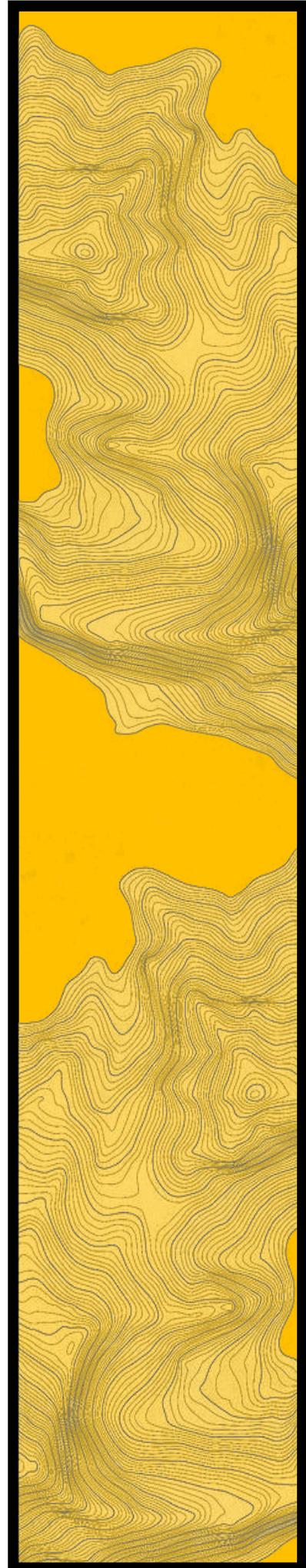
**AXIOM EXPLORATION GROUP LTD.**

SUITE 101 - 3239 FAITHFULL AVENUE  
SASKATOON, SK, CANADA



Effective Date: August 31<sup>st</sup>, 2023

TROY MARFLEET, P.GEO.  
KIMBERLEY HALPIN, M.Sc., G.I.T.





## **DISCLAIMER**

This Technical Report (as defined herein) was prepared by Axiom Exploration Group Ltd. (Axiom). The quality of information, conclusions, and estimates contained herein are consistent with the level of effort involved in Axiom's services based on

- i. information available at the time of preparation
- ii. data supplied by outside sources, and
- iii. the assumptions, conditions, and qualifications set forth in this Technical Report

This Technical Report is intended to be used by North Shore Energy Metals Ltd. (North Shore, or the Company) and Clover Leaf Capital Corporation (Clover Leaf), subject to the terms and conditions of its contract with Axiom. This contract permits North Shore and Clover Leaf to use this Technical Report for its purposes. This contract permits the TSX Venture Exchange to use this Technical Report for the Listing process.

## **CAUTION REGARDING FORWARD-LOOKING STATEMENTS**

Certain statements contained in this Technical Report may constitute "forward-looking information" and "forward-looking statements" within the meaning of applicable securities laws (collectively, "Forward-Looking Statements"), which relate to expectations about future events. All statements other than statements of historical fact are Forward-Looking Statements. The use of any of the words "anticipate", "plan", "contemplate", "continue", "estimate", "expect", "intend", "propose", "might", "may", "will", "shall", "project", "should", "could", "would", "believe", "predict", "forecast", "target", "aim", "pursue", "potential", "objective" and "capable" and the negative of these terms or other similar expressions are generally indicative of Forward-Looking Statements. These statements involve known and unknown risks, uncertainties and other factors that may cause actual results or events to differ materially from those anticipated in such Forward-Looking Statements. No assurance can be given that these expectations will prove to be correct and such Forward-Looking Statements should not be unduly relied on. These statements speak only as of the effective date of this Technical Report. In addition, this Technical Report may contain Forward-Looking Statements attributed to third-party sources.

Any Forward-Looking Statements included in this Technical Report are expressly qualified in their entirety by this cautionary statement and are made as of the effective date of this Technical Report. The Company does not undertake any obligation to update or revise any Forward-Looking Statements to reflect any new information, estimates or opinions, future events, or results or otherwise, except as required by applicable securities laws.



## **TABLE OF CONTENTS**

1.	Summary.....	1
1.1.	Introduction .....	1
1.2.	Property Description and Ownership .....	2
1.3.	Accessibility, Climate, Local Resources and Physiography .....	2
1.4.	Geology and Mineralization .....	3
1.5.	Exploration Status .....	3
1.6.	Mineral Resource and Mineral Reserve Estimates .....	4
1.7.	Interpretations and Conclusions .....	4
1.8.	Recommendations .....	4
2.	Introduction .....	5
2.1.	Introduction .....	5
2.2.	Terms of Reference.....	5
2.3.	Purpose of the Report .....	5
2.4.	Sources of Information .....	5
2.5.	Site Visit & Personal Inspection.....	5
2.6.	Qualified Persons & Authors .....	6
2.7.	Report Terminology.....	7
3.	Reliance On Other Experts.....	8
4.	Property Description & Location .....	9
4.1.	Crown Mineral Rights .....	10
4.2.	Agreements and Royalties .....	13
4.3.	Environmental Liabilities.....	15
5.	Accessibility, Climate, Physiography, Local Resources & Infrastructure .....	16
5.1.	Accessibility.....	16
5.2.	Climate.....	16
5.3.	Physiography .....	16
5.4.	Local Resources .....	17
5.5.	Infrastructure .....	17
5.6.	Local Stakeholders.....	18
6.	History.....	19
6.1.	Prior Ownership .....	19
6.2.	Previous Work.....	20
6.3.	Summary of Previous Work.....	22
6.4.	Historical Mineral Resource & Mineral Reserve Estimates .....	46



6.5.	Historical Production .....	46
7.	Geological Setting & Mineralization .....	47
7.1.	Regional Geology .....	47
7.2.	Local Geology .....	49
7.3.	Property Geology .....	50
7.4.	Geological Cross-Sections .....	51
7.5.	Showings and Mineralization .....	51
7.6.	Structure .....	53
7.7.	Metamorphism & Alteration .....	54
7.8.	Quaternary Geology .....	55
8.	Deposit Types .....	55
9.	Exploration .....	57
9.1.	Condor Geophysical Assessment and Interpretation .....	57
9.2.	Geophysical Target Model.....	61
9.3.	North Shore Xcalibur Airborne Geophysical Survey .....	65
9.4.	Condor Initial Geophysical Assessment and Interpretation of Data Related to Skyharbour Option Claims .....	73
10.	Drilling .....	75
11.	Sample Preparation, Analyses, and Security .....	76
12.	Data Verification .....	76
13.	Mineral Processing and Metallurgical Testing.....	78
14.	Mineral Resource Estimates.....	78
15.	Mineral Reserve Estimates.....	78
16.	Mining Methods .....	78
17.	Recovery Methods .....	79
18.	Project Infrastructure .....	79
19.	Market Studies and Contracts .....	79
20.	Environmental Studies, Permitting and Social or Community Impact.....	79
21.	Capital and Operating Costs.....	79
22.	Economic Analysis .....	79
23.	Adjacent Properties .....	80
23.1.	Skyharbour Resources Ltd. – Tisdale Clean Energy South Falcon East Project 80	
23.2.	Valor Resources - Hook Lake Project .....	81
23.3.	Baselode Energy - ACKIO Discovery.....	83
23.4.	92 Energy Ltd. - Gemini Mineralized Zone .....	84



24. Other Relevant Data and Information .....	85
25. Interpretation and Conclusions .....	85
25.1. Potential Risks .....	86
26. Recommendations .....	87
27. References .....	90
28. Date & Signatures .....	95
29. Statements of Certification.....	96
Troy Marfleet – Certificate of Qualified Person.....	96
30. Consent of Qualified Person.....	97

## **LIST OF FIGURES**

Figure 1-1: Location of the Falcon Property.....	1
Figure 2-1: Photograph of the Falcon Project. ....	6
Figure 4-1: Location of the Falcon Claims in relation to La Ronge, Saskatchewan. ....	11
Figure 4-2: Location of the Falcon Property Mineral Dispositions. ....	13
Figure 5-1: Infrastructure in the vicinity of the Falcon Project. ....	17
Figure 5-2: Location of First Nations Reserves relative to the Falcon Property.....	18
Figure 6-1: Sketch Map from AR 74H03-0009.....	23
Figure 6-2: AGIP Mapping of Zone D (Adapted from 74A14-0034).....	25
Figure 6-3: Symbols used in Figure 6-2 (From 74A14-0034).....	26
Figure 6-4: AGIP DDH locations on Grid D (Adapted from AR 74A14-0035). ....	28
Figure 6-5: Location of radioactive Boulders on the Falcon Property.....	30
Figure 6-6: Compilation Map of the Grid D area by AGIP. ....	32
Figure 6-7: Legend and Symbols from Figure 6-6. ....	33
Figure 6-8: Geology of Showing #3 mapped by AGIP. ....	34
Figure 6-9: AGIP Compilation Map of the Big Sandy Lake Grid.....	37
Figure 6-10: Map showing outlines of the 2006 and 2007 Airborne Surveys.....	39
Figure 6-11: Drill Locations from 1979, 1981, and 2008 on the Falcon Property.....	40
Figure 6-12: Total Divergence Conductive Zones Identified on the Hook Lake Property .....	42
Figure 6-13: Total Magnetic Intensity & Conductive Zones of the Hook Lake Survey Block....	43
Figure 6-14: Skyharbour airborne survey flight plan. From Billard (2022).. ....	44
Figure 6-15: Skyharbour airborne survey magnetic intensity. From Billard (2022).. ....	45



Figure 6-16: Skyharbour airborne survey enhanced GDD Fourier domain with interpreted structures. From Billard (2022).....	46
Figure 7-1: Regional Geological Setting of the Falcon Project. ....	48
Figure 7-2: Geology of the Falcon Claims .....	51
Figure 7-3: SMDI Locations on the Falcon Claims.....	52
Figure 9-1: Extent of VTEM and ZTEM surveys relative to the Falcon Property. ....	58
Figure 9-2: The linepath for the VTEM survey and the Falcon inversion Area of Interest.....	59
Figure 9-3: Targets Identified on the Falcon Property by Condor (Peterson et al., 2022).....	63
Figure 9-4: Target zones in the north portion of the Falcon Claims.....	64
Figure 9-5: Target zones in the central portion of the Falcon claims.....	64
Figure 9-6: Target Zones in the southern portion of the Falcon Claims.....	65
Figure 9-7: Falcon Survey Area Flight Plan. ....	66
Figure 9-8: Final Digital Terrain Model of the Falcon area (referenced to the EGM96 Geoid). 68	
Figure 9-9: Depth to Basement Interpretation (Earthfield, 2023).....	70
Figure 9-10: Magnetic Reduction to the Pole (Earthfield, 2023)).....	70
Figure 9-11: Radiometric Total Count (Earthfield, 2023).....	71
Figure 9-12: Radiometric – Uranium Concentrations (Earthfield, 2023). ....	71
Figure 9-13: Lineament Density (Earthfield, 2023).....	72
Figure 9-14: Intersection Density (Earthfield, 2023).....	72
Figure 9-15: Uranium Target Map (Earthfield, 2023). ....	73
Figure 9-16: EM conductor picks with survey grid background and the Saskatchewan Geological Survey (SGS) conductor axes. (Moul, 2023) .....	74
Figure 9-17: TMI-RTP from the 2006 and 2007 surveys with conductor picks. (Moul, 2023) ..	75
Figure 12-1: Location of samples collected during the Axiom site visit.....	77
Figure 12-2:Troy Marfleet, QP, testing for radioactivity at the “D Zone” Outcrop.....	78
Figure 23-1: Location of Select Exploration Projects in the Falcon Project Area. (Adapted from SMAD). ....	80
Figure 23-2: Sample Results from the Hook Lake Property (Skyharbour, August 31, 2021). ..	82

## **LIST OF TABLES**

Table 2-1: Report Terminology .....	7
Table 4-1: Disposition Information .....	9
Table 4-2: Summary of the Major Terms of the South Falcon Option .....	14
Table 6-1: Summary of Historic Exploration on the Falcon Project .....	21
Table 6-2: Grab samples collected from Zone D by AGIP in 1978.....	24
Table 6-3: Grab Samples from Boulder Field 02 (From AR 74A14-0043) .....	36
Table 7-1: Anomalous Samples from SMDI 2455 (AR MAW00345) .....	53
Table 7-2: Anomalous Boulders on Skyharbour Option Claims .....	53
Table 9-1: VTEM System Specifications.....	60
Table 9-2: Acquisition and Processing Sampling Rates of the 2013 Geophysical Survey.....	60
Table 9-3: Description of the Target Zones Identified on the Falcon Property (Peterson et al., 2022).....	62
Table 9-4: Survey Polygon Coordinates (WGS84 UTM Zone 13N) .....	67
Table 26-1: Proposed Exploration Budget for the Falcon Property .....	88

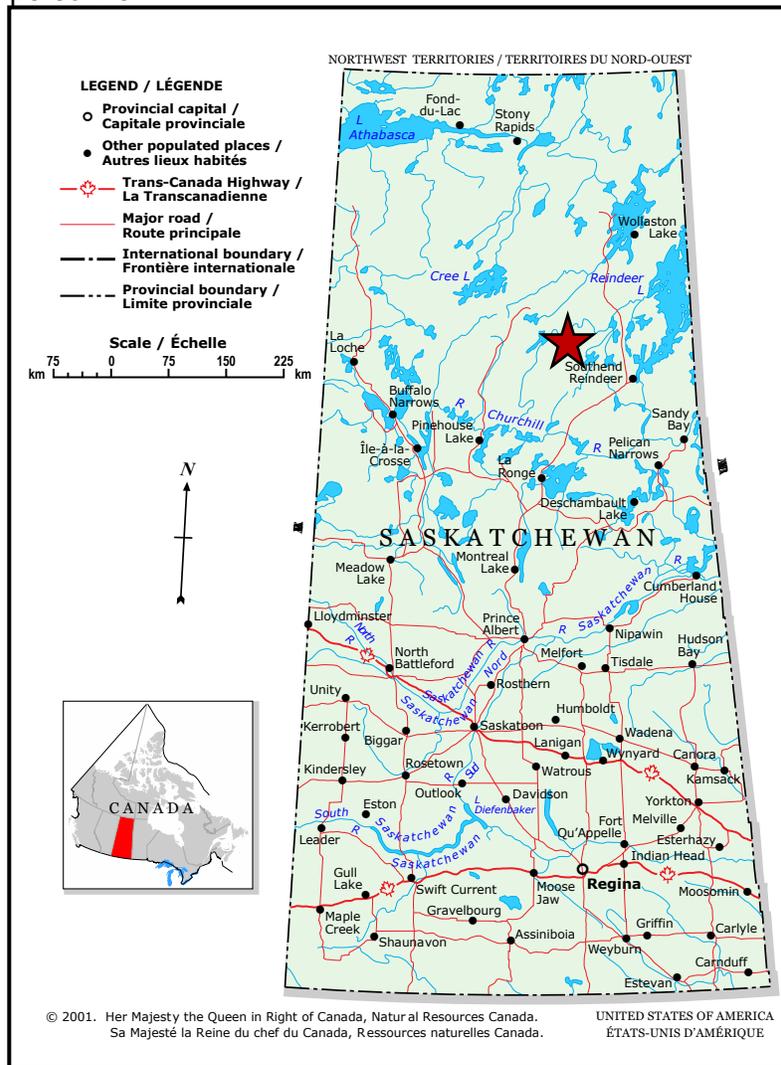




## 1. SUMMARY

### 1.1. INTRODUCTION

Axiom Exploration Group Limited (Axiom) was engaged by North Shore Energy Metals Ltd. to prepare an independent Technical Report compliant with National Instrument 43-101 on the Falcon Project (Falcon, the Project, or the Property), located in northern Saskatchewan, Canada. The report was written with the effective date of January 13<sup>th</sup>, 2023. In May of 2023, North Shore increased the size of the project by eleven claims through an option agreement. This report is an amended version of the previous report that contains information about the new claims. The report will be utilized by North Shore and Clover Leaf. The Falcon Property is located approximately 220 km north of La Ronge, Saskatchewan. This report is based on the information provided by North Shore, publicly available data, and information collected from the site visit by Axiom personnel.



**Figure 1-1: Location of the Falcon Property.**

General location of the claims is shown by the red star (NRC, 2001).



North Shore is an exploration company located in Vancouver, British Columbia, with a focus on the uranium potential of the Athabasca Basin and its importance in the future of energy security. Clover Leaf is a Capital Pool Company. On December 19, 2022, North Shore and Clover Leaf entered into a binding definitive share exchange agreement (the “Definitive Agreement”). Under the Definitive Agreement, Clover Leaf will acquire 100 per cent of the outstanding North Shore common shares from the North Shore shareholders in exchange for the issuance of one common share of Clover Leaf for each outstanding share of North Shore. The closing of the transactions contemplated in the Definitive Agreement will result in the reverse takeover of Clover Leaf by North Shore. Following closing, North Shore will be a wholly-owned subsidiary of Clover Leaf, and Clover Leaf shall continue to conduct business under the name “North Shore Uranium Ltd.”

This Technical Report has been completed under the requirements of disclosure as per the Canadian Securities Laws and National Instrument 43-101 Standards of Disclosure for Mineral Projects (NI 43-101) for use by North Shore and for use by Clover Leaf.

## **1.2. PROPERTY DESCRIPTION AND OWNERSHIP**

---

The Falcon Project consists of 15 contiguous Saskatchewan Mineral Dispositions. Four of the Mineral Dispositions were acquired in April 2022: MC00015506, MC00015508, MC0015528, and MC00015529, which total 12,791.41 ha in size (the 100%-owned Claims). These claims are currently held 100% by North Shore and are all in good standing at the time of this report. Eleven of the Mineral Dispositions are subject to the May 29, 2023, South Falcon Option Agreement (the South Falcon Option) between North Shore, and Skyharbour Resources Ltd. (Skyharbour): MC00016570, MC00014061, MC00015063, MC00015180, S-110194, S-110195, S-111681, S-111770, S-113294, S-113296, S-113298 (the Skyharbour Option Claims).

Clover Leaf will acquire 100 per cent of the outstanding North Shore common shares from the North Shore shareholders as per the Definitive Agreement outlined in Section 1.1.

## **1.3. ACCESSIBILITY, CLIMATE, LOCAL RESOURCES AND PHYSIOGRAPHY**

---

The Falcon Property is located approximately 220 km north of La Ronge, Saskatchewan, and approximately 25 km southeast of Key Lake, Saskatchewan. The Property lies approximately 100 km west of Provincial Highway 905. The old Key Lake winter road, which connected the Key Lake mine site with a point on Highway 905, passes within a few kilometers of the northern extent of the property (Newson, 2008). The area can be accessed year-round by helicopter or fixed-wing aircraft.

The climate in the area can be classified as a sub-arctic climate, Köppen climate classification Dfc (Beck et al., 2018). The region experiences cold winters and moderate to cool summers. The project area is typically ice free from May to November, although some work can proceed year-round if utilizing appropriately winterized equipment.

The Falcon Project is located within the Boreal Shield Ecozone and is covered by shield-type boreal forest which consists mainly of pine and spruce with sporadic aspen. Topography is typically subdued and in low-lying areas peatlands are common. Throughout the region there are numerous ponds, lakes, streams, and rivers of various sizes (SCDC, 2014).



## 1.4. GEOLOGY AND MINERALIZATION

---

The Falcon Project is located in the Wollaston Domain of the southeastern Hearne Province, which forms part of the Western Churchill Structural Province. The project is located approximately 30 km from the margin of the Athabasca Basin, which hosts several world class uranium deposits.

SMDI 2455, which lies along the boundary between claims MC00015180 & MC00015506, consists of a 250 m by 10 m zone of anomalous radioactivity first identified as “Zone D” by AGIP. The uranium-pyrite-molybdenite mineralization occurs in fractures, veins and localized breccias in a meta-arkose host rock. The grab samples collected by AGIP from a sheared vein at this showing assayed between 841 ppm and 1.26% U. SMDI 5038, known as the EWA showing, where one grab sample collected at the site returned 0.492% U<sub>3</sub>O<sub>8</sub> and 1,300 ppm lead, is located along the boundary between claims S-113296 and S-113294. Three additional showings warrant mention. SMDI 2456, known as the Geicke River Radiometric Boulder Fan, is located along the boundary between claims MC00015180 and S-111770. SMDI 1014, the Knob Lake radioactive pegmatite and uranothorite boulder, is located on claim S-113298. SMDI 2020, the Big Sandy Radioactive Boulder Fan is located on claim S-110194.

## 1.5. EXPLORATION STATUS

---

The Falcon Property is an early-stage prospect with a limited exploration history. The majority of the exploration on the 100%-owned Claims area occurred in the late 1970's and early 1980's when a joint venture between AGIP and SMDC identified “Zone D”, which now corresponds with SMDI No. 2455. Drilling of this showing failed to intersect any significant mineralization but the drill logs record several graphitic zones, pegmatites, and structures. The Skyharbour Option Claims were also explored in the 1970's and early 1980's.

The most recent exploration in the project area consists of airborne geophysical surveys and a drill program conducted on the Skyharbour Option Claims. The first modern airborne geophysical surveys were flown in 2006 & 2007 by JNR Resources (JNR) and Star Uranium respectively and were heli-borne VTEM surveys which covered a most of the claim area. In 2013, Prescient Mining completed a heli-borne ZTEM surveys which identified several areas of interest. Follow-up work related to the 2006 survey consisted of a drill program conducted by JNR related to features identified from interpretation of the geophysical survey. Follow-up work was recommended for the 2007 and 2013 surveys, but no drilling related to the surveys was recorded.

An airborne gravity, magnetics, and radiometric survey covering the four 100%-owned Claims block at a 200 m line spacing that was commissioned by North Shore was flown in October of 2022. An airborne gravity, magnetics, and radiometric survey covering nine of the eleven Skyharbour Option Claims block at a 200m line spacing commissioned by Skyharbour was flown in June of 2022. Analysis and reinterpretation of the 2006, 2007, 2013 and 2022 airborne geophysical survey data by North Shore is ongoing.



## **1.6. MINERAL RESOURCE AND MINERAL RESERVE ESTIMATES**

---

No mineral resource or mineral reserve estimate has been completed for the Falcon Property.

## **1.7. INTERPRETATIONS AND CONCLUSIONS**

---

The Falcon Project is an early stage, greenfields project which has seen intermittent uranium exploration since the 1960's. The most recent work in the project area consists of airborne geophysical surveys and a 2008 drill program; some of the follow-up work from these surveys that was recommended was never completed. Additional geophysical work, consisting of interpretation of data from the recent airborne surveys covering most of the property, is ongoing.

The Falcon Property has the potential to contain either unconformity-associated uranium mineralization, basement-hosted mineralization, or pegmatite-hosted uranium mineralization, as these types of mineralization have been identified in the surrounding region. Additional mapping and prospecting of the property may help determine the type of mineralization present in the project area and assist in appropriately planning future exploration.

Overall, considering the geology of the region and the historical data available, the Falcon Project merits additional exploration. Any proposed exploration is dependent on funding, permitting, contractor availability, and any other reasons an exploration program may be delayed.

## **1.8. RECOMMENDATIONS**

---

Further exploration is recommended on the Falcon Property. Any targets identified by the 2022 airborne surveys or the reinterpretation of the 2006, 2007, and 2013 airborne surveys should be examined; additional detailed ground geophysics may be required in these areas. Prospecting and geological mapping of these prospective areas should be completed to further refine the geology, with particular attention paid to areas of anomalous radioactivity, graphitic pelites, pegmatites, and the mapping of structural features.

The existing historical exploration data should be compiled, digitized, and analyzed to help guide future exploration work. Outcrop samples should be collected from the "D showing", and other prospective areas for litho geochemistry. As other showings in the region contain anomalous REE in addition to the U, adding REE analysis to the assay package should be considered. Ultimately, drill testing of any identified targets may be required.



## **2. INTRODUCTION**

---

### **2.1. INTRODUCTION**

---

This report summarizes the exploration work performed on the Falcon Property. Axiom Exploration was contracted by North Shore to write a National Instrument 43-101 (NI 43-101) Technical Report on the Falcon Property. Axiom is a Saskatoon, Saskatchewan based Geological, Geophysical, and Environmental Consulting Company.

North Shore is an exploration company located in Vancouver, British Columbia with a focus on the uranium potential of the Athabasca Basin and its importance in the future of energy security. Clover Leaf is a Capital Pool Company located in White Rock, British Columbia.

### **2.2. TERMS OF REFERENCE**

---

Brooke Clements, President of North Shore, requested that Axiom review the Falcon Project and prepare a technical summary for the property. This technical report has been prepared under the guidelines of Canadian National Instrument 43-101 (NI 43-101).

All currencies are in Canadian dollars and measurements are in metric units, unless otherwise stated.

### **2.3. PURPOSE OF THE REPORT**

---

The purpose of this report is to submit an independent technical evaluation of the exploration potential of the Falcon Project and to summarize the available data used to formulate this assessment. This technical report will be used by North Shore and Clover Leaf as fulfillment of part of the Exchange Initial Listing Requirements: Tier 2 Mining Issuer.

### **2.4. SOURCES OF INFORMATION**

---

All interpretations and conclusions for this report are derived from:

- Historical prospecting, geophysical and geochemical exploration programs as documented in Assessment Reports submitted to the Government of Saskatchewan.
- Unpublished internal reports provided by North Shore.
- Geophysical interpretations completed by Condor North Consulting ULC (Condor) and Earthfield Technology LLC (Earthfield).
- Publicly available geological journal articles, maps, news releases, and similar sources.
- The site visit was completed by Axiom personnel.

### **2.5. SITE VISIT & PERSONAL INSPECTION**

---

A site visit to the Falcon Property was made by Mr. Troy Marfleet, P.Geo., of Axiom between October 3<sup>rd</sup>, 2022, and October 5<sup>th</sup>, 2022, on behalf of North Shore. The site visit to the Falcon Property included prospecting of the historical "Zone D showing" outcrop to confirm its location falls within the southern extent of North Shore claim boundaries. A handheld scintillometer was

used to confirm the anomalous radioactivity described in historical reports. Three (3) outcrop samples of the “Zone D showing” were collected to confirm anomalous radioactivity. Results from the SRC analysis showed background values of Uranium and a maximum value of 0.02% Thorium.



**Figure 2-1: Photograph of the Falcon Project.**

## **2.6. QUALIFIED PERSONS & AUTHORS**

---

The Qualified Person for this report is Mr. Troy Marfleet, P.Geo. with Ms. Kimberley Halpin, M.Sc., G.I.T. as co-author.

The authors' Statement of Qualification can be found in Section 29.



## 2.7. REPORT TERMINOLOGY

Common Terminology to be utilized in this report are listed in Table 2-1:

**Table 2-1: Report Terminology**

Term	Definition
ha	Hectare
NTS	National Topographic Sheet
ppm	Parts per million
ppb	Parts per billion
NSR	Net Smelter Returns
CRM	Certified Reference Material
U	Uranium
Au	Gold
Cu	Copper
Ni	Nickel
Co	Cobalt
As	Arsenic
REE	Rare Earth Elements
TREO	Total Rare Earth Oxide
Fe	Iron
Pt	Platinum
Pb	Lead
km	Kilometers
m	Meters
cm	Centimeters
mm	Millimeters
g	Grams
MARS	Mineral Administration Registry Saskatchewan
SMAD	Saskatchewan Mineral Assessment Database
SMDI	Saskatchewan Mineral Deposit Index
AR	Assessment Report
SGS	Saskatchewan Geological Survey
GSC	Geological Survey of Canada
DDH	Diamond Drill Hole



### **3. RELIANCE ON OTHER EXPERTS**

---

This Technical Report is based on publicly available geological data, historical reports, as well as a site visit by Axiom Group personnel.



## 4. PROPERTY DESCRIPTION & LOCATION

The Falcon Project consists of a contiguous claim block comprising 15 Saskatchewan Mineral Dispositions which total 55,698.20 ha in size (Table 4-1). At the time of writing, the following four claims are owned 100% by North Shore Energy Metals Ltd.: MC00015506, MC00015508, MC00015528, MC00015529. The remaining eleven claims are subject to the South Falcon Option.

The Falcon Property is located within NAD83 UTM Zone 13N on National Topographic Sheet (NTS) 74H/02 and 74H/03, approximately 220 km north of La Ronge, Saskatchewan (Figure 4-1). The center of the Property lies at approximately latitude 57° 12' N and longitude 105° 10' W.

**Table 4-1: Disposition Information**

Disposition Number	Owner	Effective Date	Good to Date	Status	Area (Ha)
MC00015506	North Shore Energy Metals Ltd. 100%	2021-10-04	2024-01-02	Active	2,666.23
MC00015508	North Shore Energy Metals Ltd. 100%	2021-10-04	2024-01-02	Active	2,924.01
MC00015528	North Shore Energy Metals Ltd. 100%	2021-10-04	2024-01-02	Active	3,014.70
MC00015529	North Shore Energy Metals Ltd. 100%	2021-10-04	2024-01-02	Active	4,186.47
MC00016570	Skyharbour Resources Ltd., North Shore Option	2020-06-18	2025-09-15	Active	1,002.30
MC00014061	Skyharbour Resources Ltd., North Shore Option	2020-06-18	2025-09-16	Active	2,421.16
MC00015063	Skyharbour Resources Ltd., North Shore Option	2021-09-09	2023-12-08	Active	5,723.49
MC00015180	Skyharbour Resources Ltd., North Shore Option	2021-09-21	2023-12-20	Active	4,948.57
S-110194	Skyharbour Resources Ltd., North Shore Option	2006-10-11	2029-11-28	Active	4,554
S-110195	Skyharbour Resources Ltd., North Shore Option	2006-10-11	2024-11-28	Active	4,142
S-111681	Skyharbour Resources Ltd., North Shore Option	2010-06-14	2025-08-15	Active	4,320
S-111770	Skyharbour Resources Ltd., North Shore Option	2010-06-14	2025-08-15	Active	4,810
S-113294	Skyharbour Resources Ltd., North Shore Option	2006-08-31	2024-11-29	Active	3,863.81
S-113296	Skyharbour Resources Ltd., North Shore Option	2006-08-31	2026-11-29	Active	3,844.99
S-113298	Skyharbour Resources Ltd., North Shore Option	2006-10-17	2024-01-15	Active	3,277.23



## **4.1. CROWN MINERAL RIGHTS**

---

In Canada, natural mineral resources fall under provincial jurisdiction. All mineral resource rights in the Province of Saskatchewan are governed by The Crown Minerals Act (C-50.2) and The Mineral Tenure Registry Regulations, 2012 (C-50.2 Reg 27), that are administered by the Saskatchewan Ministry of Energy and Resources. Mineral rights are owned by the Crown and are distinct from surface rights.

### **4.1.1. CROWN RESERVES**

---

Crown reserves in Saskatchewan are defined as areas in which Crown minerals are not available for dispositions, including oil and gas leases, potash leases or mineral claims.

Typically, Crown reserves are established to prevent conflicts in resource development and to minimize possible interference between mineral disposition activity and future land use.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

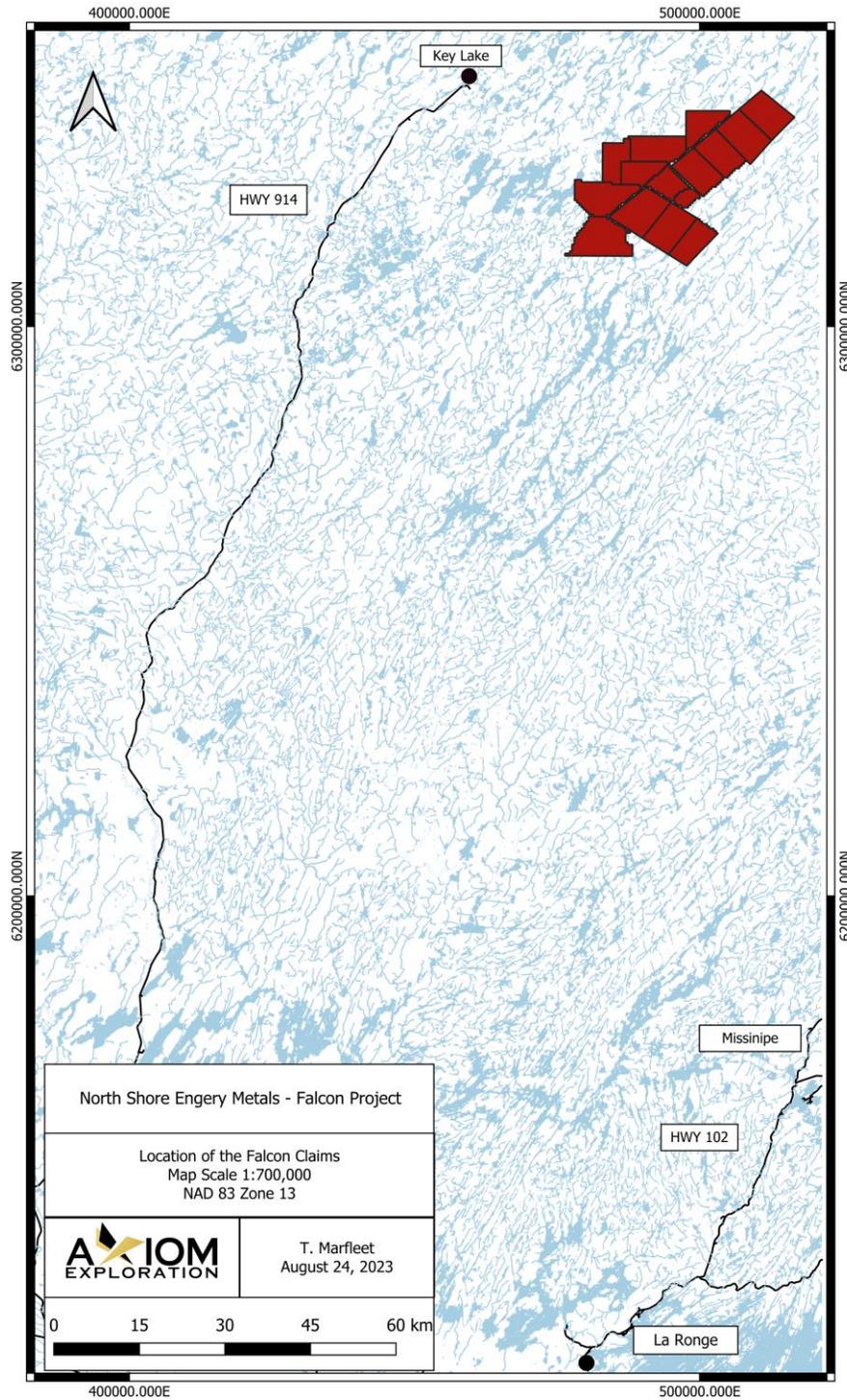


Figure 4-1: Location of the Falcon Claims in relation to La Ronge, Saskatchewan.

Claim location shown in red.

#### **4.1.2. MINERAL CLAIMS (DISPOSITIONS)**

---

Subject to existing legislation, a claim is a defined area where the holder of the claim has the exclusive rights to explore and prospect for the minerals within the claim area and to convert any portion or the entire claim into a lease or into leases. A claim may be held for two years, initially, and thereafter from year to year being subject to the holder spending the required amounts in exploration operations on the claim lands.

To maintain mineral claims in good standing in the Province of Saskatchewan, the claim holder must undertake prescribed minimum exploration work on an annual basis. The current requirements state that \$15/ha per year for claims that have existed for 10 years or less and \$25/ha per year for claims that have existed more than 10 years.

A total of eight dispositions pertaining to this report were recorded in 2020, 2021 or 2023 and are therefore subject to the minimum work requirement of \$15/ha per year, seven dispositions were recorded over ten years ago and are subject to a minimum work requirement of \$25/ha per year (Table 4-1).

#### **4.1.3. MINERAL LEASES**

---

Mineral claims in good standing may be converted to mineral lease(s) upon application. Mineral leases allow for mineral extraction, are subject to 10-year terms, and they are renewable.

#### **4.1.4. SURFACE LEASES**

---

Surface leases are required for any facilities constructed in support of mineral extraction and have a 33-year maximum term and which are also renewable.

#### **4.1.5. FALCON PROPERTY CLAIMS**

---

As of December 6<sup>th</sup>, 2012, mineral dispositions are defined as electronic mineral claim parcels within the Mineral Administration Registry System (MARS) using a Geographical Information System (GIS). MARS is a web based and publicly accessible electronic tenure system for applications, issuances, and administration of mineral claims, permits, and leases. The following information is based on the data from MARS.

