National Instrument 43-101 Technical Report on the Ursa Project, Northern Saskatchewan, Canada

PREPARED FOR:
Cosa Resources Corp.

PREPARED BY:
T. Maunula & Associates Consulting Inc.

QUALIFIED PERSON:
Tim Maunula, P.Geo.