The Falcon Property consists of a total of 15 Saskatchewan Mineral Dispositions (Figure 4-2). The claims cover an area of 55,698.96 hectares, which, at the time of writing, are either owned 100% by North Shore Energy Metals Ltd. or subject to the South Falcon Option and are currently in good standing. North Shore does not have surface rights associated with the mineral claims that comprise the Property.

#### **4.1.6. PERMIT REQUIREMENTS**

---

To conduct exploration activities on Crown land in Saskatchewan permits will be required before work can begin. The permits required will depend on the specific activities included in the proposed exploration program. The drill program proposed on the Falcon Property will require a surface disturbance permit from the Saskatchewan Ministry of Environment, including, but not



limited to, an Aquatic Habitat Protection permit, a Work Authorization permit, a Temporary Work Camp permit, and a Temporary Water Rights License for Industrial Water Use.

To the author's knowledge there are two active permits for the Falcon Project. Work Authorization 22-13-M0180 covers low-impact exploration activities on North Shore's four 100%-owned claims. The permit expires on August 31, 2023, and North Shore has applied for an extension. Work Authorization 22-14-M0113, held by Skyharbour, covers helicopter-assisted diamond drilling and a temporary work camp on the Skyharbour Option Claims. The permit expires on June 30, 2024.

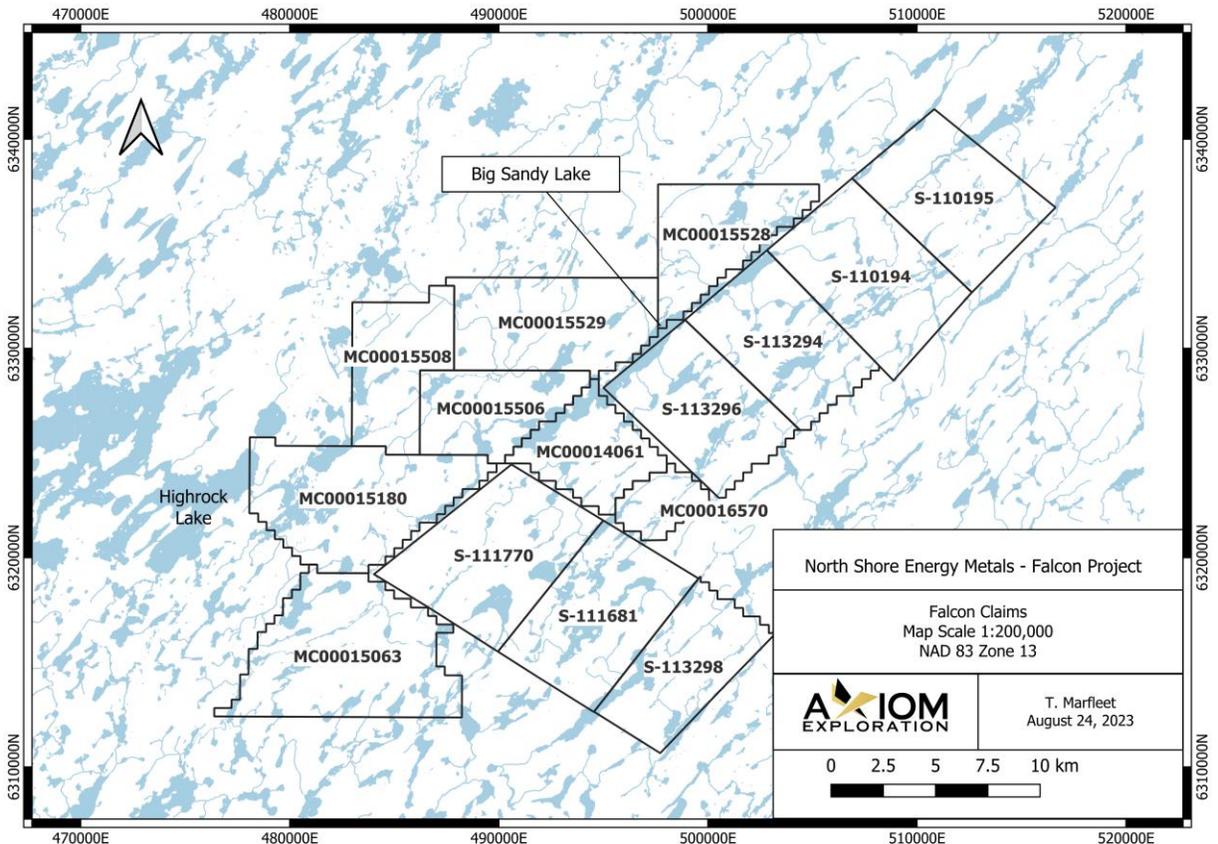


Figure 4-2: Location of the Falcon Property Mineral Dispositions.

## 4.2. AGREEMENTS AND ROYALTIES

### 4.2.1. DEFINITIVE SHARE EXCHANGE AGREEMENT WITH CLOVER LEAF

On December 19, 2022, North Shore and Clover Leaf entered into a binding definitive share exchange agreement (the "Definitive Agreement"). Under the Definitive Agreement, Clover Leaf will acquire 100 per cent of the outstanding North Shore common shares from the North Shore shareholders in exchange for the issuance of one common share of Clover Leaf for each outstanding share of North Shore. The closing of the transactions contemplated by the Definitive Agreement will result in the reverse takeover of Clover Leaf by North Shore. Following closing,



North Shore will be a wholly-owned subsidiary of Clover Leaf, and Clover Leaf shall continue to conduct business under the name “North Shore Uranium Ltd.”

#### **4.2.2. FALCON PROPERTY OPTION AGREEMENT**

Four of the claims comprising the Falcon property are subject to an option agreement, dated April 14<sup>th</sup>, 2022, between Brian Fowler, Big Boss Capital Ltd. and North Shore. North Shore was granted an option to acquire 100% of the four Falcon claims for \$75,000 in cash which was paid in April of 2022, and at North Shore’s election, the payment of \$25,000 in cash or issuance of \$25,000 worth of common shares by April 14, 2023. In April 2023, \$25,000 in cash was paid, satisfying the terms of the option. Included in the option agreement is a royalty agreement between North Shore and Big Boss Capital Ltd. and Brian Fowler which states that upon the commencement of production North Shore must pay a 2% NSR royalty as per the agreement. North Shore has the right to acquire one-half the royalty, equal to 1% of NSR, at any time by paying \$1,000,000. There are no other royalties, back-in rights, payments, or other agreements or encumbrances to which the property is subject.

#### **4.2.3. THE SOUTH FALCON OPTION AGREEMENT**

On May 29, 2023, North Shore entered into the South Falcon Option with Skyharbour whereby Skyharbour granted North Shore an exclusive and irrevocable right and option to acquire a 100% undivided interest in Skyharbour’s South Falcon Property. The 11 mineral claims subject to the South Falcon Option are adjacent to North Shore’s 100%-owned claims and now form part of North Shore’s Falcon property.

The closing date of the South Falcon Option is the date of the closing of the qualifying transaction contemplated in the Definitive Agreement (The Closing Date). Table 4-2 summarizes the major terms to exercise the South Falcon Option to acquire an 80% interest in the South Falcon Property, including modifications reflected in the August 28<sup>th</sup>, 2023, Amending Agreement to the South Falcon Option Agreement.

**Table 4-2: Summary of the Major Terms of the South Falcon Option**

	<b>Signing (\$1,000)</b>	<b>Closing Date (\$1,000)</b>	<b>Dec. 31, 2023 (\$1,000)</b>	<b>13 months after Closing Date (\$1,000)</b>	<b>2<sup>nd</sup> Ann. of Closing Date (\$1,000)</b>	<b>3<sup>rd</sup> Ann. of Closing Date (\$1,000)</b>	<b>Totals</b>
Cash	25	25	0	100	150	225	525
Shares		150	0	200*	350*	525*	1,225
Work		0	250	250	1,300	1,750	3,550
<b>Totals</b>		<b>200</b>	<b>250</b>	<b>550</b>	<b>1,800</b>	<b>2,500</b>	<b>5,300</b>

\* Cash or shares at North Shore’s option, the value of the shares is based on the volume-weighted average trading price of North Shore shares for the five trading days immediately prior to the date of issuance, subject to a minimum issue price of the Discounted Market Price as defined by the rules of the TSXV.

Upon North Shore earning an 80 percent interest in the 11 Skyharbour Option Claims from Skyharbour, it will have 90 days to acquire the remaining 20 percent interest in the claims by paying Skyharbour \$5 million in cash and issuing Skyharbour \$5 million worth of shares, with the



value of the shares based on the volume-weighted average trading price of North Shore shares for the twenty trading days immediately prior to the date of issuance, subject to a minimum issue price of the Discounted Market Price as defined by the rules of the TSXV. If North Shore does not elect to acquire the remaining 20 percent interest, a joint venture will be formed with Skyharbour holding a 20 percent participating interest.

Claims MC00015180 and MC00015063 are subject to a one percent NSR royalty payable to Skyharbour. The remaining nine Skyharbour Option Claims are subject to a two percent NSR royalty payable to Denison Mines Corp. with North Shore having the right to purchase one percent of the royalty at any time by paying \$1 million.

### **4.3. ENVIRONMENTAL LIABILITIES**

---

To the author's knowledge there are currently no risks that may affect the access, title or the right or ability to perform work on the property. Environmental liabilities that may affect access to the property would include, but are not limited to; summer season wildfires, or above-average rainfall limiting season road access in the spring and summer.



## **5. ACCESSIBILITY, CLIMATE, PHYSIOGRAPHY, LOCAL RESOURCES & INFRASTRUCTURE**

---

### **5.1. ACCESSIBILITY**

---

The Falcon Property is located approximately 220 km north of La Ronge, Saskatchewan, and approximately 25 km southeast of Key Lake, Saskatchewan. The Property is approximately 100 km west of Provincial Highway 905. The old Key Lake winter road, which connected the Key Lake mine with a point on Highway 905 passes within a few kilometers of the northern extent of the property (Newson, 2008).

Access to the Property can be obtained year-round by fixed wing aircraft or helicopter. Aircraft can be chartered from Missinipe, Saskatchewan, which lies approximately 170 km south of the Property or from Points North Landing, Saskatchewan, which is located approximately 145 km north-northeast of the Property.

### **5.2. CLIMATE**

---

The Falcon Project area experiences a subarctic climate (Köppen climate classification Dfc) (Beck et al., 2018). There is a wide range in seasonal temperatures in the project area, with short, cool summers and bitterly cold winters. According to Environment and Natural Resources Canada, temperatures across the region typically range from an average low in January of -22.3°C to an average high of 16.3°C in July. Average annual precipitation in the region is 482.5 mm, while the average annual snowfall is 164.4 cm. The average frost-free period is approximately 84 days (ENRC, 2019). Work can be completed year-round if utilizing appropriately winterized equipment.

The property is located within the Boreal Shield Ecozone and the Churchill River Upland Ecoregion. The area is largely covered with shield-type boreal forest consisting mainly of pine and spruce with sporadic fir, alder, birch, and aspen. Low-lying peatland areas may contain black spruce and tamarack (SCDC, 2014).

### **5.3. PHYSIOGRAPHY**

---

The landscape in the project area is characterized by a mix of outcrop, glacial deposits, wetlands, and lakes (SCDC, 2014). The relief in the region is moderate, ranging from between 500 to 600 m above sea level. There is a moderate amount of outcrop in the area, although locally it can be obscured by extensive glacial deposits (Ray, 1977). Lakes, which cover up to 40% of the region, are typically long and narrow and aligned in a northeast-southwest direction which parallels the bedrock structure and the direction of ice movement (SCDC, 2014).



## 5.4. LOCAL RESOURCES

The project area contains an abundant supply of water from the numerous lakes, ponds, and streams. The nearest accessible hospital to the claims is in the town of La Ronge located approximately 220 km south of the property. The closest RCMP detachment is located in the community of Southend, Saskatchewan which lies 145 km southeast of the claim area.

## 5.5. INFRASTRUCTURE

Infrastructure is very limited in the project area. The Falcon Project is approximately 25 km southeast of Key Lake and Highway 914. Highway 905 lies approximately 100 km east of the Project area. Along this Highway there are limited services available at Kilometer 147, which hosts a gas station, restaurant, and lodgings.

Electrical power in northern Saskatchewan is serviced by a 138 kV transmission line that extends from the Island Falls generating station to Brabant Lake to Key Lake and Points North. This power line runs through the southwestern portion of the Falcon claims (Figure 5-1).

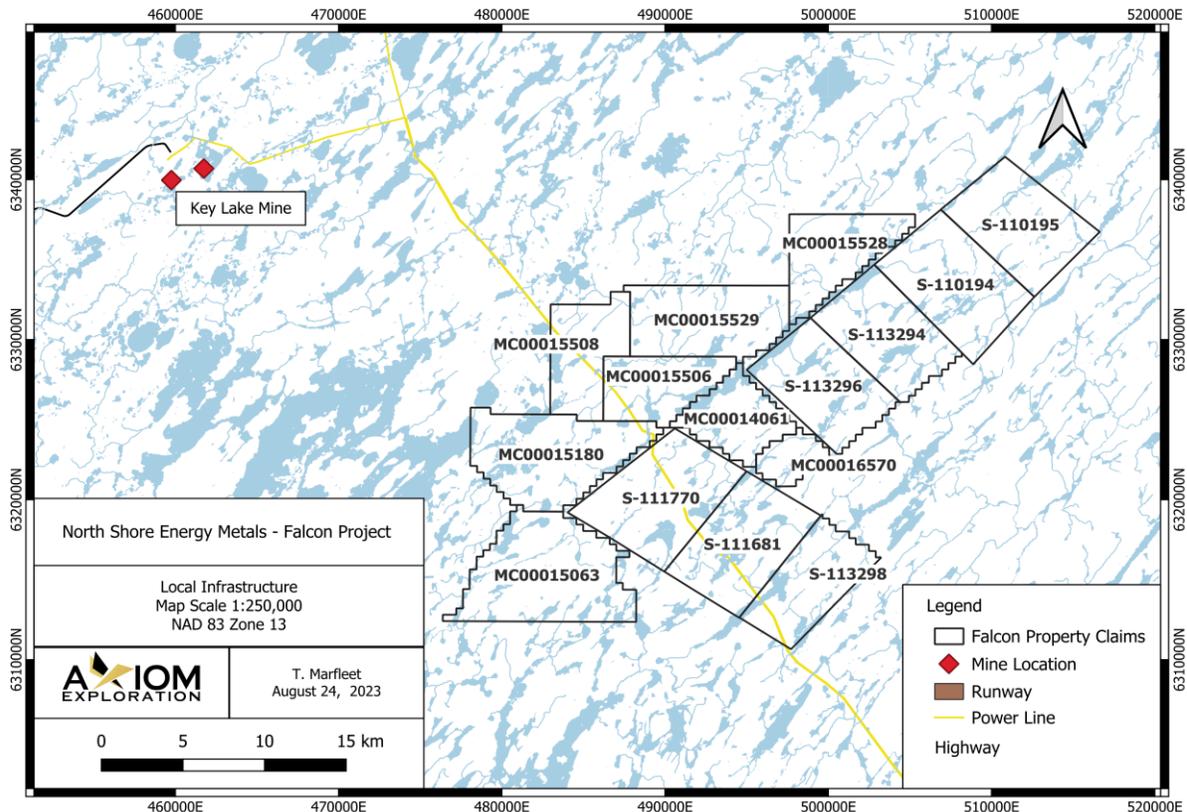


Figure 5-1: Infrastructure in the vicinity of the Falcon Project.



## 5.6. LOCAL STAKEHOLDERS

The population center of La Ronge, consisting of the Northern Town of La Ronge, the Northern Village of Air Ronge, and the Kitsakie 156B and Lac La Ronge 156 Indian reserves of the Lac La Ronge First Nation, consists of 5,766 individuals as of 2021 (Stats. Can., 2021). La Ronge is a transit and supply hub for northern Saskatchewan and contains an airport, industrial hub and plenty of amenities.

Should the Falcon property develop into a producing mine the closest town which could facilitate the potential mining activities is La Ronge. The town is situated near the geographic center of Saskatchewan and is connected to southern Saskatchewan via Highway 2. The area houses local businesses, hospital facilities, schools, banks, a regional airport and access to industrial supplies and all manner of exploration and mining support services. The Property has sufficient area and surface rights for additional infrastructure, including tailings storage areas, waste disposal areas, and temporary accommodations. A processing mill would not require building, due to the proximity to Key Lake Mill. Local stakeholders have an existing positive relationship with mining and exploration companies in the area.

There are no known Threatened or Endangered wildlife or vegetation species within the Falcon project area (SCDC, 2014).

### 5.6.1. FIRST NATIONS

There are two First Nations Reserves in the vicinity of the Falcon Property. Approximately 60 km to the northwest of the Falcon Property is the Slush Lake Reserve which is part of the English River First Nation. To the southwest of the property lies the Mawdsley Lake Reserves which are also part of the English River First Nation. These Reserves are located approximately 70 km from the project area.

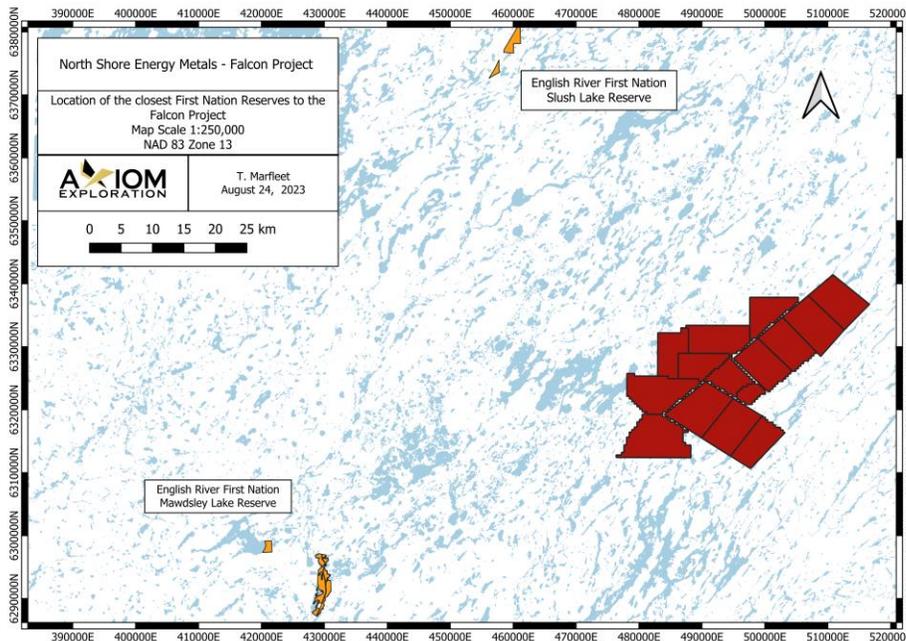


Figure 5-2: Location of First Nations Reserves relative to the Falcon Property.

## **6. HISTORY**

---

### **6.1. PRIOR OWNERSHIP**

---

#### **6.1.1. 100%-OWNED CLAIMS**

---

Interest in the uranium potential of the region surrounding the Falcon Project area began in the late 1960's and there have been several generations of exploration in the claim area since that time. The area covered by the four 100%-owned claims has been held by numerous owners in several different claim configurations starting in the 1960's. The earliest recorded owners were Numac Oil and Gas in 1969 and Great Plains Development Corporation of Canada who explored the area during the period from 1969 to 1971.

After the initial phase of interest, the ground remained unclaimed until the late 1970's when the area saw renewed interest. The area north of the Highrock River was explored by Stampede International Resources Ltd. in 1977. Other portions of the current claim area were acquired by AGIP in 1978. From the late 1970's to the early 1980's the claim area was explored predominantly by AGIP, Saskatchewan Mining and Development Corp., and Texaco as a Joint Venture, with AGIP as the primary operator. During this time uranium mineralization at the "D" zone, which would later become SMDI No. 2455, was discovered. After several years of active exploration, the mineral prospect permit covering the current claim area was allowed to lapse in 1983.

The next recorded owner that could be confirmed by the authors was Star Uranium Corp. starting in 2007. Star Uranium allowed the claims to lapse in 2010. The claim area was then acquired by Prescient Mining Corp. in 2013 as part of their Hook Lake Property. Following the lapse of Prescient Mining Corp.'s claims the area remained open until the four claims were acquired by prospector Brian Fowler in 2021.

The four 100%-owned claims were acquired by North Shore from prospector Brian Fowler and Big Boss Capital Ltd. in 2022. For complete claim details see Table 4-1.

#### **6.1.2. SKYHARBOUR OPTION CLAIMS**

---

The claim ownership and exploration history of what are now the Skyharbour Option Claims in the 1960's through the 1990's is similar to that of the 100%-owned claims.

In May of 2004, after a review of assessment data, JNR Resources staked a large claim block known as the Way Lake property that included seven of what are now the 11 Skyharbour Option Claims. In 2007, Star Uranium owned most of what are now claims S-111681, S-111770, MC00015063 and MC00015180. In 2010, JNR acquired claims S-11681 and S-111770 and they became part of their Way Lake property. In 2013, Denison Mines Corporation purchased JNR Resources and became owners of the Way Lake property. In 2014, Skyharbour purchased the Way Lake property from Denison which included nine of the eleven Skyharbour Option Claims. In 2021, Skharbour acquired claims MC0001580 and MC00015063 by online staking.

## 6.2. PREVIOUS WORK

---

The Falcon Project area has been explored intermittently since the late 1960's when the earliest uranium exploration activity began in the Athabasca region. The earliest exploration consisted of multiple generations of airborne geophysical surveys followed by limited ground prospecting. During the period between 1969 and 1982 there were several generations of airborne geophysical surveys, including EM, magnetics and radiometrics, which partially overlap the present extents of the Falcon property (Table 6-1). Follow-up work to these geophysical surveys included prospecting, lake sediment and water sampling, ground radiometrics, track etch and geological mapping and sampling.

Three diamond drill holes (DDH) were drilled on what is now claim MC00015063 and three holes were drilled on what are now claims MC00015506 and MC00015180 by AGIP Canada Ltd. as documented in AR 74A14-0011, AR744A14-0013 and AR 74H02-0025. Additional drilling, also completed by AGIP and documented in AR 74H02-0025, was completed between claims MC00015528 and S-11094. In 1979, as documented in AR 74H02-0023, AGIP Canada Ltd. completed seven drill holes, one on claim S-110194, three on S113294, one on S-113296 and two on MC000116570. There is no work recorded in the SMAD between the early 1980's and the early 2000's.

In 2006 and 2007 JNR Resources and Star Uranium respectively, completed heli-borne EM surveys that covered most of the property with the goal of acquiring modern data to assist in the exploration for basement-type uranium mineralization. In 2013 a helicopter borne ZTEM and airborne magnetic geophysical survey was completed over a portion of the project area on behalf of Prescient Mining. In 2007, JNR Resources conducted a prospecting program that covered a large area including some of the Skyharbour Option Claims. In 2008, JNR Resources drilled 28 holes on targets selected from the 2006 survey. Although additional work was recommended related to the 2007 and 2013 airborne surveys, the only record of follow-up work being completed is minor prospecting by JNR Resources in 2007.

In 2012, the Falcon Point Project was acquired by Denison Mines, and then in June of 2014 the property was acquired by Skyharbour Resources. In 2022, Skyharbour flew an airborne gravity, magnetic, and radiometric survey over the Skyharbour Option Claims.

The Saskatchewan Geological Survey (SGS) and the Geological Survey of Canada (GSC) have both performed several generations of geological mapping in the claim area. The most detailed mapping available for the project area was completed by Ray (1977) of the Saskatchewan Geological Survey at a reconnaissance basis at a scale of 1:63,360. The corresponding map published from this project was published at a scale of 1:100,000.

Table 6-1 summarizes the exploration history of the project area. The information has been adapted from the Saskatchewan Mineral Deposit Index (SMDI) and the Saskatchewan Mineral Assessment Database (SMAD).



**Table 6-1: Summary of Historic Exploration on the Falcon Project**

Time Period	Description of Work
1969	Numac Oil and Gas Ltd. completed an airborne electromagnetic, magnetic, and radiometric survey, followed by ground-truthing and prospecting.
1969 to 1971	Great Plains Development Corporation of Canada conducted airborne radiometric surveys in the project area followed by ground radiometric surveys, prospecting, and the drilling of three holes.
1977	Stampede International Resources Ltd. completed airborne geophysical surveys in the Highrock River area. The airborne surveys were followed by ground prospecting, soil, and water sampling.
1978 to 1981	Geophysical and geochemical surveys were completed over the project area by AGIP Canada Ltd. The electromagnetic survey identified several conductors, with Zone D lying near the southern boundary of the current Falcon claims. More detailed ground geophysical surveys, geological mapping and sample of the D Zone was completed, followed by 350 m of diamond drilling. Additional regional prospecting identified several radioactive boulder trains and led to the eventual drilling of several additional holes at the north end of Big Sandy Lake.
2006	JNR Resources completed an airborne EM (VTEM) survey over a large area included all or portions of nine of the 11 Skyharbour Option Claims. Electromagnetic features identified from this survey were drilled by JNR in 2008.
2007	Star Uranium Corp. completed an airborne EM (VTEM) survey over a portion of the project area including most of the 100%-owned claims and three of the Skyharbour Option Claims. An anomalous zone associated with SMDI 2455 was identified. Also in 2007, JNR conducted a large prospecting program that included work on some of the Skyharbour Option Claims.
2008	JNR Resources conducted a drill program during which 28 holes were drilled related to electromagnetic features selected from the 2006 airborne survey.
2013	Prescient Mining Corp. completed a ZTEM, and airborne magnetic geophysical survey completed to identify magnetic and conductive zones on the property to evaluate the potential to host unconformity-related uranium mineralization.
2022	Skyharbour completed an airborne gravity, magnetic, and radiometric survey that covered nine of the eleven Skyharbour Option Claims.

*\*Note - The SMDI entry states that Showing No. 2455 was rediscovered by JNR Resource while working on their Way Lake Project, but the maps accompanying the filed assessment work show that the Way Lake claims lie on the opposite side of Big Sandy Lake and do not overlap the current Falcon claims. \**



### **6.3. SUMMARY OF PREVIOUS WORK**

---

#### **1969: NUMAC OIL AND GAS LTD.**

---

(SMAD File 74H02-0008)

In 1969 Numac Oil and Gas Ltd. conducted airborne electromagnetic, magnetic, and radiometric surveys in the area surrounding Big Sandy Lake, along the Geikie River. The flight lines of this survey were spaced at one-quarter mile intervals and oriented northwesterly. Any identified anomalies were followed up by ground checks and prospecting. All radiometric anomalies identified by this survey were caused by outcrops of radioactive pegmatite. No further work was recommended by the assessment report.

#### **1969 & 1971: GREAT PLAINS DEVELOPMENT CORPORATION OF CANADA LTD.**

---

(SMAD File 74A14-0011, 74A14-0013)

Summaries of previous exploration work provided in the assessment reports filed by AGIP in the late 1970's and early 1980's state that Great Plains Development Corporation of Canada Limited completed airborne radiometric surveys over much of the region in the late 1960's and early 1970's. The radiometric survey identified numerous radiometric anomalies. Prospecting and ground radiometric surveys of the identified anomalies showed that the majority of these anomalies were due to pegmatite hosted uranium mineralization.

Ground VLF-EM and seismic surveys were performed over select areas of interest. Limited drilling, including three holes on what is now claim MC00015063 confirmed graphite to be the source of the conductivity, but no uranium mineralization was reported in association with the graphite. The permit was allowed to lapse (SMAD File 74A14-0034).

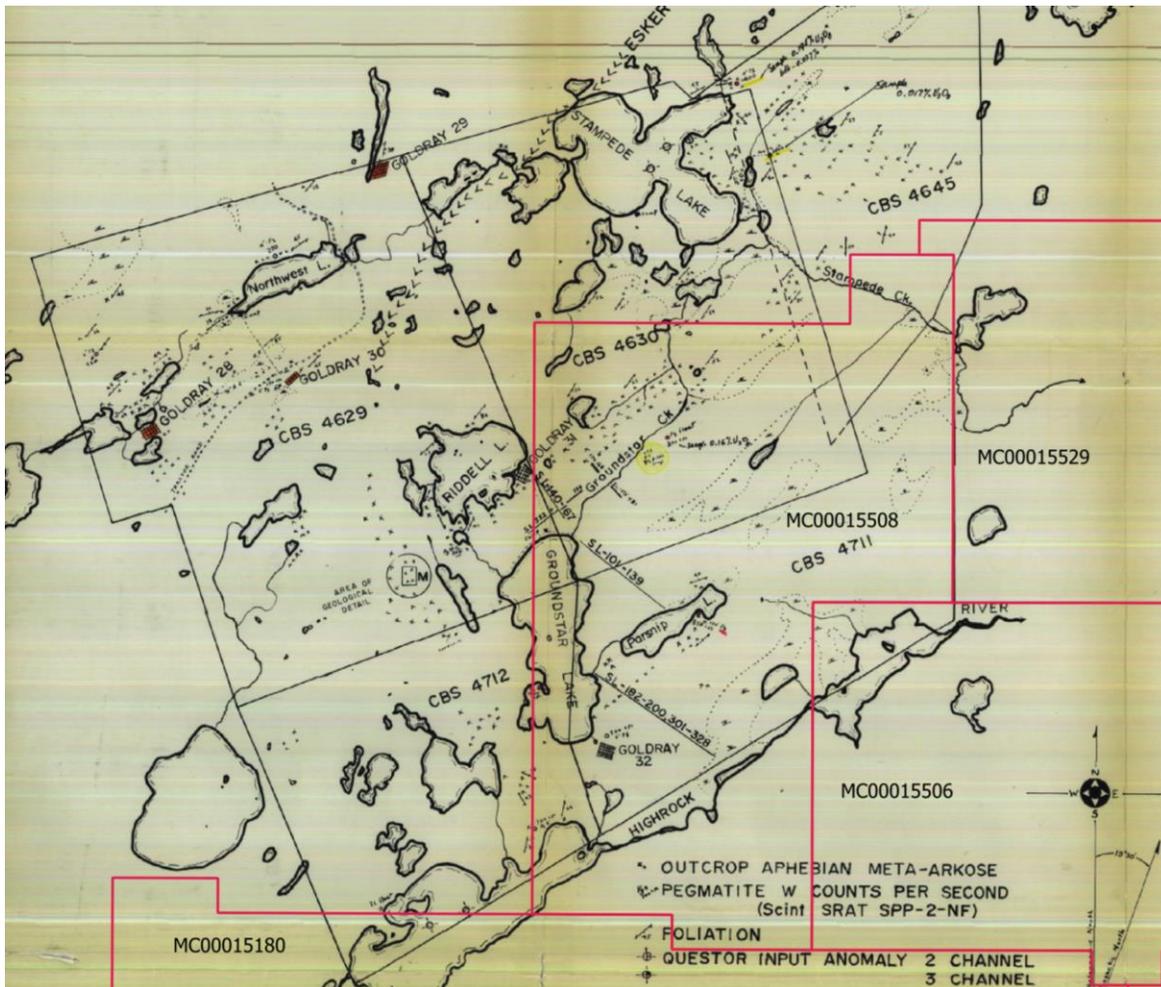
The authors were unable to locate much of the original assessment work filed by Great Plains Development Corporation of Canada Ltd. and have relied upon the summaries provided in later assessment work for the area, such as AR 74A14-0034.

#### **1977: STAMPEDE INTERNATIONAL RESOURCES LTD.**

---

(SMAD File 74H03-0009)

In the summer of 1977, an airborne Mk VI Input and magnetometer survey was completed in the claim area north of Highrock River. The airborne geophysical survey was followed by ground prospecting, scintillometer surveys, and soil and water sampling. The ground scintillometer prospecting showed several localized areas of anomalous radioactivity that appeared to be related to pegmatitic units. Grab samples from the outcrop in this area, to the north of the current Falcon project, assayed 0.195%  $U_3O_8$ . A radioactive boulder from the same area assayed 0.160%  $U_3O_8$  (Figure 6-1).



**Figure 6-1: Sketch Map from AR 74H03-0009.** Falcon claim boundaries shown in red. Radioactive pegmatite outcrops circled in yellow.

**1978 - 1981: AGIP CANADA LTD. JOINT VENTURE**

(SMAD Files: 74A14-0034, 74A14-0035, 74A14-0036, 74H02-0023, 74H02-0025, 74A14-0043)

An INPUT electromagnetic survey was flown by Questor Surveys Ltd. over AGIP Canada Ltd.'s Permit #2 in 1978 to identify graphitic conductive zones in pelitic units of the Wollaston Supergroup. A total of 873 line-km were flown, which identified five conductive zones. Detailed ground surveys, consisting of MaxMin II, VLF-EM and magnetometer surveys, were then completed in the five identified areas of interest.

In addition to the geophysical surveys lake sediment sampling was completed by helicopter over the permit area. In total, 442 lake sediment samples were collected and analyzed. The survey identified 4 regions of anomalous uranium values, with several single site anomalies also occurring throughout the project area. Lake sediment sample 2011-014, collected from a small lake near the south end of Big Sandy Lake in the vicinity of the Falcon Project, contained 38 ppm



U, 27 ppm Ni, 16 ppm Co. This survey also included the collection of water samples however these samples were not analyzed.

A number of conductive zones were identified by the initial airborne survey including Zone D (SMDI 2455) which was described as a series of strong, multiple conductors. A single conductor in the northern portion of the grid area was traced for over 800 m. In the southern portion of the grid, two strong conductors have a strike length of approximately 300 m. Stewart and Eaton (1978) state that the geophysical characteristics of the anomalies suggest that graphite is the source of the conductivity. All the conductors were described as steeply dipping, near surface, and plunge gently to the northeast.

Detailed mapping of Zone D grid showed pelitic metasediment occur along the northwestern end of the grid. The pelites in this area are graphitic, dull grey, fine to medium grained, schistose, and display local concentrations of cordierite. A radiometric survey of the grid outlined an area of anomalous radioactivity on L9+50 that was attributed to localized uranium mineralization. This zone of anomalous radioactivity extends discontinuously from L9+50N to approximately L12+00N. The radioactivity in this zone is associated with fractures, veins, and localized breccias (Figure 6-2). The fractures are north and northwest trending and crosscut the regional foliation.

Foliation measured in the map area trend 040° to 060° with steep to shallow dips to both the east and west. The major structural feature noted in the map area was an asymmetrical, northeast trending syncline. Small D<sub>2</sub> folds indicate a northeastern plunge.

Outcropping uranium mineralization consisted of a uraniferous vein with associated molybdenite and pyrite. Grab samples from the vein assayed 1.26% U. Chip sampling of this showing averaged 481 ppm U over 0.5 m. A breccia zone was also sampled, with grab samples assaying up to 1780 ppm U. Complete assay results from samples collected from the Zone D showing are listed in Table 6-2.

**Table 6-2: Grab samples collected from Zone D by AGIP in 1978**

Sample No	U	Mo
R2011 D-01	1.26%	0.8%
R2011 D-02	840 ppm	120 ppm
R2011 D-03	64 ppm	26 ppm
R2011 D-04	60 ppm	10 ppm
R2011 D-05	1120 ppm	6 ppm
R2011 D-06	1780 ppm	10 ppm
R2011 D-07	30 ppm	-
R2011 D-08	1800 ppm	-
R2011 D-09	1000 ppm	-
R2011 D-11	175 ppm	-

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

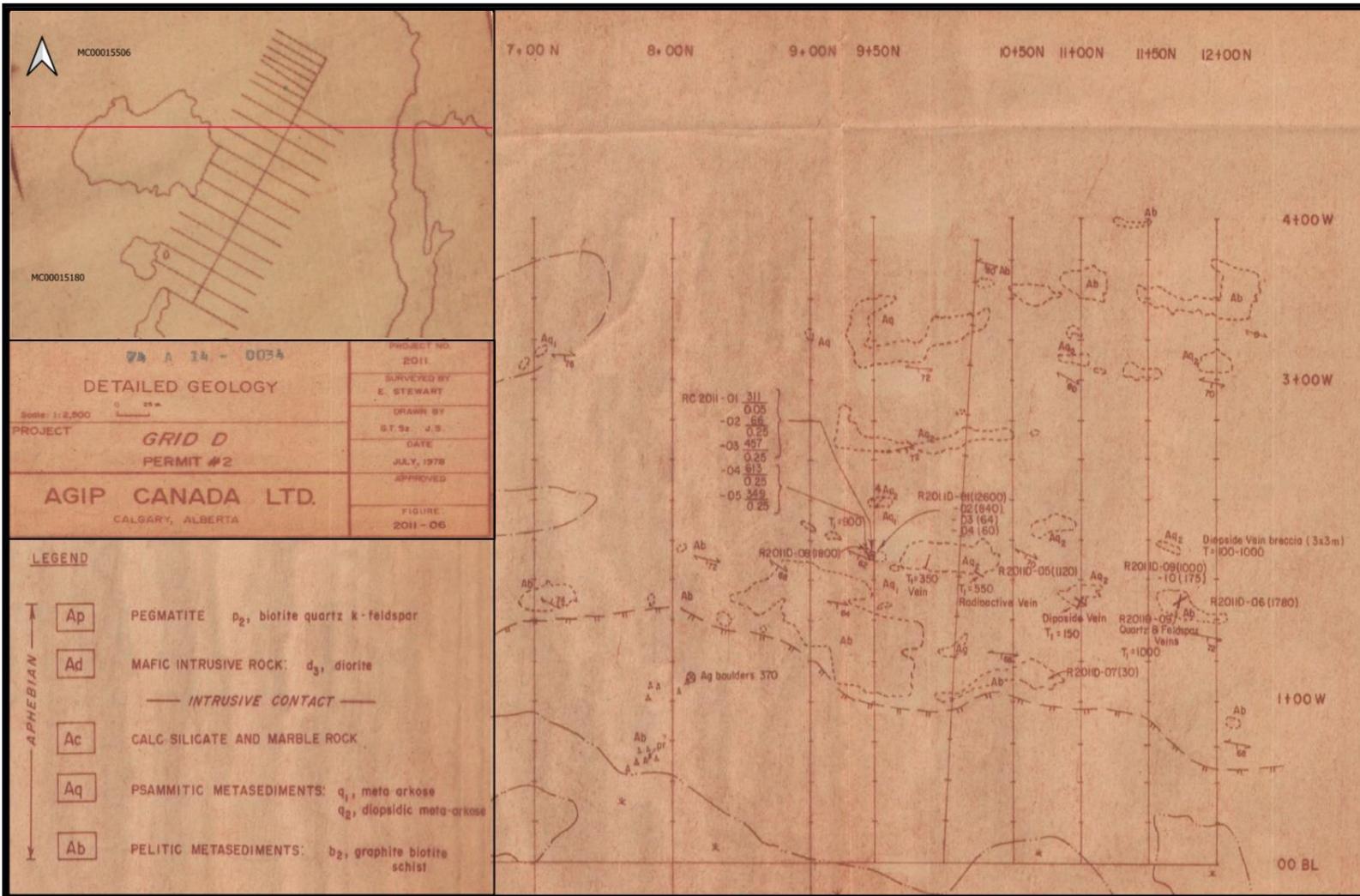


Figure 6-2: AGIP Mapping of Zone D (Adapted from 74A14-0034). Inset map shows the relation of the Zone D grid to Falcon claims MC00015506 & MC00015180, with the claim boundary in red. Symbols listed in Figure 6-3.

SYMBOLS	
	STRIKE AND DIP OF DOMINANT FOLIATION (UNCERTAIN IF S <sub>1</sub> OR S <sub>2</sub> )
	STRIKE OF DOMINANT FOLIATION (DIP UNKNOWN)
	MINOR F <sub>2</sub> FOLD WITH PLUNGE OF FOLD AXIS
	FAULT OR SHEAR (ASSUMED)
	MINERAL OCCURENCE
	OUTCROP LOCATION
	GRAB SAMPLE LOCATION
	RADIOMETRIC READING IN COUNTS PER MINUTE (TV-1A) x 100 CPM
	LIMIT OF ESKER
	SWAMP
	LAKE OR POND
	STREAM AND DIRECTION OF FLOW
	BOULDERS (ANGULAR)
	STEEP SLOPE
	JOINTS (WITH ATTITUDE, VERTICAL)
	MINERALIZED VEIN
	ROCK CHIP SAMPLE
	ROCK CHIP SAMPLE $\frac{\text{ppm U}}{\text{DISTANCE}}$

Figure 6-3: Symbols used in Figure 6-2 (From 74A14-0034).

Stewart and Eaton (1978) believed there was potential for basement-hosted mineralization in this area in structurally favorable sites. The limited outcrop hampered attempts at additional surface exploration in this area. Drill testing Zone D was recommended in the 1978 assessment report.

The 1979 exploration program completed by AGIP included a comprehensive structural and glacial interpretation of the project area. The structural interpretation concluded that faulting is abundant within the area and was recognized by topographic lineaments and magnetic discontinuities. The most obvious fault sets strike north-northwest. Aeromagnetic discontinuities suggest the presence of an east-west trending fault set; however, no field observations support this interpretation. A third set of faults strike roughly parallel to the dominant foliation in the area.

Additional ground geophysical surveys were completed on Zone D in 1979 in an attempt to extend the previously identified conductors present in this area and to examine the potential continuation of the conductive units at depth. An additional 4.5 km of horizontal loop, 1.4 km of VLF-EM and 1.9 km of proton magnetometer surveys were completed on the extension of Zone D.

This was followed by drill testing targets on Zone D that were identified during the previous year's exploration (Figure 6-4). A total of 350 m, in three inclined diamond drill holes, were drilled and radiometrically probed. Only the northern most hole lies within the current Falcon claims. Sampling of the holes was based on radiometric anomalies or mineralization visually identified in the core. Mainly pelitic and semi-pelitic gneisses were encountered during the drilling on Zone D, with rare pegmatites up to 50 cm thick. Faults, shears, and breccia zones are abundant in the

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023



core, with some of the faults and shear zones filled with chlorite, hematite and local graphite. Diamond drilling confirmed graphite to be the source of the conductivity, but no mineralization and only rare anomalous radioactivity was noted in these holes. Beaudry et al. (1979) recommended no further work on Zone D.

In 1979, as documented in AR 74H02-0023, AGIP completed seven drill holes, one on claim S110194, one on claim S110194, two on S113294, one on S-113296 and two on MC000116570.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

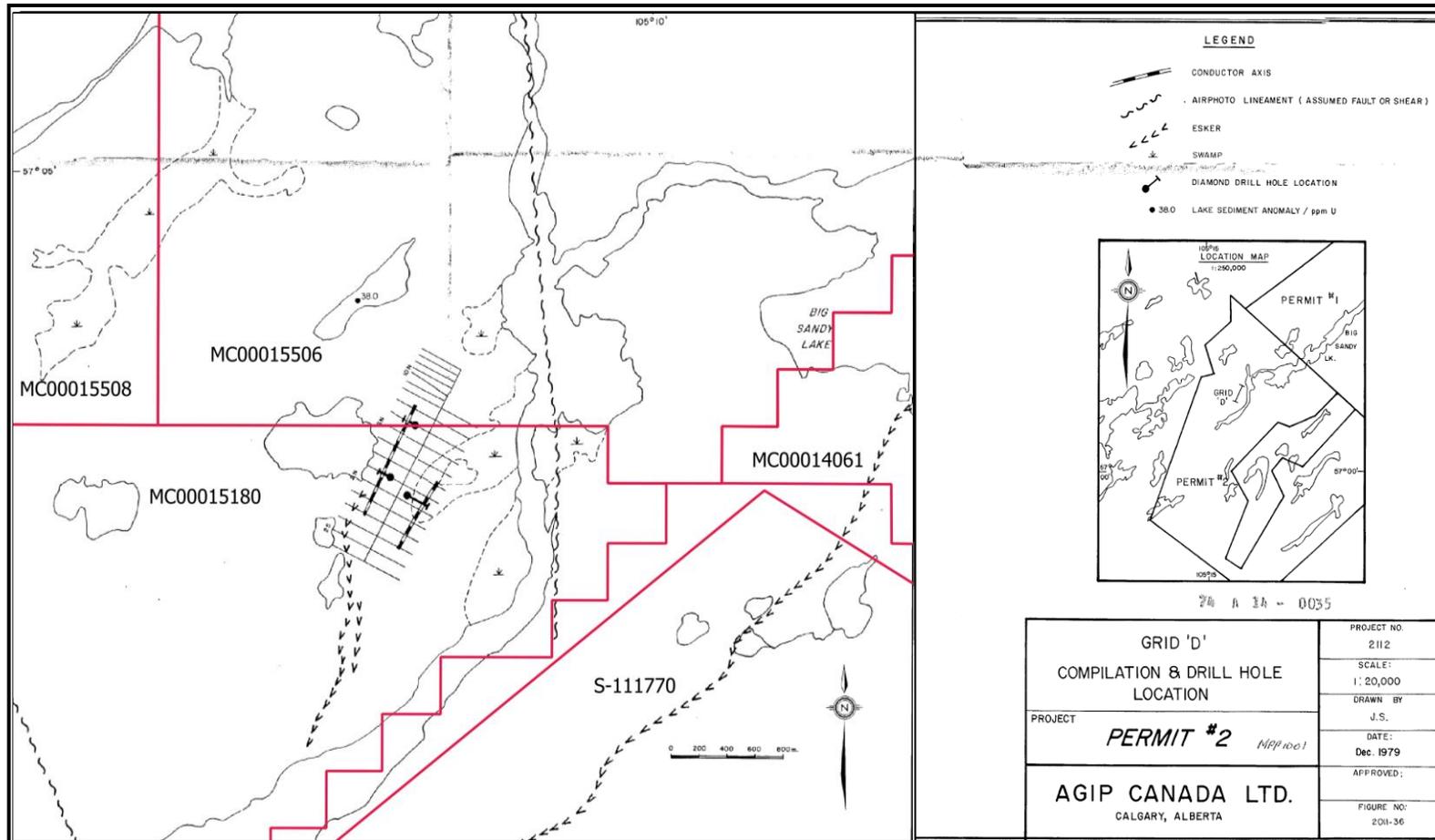
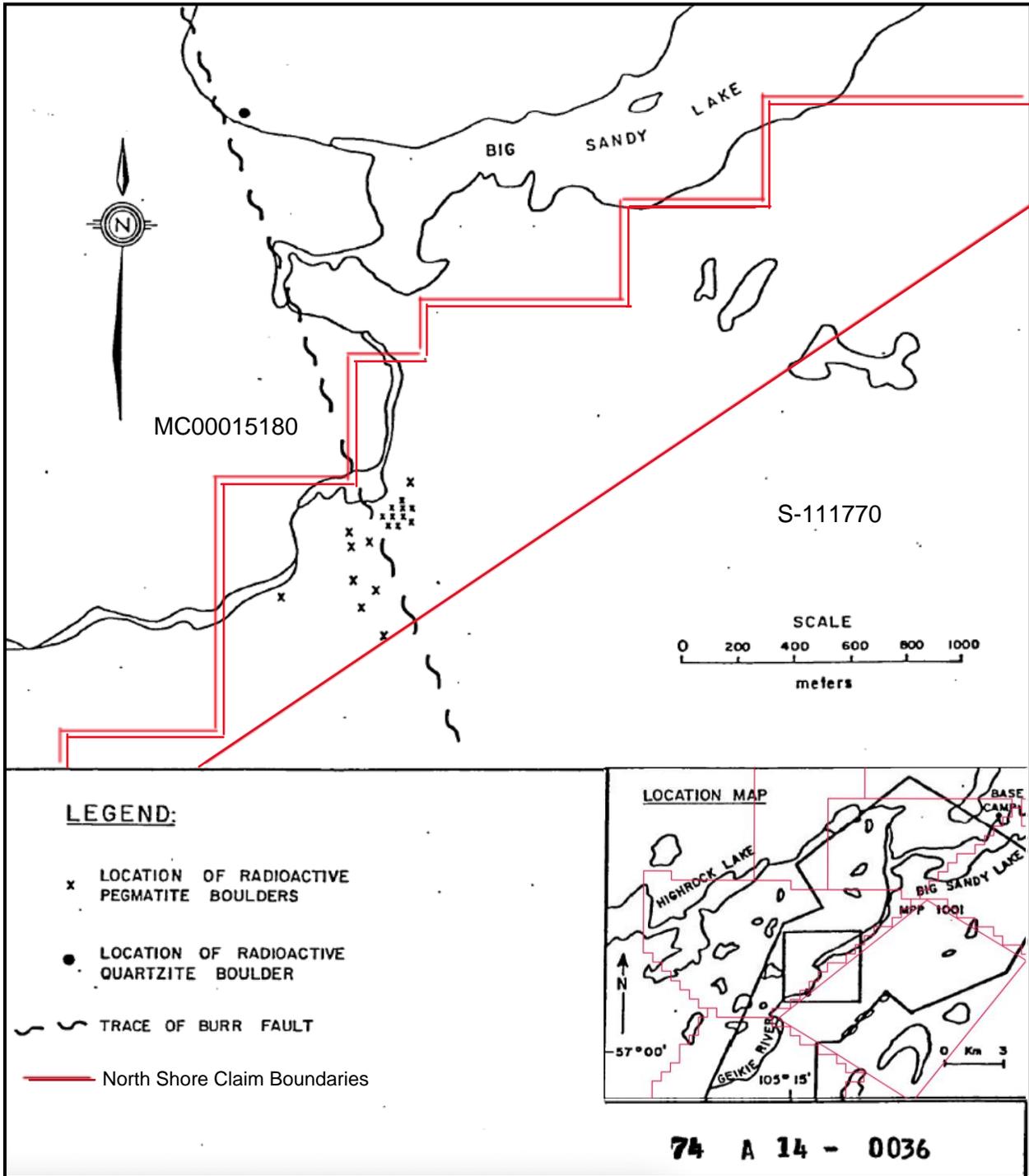


Figure 6-4: AGIP DDH locations on Grid D (Adapted from AR 74A14-0035). This grid lies across the boundary between Falcon Claim MC00015506 & MC00015180.



The 1980 exploration program by AGIP consisted of regional mapping and radiometric prospecting focused mainly on the southeast end of Big Sandy Lake. The prospecting located a radioactive boulder fan south of the Geikie River, now known as SMDI 2456 (Figure 6-5). The mineralization occurs in subangular to subrounded, 30 to 200 cm diameter boulders which form a 500 m long, 50 to 100 m wide fan which trends approximately 030°. The boulders consist of coarse-grained pegmatite with yellow secondary uranium staining and local molybdenite flakes. These boulders contained an average of 0.45% U<sub>3</sub>O<sub>8</sub>, 1142 ppm Cu, and 1050 ppm Mo.

One kilometer north of the Geikie boulder fan a subangular, silicified boulder was found which contain yellow staining and locally abundant molybdenite and pyrite. This boulder assayed 0.35% U<sub>3</sub>O<sub>8</sub>, 45 ppm Cu and 206 ppm Mo.



**Figure 6-5: Location of radioactive Boulders identified in 1980 on the Falcon Property.**  
Inset location map shows the extent of the current Falcon claims relative to the map area.

Uranium mineralization was located on the large island at the southwest end of Big Sandy Lake (Figure 6-6). The anomalous radioactivity was associated with fractures in meta-arkose outcrop on the eastern side of the island. Small uraninite crystals, approximately 5 mm in size, are located in fractures striking  $010^{\circ}$  with a  $65^{\circ}$  dip towards the southeast. Associated with the mineralization is hematite staining and moderate silicification, both of which are restricted to the fractures. Ilmenite and tourmaline were also noted in the fractures by Beaudry et al. (1980). These fractures can be traced for approximately 2 m.

A total of 22 additional soil samples and 3 stream sediment samples were collected from the Geikie River-Highrock River area during the 1980 exploration program. Only one anomalous sample, S-094 which contained 5 ppm of Pb, was obtained from this area. This anomaly was not considered significant due to its singularity and low intensity. The lake sediment anomaly of 38 ppm U, 27 ppm Ni, 16 ppm Co obtained in sample 2011-014 in the 1978 survey in this area remained unexplained.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

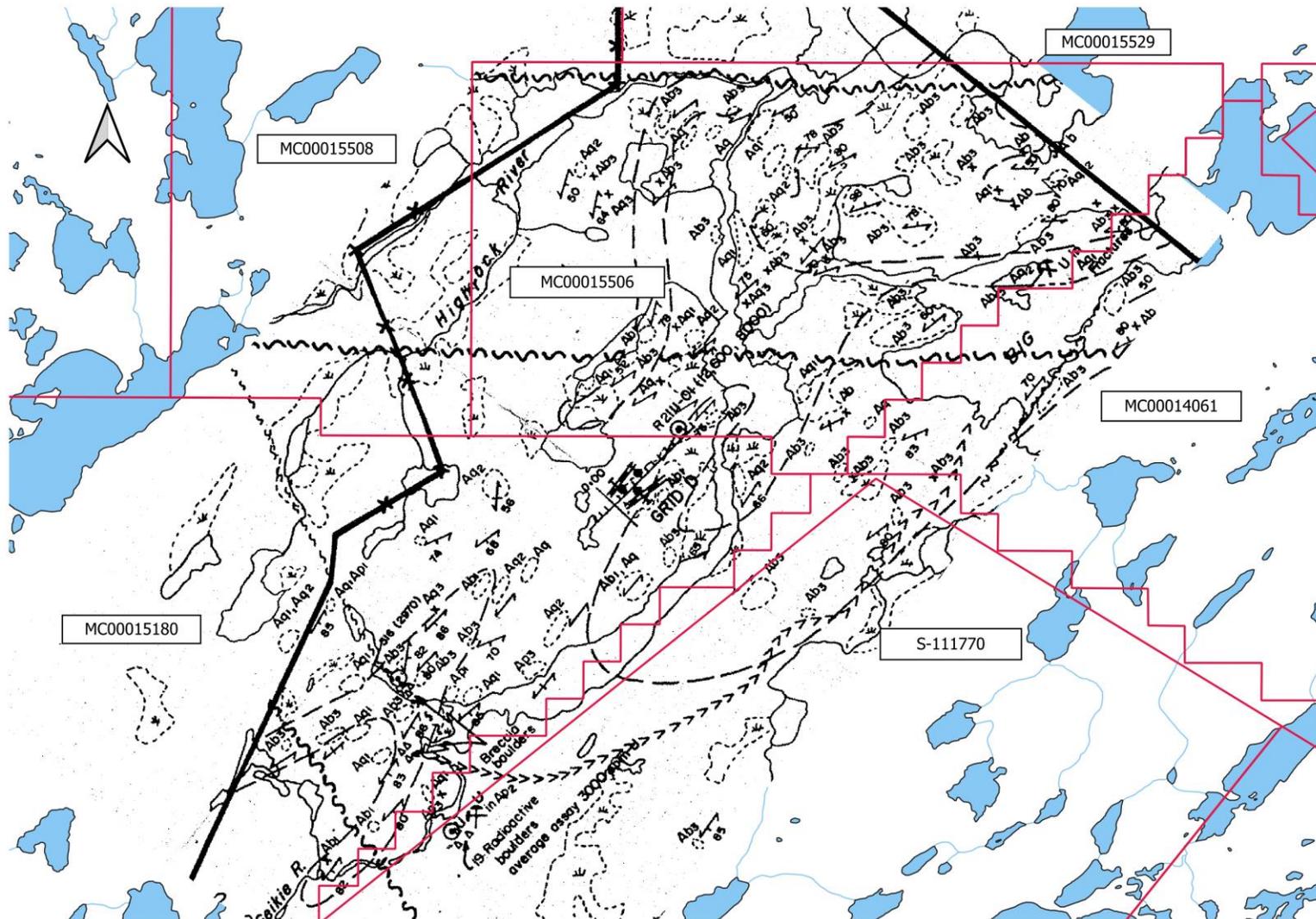


Figure 6-6: Compilation Map of the Grid D area by AGIP. Adapted from AR 74A14-0036. Current extent of the Falcon claims shown in red. Map Legend in Figure 6-8.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

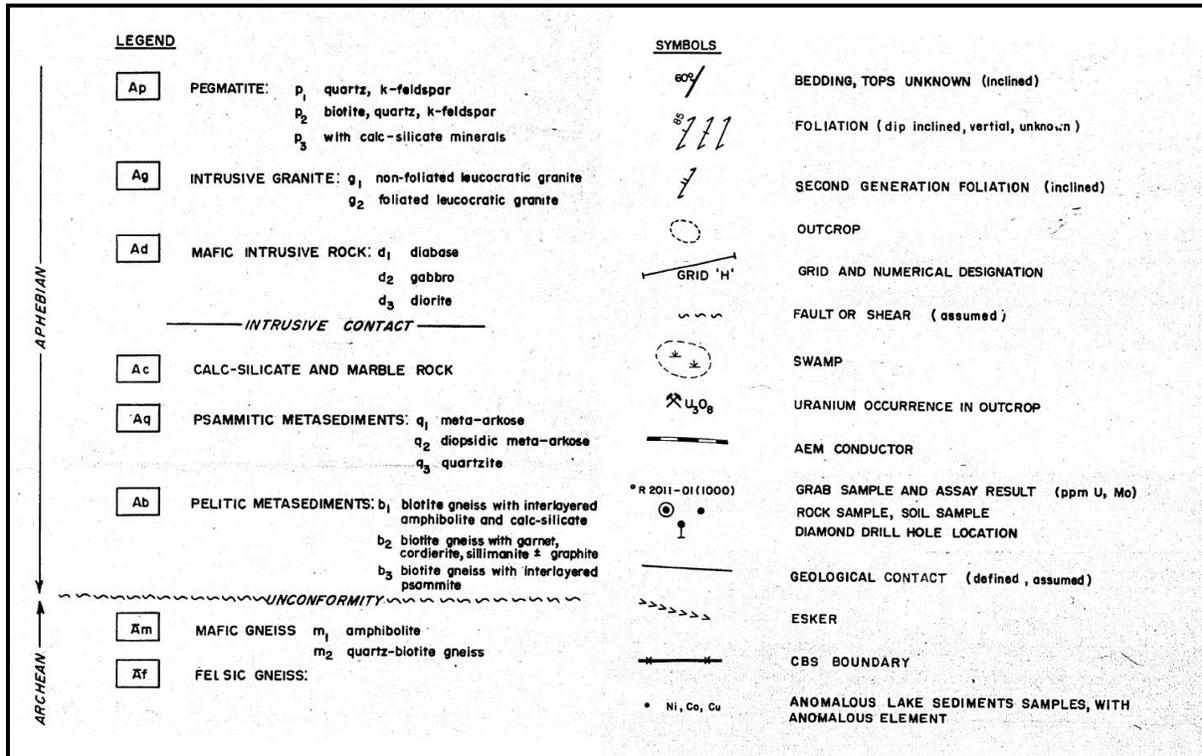


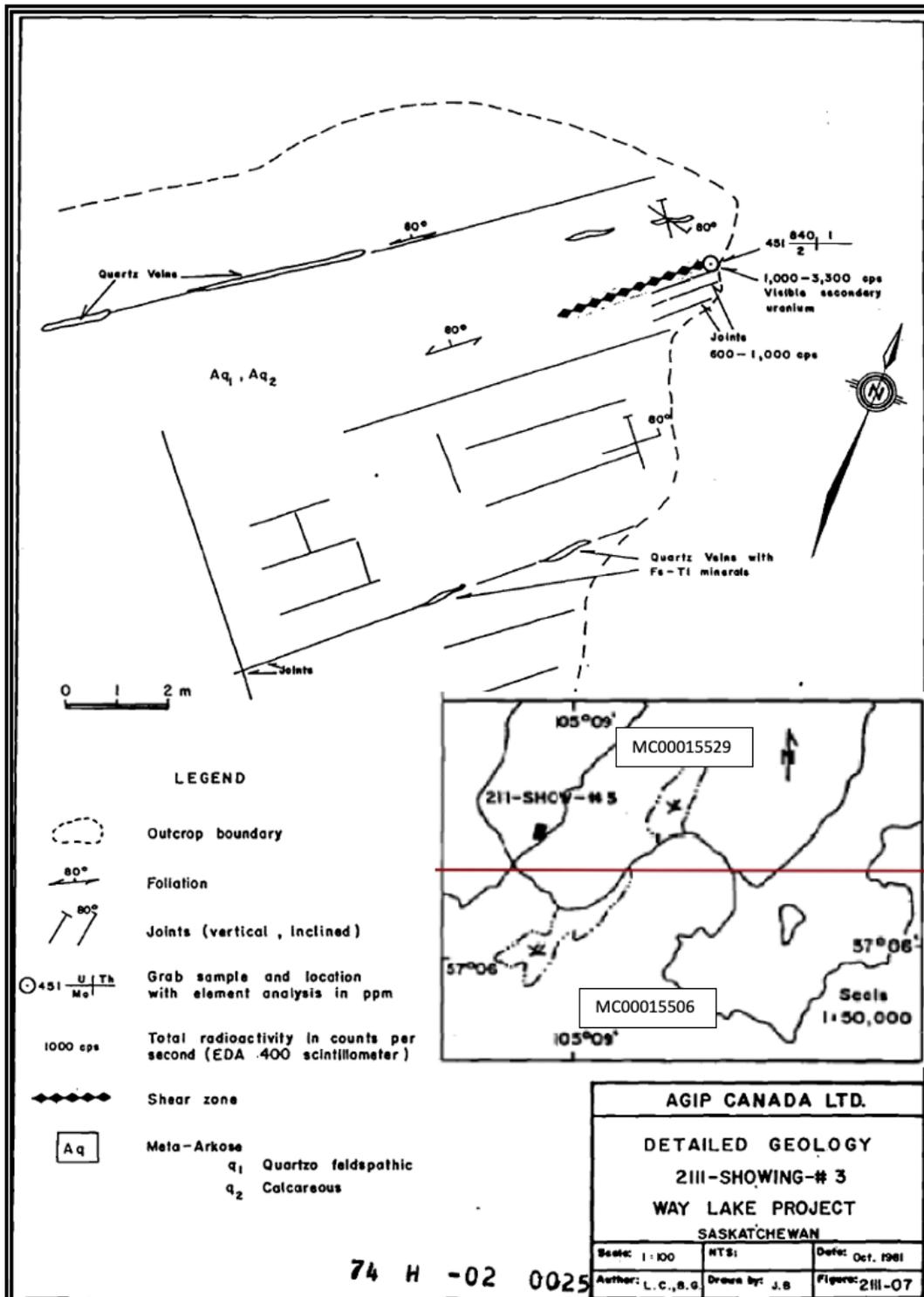
Figure 6-7: Legend and Symbols from Figure 6-6.

In 1981 regional geological mapping and radiometric prospecting located Showing #3, to the north of Big Sandy Lake in a radioactive shear within a meta-arkose outcrop. The shear zone is up to 10 cm wide and can be traced for 4 m along strike and contains visible secondary uranium. The shear roughly parallels the foliation within interbedded meta-arkose and calcareous meta-arkose. Boudinaged quartz veins were also noted in the outcrop. The foliation trends 045° and dips steeply to the north. A single grab sample from this shear, Sample 2111-R-451, assayed 840 ppm U (Figure 6-8). Further prospecting was recommended in this area.

Showing #4 of the 1981 exploration program consisted of a radioactive pegmatite. The outcrop is approximately 400 m by 2,000 m and has a composition of approximately 85% pegmatite. Visible secondary uranium mineralization occurs irregularly in this area. A grab sample, 2111-R-104 assayed 800 ppm U.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023



**Figure 6-8: Geology of Showing #3 mapped by AGIP.** This showing lies within Falcon claim MC00015529 near the boundary with MC00015506. Boundary between the claims shown in the inset in red.



In the winter of 1981 additional geophysics and diamond drilling was completed on Big Sandy Lake to attempt to locate the source of previously identified mineralized boulders. A ground radiometric survey at 25 m sample intervals was completed over the entire grid. Anomalous radioactivity was determined to be due to either radioactive biotite gneiss boulders or pegmatites. A magnetic and VLF-EM survey was also completed over the grid area, totalling 43.3 km of total field magnetics. The grid was centered over a narrow, linear magnetic high. The anomaly strikes in a northeast-southwest direction parallel to the local trend for a distance of 1.8 km. No obvious cross-cutting features were observed. The VLF-EM survey identified three northeast-southwest trending conductive zones. The northern trend is discontinuous and roughly parallel the northwestern shore of Big Sandy Lake for a distance of approximately 2 km. These conductors remained open to grid west.

Canadian Mining Geophysics of Ottawa completed 8 km of gravity survey on behalf of AGIP in the winter of 1981. No significant features were identified by this survey.

In the winter of 1981, a total of 810 m of diamond drilling was completed by Midwest Drilling of Winnipeg, Manitoba in the Big Sandy Lake area (Figure 6-9). Drill holes WL-1-81, WL-2-81 and WL-3-81 were drilled to test the magnetic anomaly and VLF-EM conductors. WL-4-81 tested faults interpreted from the geophysical data. Drill hole WL-5-81 was targeted to intersect the fault zone identified in WL-1-81 and WL-2-81. Drill hole WL-6-81 tested the apex of the radioactive boulder distribution. WL-7-81 tested the limits of the boulder fan along a VLF-EM conductor. Drill holes WL-8-81 and WL-9-81 tested the extent of the weak mineralization identified in WL-7-81. All holes were radiometrically probed with a Mount Sopris Model 2500 borehole logger. Sampling of the drill core was based on the presence of radiometric anomalies identified during the borehole logging.

The lithologies encountered in the drill holes were pelitic and interbedded psammitic metasediments and calc-silicates. Pegmatitic segregation were noted throughout. Alteration noted in these holes consisted of kaolinization, epidotization and chloritization with minor hematite and limonite. The alteration appears to be focused along fractures and shears. Geochemical analysis of the radioactive interval between 18 and 22m in DDH WL-7-81 returned a maximum of 87 ppm U.

In 1981 AGIP's summer exploration activity included follow-up on a silicified, radioactive boulder that was identified north of Big Sandy Lake near the trace of the Burr Fault in 1980. Detailed prospecting up ice from this boulder located Boulder Field 2112-BF-02 at the south end of Big Sandy Lake.

The boulder field consisted of 37 subangular to rounded boulders clustered along a 2 km line trending 030°. The boulders are typically medium grained and contain quartz, feldspar and varying amounts of molybdenite. Tremolite and biotite occur in some boulders as an accessory mineral. Grab samples collected from three boulders averaged 1520 ppm U, 425 ppm Th and 8,670 ppm Mo. Petrography showed that discrete grains of pitchblende are the source of the radioactivity and that they occur in association with the molybdenite. These boulders were determined by Donkers (1982) to have a pegmatitic affinity. Donkers (1982) stated that the area should be evaluated for magmatic-hydrothermal vein type uranium deposits.



Only limited mapping was conducted of the area surrounding the boulder field. The outcrops in the immediate area consist of semi-pelitic gneiss interlayered with thin quartzo-feldspathic bands. Some of these bands contain magnetite augen. Locally the outcrop contains late, irregular quartzo-feldspathic segregations with associated cordierite that crosscut the foliation. The outcrop lithology is distinctly different than that of the boulders and no anomalous radioactivity was noted in the outcrop.

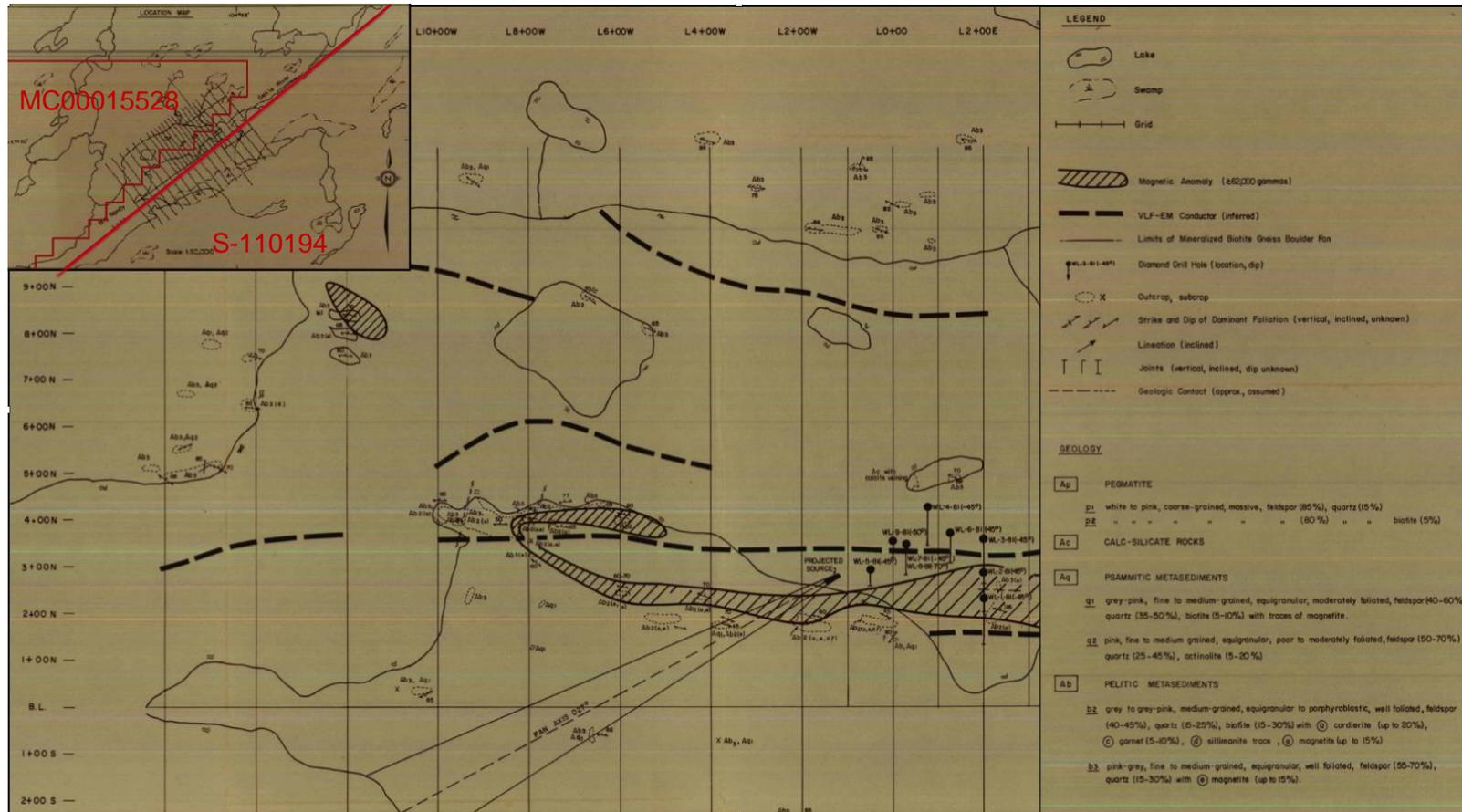
All the boulders contain quartz and feldspar as the main minerals, with the quartz occurring as parallel bands or elongated lenses in a feldspar groundmass. Irregular fractures filled with brownish iron oxides are common. Molybdenite appears to be concentrated in planes parallel to the quartz banding and also disseminated in the rocks. The radioactivity is associated with molybdenite rich zones. Yellow minerals, suggested by Donkers (1982) to be a mixture of molybdenite and secondary uranium minerals, are consistently found in these radioactive zones. Three of these boulders were analyzed, with results in Table 6-3 below.

**Table 6-3: Grab Samples from Boulder Field 02 (From AR 74A14-0043)**

Sample No.	U ppm	Th ppm	Pb ppm	Mo ppm	V ppm	Cu ppm	Ni ppm
2112-BF-02-02	1,360	430	1,740	9,000	60	30	36
2112-BF-02-03	1,520	250	1,600	12,000	50	22	54
2112-BF-02-06	1,700	570	600	5,000	60	22	25

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023



**Figure 6-9: AGIP Compilation Map of the Big Sandy Lake Grid (Adapted from 74H02-0025).** The location of the AGIP grid relative to Falcon Claims MC00015528 and S-110194 (red outline) is shown in the inset location map in the upper right corner.



## **2006 AND 2007: JNR RESOURCES.**

---

(SMAD Files 74H-0066 and 74H02-0043)

In 2006 a large airborne VTEM geophysical survey was flown by JNR Resources. The southwestern corner, or about 25% of the survey area covered most of the Skyharbour Option Claims (Figure 6-10). The objective of this survey was to acquire EM data on the property using modern equipment to assist in the exploration for basement-hosted uranium mineralization.

The survey was carried out by Geotech Ltd. of Aurora, Ontario, using a helicopter-borne VTEM system. Both EM and magnetic surveys were completed. A number of conductive anomalies were selected by Geotech.

In the summer of 2007, JNR Resources conducted a prospecting program over a large area with the primary focus being the investigation of conductive zones identified in the 2006 survey. A number of areas on what are now the Skyharbour Option Claims were investigated. The EWA showing (SMDI 5038) was discovered during this program along the boundary of what are now claims S113296 and S113294. The showing is described in AR74H02 as being a 10 to 20 metre wide, northeast trending sheared pelitic unit with granitic inliers. Several grab samples from the shear zone returned values of 0.063 to 0.492%  $U_3O_8$  and up to 1300 ppm Pb.

## **2007: STAR URANIUM CORP.**

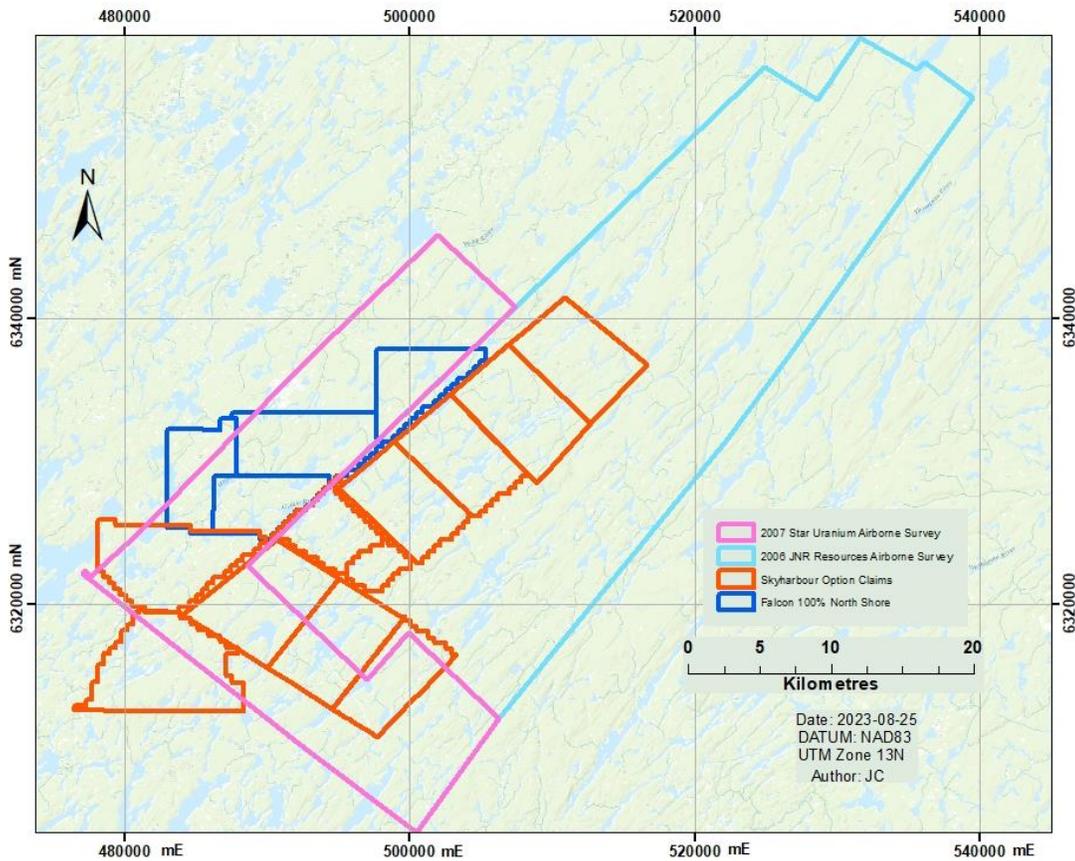
---

(SMAD File 74H03-0050)

In 2007 an airborne VTEM geophysical survey was flown over the Falcon Project area by Star Uranium Corp. (Figure 6-10) This survey was part of a larger airborne survey completed for JNR Resources (JNR) by Geotech, with the data made available to Star Uranium Corp. (Star) under an agreement between Star and JNR. The objective of this survey was to acquire EM data on the property using modern equipment to assist in the exploration for basement-hosted uranium mineralization.

The survey was carried out by Geotech Ltd. of Aurora, Ontario, using a helicopter-borne VTEM system. Both EM and magnetic surveys were completed at this time. The conductive anomalies identified by this survey largely lie to the south of the 100%-owned claims.

**FALCON PROPERTY 2006 AND 2007 AIRBORNE SURVEYS**



**Figure 6-10: Map showing outlines of the 2006 and 2007 Airborne Surveys.** From SMAD File 74H03-0050 and 74H-0066.

**2008: JNR RESOURCES**

(SMAD File 74H02-0045)

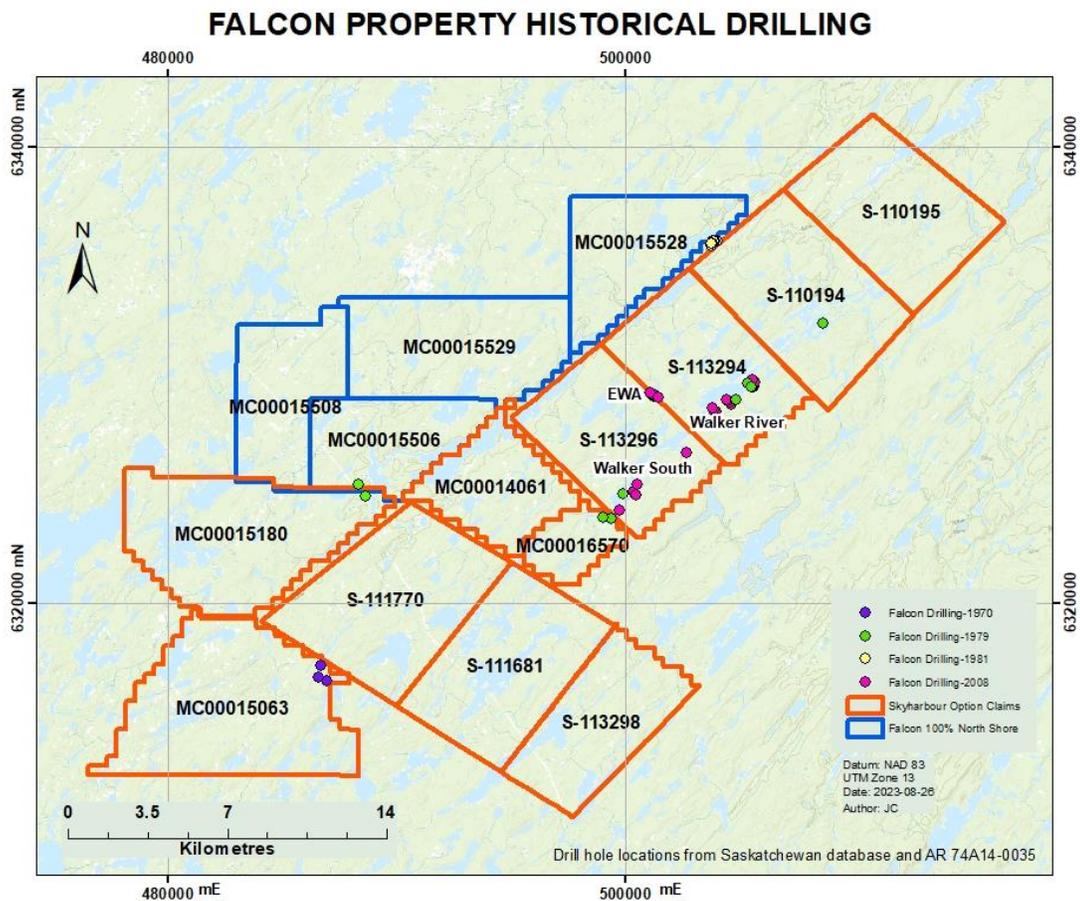
In the summer of 2008, JNR Resources drilled 28 diamond drill holes on two of what are now Skyharbour Option Claims, S-113296 and S-113294 as part of their Way Lake exploration program (Figure 6-11). A total of 7,315 metres was drilled with the longest hole being 422 metres. As described in AR 74H02-0045, the 2008 drilling was focused in the following three areas: EWA, Walker River and Walker South (Figure 6-11).

Seven holes were drilled over three fences in the EWA showing area (SMDI 5038) (WYL-08-501 to WYL-08-507) (Figure 6-11). the drill holes encountered Archean orthogneiss and granite gneiss which is intruded by numerous, often radioactive, pegmatite dykes and fracture-associated clay, hematite, and chlorite alteration. Anomalous uranium values up to 0.235% U<sub>3</sub>O<sub>8</sub> with associated boron, lead, and molybdenum were reported scattered through the pegmatite and associated with fractures and weak shearing.



Fourteen holes were drilled in the Walker River area consisting of five fences that targeted conductive horizons along a 2.2-kilometer distance in areas of structural complexity (WYL-08-15 to WYL-08-28) (Figure 6-11). No elevated uranium values were reported. Clay and chlorite alteration and lesser hematite, limonite and carbonate were reported in some holes along with elevated boron, nickel, arsenic, copper, cobalt, vanadium, and molybdenum values.

Six holes were drilled over three fences in the Walker South area and one hole targeted an area of radioactivity associated with pegmatite (WYL-08-29 to WYL-08-35) (Figure 6-11). No elevated uranium values were reported. Structure-associated clay and chlorite alteration was reported in several holes. Elevated copper, nickel, cobalt, vanadium, and molybdenum values associated with altered and disrupted graphitic pelitic gneiss with some sulphide-rich zones were reported in WYL-08-31. Occasional fracture zones and weak radioactivity associated with granitic pegmatites were reported in WYL-08-34.



**Figure 6-11: Drill Locations from 1970, 1979, 1981, and 2008 on the Falcon Property.** From SMAD File 74H02-0045 and 74A14-0035 and the Saskatchewan database.



**2013: PRESCIENT MINING CORP.**

---

(SMAD File MAW00345)

In June of 2013 a helicopter-borne Z-Axis Tipper Electromagnetic (ZTEM) and airborne magnetic geophysical survey was flown over the project area by Aeroquest Airborne of Aurora, Ontario. The purpose of the surveys was to identify magnetic and conductive zones and to evaluate the potential of the area to host unconformity-associated uranium mineralization. In total approximately 153.5 line-km of data were collected. The survey block was flown in a northeast-southwest direction with a flight line spacing of 200 m. The helicopter maintained an average height of 90 m above the ground.

All ZTEM frequencies have been affected by the power line corridor which transects the survey block. As SMDI 2455 lies within the area affected by the power line it is possible that ZTEM anomalies associated with this occurrence are obscured (Figure 6-10). Several additional anomalous conductive zones were identified on the Hook Lake Survey Block all of which were interpreted to indicate geological lineaments. North of the power line these lineaments have a northeastern trend.

The magnetic data shows two positive magnetic anomalies, sub-parallel to survey lines, that are crosscut by a perpendicular trending magnetic low. SMDI 2455 is located on the edge of the southern magnetic anomaly (Figure 6-11). In the north of the survey area Harrington (2013) noted a positive magnetic gradient that coincides with a lateral increase in resistivity.

It was recommended by Harrington (2013) that a 3D Magnetic Inversion be carried out over the entire survey area and that 3D ZTEM inversions be conducted on the northern and southern portion which were not affected by the presence of the power line.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

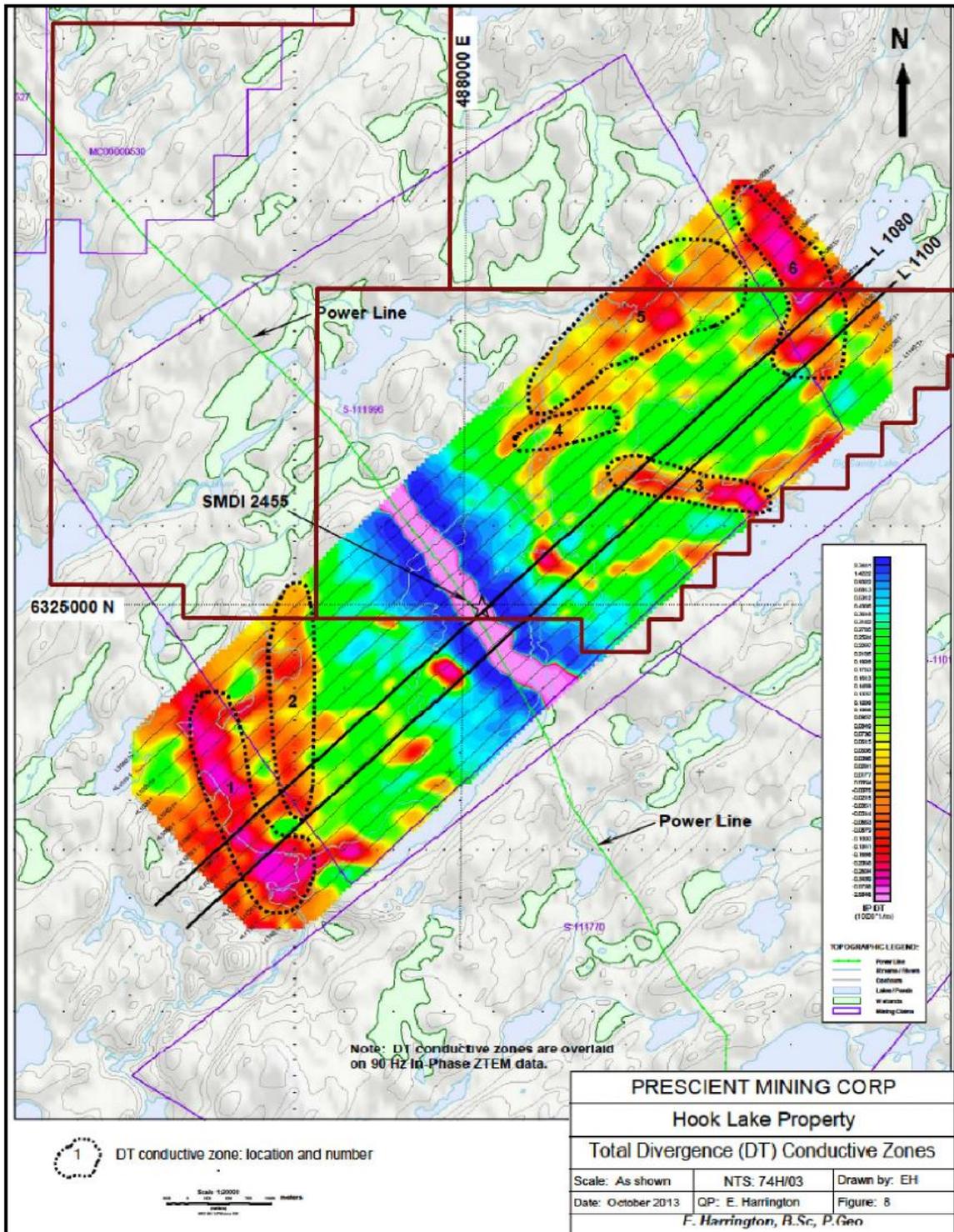


Figure 6-12: Total Divergence Conductive Zones Identified on the Hook Lake Property. Adapted from MAW00345. Outline of current claim boundaries in dark red.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

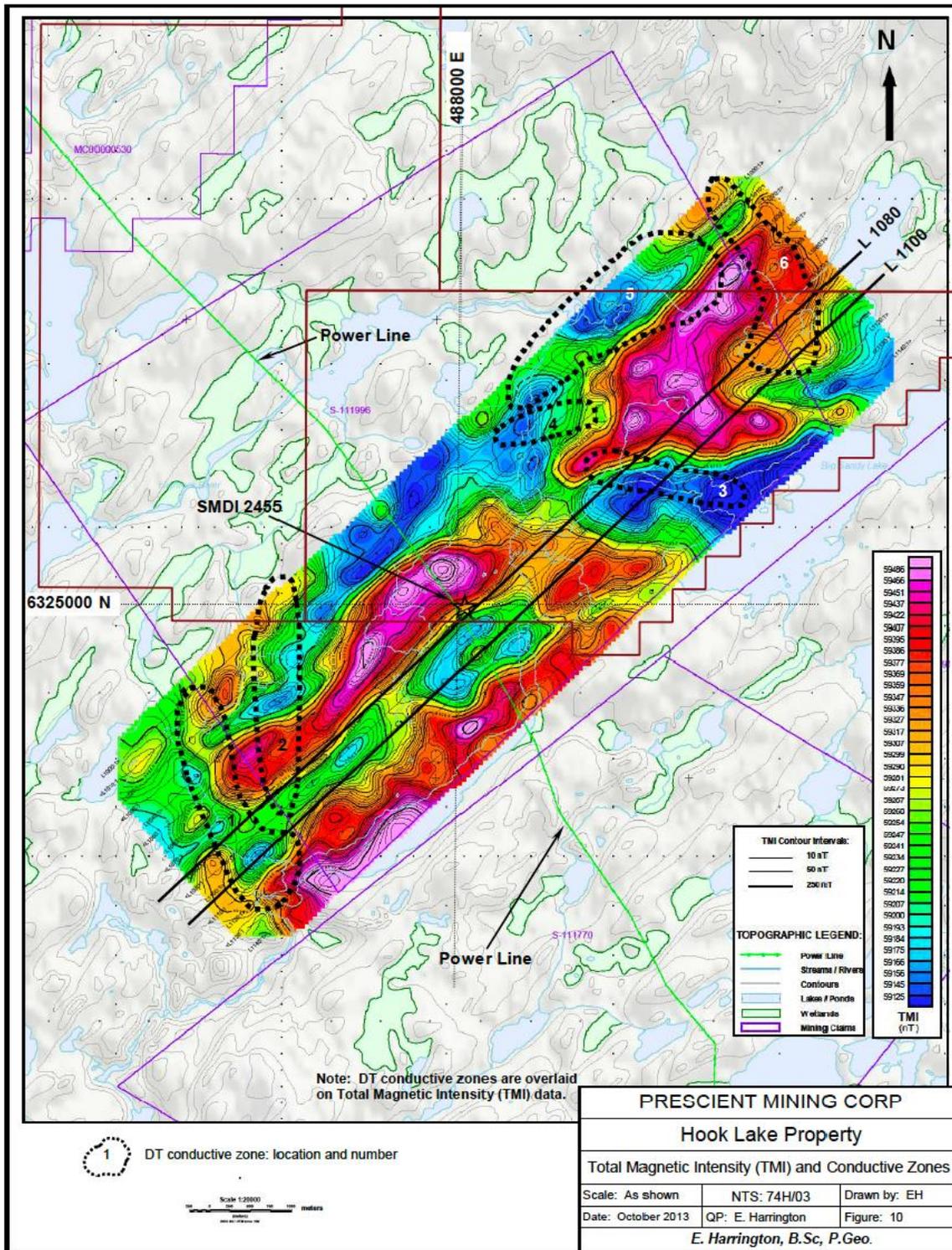


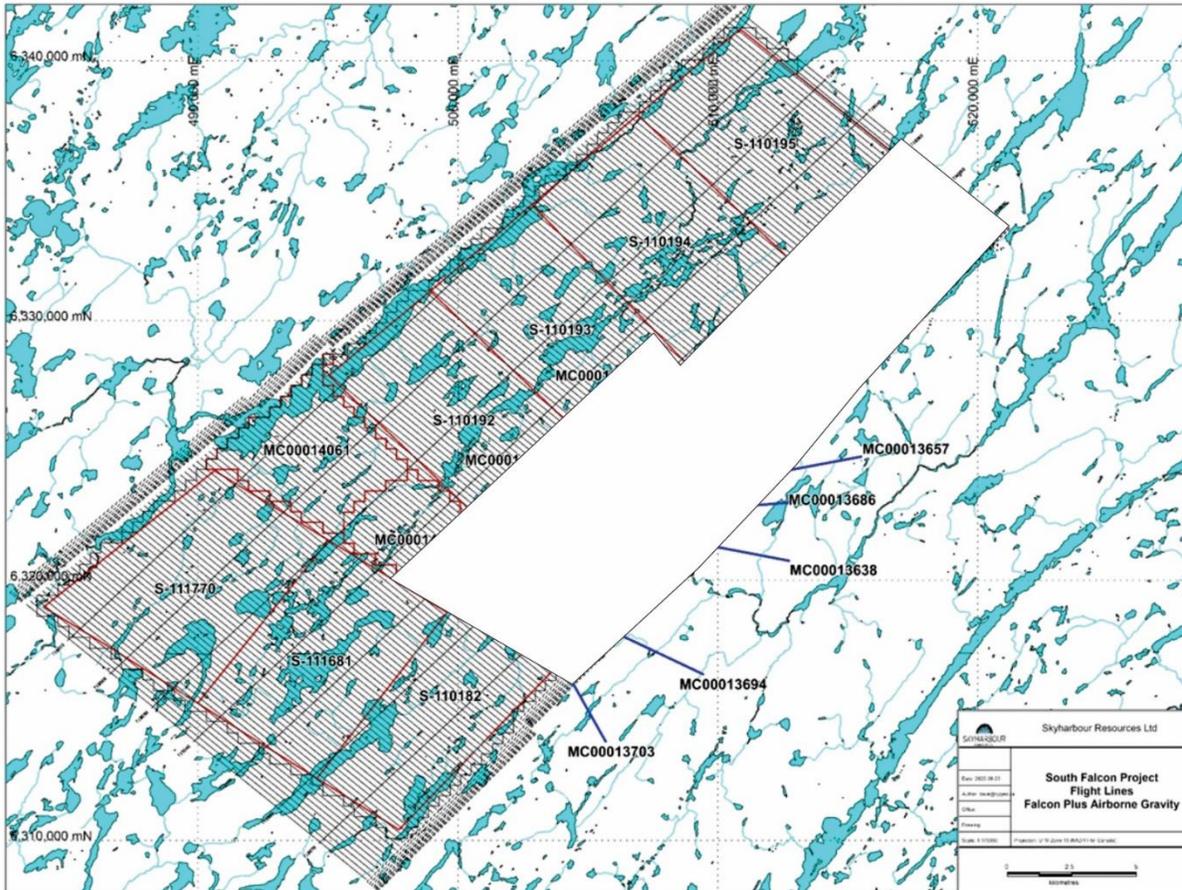
Figure 6-13: Total Magnetic Intensity and Conductive Zones of the Hook Lake Survey Block. Adapted from MAW00345. Current Falcon claim outlines shown in red.



**2022: SKYHARBOUR**

(Billard 2022)

In June of 2022, Skyharbour completed an airborne gradiometer, radiometric and magnetic survey that covered nine of the eleven Skyharbour Option claims (Figure 6-14). North Shore plans to integrate the data from this survey with historical data to assist in identifying priority targets that warrant further exploration.



**Figure 6-14: Skyharbour airborne survey flight plan.** From Billard (2022). The Skyharbour Option claims outlined in red.

An airborne gravity gradiometer, magnetic survey, and radiometric survey was flown over nine of the 11 Skyharbour Option Claims by Xcalibur Multiphysics between June 4th and June 14th of 2022 (Billard, 2022). The survey covering the Falcon claims was part of a larger survey that covered Skyharbour’s South Falcon East project which was subsequently optioned to Tisdale Clean Energy (Skyharbour Resources Ltd. (October 20, 2022). The purpose of this survey was to complement existing magnetic and EM data to help identify any probable areas of local uranium concentration. A total of approximately 2,800 line-km of data was collected over an area of approximately 320 km<sup>2</sup>. The survey was flown at a heading of 129° with a line spacing of 200 m, with tie lines every 2.05 km at an azimuth of 047° (Figure 6-14). Approximately 1,850 line-



kilometers of the survey covered the Skyharbour Option Claims at a cost of approximately \$330,000.00 (Billard, 2023).

Figures 6-15 and 6-16 show magnetic intensity and GDD Fourier domain gravity respectively from the 2022 Skyharbour survey.

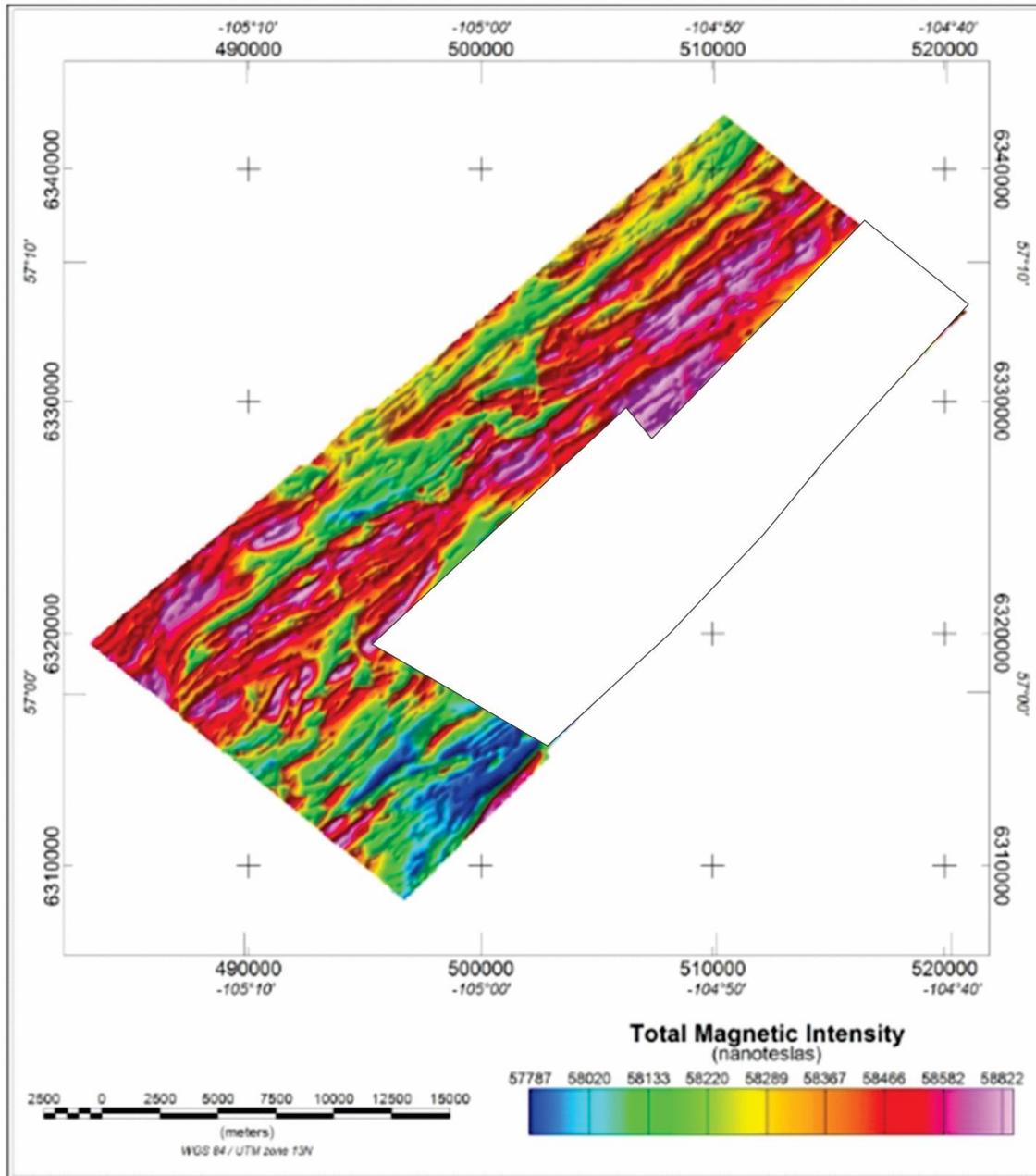


Figure 6-15: Skyharbour airborne survey magnetic intensity. From Billard (2022).

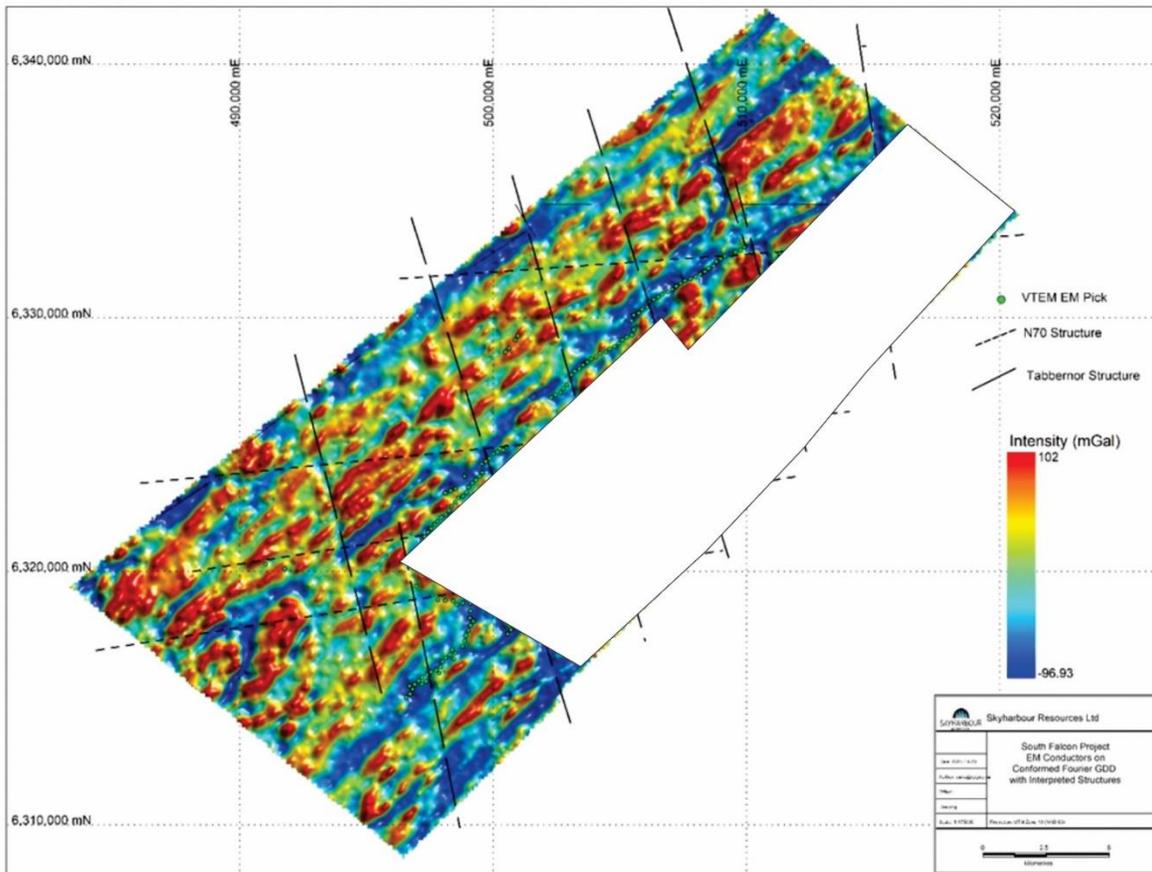


Figure 6-16: Skyharbour airborne survey enhanced GDD Fourier domain with interpreted structures. From Billard (2022)

#### 6.4. HISTORICAL MINERAL RESOURCE & MINERAL RESERVE ESTIMATES

No historical mineral resource or mineral reserve estimates have been reported for the Falcon Property.

#### 6.5. HISTORICAL PRODUCTION

There has been no historical production from the Falcon Property.

## **7. GEOLOGICAL SETTING & MINERALIZATION**

---

### **7.1. REGIONAL GEOLOGY**

---

The Falcon Project is located in the Wollaston Domain of the southeastern Hearne Province, which forms part of the Western Churchill Structural Province. The project is located approximately 10 km southeast of the southeastern margin of the Athabasca Basin, which hosts several world class uranium deposits (Jefferson et al., 2007).

The Hearne Province in Northern Saskatchewan comprises the Wollaston, Mudjatik and Virgin River domains (Figure 7-1) (Card et al., 2007). The Wollaston Domain, which underlies the Falcon Project area, consists of the north-northeast trending succession of Paleoproterozoic metasedimentary rocks of the Wollaston Supergroup. The Wollaston Supergroup consists of four unconformity bounded metasedimentary sequences which overlie Archean gneiss along the eastern margin of the Hearne Province (Yeo and Delaney, 2007).

The Wollaston Supergroup records an entire Wilson cycle, from continental rifting, as recorded by the Courtenay Lake Group, through the passive margin of the Souter Lake Group, to the ocean closure foreland-basin stage recorded in the Daly Lake and Geikie River Groups (Yeo and Delaney, 2007). These rocks extend beneath the eastern portion of the Athabasca Basin and form the basement lithologies underlying several of the uranium deposits of the eastern Athabasca Basin (Yeo and Savage, 1999; Yeo and Delaney, 2007).

The western boundary of the Wollaston Domain is transitional into the Mudjatik Domain, which is dominated by Archean to Proterozoic felsic gneisses. To the southeast, the Needle Falls shear zone, a late Paleoproterozoic dextral structure, partially defines the boundary between the Wollaston Domain and the Wathaman Batholith (Yeo and Delaney, 2007). In some areas along the eastern boundary of the domain the rocks of the Wollaston Supergroup lie unconformably on the Archean rocks of the Peter Lake Domain (Card et al., 2007).

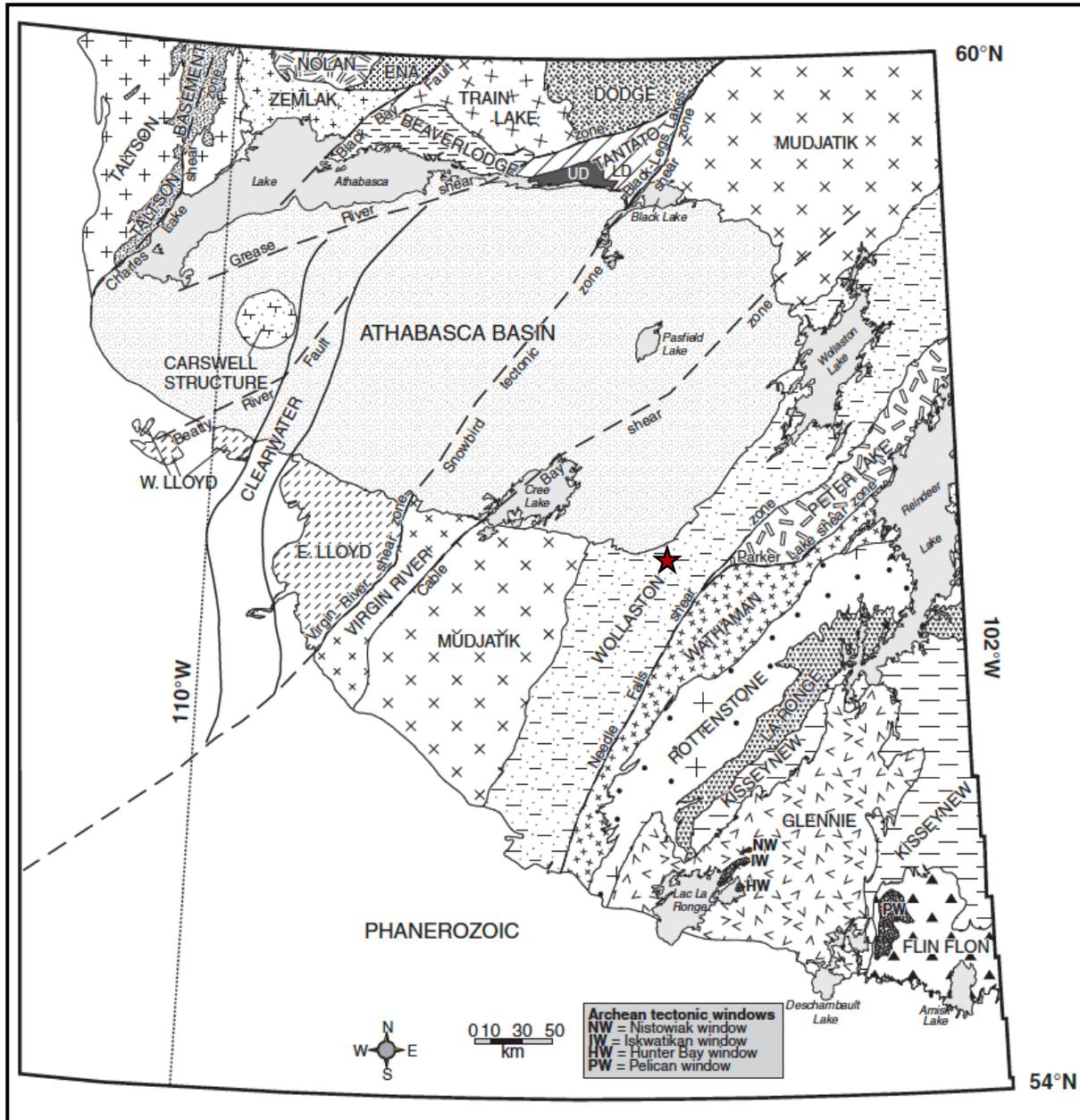
Overlying the rocks of the Wollaston Supergroup, and separated from it by an angular unconformity, are the Athabasca Group sandstones, conglomerates, and mudstones (Annesley et al., 2005; Jefferson et al., 2007). The unconformity between the Wollaston Supergroup and the Athabasca sediments is marked by variable thicknesses of red, hematitic regolith which underlie the Athabasca strata, grading downward through green, chlorite altered rock and into fresh basement lithologies (Jefferson et al., 2007). The widespread regolith, or fossilized weathering zone, formed prior to the deposition of the Athabasca sediments (Ray, 1977).

The Athabasca Basin, which formed between 1.83 Ga and 1.27 Ga, is a broad, oval shaped depositional basin of mainly fluvial sandstones which extends approximately 250 km north-south and 400 km east-west and contains up to 1,500 m of relatively flat lying Athabasca Group sediments (Rainbird et al., 2007). In addition to the fluvial sandstones the Athabasca basin also contains conglomerate and mudstones. The sediments of the Athabasca Group are unmetamorphosed but pervasively altered (Jefferson et al., 2007).

The structural history of the region is protracted and includes multiple displacements under both brittle and ductile conditions. Late brittle faults, which post-date the Trans-Hudson Orogen, are ubiquitous, with various orientations commonly mimicking the orientation of the ductile structures



they overprint and show evidence of multiple episodes of displacement. Several of these structural features affect both the Athabasca Group and the underlying basement rocks (Card et al., 2007).



**Figure 7-1: Regional Geological Setting of the Falcon Project.** Location of the Falcon Claims shown by the red star (Adapted from Card et al., 2007).

## 7.2. LOCAL GEOLOGY

---

The Wollaston Domain consists of a northeast-trending, tightly folded, linear belt of Paleoproterozoic metasedimentary rocks and interfolded anatectic granitoids that overlie Archean granitic gneisses. The Wollaston Domain has been subjected to multiphase deformation associated with the 1.86 to 1.78 Ga Trans-Hudson Orogeny (THO) (Yeo and Delaney, 2007). To the north the Wollaston sediments are unconformably overlain by the sandstones and conglomerates of the Athabasca Formation (Ray, 1977).

The Archean basement rocks form inliers within the Wollaston Group (Ray, 1977). These granitoid masses are interpreted by Ray (1977) as structurally underlying the supracrustal rocks and are the Archean basement onto which the metasediments were unconformably deposited. The Archean basement complex consists of granite to granodiorite and rare amphibolite (Yeo and Savage, 1999).

The foliated granitic gneiss is the most common type of inlier. The composition ranges from syenogranite to monzogranite and moderately to intensely foliated, with elongated quartz and feldspar and the parallel alignment of amphiboles and biotite. Locally feldspar augen up to 1.5 cm across are present. Accessory minerals include sphene, chlorite, zircon, epidote, ilmenite, and magnetite (Ray, 1977). Amphibolite bodies up to 100 m thick occur locally in some of the basement rock, with thinner, discontinuous amphibolite layers common in many of the inliers (Ray, 1977).

The Archean inliers are exposed in the cores of doubly-plunging antiforms and typically form elongate, northeast trending masses of granitic material (Ray, 1977). Although they are often obscured by glacial cover Ray (1977) states their form and size can be inferred from aeromagnetic data.

The rocks of the Wollaston Supergroup are interpreted by Yeo and Delaney (2007) as a succession of rift, passive-margin and foreland basin deposits. The Wollaston Supergroup is composed of the <2.075 Ga rift-fill Courtenay Lake Group, the passive margin Souter Group and the overlying <1.880 Ga Daly Lake-Geikie River groups, which represent a foreland basin succession (Yeo and Delaney, 2007). The Daly Lake and Geikie River groups are extensive over most of the Wollaston Domain (Yeo and Delaney, 2007).

The Daly Lake Group displays an upward increase in compositional and textural maturity. It lies unconformably on much the Archean basement except in rare areas, such as the Compulsion River region, where an unconformity with the Souter Lake Group is inferred. The Geikie River Group consists of a succession of conglomerate, arkose, calc-silicate rocks and marble which unconformably overlie the Daly Lake Group (Yeo and Delaney, 2007). The Geikie River Group becomes more carbonate rich and finer upwards. Contacts between the formations are typically transitional and primary features are only rarely preserved (Yeo and Delaney, 2007).

The Wollaston Supergroup hosts both uranium and base-metal occurrences. The major uranium deposits in the eastern Athabasca Basin occur at or near the unconformity between the undeformed siliciclastic rocks of the Athabasca Group and the deformed and metamorphosed rocks of the Wollaston Supergroup. The mineralization is typically associated with graphitic pelite and with fault zones, generally localized along older basement faults or pelitic strata (Yeo and Delaney, 2007).

Local evidence for pre-Athabasca weathering, such as bleaching, hematization, and epidotization, suggests that the Athabasca Group sediments formerly covered much of the Highrock Lake area (Yeo and Savage, 1999). Mapping by Ray (1977) reported the presence of regolith outcrop in the vicinity of Graham Lake approximately 16 km from the Athabasca Formations main margin (Ray, 1977). Yeo and Savage (1999) noted the presence of a poorly-exposed outlier of Manitou Falls Formation Sandstone north of the Highrock River, approximately 8 km south of the margin of the Athabasca Basin.

Mineralization is also associated with uraniferous pegmatitic intrusions that are characteristic of the region. Mineralized fractures occur in both the Wollaston metasediments and in conformable and cross-cutting pegmatites. In the pegmatites the mineralization is typically primary, with late remobilization of the uranium into fractures and veins (McKeough et al., 2010).

### **7.3. PROPERTY GEOLOGY**

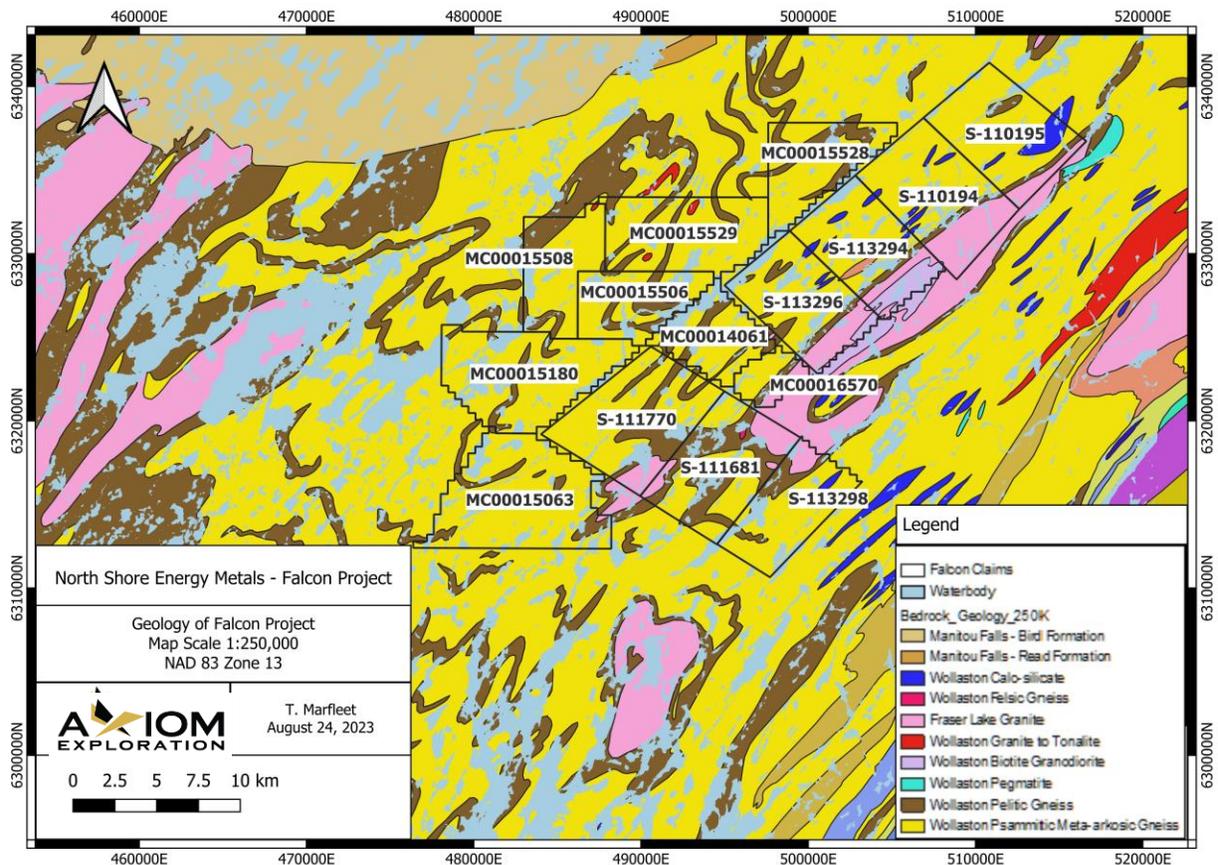
---

The Falcon Property is located within the Wollaston Domain and is situated within approximately 10 km of the margin between the Athabasca Basin and the underlying Wollaston Supergroup rocks (Figure 7-2).

Little to no detailed mapping has been completed in the claim area. Based on the available mapping completed by the Saskatchewan Geological Survey, the Falcon claims largely consist of calcareous meta-arkose and quartzo-feldspathic meta-arkose. Pelitic and semi-pelitic schists and gneisses occur as irregular, sinuous formations throughout the region (Ray, 1977). The pelitic and semi-pelitic sediments occur at the base of the Wollaston Group and higher up in the sequence interbedded with psammitic metasediments. The pelitic rocks typically contain more than 10% mafic minerals, with biotite being the most common, although cordierite, sillimanite, graphite, garnet, amphibole, and pyroxene are locally common (Donkers, 1982). Locally these rocks can be interlayered with quartzites, amphibolites, or calc-silicate rocks (Ray, 1977).

Assessment work by AGIP stated that outcrop is typically less than 5% in the project area. The outcrop consists of Archean felsic gneiss which is unconformably overlain by metamorphosed sediments of the Wollaston Supergroup. These rocks have been intruded by mafic rocks, typically of a gabbroic composition, and by several generations of pegmatites, some of which are radioactive (Donkers, 1982).

The property also contains an east-northeast trending synclinal fold which plunges at 30° to 40° east-northeast. The fold axis crosses to the north of SMDI 2455, which lies along the southern boundary of the claim block. The structures in the Big Sandy Lake area suggest the presence of a large antiform trending northeast with a moderate plunge (Ray, 1977; Donkers, 1982). Foliation trends were noted by Donkers (1982) to be quite variable, but typically the foliation strikes 020° to 045° with moderate to steep dips to either the northwest or southeast. The Property is also transected by a series of north-northwest trending faults, one of which passes just east of SMDI 2455.



**Figure 7-2: Geology of the Falcon Claims based on available 1:250,000 scale SGS mapping. Adapted from SMAD.**

## 7.4. GEOLOGICAL CROSS-SECTIONS

Not relevant at this stage.

## 7.5. SHOWINGS AND MINERALIZATION

The Athabasca Basin, which lies to the north of the Project area, hosts the world's largest high-grade uranium deposits (Card et al., 2007). Unconformity-type uranium mineralization in the Athabasca Basin is associated with graphitic Wollaston Supergroup pelites and with basement faults which have undergone brittle re-activation following the deposition of the Athabasca Group (Yeo and Delaney, 2007).

Ray (1977) suggested that U deposits could be found in areas where the lower graphitic pelites of the Wollaston Supergroup are overlain, or were overlain at one time, by the Athabasca Formation. Ray (1977) stated that the area adjacent to the current Athabasca Formation likely represents an exhumed surface and that unconformity-associated uranium deposits could exist some distance from the current margin.



Pegmatite-hosted uranium also commonly occurs in the lower Daly Lake group pelite (Yeo and Delaney, 2007). Ray (1977) noted uranium mineralization in pegmatites intruding and segregated from the Wollaston Group sediments. Uranium oxide, often with associated Mo and Cu was noted by Ray (1977) in pegmatites or fractures cutting the basal pelitic to semipelitic rocks. There is also uraninite found in sheared metasediment, such as what is observed at Burr Lake (Ray, 1977).

Approximately 25 “showings” or evidence of mineralization are documented in the Saskatchewan Mineral Deposits Index (SMDI) as occurring on or near the 15 claims constituting the Falcon property (Figure 7.3) with five of them warranting special attention: 2455, 5038, 2456, 1014 and 2020.

### FALCON PROPERTY AREA SHOWINGS

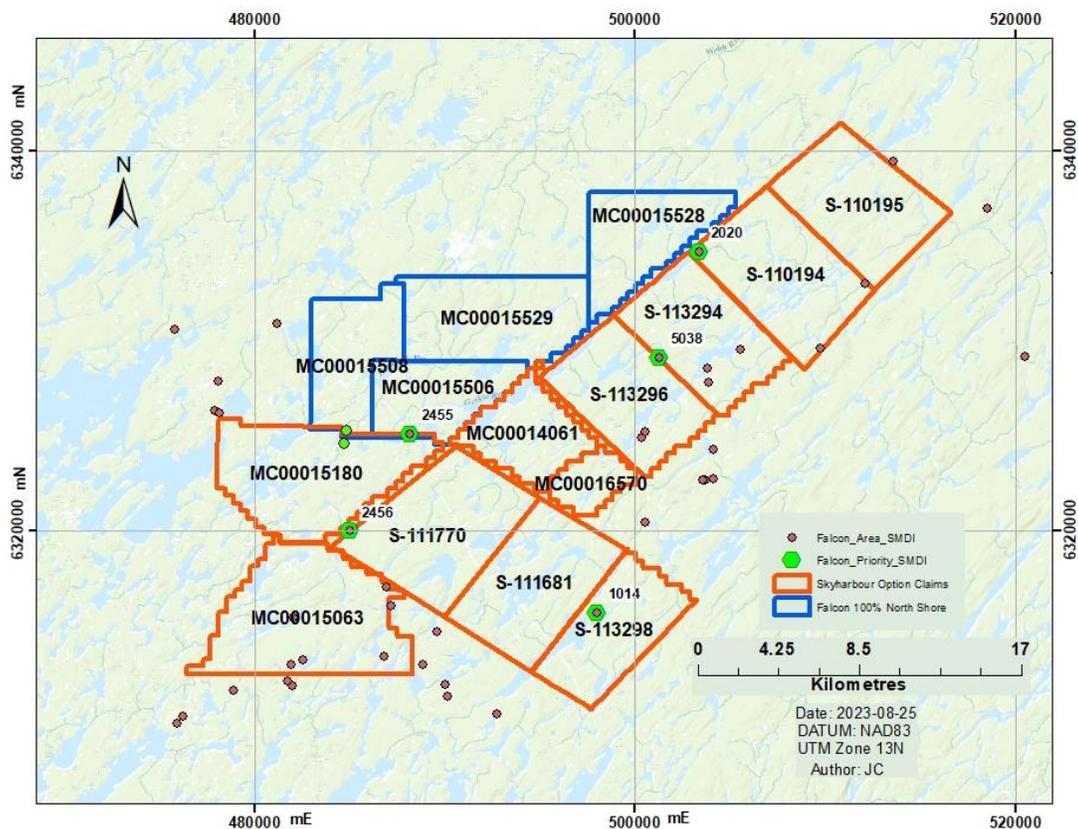


Figure 7-3: SMDI Locations on the Falcon Claims.

SMDI 2455, which lies along the boundary between claims MC00015180 and MC00015506 is described in detail in section 6-3 and in Figures 6-2, 6-3, and 6-4, consists of a 250 m by 10 m zone of anomalous radioactivity first identified as “Zone D” by AGIP (Figure 7-3). The uranium-pyrite-molybdenite mineralization occurs in fractures, veins and localized breccias in a meta-arkose host rock. The highest values were obtained from a sheared vein which assayed 1.26% U and 0.8% Mo. Significant assay results from this showing are listed in Table 7-1.

**Table 7-1: Anomalous Samples from SMDI 2455 (AR MAW00345)**

Sample ID	Type	Width (m)	Uranium	Molybdenum	Description
R2011-D-01	Grab	-	1.26%	0.8%	Vein
R2011-D-02	Grab	-	840 ppm	1,800 ppm	Vein
R2011-D-06	Grab	-	1,780 ppm	8 ppm	Vein
R2011-D-08	Grab	-	1,800 ppm	-	Boulder
CS2011-D-01	Chip	0.25	311 ppm	-	Vein
CS2011-D-04	Chip	0.25	613 ppm	-	Vein

SMDI 5038, known as the EWA showing lies along the boundary of claims S-113296 and S-113294 and is described in AR74H02 as being a 10 to 20 metre-wide, northeast-trending sheared pelitic unit with granitic inliers. Several grab samples from the shear zone returned values of 0.063 to 0.492% U<sub>3</sub>O<sub>8</sub> and up to 1,300 ppm Lead.

SMDI 2456, known as the Geicke River radiometric boulder fan located along the boundary between claims MC000115180 and S111770 was originally described by Ray (1977). The boulder fan is described in the SMDI as being 500 m long and 30 to 100 m wide and consisting of 19 sub-angular to sub-rounded boulders ranging from 30 to 200 cm diameter. The boulder fan is described in Section 6.3 of this report and in Figure 6.5. Table 7-2 presents some of the better assays from boulder grab samples.

**Table 7-2: Anomalous Boulders on Skyharbour Option Claims**

Sample ID	Pct. U	PPM Cu	PPM Mo	PPM Th
2112-102	0.081	19	710	35
2112-103	0.969	215	472	320
2112-300	0.566	460	119	290
2112-301	0.531	1380	2120	320
2112-302	0.079	4590	484	28
2112-517	0.719	193	2400	190

SMDI 1014, known as the Knob Lake radioactive pegmatite and uranothorite boulder is located on claim S113298. The showing consists of a small radioactive pegmatite outcrop where one grab sample returned 0.01% U<sub>3</sub>O<sub>8</sub> and 0.12% ThO<sub>2</sub>. A grab sample of a medium-grained biotite granite returned an assay of 0.026% U<sub>3</sub>O<sub>8</sub> and 0.09% ThO<sub>2</sub>.

SMDI 2020, the Big Sandy radioactive boulder fan which is located on claim S110194. As described in Section 6.3 of this report and on Figure 6-9, the boulder field consists of 37 subangular to rounded boulders clustered along a 2 km line trending 030o and grab samples from three boulders averaged 1520 ppm U, 425 ppm Th and 8,670 Mo.

## **7.6. STRUCTURE**

The earliest distinguishable deformational event (D<sub>1</sub>) produced the dominant regional foliation (S<sub>1</sub>) and isoclinal folding (F<sub>1</sub>) (Yeo and Savage, 1999). This deformational event is also responsible for the formation of sub-vertically inclined elongate, mantled basement gneiss domes. Protomylonitic to mylonitic fabrics are common at the contact between supracrustal rocks and the

basement gneiss and record  $D_1$  shearing and possible basement cover detachment (Yeo and Delaney, 2007).

West-northwest to north-northwest trending upright folds of  $D_2$  are not well developed except locally in the western portion of the Wollaston Domain (Yeo and Delaney, 2007). In this area there are rare examples  $F_1$  folds have been locally refolded by  $F_2$  structures. For the majority of the domain, however,  $D_1$  and  $D_2$  structures generally cannot be distinguished from one another (Yeo and Savage, 1999).

The third deformation event ( $D_3$ ) produced tight to isoclinal, northeast-trending, doubly plunging  $F_3$  folds and a pervasive, steeply northwest dipping axial-planar  $S_3$  foliation. Late  $D_3$  shears are typically sinistral and may be conjugates of the dextral Needle Falls shear zone (Yeo and Delaney, 2007). This second of the major deformational events produced the dominant regional folds which strike parallel to the north-northeasterly regional trend. This compressed the pre-existing mantled gneiss domes into flattened or complex domes or into major upright folds (Ray, 1977). Large scale isoclinal folds in the cover rocks may have suffered displacement and transposition along their limbs (Ray, 1977).

The  $D_4$  produced open, northwest trending folds with subvertical, northwest-trending axial planes and local, steep  $S_4$  foliation (Yeo and Savage, 1999). The dextral shears generated during  $D_4$  under the eastern Athabasca Basin, and associated with unconformity-type uranium deposits, are not well developed elsewhere in the Wollaston Domain. This supports the theory that initial subsidence of the Athabasca Basin occurred during  $D_4$  (Yeo and Delaney, 2007).

$D_5$  produced late steeply dipping faults (Yeo and Savage, 1999). The first set of late, brittle faults that are noted in the Wollaston Domain consist of north trending sinistral faults are believed to be associated with the Tabbernor fault system and are common northeast of the Fraser Lake area. Northwest to northeast trending sinistral faults, which are potentially related to late dextral movement on the Needle Falls shear zone are also common. As these faults extend into the Athabasca Basin, they must postdate the Athabasca Group (Yeo and Delaney, 2007).

Of note in the vicinity of the Falcon Project is the Burr Fault, which lies to the west of the project area. The Burr Fault is over 50 km long and cut both the Karin Lake and Crow Lake inliers and causes left-lateral displacement of the Athabasca Basin edge. The Burr Fault is associated with several uranium occurrences, including the Burr Lake Showing (Ray, 1977).

## **7.7. METAMORPHISM & ALTERATION**

---

At least two generations of metamorphic mineral growth and anatectic melting can be distinguished in the region. The first phase of metamorphism seems to be broadly coeval with  $D_1$ , as indicated by the orientation of biotite, sillimanite, and cordierite parallel to  $S_1$ . Early pegmatites, ranging from small sweat patches to sheets over 1 m in width are widespread. They commonly parallel to  $S_1$ , boudinaged and folded by later  $F_3$  folds (Yeo and Savage, 1999).

The second generation of metamorphism in the region was broadly coeval with  $D_3$  (Yeo and Delaney, 2007). This generation of metamorphism caused the preferred orientation of sillimanite, magnetite, and feldspathic lenses in the pelitic rocks and the diopside and hornblende in the calc-silicate rocks parallel to  $S_3$ . Second generation anatectic melts occur as undeformed sweats,

sheets or large bodies of pegmatite and granite. The pegmatite sheets generally parallel  $S_3$  or can be observed cross-cutting  $S_1$  (Yeo and Savage, 1999).

The metamorphic mineral assemblage observed in the region indicates upper amphibolite to lower granulite facies conditions. The presence of sillimanite and cordierite associated with anatectic melts suggest that conditions above 680°C and 4 kbar pressure were achieved. The presence of garnet in the second generation of metamorphism suggests that temperatures locally exceeded 700°C (Yeo and Savage, 1999).

## **7.8. QUATERNARY GEOLOGY**

---

The project area has been subjected to two periods of glaciation and is extensively covered by glacial drift. Numerous boulder fields are located in low lying valleys and along shorelines. The area is overlain by variable thicknesses of lodgement till and fluvio-glacial deposits such as eskers, kames, and outwash deposits. Northeast trending eskers are common throughout the region (Beaudry et al., 1979).

Glacial striae in the region indicate that the major ice movement was in a southwest to south-southwest direction. There is a broadly northwesterly thickening of the till cover in the region (Ray, 1977).

## **8. DEPOSIT TYPES**

---

Economic concentrations of uranium can be found in a variety of geological environments. On the Falcon Property there are two prospective deposit types. First, due to the proximity to the Athabasca Basin, is the potential for basement hosted, unconformity-associated uranium mineralization. Unconformity-associated uranium deposits of the Athabasca Basin are the world's largest high-grade uranium resource (Jefferson et al., 2007). The second potential deposit type on the Falcon Project is pegmatite-hosted or "Rössing Type" uranium mineralization. Although typically some of the lowest grade deposits, uranium deposits in granitic pegmatites can be economically significant if they contain enough tonnage. For example, the Rössing deposit was the world's fifth largest uranium producer in 2021, accounting for 5% of the global production (World Nuclear Association, 2021)

In the Athabasca Basin uranium deposits occur in three general locations spatially related to the unconformity between the basement rocks and the overlying Athabasca sediments. The first category consists of deposits which form in clay altered sandstone immediately above the unconformity and commonly extending into altered basement, such as what is observed at Cigar Lake or Key Lake. The second category is deposits which form in silica altered sandstone immediately above the unconformity, extending into altered basement and enveloped by a hydrothermal silica-rich zone, similar to what is observed at McArthur River. Finally, the third category consists of mineralization controlled by fractures and faults in basement rocks at or near the unconformity, such as what occurs at Rabbit Lake (Gandhi, 2007). The third type of mineralization is what would occur in the Falcon area as there is no Athabasca Group sandstone found in the project area.

Unconformity-associated uranium deposit types can consist of pods, veins, and semi-massive replacements of uraninite. A wide variety of compositional ranges from monometallic and

generally basement hosted veins to polymetallic lenses located just above or straddling the unconformity can occur. The basement hosted deposits typically consist of uraninite veins, breccia fillings and replacements in fault zones (Jefferson et al., 2007).

The original thickness and lateral extents of the Athabasca Basin is believed to be greater than what is currently preserved (Jefferson et al., 2007). This theory is supported by the mapping completed by Ray (1977) which located outliers of the Athabasca Group beyond the recognised basin margin and outcrops of regolith, which forms beneath the basal unconformity. There is the possibility that radioactive anomalies in the project area are derived from outlying basement hosted uranium deposits, above which the Athabasca Group cover has been totally eroded away (Jefferson et al., 2007).

Fracture controlled and breccia hosted replacement, basement hosted deposits would be the target on the Falcon claims. Fracture controlled basement ore typically occurs in steep to moderately dipping brittle shear, fracture and breccia zones hundreds of meters in strike length that extend down dip for tens of meters up to 400 m into basement rocks below the unconformity. Disseminated and massive uraninite or pitchblende occupies fractures and forms the matrix in breccias. High-grade ore lenses are bound by sheared, brecciated graphitic schist that often contain similar material forming an envelope of lower grade ore. The typical mining grade of these deposits are approximately 0.5% to 2% uranium (Jefferson et al., 2007).

Exploration for these deposits has traditionally focused on airborne and ground electromagnetic methods due to the recognition of an association between graphitic faults and uranium deposits. These methods have remained one of the most effective tools to identify the location, depth and characteristics of basement conductors (Jefferson et al., 2007). Airborne magnetic surveys can serve to identify faults and favorable basement lithological units as mapped by the magnetic gradients between the Archean gneiss domes and the Wollaston Supergroup (Jefferson et al., 2007).

There is also potential on the property for intrusive related uranium mineralization in some of the radioactive, anatectic pegmatites. This type of uranium deposit is typified by the Rössing Deposit, Namibia, where the uranium mineralization is linked to partial melting processes (Basson and Greenway, 2004; Gray et al., 2021). The Rössing Deposit consists of uranium enriched, sheeted leucogranites hosted by high-temperature, low-pressure metasedimentary rocks which were metamorphosed at upper amphibolite to granulite facies (Basson and Greenway, 2004). The uranium mineralization occurs as disseminated uraninite with the host leucogranites, remobilized veins, and as secondary mineralization (Shanyengana et al., 2020).

At the Rössing Deposit sheeted leucogranites occur along the flanks of the Rössing Dome and preferentially developed in anticline and dome structures and in surrounding metasedimentary rocks. The host granites are produced by partial melting of a metasedimentary source rock. The leucogranites intrude the pelitic to semi-pelitic schists, with rare xenoliths of pelites preserved in some of the more extensive granitic bodies. The metasediments could have provided a reducing environment conducive to the precipitation of uranium (Shanyengana et al., 2020).

A number of variably radioactive pegmatites similar to the Rössing pegmatites intrude the highly sheared, unconformable contact between the Wollaston Supergroup metasedimentary rocks and the underlying Archean orthogneisses. In the Fraser Lakes area these pegmatites are

preferentially located in antiformal fold nose. The mineralized pegmatites in this area contain uraninite, thorite, zircon and rare coffinite and allanite (McKechnie, 2012).

The Wollaston Domain pegmatites are interpreted by McKechnie (2012) to have formed as a result of partial melting. The melts were emplaced along major structural zones including sheared fold limbs, foliation, and the deformed Archean Paleoproterozoic contact. The pegmatites are concentrated in fold noses and other dilational zones (McKechnie, 2012). Late faulting and hydrothermal fluid flow has altered the pegmatites and caused the local remobilization of U into fractures and faults (McKechnie, 2012).

## **9. EXPLORATION**

---

In August of 2022 North Shore initiated a geophysical exploration program on its 100%-owned claims. The first component of the exploration program, contracted to Condor North Consulting ULC (Condor) of Denver, Colorado, was an assessment and reinterpretation of the airborne EM and magnetic data available from the SMAD assessment files for the area covering the Falcon claims. The details of Condor's work are provided below in Section 9.1 with target zones identified on the Falcon claims presented in Section 9.2.

The second component of the exploration program was an airborne gradiometer, radiometric and magnetic survey of the 100%-owned Falcon Property claims flown by Xcalibur. The objective of this survey was to assist in the identification of alteration zones, which will appear as lows in high-resolution gradiometry. The magnetic data will assist in the structural mapping and interpretation and the radiometrics will detect surface expression of any radioactive mineralization. The details of the survey are provided in Section 9.3 below.

North Shore has now begun evaluating geological and geophysical data from the Skyharbour Option Claims. Section 9.4 describes an initial evaluation of publicly available geophysical data.

### **9.1. CONDOR GEOPHYSICAL ASSESSMENT AND INTERPRETATION**

---

Condor's work on the 100%-owned Falcon Claims has involved the assessment and reinterpretation of two airborne geophysical datasets. The first dataset was collected in May and June of 2007 and consists of a helicopter-borne versatile time domain electromagnetic (VTEM) and aeromagnetic geophysical survey completed by Geotech Ltd. of Aurora, Ontario. This survey was flown over a portion of what is now the Falcon claims (Figure 9-1).

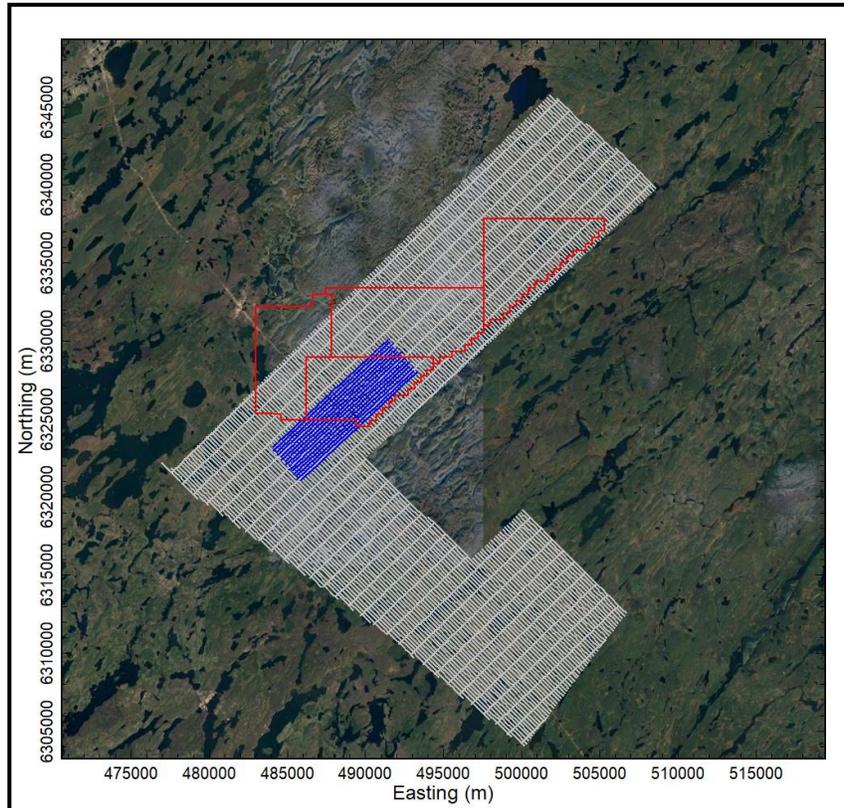
The second geophysical dataset was collected in June of 2013 by Aeroquest Airborne of Aurora, Ontario. This survey consisted of a Helicopter-borne Z-Axis Tipper Electromagnetic (ZTEM) and Airborne Magnetic geophysical survey on Prescient Mining Corps. Hook Lake Property, which lies entirely within the current Falcon Project claim area.

Both of these surveys aimed to identify shallow, basement hosted uranium deposits. An additional goal of these surveys was to characterize geological structures in the project area that may control the location of mineralization. The analysis completed by Condor stitches the data from the 2007 and 2013 surveys to complete magnetic susceptibility inversion modelling on the heliborne and fixed-wing total magnetic intensity (TMI) data compiled from the historical assessment reports.



Depth slices and isosurfaces are then generated. For the available EM data an inversion and AdTau has been generated for the survey block (Peterson et al., 2022).

Target zones identified during the initial review of the data are presented below in Section 9.2.



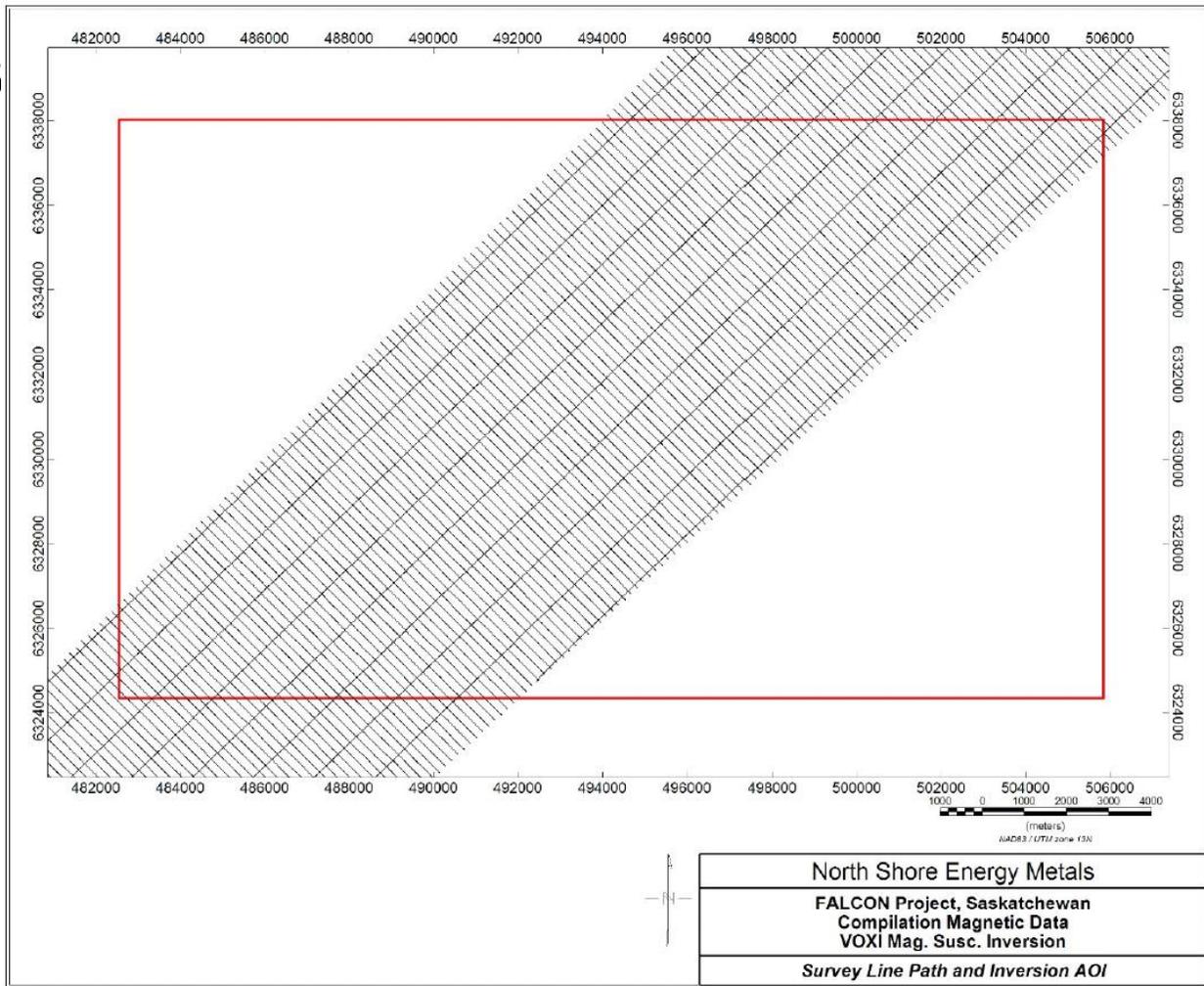
**Figure 9-1: Extent of VTEM and ZTEM surveys relative to the Falcon Property.** The VTEM flight lines are shown in white, ZTEM in blue, and the Falcon claim outlines in red.

### **9.1.1. VTEM SURVEY SPECIFICATIONS AND METHODOLOGY**

The geodetic system used for the geophysical survey was NAD 83 UTM Zone 13N. The survey lines were spaced at 200 m with 1000 m spacing between tie lines. The survey lines were flown at 135° with tie lines flown at 045° (Figure 9-2).

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023



**Figure 9-2: The linepath for the VTEM survey and the Falcon inversion Area of Interest (red outline).** Areas outside the VTEM survey utilized regional data from the Government of Canada (Condor, 2022).

The survey was flown using an Astar B2 helicopter at a nominal terrain clearance of 75 m. The principal geophysical sensors used included a Geotech Time Domain EM system and Geometrics optically pumped cesium vapour magnetic field sensor. The specifications of the VTEM system are provided below in Table 9-1. The magnetometer used was a Geometrics optically pumped cesium vapour magnetometer with a sensitivity of 0.02 nT and a 0.1 s sampling interval. The magnetic sensor was towed at a mean distance of 15 m below the helicopter.

The aircraft was also equipped with a NovaTel WAAS enabled OEM4-G2-3151W GPS navigation system and a Terra TRA 3000/TRI 40 radar altimeter. The data recording rate for the data acquisition was 0.1 seconds for electromagnetics and magnetometer and 0.2 seconds for the altimeter and GPS.



**Table 9-1: VTEM System Specifications**

VTEM Transmitter	
Coil Diameter	26 m
Number of Turns	4
Pulse Repetition Rate	30 Hz
Peak Current	244 Amp
Pulse Width	4.5 ms

VTEM Receiver	
Coil Diameter	1.1 m
Number of Turns	100
Sampling Interval	0.1 s

### 9.1.2. ZTEM SURVEY SPECIFICATIONS AND METHODOLOGY

Approximately 153.5 line km of data on 15 survey lines were collected during the ZTEM survey. The survey was flown northeast-southwest, 047° or 227°, with a flight line spacing of 200 m. Tie lines were not flown for this survey. The survey was flown using a Eurocopter Astar 350 B2 helicopter. The nominal EM sensor terrain clearance for this survey was 84 m and the magnetic sensor clearance of 99 m.

The principal geophysical sensors included a ZTEM system and a Geometrics split-beam optically pumped cesium vapor magnetic field sensor. Ancillary equipment included a NovAtel WAAS enable OEM4-G2-315W GPS navigational system and a Terra TRA 3000/TRI 40 radar altimeter. In-field data quality assurance and preliminary processing were carried out daily.

The sensitivity of the magnetic sensor was 0.02 nT at a sampling interval of 0.1 seconds. The magnetometer performs continuously in areas of high magnetic gradient with the ambient range of the sensor approximately 20k to 100k nT. The noise is specified as less than 0.5 nT.

A combined magnetometer GPS base station was used for this project.

The coil has a 7.4 m diameter with an orientation to the Vertical Dipole. The digitizing rate of the receiver was 2000 Hz. Attitudinal positioning of the receiver coil is enabled using 3 GPS antennas mounted on the coil. The output sampling rate is 0.4 seconds.

**Table 9-2: Acquisition and Processing Sampling Rates of the 2013 Geophysical Survey**

Data Type	Acquisition Sampling	Processing Sampling
ZTEM Receiver	0.0005 s	0.4 s
Magnetometer	0.1 s	0.4 s
GPS Position	0.2 s	0.4 s
Radar Altimeter	0.2 s	0.4 s
ZTEM Base Station	0.0005 s	-

The two Geotech ZTEM base station receiver coils measure the orthogonal, horizontal X and Y components of the EM reference field. They are arranged perpendicular to each other and roughly oriented according to the flight line direction. The orientation of the base stations was measured



using a compass. The base station coils each have a diameter of 3.5 m with the coil orientations to the horizontal dipole.

## **9.2. GEOPHYSICAL TARGET MODEL**

---

A target model based on the 2007 and 2013 geophysical surveys has been developed by Condor to assist in target selection and prioritization at the Falcon Property. The model is based on the currently available data and interpretations should be refined as new interpretations are established and more data is collected.

The target model emphasizes the location of conductors which could represent fault-controlled graphitic zones and other structures which could control the location of potential deposits. The targets are identified through EM anomaly picking and through analysis of the conductivity depth sections, and grids generated from conductivity inversion of the EM data. The targeting also considers the presence of strong magnetic gradients or where there is a sharp shift from magnetic high to low that may represent contact between Archean gneissic domes and the Wollaston sediments (Jefferson et al., 2007; Peterson et al., 2022).

### **9.2.1. TARGET ZONES**

---

The target zones are deemed to be logical groupings of anomalous features within the data set based on the assessment of geological and geophysical data in the context of the Target Model. The criteria for the target zones varies depending upon the available geophysical data. For example, some target zones are based mostly off the ZTEM and magnetics data and do not have an anomalous VTEM response. As most of the target zones do not have ZTEM data coverage they are based on VTEM conductor picks and observation of magnetics. The targeting was completed specifically within the North Shore claims, including a 1 km buffer zone surrounding them (Peterson et al., 2022).

A total of 7 target zones have been identified in the Falcon area; a description of each is provided in Table 9-3. Figure 9-3 provides a general overview of the identified target zone while in Figure 9-4 to 9-6 show a more detailed view the target zones overlaid on the 1VD magnetics (Peterson et al., 2022). At the northern extent of the property, on claim MC00015528, there is a single target zone which consists of strong to moderate anomalies (Figure 9-4). In the central portion of the property, on MC00015529, there are two additional target zones (Figure 9-5).

The majority of the target zones are located along the southern extent of the Property on or near the southern portion of MC00015508 and MC00015506. Target zone 4 consists of northeast-trending conductor anomaly picks which appear to cross a north-northwest trending fault. Target zone 5, which occurs in the vicinity of SMDI 2455, is based largely on the presence of the known showing (Figure 9-6). This zone is on the edge of a high magnetic gradient, which is also northeast-trending.

The target zones were prioritized based on the geophysical response and the associated geology. Targets with more than one characteristic of the target model, such as a strong conductor and associated magnetic gradient, are deemed high priority. Low to moderate target zones contain characteristics of the target model but require additional information (Peterson et al., 2022).

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023



**Table 9-3: Description of the Target Zones Identified on the Falcon Property (Peterson et al., 2022).**

Target Zone	Follow-Up Priority	Geology	VTEM	ZTEM	Magnetics	Comments
1	High	Contact between psammitic meta-arkosic gneiss (Wrn) & pelite and gneiss (Wpsn).	Two DPRs, two SPRS, high AdTau response.	No coverage.	Strong gradient on the west side of the TZ.	No associated mineralization.
2	Low	Pelite and gneiss (Wpsn) of Wollaston Group.	Two weak SPRs, high AdTau response.	No coverage.	Moderate to strong magnetic gradient.	No associated mineralization.
3	Low	Pelite and gneiss (Wpsn) of Wollaston Group, contact with Wrn unit.	Two DPRs - one moderate and one weak. Moderate to high AdTau.	No coverage.	High magnetic gradient - longer linear trend associated with contact with Manitou Falls Grp.	No associated mineralization.
4	Moderate	Wollaston Group; Psammitic meta-arkosic gneiss (Wrn) & pelite and gneiss (Wpsn). Inferred fault cuts through southern end of the TZ.	Semi-linear conductor that extends southwest approximately 8-km. Linearity of the conductor is likely broken by faulting.	No coverage.	NE-SW trending high magnetic gradients.	No associated mineralization. There is a waterbody in proximity to the target.
5	High	Pelite and gneiss of Wollaston Group (Wpsn); on the flank of an inferred fault.	Cluster of EM anomaly picks, no clear linear trend - possibly affected by the powerline.	Highly conductive, but likely affected by powerline noise.	Sitting between two strong gradient features.	Both airborne EM surveys are negatively affected by noise from the powerline. Target zone selected based on the D Zone uranium occurrence.
6	Moderate	Wollaston Group; Psammitic meta-arkosic gneiss (Wrn) & pelite and gneiss (Wpsn).	Moderate AdTau, no VTEM anomaly picks.	WNW-trending linear conductor that is strongest in the upper 100 meters. The feature extends past 300 meters.	Little to no magnetic gradient.	Aligns with the Z3 conductor as identified in the Hook Lake Assessment Report.
7	Moderate	Psammitic meta-arkosic gneiss (Wrn)	No EM anomaly picks. Moderate to low AdTau.	Strong conductor extending to several hundred meters.	Strong magnetic gradient.	Associated with the Z4 conductor identified in the Hook Lake Assessment Report.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

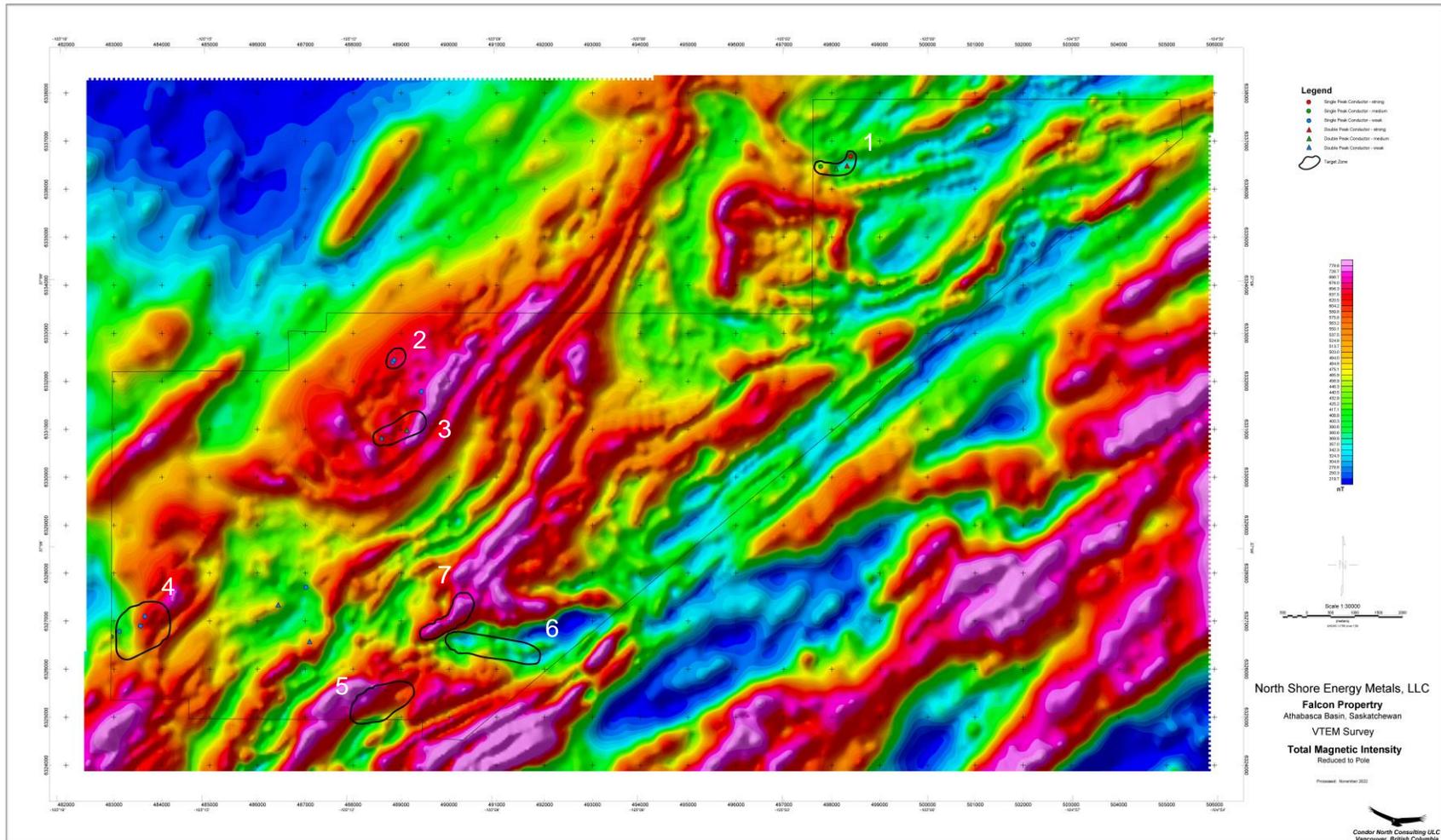


Figure 9-3: Targets Identified on the Falcon Property by Condor (Peterson et al., 2022).

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

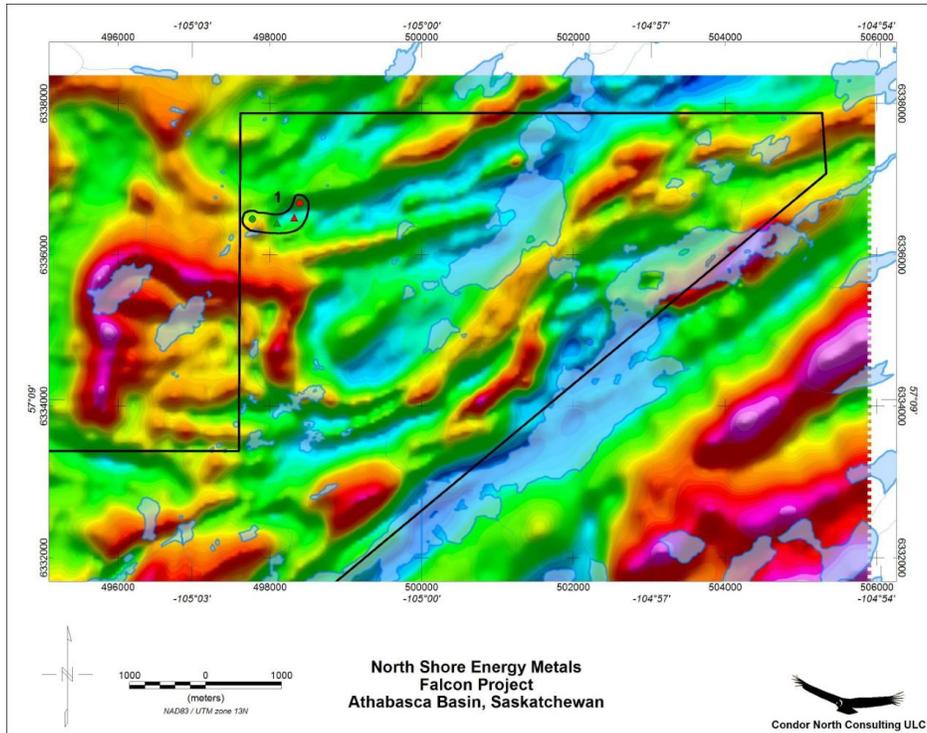


Figure 9-4: Target zones in the north portion of the Falcon Claims.

Legend in Figure 9-3.

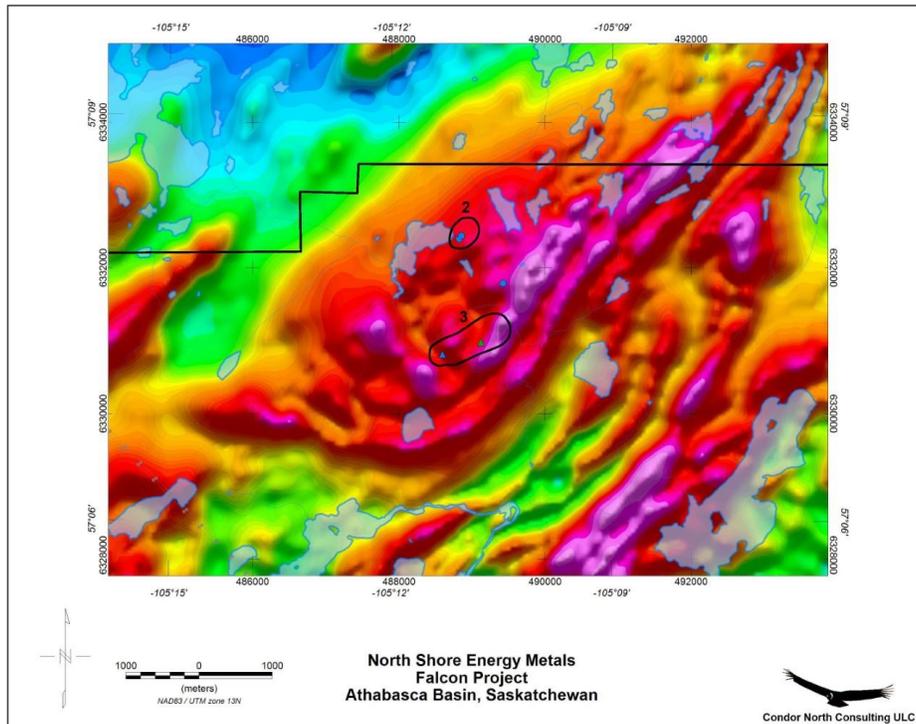
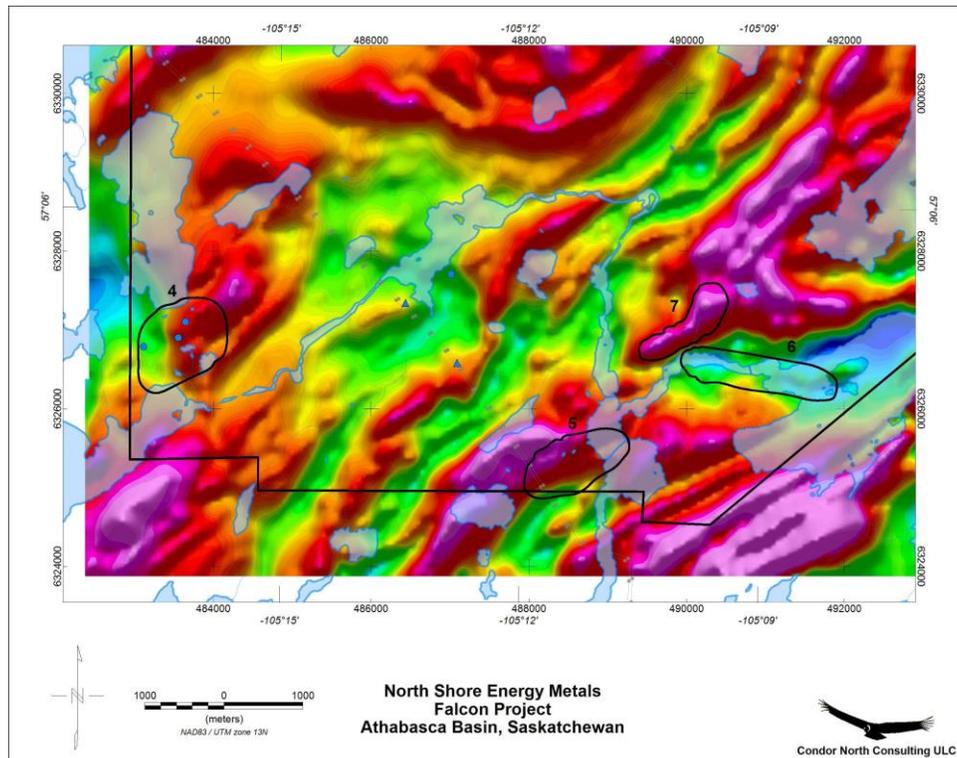


Figure 9-5: Target zones in the central portion of the Falcon claims.

Legend in Figure 9-3.



**Figure 9-6: Target Zones in the southern portion of the Falcon Claims.**

Legend in Figure 9-3.

### 9.2.2. CONDOR CONCLUSIONS AND RECOMMENDATIONS

Condor recommended ground truthing, geological mapping and soil sample of the identified target zones. Ground follow-up is particularly important in the powerline area where the quality of the geophysical data has been impacted. To add confidence to the target zones multiple geophysical techniques can serve to improve definition, including ground EM, gravity and DC resistivity/induced polarization surveys. Additional ZTEM coverage of the Property may be useful as the existing ZTEM coverage of the Falcon Property resolves the conductors well (Peterson et al., 2022).

### 9.3. NORTH SHORE XCALIBUR AIRBORNE GEOPHYSICAL SURVEY

An airborne gravity gradiometer, magnetic survey, and radiometric survey was flown over the 100%-owned Falcon Claims by Xcalibur Multiphysics between October 6<sup>th</sup> and October 10<sup>th</sup> of 2022. The purpose of this survey was to identify, if possible, any probable areas of local uranium concentration. A total of 903 line-km of data was collected over an area of approximately 157 km<sup>2</sup>. The survey was flown at a heading of 090° with a line spacing of 200 m (Figure 9-10). Tie lines were flown at a heading of 000° with a spacing of 2000 m. The nominal terrain clearance was 80 m above ground level. Field processing and quality control checks were performed daily. The cost of the survey was approximately \$167,000.<sup>00</sup>.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

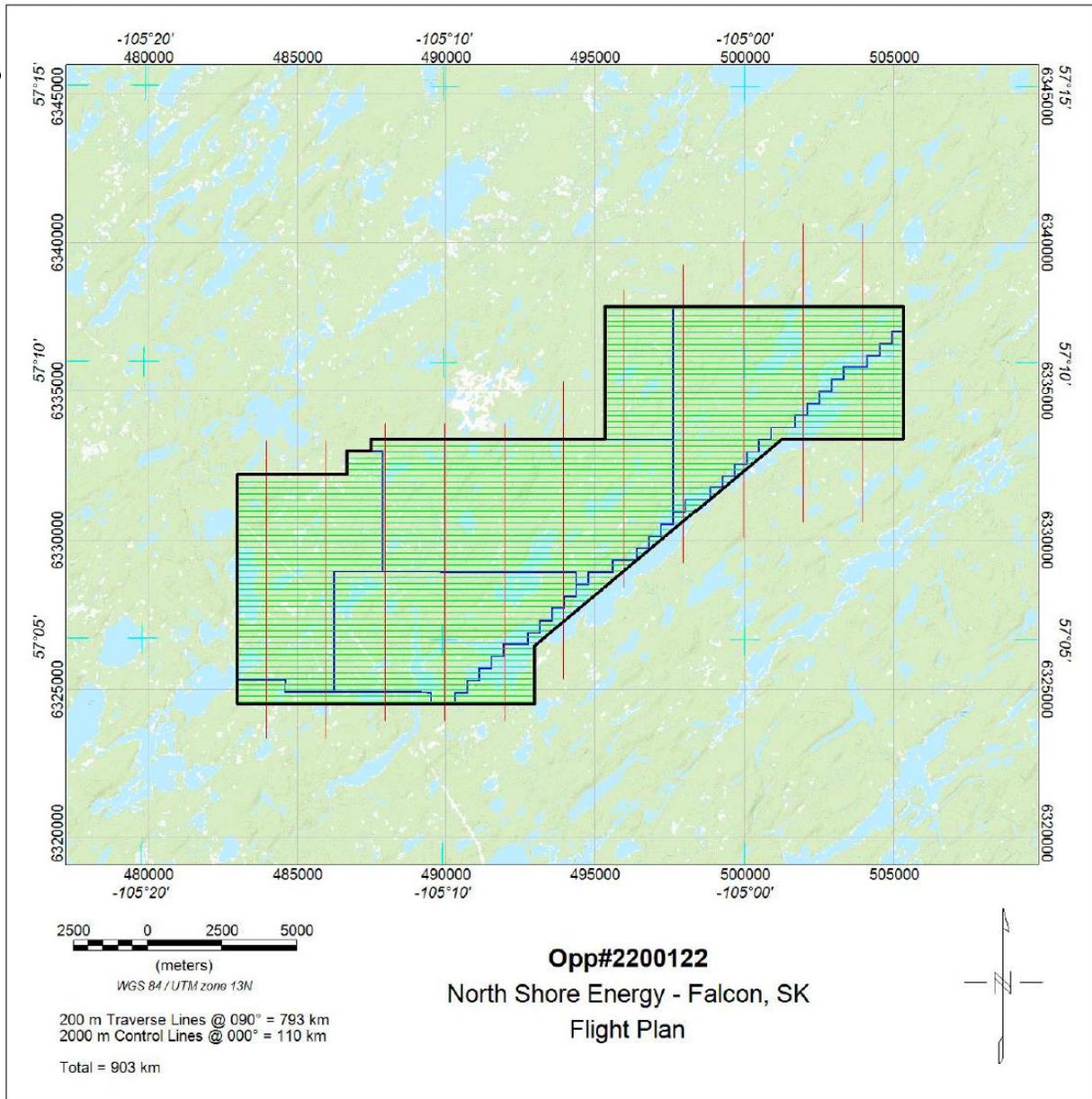


Figure 9-7: Falcon Survey Area Flight Plan.



**9.3.1. SURVEY SPECIFICATIONS**

The geodetic system used for the geophysical survey was WGS 84 in UTM Zone 13N. Polygon coordinates for the survey block are specified in Table 9-4.

**Table 9-4: Survey Polygon Coordinates (WGS84 UTM Zone 13N)**

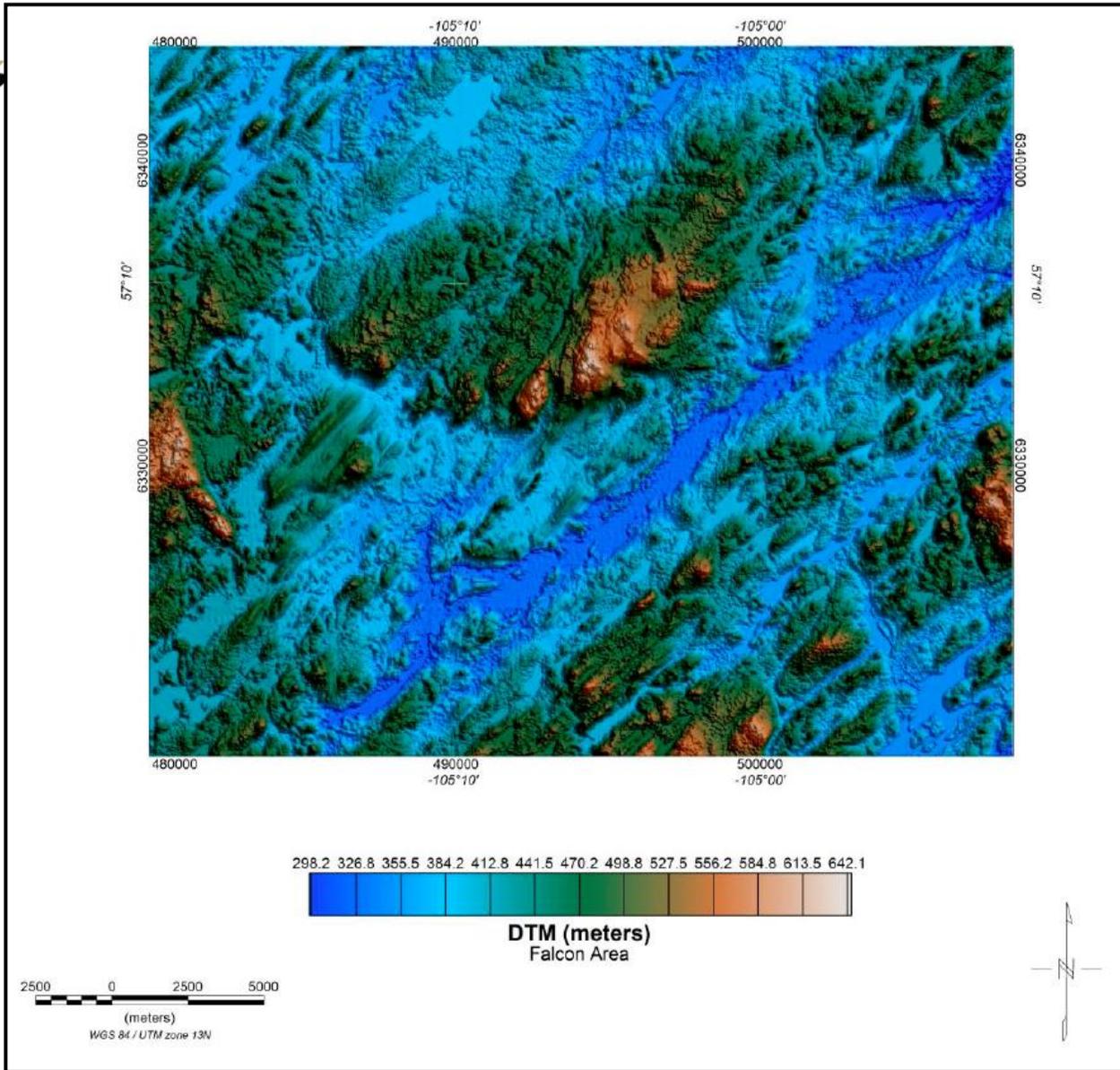
Corner Number	Easting (m)	Northing (m)
1	482962	6324500
2	482962	6332205
3	486663	6332205
4	486663	6332993
5	487466	6332992
6	487466	6333394
7	495321	6333394
8	495321	6337841
9	505321	6337841
10	505321	6333394
11	501257	6333394
12	492962	6326456
13	492962	6324500

The survey was flown using an Xcalibur Multiphysics Cessna C208B turbo prop aircraft. The survey utilized a Falcon Airborne Gravity Gradiometer (AGG) System, including Lockheed Martin Airborne Gravity Gradiometer with single near-vertical spin-axis, dual complement Gravity Gradiometer Instrument. The Gamma-ray spectrometer was a Radiation Solutions RS-500. The main spectrometer, total count, potassium, uranium, thorium and cosmic windows are recorded, along with the entire 256-channel spectrum at a rate of 1 sample per second. A Scintrex CS-3 cesium vapor magnetometer, mounted on a stinger, was used for the magnetic data collection. The sampling rate of the airborne magnetometer was 0.1 s.

Terrain clearance was provided by King KRA405B radar altimeter. The altimeter has an accuracy of 3ft at 0-500 ft and +/-5% at 500 to 2000 ft with a measurement rate of 10 Hz. A Novatel OEMV-3G provided real-time differential positional data at intervals of 1 s. A Riegl LMS-Q2401-60 laser scanner was also used, with returns recorded at a rate of 36 scans per second, and each scan returning 276 points. Each return was converted to ground surface elevation by combining scanner range and angle with aircraft position and attitude data.

A Novatel OEM4 GPS base station was set up at Points North Landing on October 6<sup>th</sup>, 2022, at 58° 16' N and 104° 5' W and 437 m asl. A CF1 Magnetometer Base Station was also set up at this location. The magnetometer base station operated at 57,155 nT.

A digital terrain model was generated for the Falcon area by combining laser scanner data with GPS position and height data. This data was supplemented by Shuttle Radar Topography Mission (SRTM) v3 data which has a one arc second resolution. The laser scanner data were gridded at 10 m with a 1 cell maximum beyond the data limits. Gaps between lines, and to extend coverage beyond the survey area, utilized SRTM data (Figure 9-8).



**Figure 9-8: Final Digital Terrain Model of the Falcon area (referenced to the EGM96 Geoid).**

Data processing completed by Xcalibur used Osis Montaj processing and imaging software, GrafNav Differential GPS processing software, and two proprietary Xcalibur Mutliphysics processing programs.

### **9.3.2. METHODOLOGY**

---

The data from the airborne survey was provided to Earthfield for detailed analysis using their proprietary Predictive Uranium Analysis. This consisted of identifying basement related fault and fracture zones, and intrusive bodies from the magnetic and gravity data. The radiometric data further assists in the targeting.

The primary method used for Earthfield's interpretation utilized inversed modelling-based Werner deconvolution algorithms as a basis for the interactive analyses of the horizontal location and depth to the source body and the related parameters of dip and susceptibility. The program MAGDEPTH was utilized by Earthfield for the Werner deconvolution. MAGDEPTH is a proprietary software package used to determine anomaly source depth (Earthfield, 2023).

Analysis of the total magnetic intensity and gravity data yield parameters for thin, sheet-like bodies, such as sills or dikes. Analysis of the horizontal gradient data yields parameters for features such as dipping geological contacts, major faults, or slope changes of the basement surface. Combining the analyses of both the total field and gradient data, it is possible to identify and calculate the geological parameters of both sheet-type bodies as well as other interfaces (Earthfield, 2023).

Independent Lineament analysis, via proprietary software, was also performed on the magnetic, gravity, and topographic data. This involved the identification of inflection points which mark the theoretical position of possible faults and fractures. These lineations were combined with the interpreted basement faults and fractures, and lineament density/intersection maps were generated. Topographic linears indicate possible surface expression of fractures. The magnetic linears further indicate areas of possible basement fracturing (Earthfield, 2023).

The gravity data is used to identify low density zones that may be related to hydrothermal alteration and the radiometric data identifies anomalies related to increased uranium concentrations in shallow geologic environments (Earthfield, 2023).

### **9.3.3. RESULTS AND INTERPRETATION**

---

Earthfield's analysis identified several potential uranium targets within the Falcon Property. Numerous fracture zones exist within the basement and have been identified by Earthfield utilizing inversion analysis and a depth to basement/fault/fracture map developed (Figure 9-9). The Reduction to Pole residual magnetic map may help identify hydrothermal alteration zones associated with graphite or uranium deposition. Graphite is typically related to magnetic anomaly lows (Figure 9-10). As graphite is also low density it can produce high frequency gravity anomaly lows as well. Radiometric maps were also generated by Earthfield, including both total count and concentration maps (Figure 9-11 and 9-12).

Complete lineament analysis was completed by Earthfield to produce lineament and intersection density maps. These maps indicate the areas with the highest fracture potential (Figure 9-13 and 9-14).

The results of all the analyses were combined by Earthfield using a proprietary, weighted, Boolean approach to produce a risk-reduced Uranium Target Map (Figure 9-15).

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

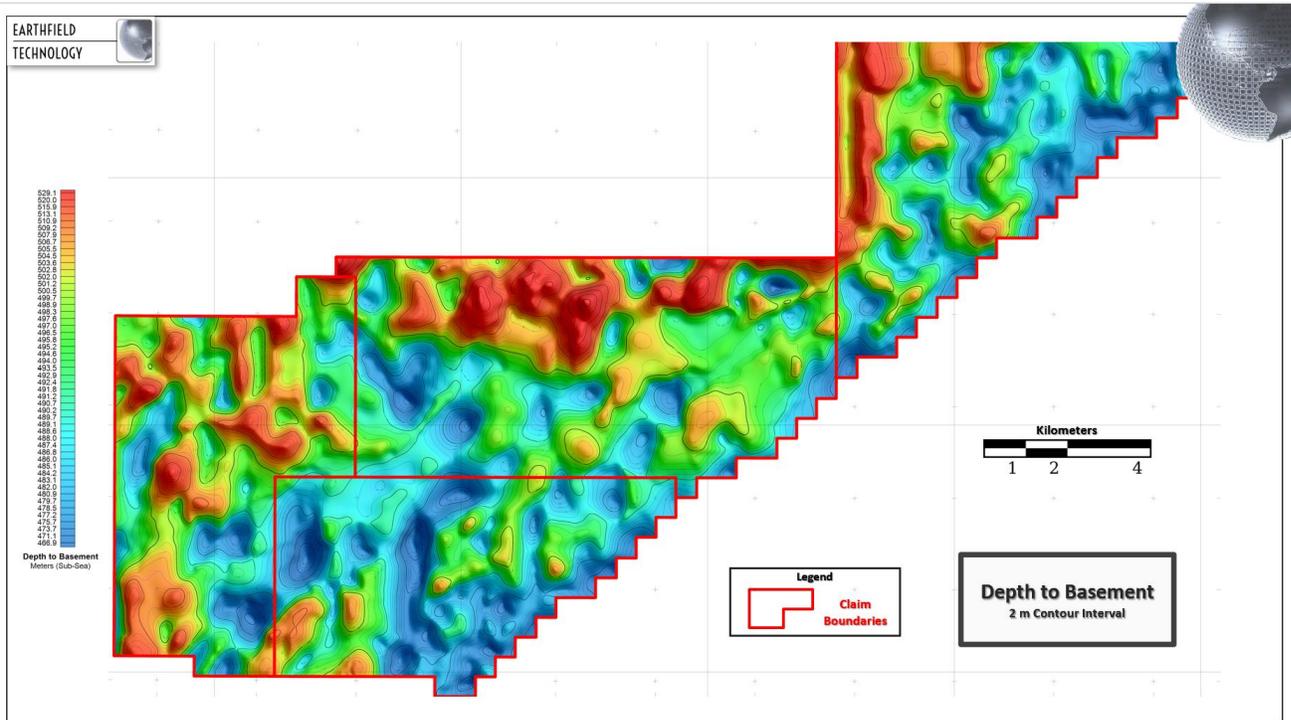


Figure 9-9: Depth to Basement Interpretation (Earthfield, 2023).

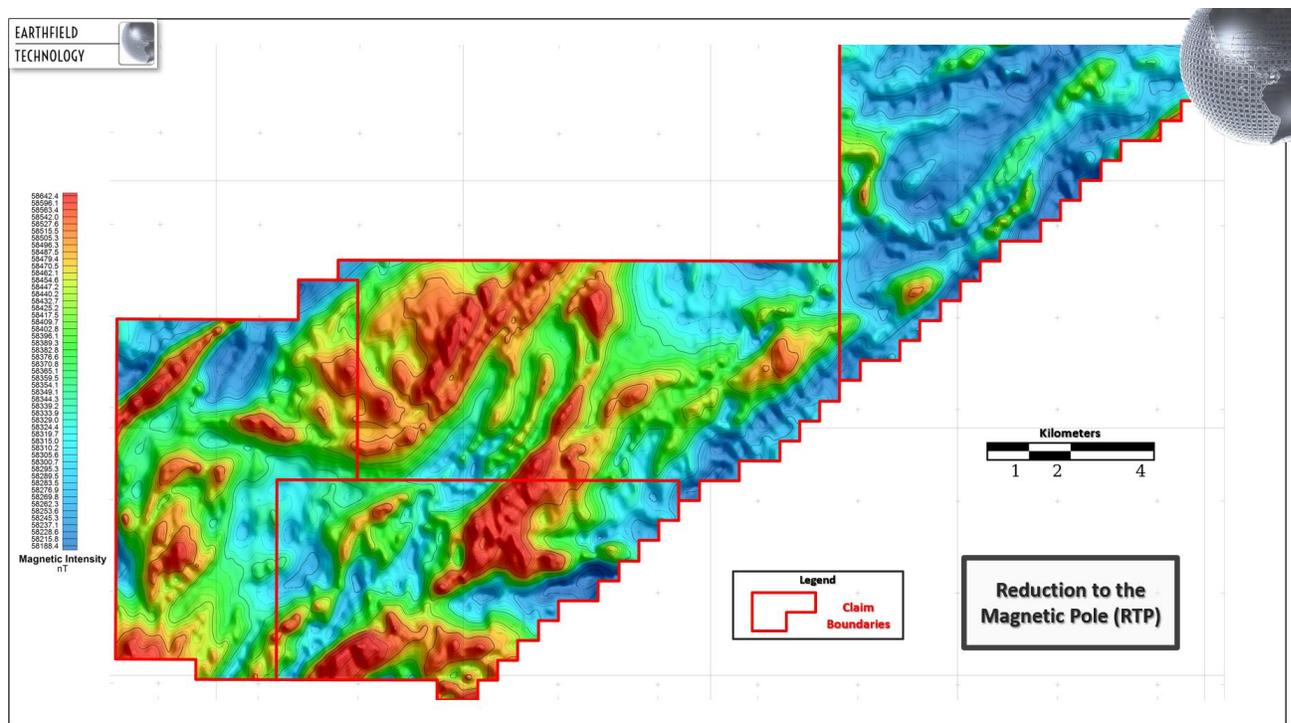


Figure 9-10: Magnetic Reduction to the Pole (Earthfield, 2023).

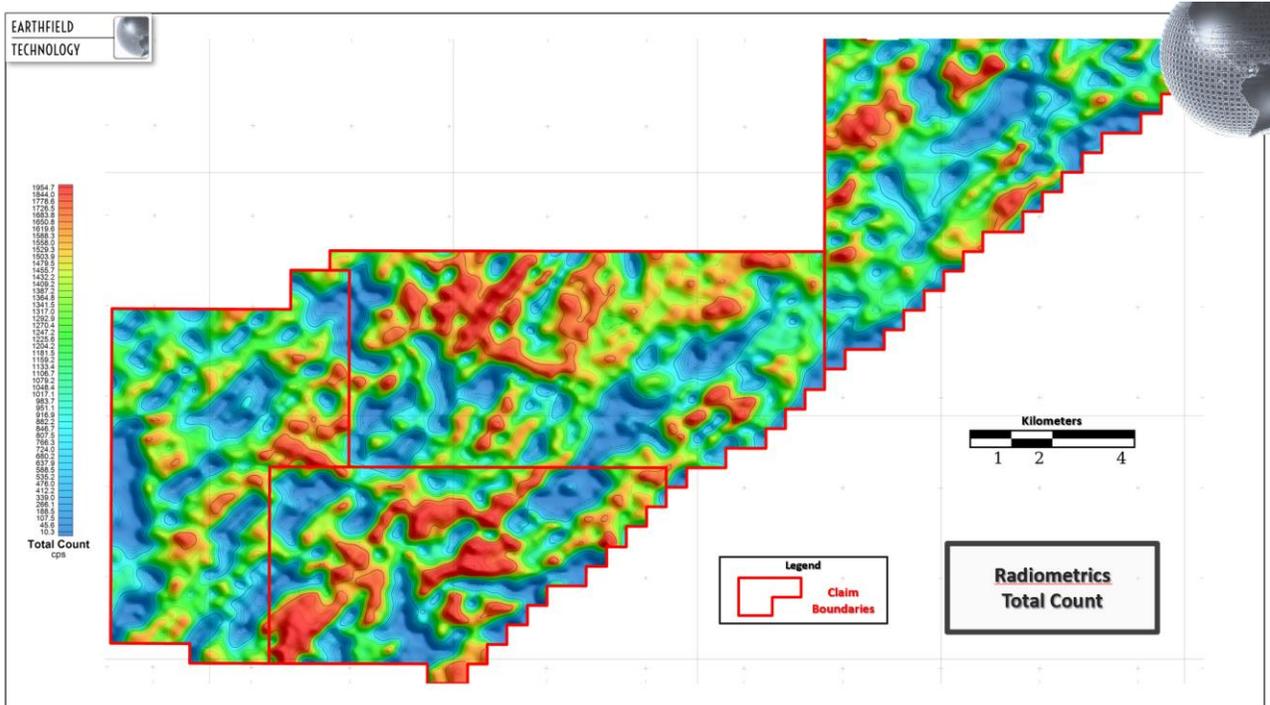


Figure 9-11: Radiometric Total Count (Earthfield, 2023).

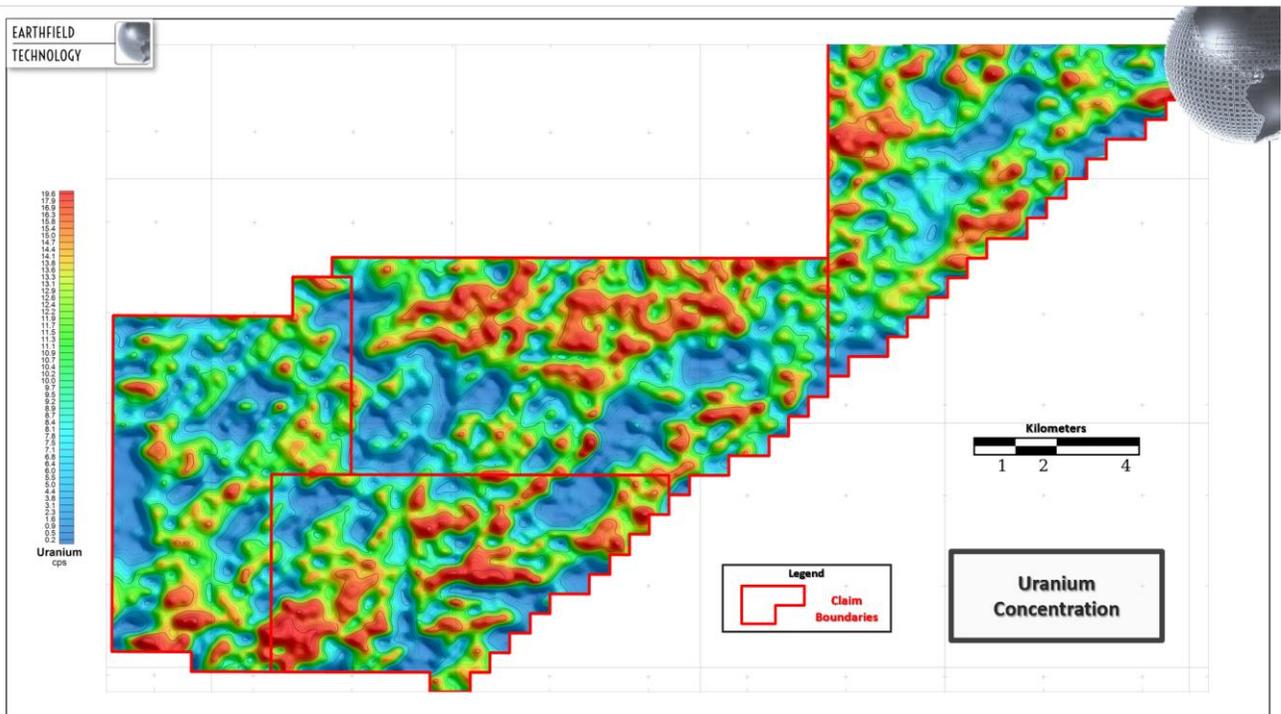


Figure 9-12: Radiometric – Uranium Concentrations (Earthfield, 2023).

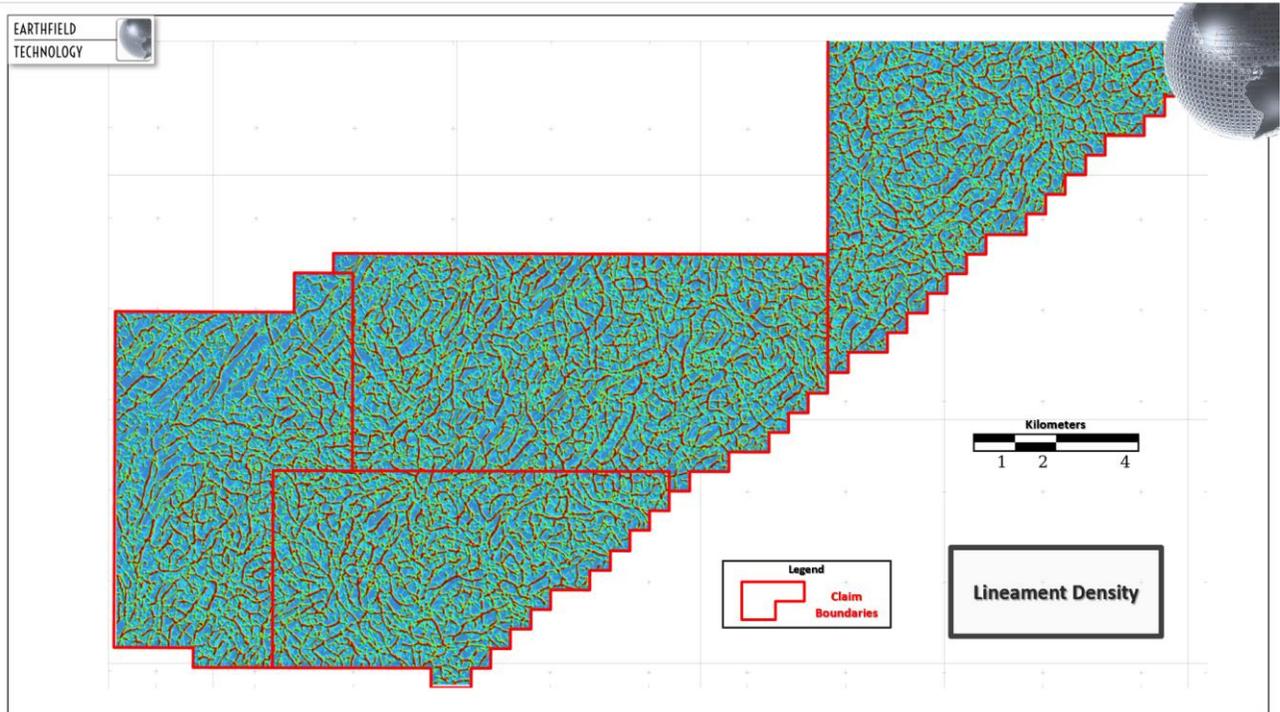


Figure 9-13: Lineament Density (Earthfield, 2023).

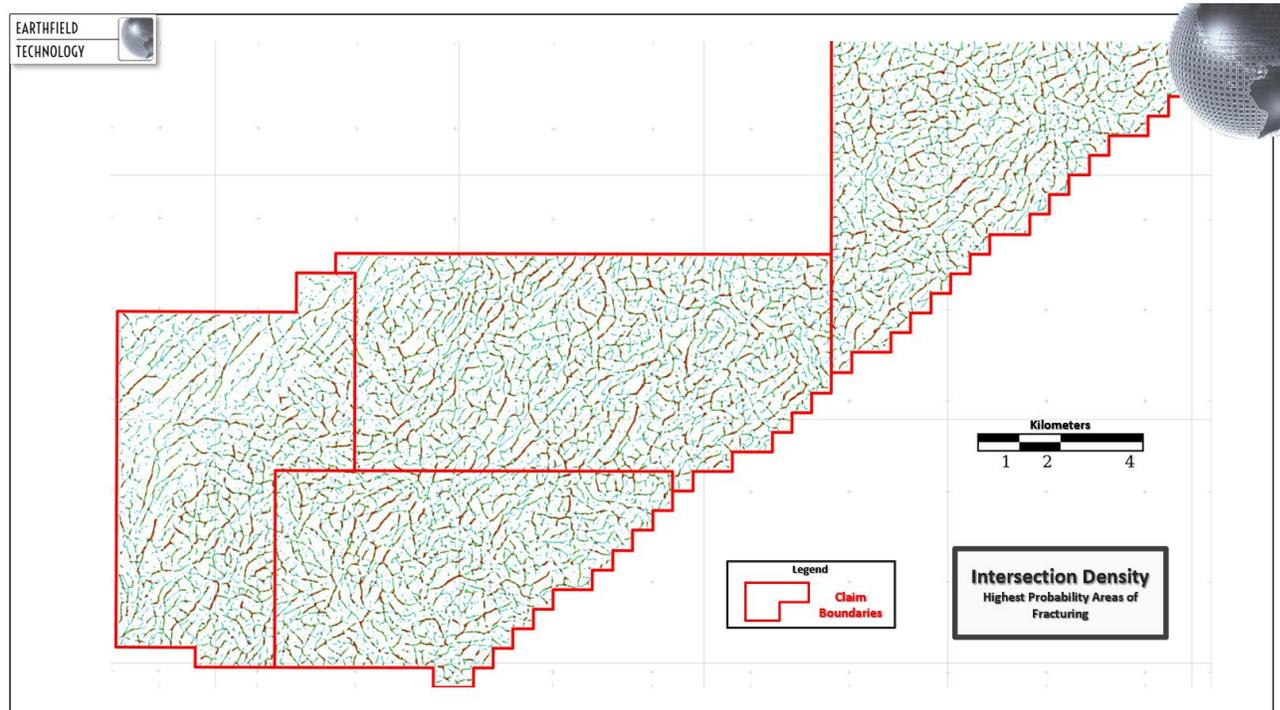
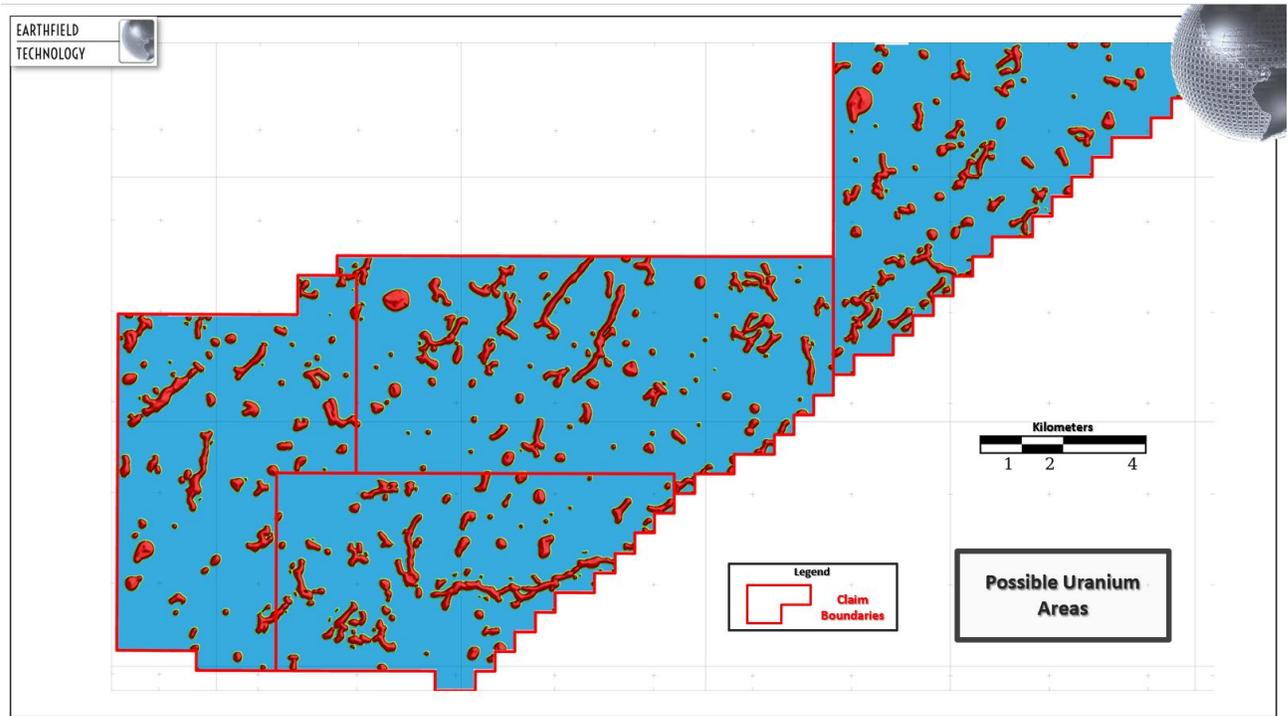


Figure 9-14: Intersection Density (Earthfield, 2023).



**Figure 9-15: Uranium Target Map (Earthfield, 2023).**

#### **9.4. CONDOR INITIAL GEOPHYSICAL ASSESSMENT AND INTERPRETATION OF DATA RELATED TO SKYHARBOUR OPTION CLAIMS**

In August of 2023, Condor was engaged by North Shore to conduct an initial evaluation of publicly available geophysical data for the Skyharbour Option Claims with emphasis on the five western most claims (Moul, 2023). EM and magnetic data from the surveys flown in 2006 and 2007 were reviewed for the focus area (SMAD File 74H03-0066, 2007) (SMAD File 74H03-0050, 2008). EM profiles were reviewed; powerline responses and discrete conductors were classified based on a single-peak response or a double-peak response and the response amplitude was classified as strong, moderate, or weak. Figure 9-16 shows the selected EM conductors with a survey grid background. Figure 9-17 shows the conductors with RTP magnetics background.

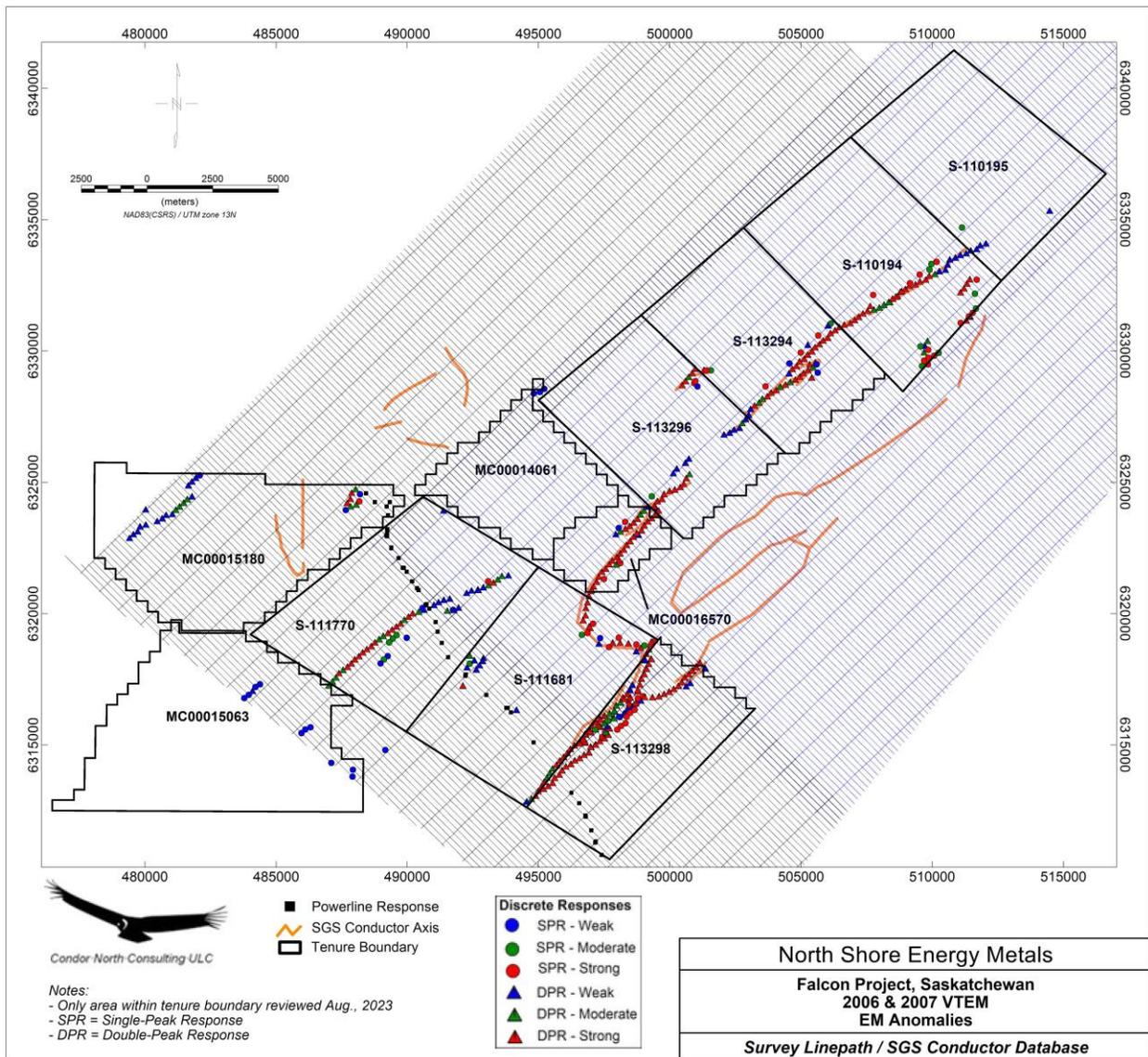
Moul (2023) recommended consideration of the following additional steps:

1. The magnetic and AdTau grids should be merged. The ZS-suite filters should be re-run on the merged TMI-RTP grid.
2. Conductor axes should be defined based on the characteristics of the EM responses defined at the discrete picks.
3. The gridded magnetic data should be used to define significant structural features proximal to the EM responses.



4. Additional geophysical and geoscience data should be incorporated with the EM and magnetic results to assist in prioritization of areas for follow-up work and potential drilling including the Falcon Airborne Gravity-Gradiometer (AGG) data. The GDD and gD gridded data may be of value in defining major structures and have the potential to define areas of bedrock alteration which may assist in targeting.

5. EM responses in areas prioritized for follow-up work should be modelled using the Electromagnetic Imaging Technology (EMIT) conductive plate modelling software to better define the conductor parameters.



**Figure 9-16: EM conductor picks with survey grid background and the SGS conductor axes. It appears that conductors selected from the 2007 survey are not in the public database. (Moul, 2023)**

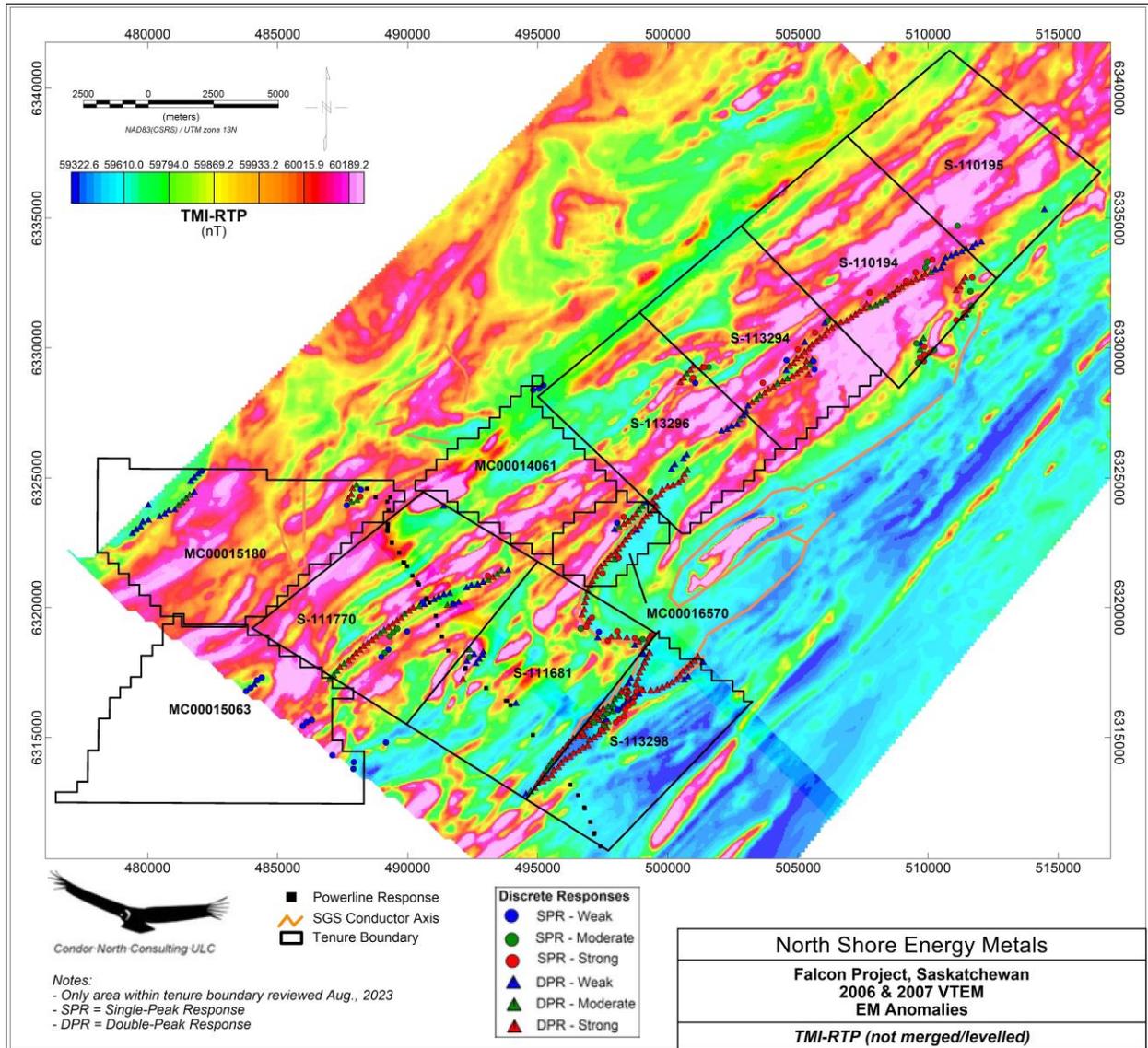


Figure 9-17: TMI-RTP from the 2006 and 2007 surveys with the discrete conductor picks. (Moul, 2023)

## 10. DRILLING

To date, there has been no drilling completed on the Falcon Property by North Shore. A summary of the historic drilling that has been completed for the Falcon Project area is included in Sections 6.2 and 6.3 above.



## **11. SAMPLE PREPARATION, ANALYSES, AND SECURITY**

---

No samples have been collected from the Falcon Property by North Shore.

## **12. DATA VERIFICATION**

---

The authors have reviewed all historical exploration work on the Property recorded in publicly available assessment files from the Government of Saskatchewan Ministry of Energy and Resources in the Saskatchewan Mineral Assessment Database. These older, historic records are sometimes incomplete, so relevant details of the exploration results may be missing and should be used with caution.

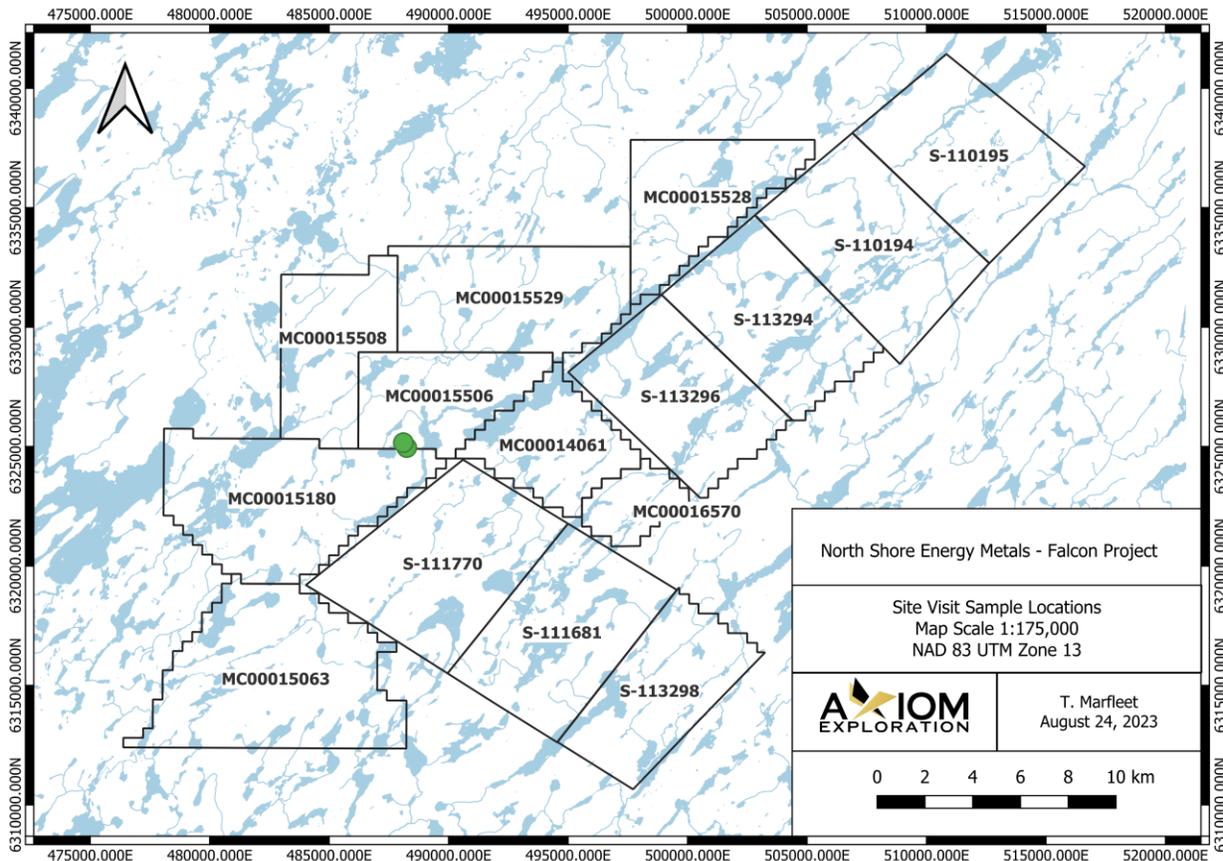
### **12.1. AXIOM SITE VISIT**

---

A site visit to the Falcon Property was made by Mr. Troy Marfleet, P.Geo., of Axiom between October 3<sup>rd</sup>, 2022, and October 5<sup>th</sup>, 2022, on behalf of North Shore. The site visit to the Falcon Property included prospecting of the historical "D Zone" showing outcrop to confirm the location falls within the southern extent of North Shore claim boundaries, and a handheld scintillometer was used to confirm the anomalous radioactivity described in historical reports.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023



**Figure 12-1: Location of samples collected during the Axiom site visit.**

In addition to a site visit and verification of the radioactivity of the “D Zone” showing, three (3) outcrop samples with elevated counts-per-second radioactivity values on the handheld RS-125 scintillometer were collected by the Qualified Person at the “D Zone” showing to confirm anomalous radioactivity. Results from the SRC analysis showed background values of Uranium and a maximum value of 0.02% Thorium. GPS locations of each sample were recorded as evidence that the historical showing is within the company’s claim boundaries.



Figure 12-2: Troy Marfleet, QP, testing for radioactivity at the “D Zone” Outcrop

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

---

Not applicable at this stage.

### **14. MINERAL RESOURCE ESTIMATES**

---

Not applicable at this stage.

### **15. MINERAL RESERVE ESTIMATES**

---

Not applicable at this stage.

### **16. MINING METHODS**

---



Not applicable at this stage.

## **17. RECOVERY METHODS**

---

Not applicable at this stage.

## **18. PROJECT INFRASTRUCTURE**

---

Not applicable at this stage.

## **19. MARKET STUDIES AND CONTRACTS**

---

Not applicable at this stage.

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

---

Not applicable at this stage.

## **21. CAPITAL AND OPERATING COSTS**

---

Not applicable at this stage.

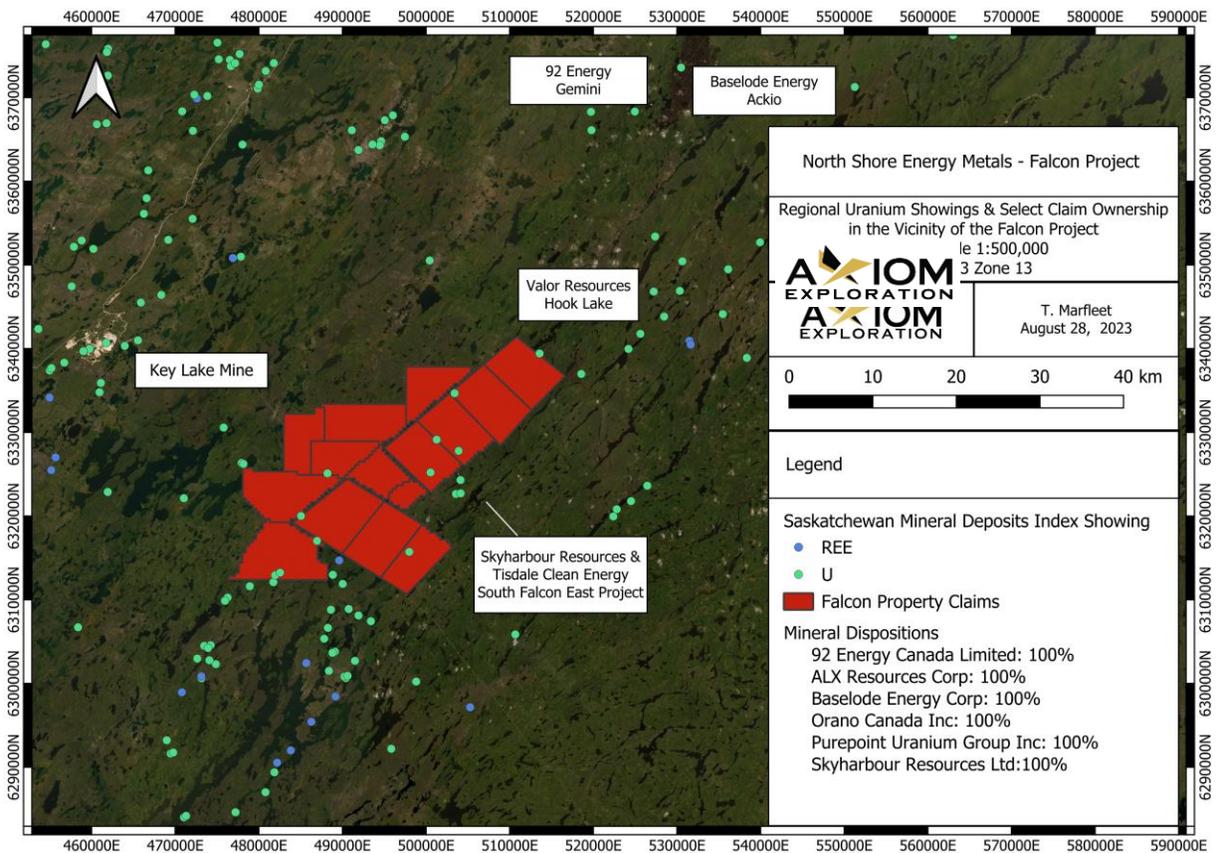
## **22. ECONOMIC ANALYSIS**

---

Not applicable at this stage.

## 23. ADJACENT PROPERTIES

Surrounding the Falcon Project are a number of other uranium exploration projects at various stages of exploration and development including Skyharbour Resources Ltd. South Falcon Point Project, which includes the Fraser Lakes Zone B Deposit, which lies 10 km southeast of the Falcon project, Valor’s Hook Lake Project which lies approximately 25 km east-northeast of the Falcon Project, and 92 Energy’s Gemini and Baselode’s Ackio discoveries which lie approximately 45 km to the northeast of Falcon (Figure 23-1).



**Figure 23-1: Location of Select Exploration Projects in the Falcon Project Area.**

(Adapted from SMAD).

### 23.1. SKYHARBOUR RESOURCES LTD. – TISDALE CLEAN ENERGY SOUTH FALCON EAST PROJECT

The South Falcon East Uranium Project is the most advanced of the adjacent exploration properties; in 2015 Skyharbour Resources Ltd. (Skyharbour) released a NI 43-101 Technical Report on the Falcon Point Uranium Project. This report included an inferred resource for the Fraser Lakes Zone B Deposit of 6.96 Mlbs U<sub>3</sub>O<sub>8</sub> within 10.4 million tonnes at an average grade of 0.03% U<sub>3</sub>O<sub>8</sub> (Armitage, 2015).

The Fraser Lake Zone B consists of approximately 70 mineralized outcrops which have been identified within an antiformal fold nose that is crosscut by an east-west dextral brittle-ductile structure and younger north-northeast and north-northwest brittle faults (Annesley et al., 2010; Armitage, 2015). The uraniferous pegmatites occur within the tectonized contact between Archean granitoids and the basal pelitic metasediments of the Wollaston Supergroup. The tectonized, or sheared, contact folds around Archean granitic dome and is thickest with synformal and antiformal noses (Armitage, 2015).

The Fraser Lakes Zone B Deposit has a strike length of approximately 1,400 m, trends approximately 240° and dips 30° to the north. In cross-section the pegmatite hosted mineralization is tabular in shape. The mineralization ranges from 2 m to 20 m in width over a vertical thickness of approximately 175 m. The mineralization is accompanied by varying degrees of illite, dickite and kaolinitic clay, chlorite, hematite, and fluorite. The uranium occurs in association with Th-REE and there are also elevated concentrations of Cu, Ni, V, Bi, Zn, Co, Pb and Mo found within the pegmatites (Armitage, 2015). Armitage (2015) states that the U-Th-REE mineralization hosted by fractured and altered pegmatites is consistent with 'Rössing Type' uranium mineralization.

North of Zone B JNR Resources, who previously owned the property, drill several structural targets along a 65 km long conductor system on what are now the Skyharbour Option Claims. Two of these holes intersected a major clay-filled fault systems with anomalous radioactive and U mineralization. Annesley et al. (2010) stated that these structurally controlled, basement hosted deposits display some similarities to high-grade, basement-hosted uranium deposits in the Athabasca Basin such as Eagle Point, Millennium, P-Patch and Roughrider. The Fraser Lake area displays evidence of major structural reactivation, significant clay alteration, uranium remobilization and basinal brine fluid circulation, all of which are characteristic of basement hosted uranium deposits in the Athabasca Basin (Annesley et al., 2010).

*\*Note: The qualified person has been unable to verify the above information and has relied on public disclosures by the owner of the Falcon Point Property. The information above is not necessarily indicative of the mineralization on the property that is the subject of this technical report.*

## **23.2. VALOR RESOURCES - HOOK LAKE PROJECT**

---

The Hook Lake Project, owned by Valor Resources (Valor) and Skyharbour, consists of several uranium prospects, including some high-grade surface mineralization, such what is observed at the S-Zone. Chip sampling completed by Valor at the S Zone trench in 2021 confirmed the historical high-grade U-REE results. A total of 7 chip samples were collected with 4 samples assaying over 6% U<sub>3</sub>O<sub>8</sub>. These chip samples also contained up to 507 g/t Ag, and between 0.81% and 3.68% TREO (Figure 23-2). The sample which assayed 3.68% TREO included 8,562 ppm Nd<sub>2</sub>O<sub>3</sub>+Pr<sub>6</sub>O<sub>11</sub> and 1,676 ppm Dy<sub>2</sub>O<sub>3</sub>. A boulder sample from this area assayed 59.2% U<sub>3</sub>O<sub>8</sub> and 5.05% TREO (Skyharbour, August 31, 2021).

Previous sampling of the trench completed by Skyharbour in 2015, confirmed the presence high grade surface outcrop with grab samples assaying between 29.8% and 68.0% U<sub>3</sub>O<sub>8</sub> (Skyharbour, 2015).

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023

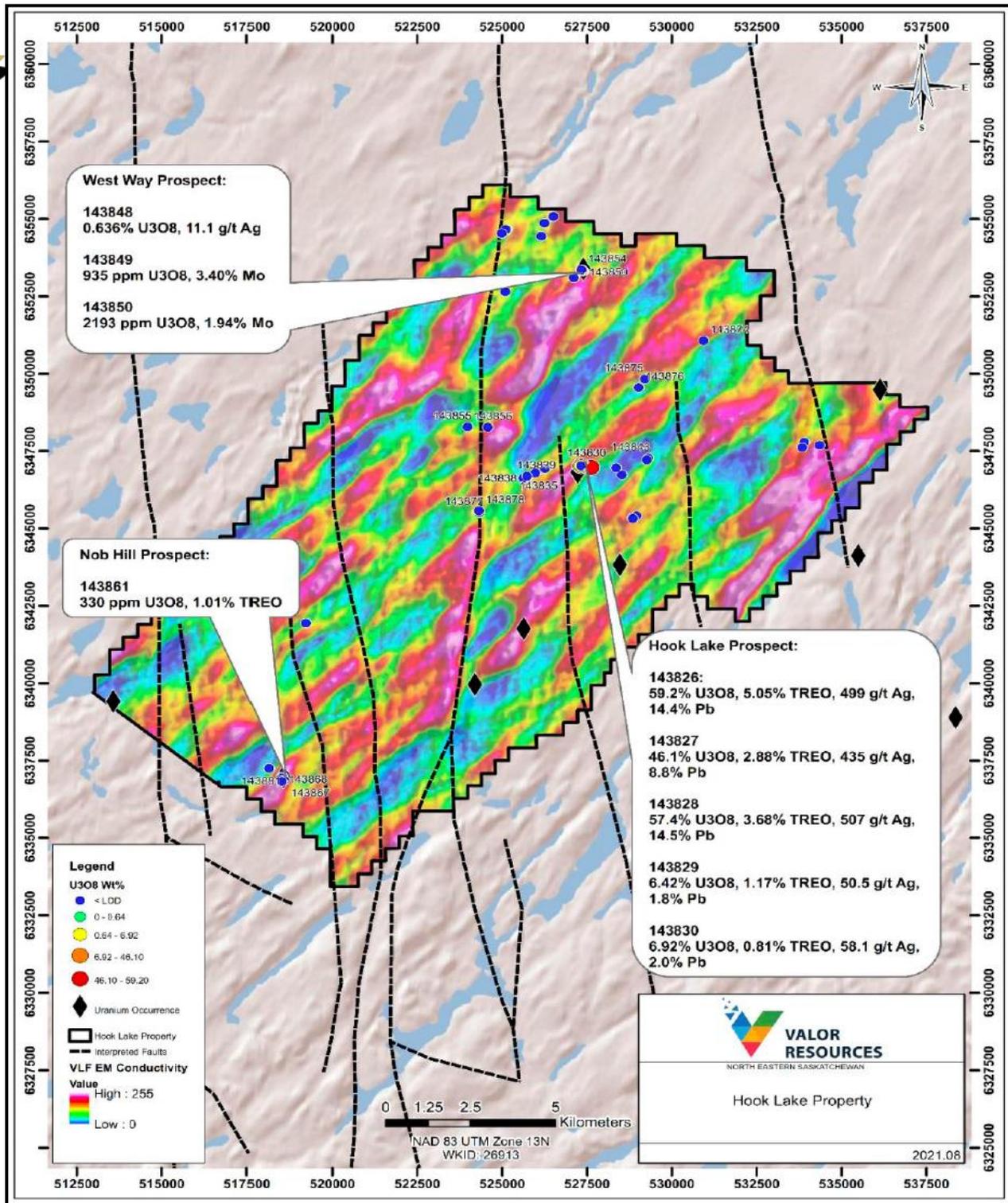


Figure 23-2: Sample Results from the Hook Lake Property (Skyharbour, August 31, 2021).

Historic work completed by AGIP in 1979 on the S Zone exposed a 6m by 1.5 m vein of high-grade uranium mineralization in a shear zone. Systematic chip sampling of this vein yielded an average grade of 28 wt%  $U_3O_8$ . The mineralization described is described by Donkers and Tykajlo (1982) as being hosted by sodic syenite intrusive which contains pelitic xenoliths. The mineralization is crescent shaped and occurs in a mineralogically zoned pod. The mineralization appears to be structurally controlled, with the mineralization focused at the intersection of two interpreted faults (Donkers and Tykajlo, 1982).

Historic drilling of the S Zone showed that the mineralization occurs as fracture controlled secondary uranium mineralization, pitchblende veins, and massive pitchblende hosted in syenite. Based on the 1982 drilling Donkers (1982) concluded that the mineralized zone strikes broadly  $030^\circ$  and dips approximately  $70^\circ$  to the northwest and plunges northwards at  $40^\circ$  to  $45^\circ$ . Samples with visible mineralization from this drill program assayed between 36 and 150,000 ppm U (Donkers, 1982).

In addition to the S Zone there are several other showings on the Hook Lake Property. The West Way showing contains vein-type U mineralization hosted within a northeast trending shear zone. Historic grab samples collected from this showing contain U values from .072 to 0.475%  $U_3O_8$ . Drilling of the showing, completed by JNR Resources in 2007, intersected the altered shear zone at depth with anomalous Cu, Ni, Co, As, V, U, and Pb (Bradley, 2008). The Nob Hill showing consists of fracture-controlled vein-type uranium mineralization. Outcrop grab samples contained up to 0.130% and 0.141%  $U_3O_8$  (Bradley, 2008).

*\*Note: The qualified person has been unable to verify the above information and has relied on public disclosures by the owner of the Hook Lake Project. The information above is not necessarily indicative of the mineralization on the property that is the subject of this technical report.*

### **23.3. BASELODE ENERGY - ACKIO DISCOVERY**

---

The ACKIO Discovery targets near-surface, basement hosted uranium mineralization. Currently the ACKIO Discovery is composed of at least 5 separate zones of mineralization and measures more than 375 m along strike and is greater than 150 m wide (Baselode, Sept. 26, 2022).

A recent drill program at the Baselode Energy ACKIO Discovery included 0.90%  $U_3O_8$  over 31 m in DDH AK22-069, which contained individual results of up to 5.61%  $U_3O_8$  over 0.5 m (Baselode, Sept. 20, 2022). Other initial results from Baselode's 2022 drill program included numerous intercepts of  $>0.50\%$   $U_3O_8$ . Of the 76 DDH completed in 2022, 44 DDH intersected intervals of elevated radioactivity (Baselode, Oct. 19, 2022). In June of 2023, Baselode commenced a 10,000 m drill program at ACKIO (Baselode, June 5, 2023)

*\*Note: The qualified person has been unable to verify the above information and has relied on public disclosures by the owner of the ACKIO Discovery. The information above is not necessarily indicative of the mineralization on the property that is the subject of this technical report.*

#### **23.4. 92 ENERGY LTD. - GEMINI MINERALIZED ZONE**

---

The Gemini Mineralized Zone (GMZ) consists of near surface, basement hosted uranium mineralization. The GMZ straddles the margin of the Athabasca Basin and the underlying Wollaston Supergroup sedimentary rocks. The unconformity between the Athabasca Basin and the underlying basement is shallow in the project area and generally buried beneath glacial deposits.

The 2021 drilling completed by 92 Energy Ltd. targeted VTEM conductors up ice from historic radioactive boulder samples. DDH GEM-004 intercepted 5.5m of 0.12%  $U_3O_8$  (1,200 ppm) (92 Energy Ltd.). Since the initial discovery in 2021, an additional 12 DDH were completed in the winter of 2022 with 9 DDH intersecting uranium mineralization. Several of the 2022 DDH had intervals which assayed  $>0.5$  wt%  $U_3O_8$  (92 Energy Ltd., July 18, 2022). 92 Energy reported two significant intersections from their winter 2023 drill program: 1) 9.66%  $U_3O_8$  over 0.5 m width within 1.47%  $U_3O_8$  over 5.0 m, and 2) 0.93%  $U_3O_8$  over 2.5 m within 0.35%  $U_3O_8$  over 15.5 m (92 Energy Ltd., May 4, 2023). In August 2023, 92 Energy Ltd. Commenced a 4,000 m drill program focused on the Gemini uranium discovery (92 Energy Ltd. August 14, 2023).

The uranium mineralization at GMZ is basement hosted and associated with a strongly altered, broad zone of bleaching, clay alteration and hematite which appears to be controlled by fault breccias and other structures (92 Energy Ltd.).

*\*Note: The qualified person has been unable to verify the above information and has relied on public disclosures by the owner of the Gemini Project. The information above is not necessarily indicative of the mineralization on the property that is the subject of this technical report.*

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

---

All UTM coordinates included in this report were measured in NAD83 / UTM Zone 13N, unless otherwise stated, and all elevations are referenced from 'meters above mean sea level'.

No additional information or explanation is necessary to make this report understandable and not misleading.

## **25. INTERPRETATION AND CONCLUSIONS**

---

The Falcon Property is located near the margin of the Athabasca Basin, which hosts several world class unconformity-associated uranium deposits. There are indications from the surrounding region that the previous extent of the Athabasca Basin was greater than what is currently preserved. This suggest that there may be potential for basement hosted unconformity-associated uranium mineralization in the project area.

In addition to the potential to host unconformity related uranium mineralization there is also potential for Rössing Type uranium mineralization in the project area. Several of the historic assessment reports note the presence of radioactive pegmatites in the area and the Fraser Lake Zone B Deposit, which lies to the south of the Project consists of Rössing Type mineralization.

Detailed exploration in the Falcon Project area to date is limited with the bulk of the past exploration on the property occurred in the late 1970's, early 1980's, and between 2006 and 2010. The exploration completed during the late 1970's identified the Zone D showing and several other areas of anomalous radioactivity. The most extensive program in the project area was a drill program completed by JNR Resources in 2008 where 28 holes were drilled. Although no significant mineralization is noted in the drill logs, elevated uranium values up to 0.235% U<sub>3</sub>O<sub>8</sub> were reported in holes associated with the EWA showing. There are mentions of structures, graphite, pegmatite segregations and anomalous radioactivity, all of which are favorable indicators of uranium potential.

Recent work includes airborne geophysical surveys that cover most of the property, with VTEM and magnetic surveys completed in 2006, 2007, and a ZTEM and magnetic survey in 2013. These surveys identified several geophysical anomalies in the claim area which have not seen appropriate follow-up. Additional airborne gravity-magnetic-radiometric surveys which cover most of the entire Falcon project were completed by Skyharbour and North Shore in June 2022 and October 2022 respectively.

The Falcon Project merits additional exploration. Any geophysical anomalies identified by either the 2022 airborne surveys or the reinterpretation of the historic results should be examined by ground geophysics and/or radiometric prospecting. Geological mapping, with a focus on structure, alteration and the distribution of radioactive veins or pegmatites, should be completed in prospective areas, including the historic showings. Systematic sampling of the showings should be completed. Priority targets generated from desktop interpretation and initial field investigation should be assessed as potential drill targets. Any proposed exploration is dependent on funding, permitting, contractor availability and any other reason for which an exploration program may be delayed.



## 25.1. POTENTIAL RISKS

---

As with moving forward on any project there are many risks to be assessed by the operating company. For this project, the authors have identified the following potential risks; commodity price risk, geological risk, and license to operate risk.

Price fluctuations for commodities can have considerable impacts on the viability of mineral deposits and are susceptible to many factors including war, local, governmental and world politics.

With any exploration property there is a possibility that mineral resources, if present, will not be sufficient to be economic. Mineral resources, if present, may not be easily extracted or smaller than estimated.

Stakeholder and regulator expectations and requirements may have unforeseen challenges in operations and licensing.



## 26. RECOMMENDATIONS

---

The authors believe that the Falcon Property merits additional follow-up, given the geological setting and the historic results obtained from the project area. New airborne geophysical surveys that include gravity, magnetics and radiometrics, were completed over 13 of the 15 Falcon Property claims in 2022 to identify any additional geophysical anomalies in the claim area and complement data from surveys flown in 2006, 2007, and 2013. The results from these surveys should be used to guide future exploration of the Falcon Property.

In addition to priority targets defined from earlier surveys, targets generated by the Xcalibur airborne survey and the seven target zones generated by Condor should be considered for detailed ground geophysical surveys. These areas should also be prospected and mapped if outcrop is present.

Geophysical data that covers the 11 Skyharbour Option Claims should be evaluated and interpreted to identify and prioritize targets for further exploration.

A reconnaissance prospecting and sampling program should be completed over portions of the Falcon claims, with particular focus on areas of identified geophysical anomalies, priority showings from the SMDI database including the Zone D showing (SMDI 2455) and prospecting up ice from the radioactive boulder field BF-2112-02. Mapping and sampling of the Zone D showing, and any other prospective outcrops should be completed, including a structural interpretation.

Any proposed exploration is dependent on funding, permitting, contractor availability and any other reasons an exploration program may be delayed.

The authors recommend the following exploration activities to better evaluate the potential of the Falcon Property:

- Detailed evaluation and interpretation of geophysical data with emphasis on data from the Skyharbour Option Claims and emphasis on EM conductors that have not been tested by drilling on claims S-113298, S-111681, and S-111770.
- Prospective areas identified through the interpretation of airborne survey data should be followed up by ground geophysics, mapping, and sampling.
- The development of an integrated, digitized dataset of the historic data should be completed.
- The Zone D showing (SMDI 2455) at the southern edge of the property should be mapped and systematically resampled.
- Given the REE associated with U+Th elsewhere in the region consideration should be given to adding REE analysis to the assay package.
- Reconnaissance prospecting, mapping, and sampling should begin over the entire claim block.
- Finally, if warranted, any targets identified will require drill testing.

A proposed exploration budget is provided in Table 26-1.



**Table 26-1: Proposed Exploration Budget for the Falcon Property**

The following budget outlines a two-phase plan for the Falcon Property.

Phase one would begin with additional geophysical interpretation and digitizing of historical data during 2023, coupled with ground geophysics focused on areas of greatest interest during the winter of 2024. Ground geophysics would be followed by additional geophysics data interpretation along with satellite imagery analysis. Soil sampling grids would be designed to cover areas highlighted by geophysics or historical data. A Fall 2023 and/or Summer 2024 field program would consist of outcrop prospecting and sampling over key areas.

A Phase Two drilling program, if warranted, would be based on Phase One results and would occur in the winter or summer of 2024. The program would focus on targets generated by the geophysics interpretation and the data provided by the prospecting and soil sampling programs in Phase one.

<b>Phase One – Fall 2023/Summer 2024 – Geophysics Interpretation, Digitization of Historic Data, Ground Geophysics and Prospecting &amp; Soil Sampling Programs</b>	
<b>Item</b>	<b>Cost in CDN\$</b>
Geophysical Interpretation and Recommendations	\$25,000
Satellite Imagery Analysis for Outcrop Locations	\$5,000
Scanning, Digitizing and Georeferencing of All Historical Maps	\$15,000
Drone & Ground Geophysics Survey Program – Gravity and EM	\$62,000
Interpretation of Ground Survey Data	\$20,000
Geophysical Modeling and Target Generation	\$6,000
Intermediate Geologist for Prospecting Program (at \$950/day)	\$13,300
Junior Geologist for Soil Sampling Program (at \$575/day)	\$8,000
Accommodations and Food for Programs	\$5,600
Travel Expenses	\$3,600
Helicopter Costs	\$60,000
Assays	\$20,000
Reporting of Results	\$6,500
<b>Total</b>	<b>\$250,000</b>

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023



<b>Phase Two (If warranted) - Winter 2024 or Summer 2024 – Diamond Drilling Program</b>	
<b>Item</b>	<b>Cost in CDN\$</b>
Senior Geologist (at \$1150/Day)	\$29,900
Intermediate Geologist (at \$950/day)	\$24,700
Junior Geologist (at \$575/day)	\$14,950
Drilling Contractor	\$700,000
Accommodations and Food	\$19,600
Travel Expenses	\$15,800
Helicopter Costs	\$280,000
Assays	\$75,000
Geological interpretation and reporting	\$10,000
Administration	\$5,000
<b>Total</b>	<b>\$1,174,950</b>

## 27. REFERENCES

---

92 Energy Ltd. <https://www.92energy.com/> Accessed October 25, 2022.

92 Energy Ltd. (2022, July 18): 92 Energy Reports 8m of 2,526 ppm U<sub>3</sub>O<sub>8</sub> (incl. 1m of 7,820 ppm U<sub>3</sub>O<sub>8</sub>) – Final Winter 2022 Chemical Assay Results [News Release]. [https://global-uploads.webflow.com/6050290c98a8afe291e89853/62fd08cf102c5ae9af961ee1\\_Final%20Winter%20Assays%20GMZ%20-%208m%40%2C526ppm%20\(incl.%201m%40%2C820%20ppm\).pdf](https://global-uploads.webflow.com/6050290c98a8afe291e89853/62fd08cf102c5ae9af961ee1_Final%20Winter%20Assays%20GMZ%20-%208m%40%2C526ppm%20(incl.%201m%40%2C820%20ppm).pdf)

92 Energy Ltd (2022, July 25): 92 Energy Intersects Near Surface Uranium Mineralization at the GMZ – Starting at 60m Below Surface [News Release]. [https://global-uploads.webflow.com/6050290c98a8afe291e89853/62fd101655e2616137c41945\\_92E%20Intersects%20uranium%20mineralisation%20near%20surface.pdf](https://global-uploads.webflow.com/6050290c98a8afe291e89853/62fd101655e2616137c41945_92E%20Intersects%20uranium%20mineralisation%20near%20surface.pdf)

92 Energy Ltd. (2023, May 4): High-grade uranium up to 9.7% U<sub>3</sub>O<sub>8</sub> intersected at Gemini Uranium Project [News Release]

92 Energy Ltd. (2023, August 14): Drilling Starts at Gemini uranium discovery in Athabasca Basin, Canada [News Release]

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

Annesley, I.R., Austman, C.L., Creighton, S., Mercadier, J., Ansdell, K.M., Gittings, F., Bogdan, T.S., Billard, D., (2010): Fraser Lakes U-Th-REE mineralization, southeastern Athabasca basement: composition and U-Th-Pb chemical/isotopic ages with consequences for U protore and U/C-type mineralization in Open House 2010, Saskatchewan Geological Survey.

Armitage, A., (2015): Technical Report on the Falcon Point Uranium Project, Northern Saskatchewan for Skyharbour Resources Ltd.

Baselode Energy Corp. (2022, Sept. 20), Baselode Intersects Best Drill Hole To Date With 0.90% U<sub>3</sub>O<sub>8</sub> Over 31.0 Metres Starting at 69.3 m True Vertical.

Baselode Energy Corp. (2022, Sept. 26), Baselode Provides Interpretations of the Recently Released Uranium Assay Results.

Baselode Energy Corp. (2023, June 5), Baselode Starts 10,000 Metre Drill Program at ACKIO High-Grade Uranium Zone, Hook Project.

Basson, I.J. and Greenway, G., (2004): The Rossing Uranium Deposit: a product of late-kinematic localization of uriferous granites in the Central Zone of the Damara Orogen, Namibia. Journal of African Earth Sciences, v. 34, p. 413-435.

Beck, H.E., Zimmermann, N.E., McVicar, T.R., Vergopolan, N., Berg, A., Wood, E.F.(2018): Present and future Koppen-Geiger climate classification maps a 1 km resolution. Scientific Data, v. 5, Article no. 180214.

Billard, D., 2022, Skyharbour Resources Ltd., South Falcon Point Project, 2022 airborne gravity survey: Confidential assessment report submitted as MAW3308.

Billard, D (2023): Email communication between Billard, Skyharbour Chief Geologist and Brooke Clements, President of North Shore describing Skyharbour's 2022 airborne gravity survey.

Card, C.D., Pana, D., Portella, P., Thomas, D.J., and Annesley, I.R.(2007): Basement rocks to the Athabasca Basin, Saskatchewan and Alberta; in EXTech IV: Geology and Uranium EXploration TECHnology of the Proterozoic Athabasca Basin, Saskatchewan and Alberta, Geological Survey of Canada, Bulletin 588, p. 69-87.

Environment and Natural Resources Canada (2019) 'Canadian Climate Normals 1981-2010 Station Data'. Available at

[https://climate.weather.gc.ca/climate\\_normals/results\\_1981\\_2010\\_e.html?searchType=stnProv&lstProvince=SK&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&stnID=3377&dispBack=0](https://climate.weather.gc.ca/climate_normals/results_1981_2010_e.html?searchType=stnProv&lstProvince=SK&txtCentralLatMin=0&txtCentralLatSec=0&txtCentralLongMin=0&txtCentralLongSec=0&stnID=3377&dispBack=0)

Earthfield (2023): Summary Report, Falcon Area, Saskatchewan – Uranium Analysis Using Magnetic/AGG/Radiometric Data.

Gandhi, S.S., (2007): Significant unconformity-associated uranium deposits of the Athabasca Basin, Saskatchewan and Alberta, and selected related deposits of Canada and the world. Geological Survey of Canada, Open File 5005.

Gray, T., Kinnard, J., Laberge, J., Caballero, A., (2021): Uranifersou Leucogranites in the Rossing Area, Namibia: New Insights from Geological Mapping and Airborne Hyperspectral Imagery. Economic Geology, v. 116, p. 1409-1434.

Harvey, S.E. and Bethune, K.M., (2007): Context of the Deilmann Orebody, Key Lake Mine, Saskatchewan; in EXTech IV: Geology and Uranium EXploration TECHnology of the Proterozoic Athabasca Basin, Saskatchewan and Alberta, Geological Survey of Canada, Bulletin 588, p. 249-266.

Jefferson, C.W., Thomas, D.J., Gandhi, S.S., Ramaekers, P., Delaney, G., Brisbin, D., Cutts, C., Portella, P., and Olson, R.A., (2007): Unconformity associated Uranium Deposits of the Athabasca Basin, Saskatchewan and Alberta; in EXTech IV: Geology and Uranium EXploration TECHnology of the Proterozoic Athabasca Basin, Saskatchewan and Alberta, Geological Survey of Canada, Bulletin 588, p. 23-67.

Marfleet and Halpin, 2023, Technical report for the Falcon project, Saskatchewan, Canada: NI-43-101 technical report prepared for North Shore Energy Metals Ltd. And Clover Leaf Capital Corporation.

McKeough, M., Lentz, D.R., and Brown, J. (2010): Geology and Associated Pegmatite and Vein Hosted Uranium Mineralization of the Kulyk, Eagle, and Karin Lake Regions Wollaston Domain, Northern Saskatchewan; in Summary of Investigations 2010, Saskatchewan Geological Survey, Sask. Ministry of Energy and Resources, Misc. Rep. 2010-4.2.

McKechnie, C.L., (2012): The Fraser Lakes Zone B U-Th-REE Deposits and Its Host Rocks: Implications for Pegmatite and Leucogranite Hosted U-Th-REE Deposits in Northern Saskatchewan, Canada. University of Saskatchewan.

Moul, F., (2023): Review of VTEM EM Responses at Falcon Project, Saskatchewan. Condor Consulting memo to North Shore Energy Metals Ltd.

Natural Resources Canada (2001): Political Map of Saskatchewan. Available at <https://www.nrcan.gc.ca/earth-sciences/geography/atlas-canada/explore-our-maps/reference-maps/16846#provincial-and-territorial>

Peterson, H., Moul, F., and Witherly, K., (2022): Processing and Analysis of Airborne EM and Magnetic Data Falcon Property, Saskatchewan Canada. Condor Consulting Report to North Shore Energy Metals Ltd.

Ray, G.E., (1977): The Geology of the Highrock Lake – Key Lake Vicinity, Saskatchewan, Parts of NTS 74A and 74H. Saskatchewan Geological Survey, Report No. 197.

Rainbird, R.H., Stern, R.A., Rayner, N., Jefferson, C.W., (2007): Age, Provenance, and regional correlation of the Athabasca Group, Saskatchewan and Alberta, constrained by igneous and detrital zircon geochronology; in EXTech IV: Geology and Uranium EXploration TECHnology of the Proterozoic Athabasca Basin, Saskatchewan and Alberta, Geological Survey of Canada, Bulletin 588, p. 193-209.

Saskatchewan Conservation Data Centre (2014): Saskatchewan's Ecoregions. Available at <http://biodiversity.sk.ca/eco.htm>

Shanyengana, S.H., Fan, H., Xue, C. Shanyengana, E.S., Mapani, B., Shilogo, E., Chen, J., (2020): An example of uriferous leucogranite in the Rossing South-West deposit, Namibia. Journal of African Earth Sciences, v. 162.

Skyharbour Resources Ltd. (2015, October 27): Skyharbour Samples up to 68% U<sub>3</sub>O<sub>8</sub> at Falcon Point Uranium Project, Saskatchewan [News Release]. <https://www.sedar.com/GetFile.do?lang=EN&docClass=8&issuerNo=00005656&issuerType=03&projectNo=02408253&docId=3814737>

Skyharbour Resources Ltd. (2021, August 31): Skyharbour Partner Company Valor Announces High-Grade Sample Results from Hook Lake Project Field Program [News Release]. <https://www.sedar.com/CheckCode.do>

Skyharbour Resources Ltd. (2022, October 2022), Skyharbour signs option agreement with Tisdale Clean Energy to option the South Falcon East property, Saskatchewan.

SMAD File 74A14-0011(1969): AGIP Canada Assessment Report.

SMAD File 74A14-0013 (1971): AGIP Canada Assessment Report.

SMAD File 74A14-0034 (1978): AGIP MPP No. 1001 Assessment Report by Stewart and Eaton.



SMAD File 74A14-0035 (1979): AGIP MPP No. 1001 Assessment Report by Beaudry, Stewart and Eaton.

SMAD File 74A14-0036 (1980): AGIP MPP No. 1001 Assessment Report by Beaudry, Donkers, Eaton and Cadieux.

SMAD File 74A14-0043 (1982): AGIP MPP No. 1001 Foster Lake Project Assessment Report by Donkers.

SMAD File 74H02-0008 (1969): Numac Oil and Gas Ltd. Permit No. 6 Assessment Report by Hegge.

SMAD File 74H02-0023 (1980): AGIP Canada Assessment Report by Stewart.

SMAD File 74H02-0025 (1982): AGIP Way Lake Project Assessment Report by Donkers and Tykajlo.

SMAD File 74H02-0038 (1982): Way Lake Project MPP Assessment Report by Donkers.

SMAD File 74H02-0043 (2008): JNR Resources Inc. Way Lake Project 2007 Summer Program by Bradley.

SMAD File 74H02-0045 (2009): JNR Resources Assessment Report by Cutforth.

SMAD File 74H03-0009 (1977): Stampede International Resources Highrock Lake Area Assessment Report by McCannell.

SMAD File 74H03-0066 (2007): JNR Resources Assessment Report by Bradley.

SMAD File 74H03-0050 (2008): Star Uranium Corp. Assessment Report by Newson.

SMAD File MAW00345 (2013): Prescient Mining Corp. Hook Lake Property Assessment Report by Harrington.

Statistics Canada (2022): Census Profile. 2021 Census. Available at <https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/searchrecherche/lst/results-resultats.cfm?Lang=E&GEOCODE=47>

World Nuclear Association (2021): World Uranium Mining Production. Available at <https://world-nuclear.org/information-library/nuclear-fuel-cycle/mining-of-uranium/world-uranium-mining-production.aspx>

Xcalibur MPH (2023): North Shore Energy Metals Ltd. FALCON Airborne Gravity Gradiometer, Magnetometer and Spectrometer Survey, Saskatchewan, Canada. Project Number 2200122.

Yeo, G.M., and Delaney, G., (2007): The Wollaston Supergroup, Stratigraphy and metallogeny of a Paleo Proterozoic Wilson cycle in the Trans-Hudson Orogen, Saskatchewan; in Extech IV: Geology and Uranium Exploration TECHNOLOGY of the Proterozoic Athabasca Basin, Saskatchewan and Alberta, Geological Survey of Canada Bulletin 588, p.89-117.

TECHNICAL REPORT FOR THE FALCON PROJECT,  
SASKATCHEWAN, CANADA

JANUARY 2023



Yeo, G.M. and Savage, D.A., (1999): Geology of the Highrock Lake Area, Wollaston Domain NTS 74H-3 and 74H-4; in Summary of Investigations 1999, Saskatchewan Geological Survey, Saskatchewan Energy and Mines, Misc. Rep. 99-4.2.



## 28. DATE & SIGNATURES

---

This Technical Report is Dated effective August 31<sup>st</sup>, 2023. Revisions to the sign-off on this Technical Report, have been completed, and are dated, signed, and sealed by the undersigned this 31<sup>st</sup> day of August 2023.

*"Troy Marfleet"*

23 08 31

\_\_\_\_\_  
(Signed & Sealed) "Troy Marfleet"  
Troy Marfleet, P.Ge.

23 08 31

*"Kim Halpin"*

\_\_\_\_\_  
(Signed & Sealed) "K. Halpin"  
Kim Halpin, G.I.T.



## 29. STATEMENTS OF CERTIFICATION

---

### TROY MARFLEET – CERTIFICATE OF QUALIFIED PERSON

---

I, Troy Marfleet, P.Ge., an author and reviewer of this technical report entitled Technical Report for The Falcon Project”, prepared for North Shore Energy Metals Ltd. and Clover Leaf Capital Corporation and dated August 31<sup>st</sup>, 2023, do hereby certify that:

1. I am a current Senior Geologist at Axiom Exploration Group Ltd. of 101 - 3239 Faithfull Avenue, Saskatoon, SK, Canada, S7K 8H4.
2. I am a graduate of the University of Saskatchewan, Saskatoon, Saskatchewan, Canada with a bachelor’s degree in Geological Sciences.
3. I am registered as a Professional Geoscientist in the Province of Saskatchewan (APEGS Reg. #23211) and a member in good standing. I have worked as a geologist in the natural resources industry since 2008.
4. I have read the definition of ‘qualified person’ set out in National Instrument 43-101 (NI 43-101) and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a 'qualified person' for the purposes of NI 43-101.
5. I have visited the properties which are the subject of this Technical Report on October 4<sup>th</sup>, 2022, spending a total duration of 5 hours across the four properties.
6. I have had prior involvement with the subject matter of the Technical Report in 2018.
7. I have read NI 43-101, and the Technical Report has been prepared in compliance with NI 43-101.
8. I am independent of North Shore Energy Metals Ltd, who the report is written for, and I am independent of Clover Leaf Capital, who is submitting the report. I am independent of the Vendor and Property.
9. My relevant experience for the purpose of the Technical Report is:
  - Participation in; review of and reporting on numerous mining and exploration projects for the purposes of mineral exploration, resource development, environmental regulatory compliance, quality control and due diligence.
  - Previous roles as an exploration geologist and project manager on numerous mineral exploration projects in Canada.
  - Experience as a consulting geologist and supervisor on numerous uranium exploration and development projects across western Canada.
10. At the effective date of the Technical Report, 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. I take responsibility for the items in the Technical Report.

Dated this 31<sup>st</sup> day of August 2023

*"Troy Marfleet"*

23 0831

---

(Signed & Sealed) "Troy Marfleet"  
Troy Marfleet, P.Ge.



### **30. CONSENT OF QUALIFIED PERSON**

---

To: Securities Regulatory Authority of Ontario, British Columbia, and Saskatchewan,

I, Troy Marfleet, do hereby consent to the public filing of technical report entitled "Technical Report for The Falcon Project" and dated August 31<sup>st</sup>, 2023 (the "Technical Report") by Clover Leaf Capital Pool Company (the "Issuer"), with the TSX Venture Exchange under its applicable policies and forms in connection with the reverse take-over by North Shore Energy Metals to be entered into by the Issuer and I acknowledge that the Technical Report will become part of the Issuer's public record.

Troy Marfleet, P.Geo. August 31<sup>st</sup>, 2023

*"Troy Marfleet"*

23 08 31

\_\_\_\_\_  
(Signed & Sealed) "Troy Marfleet"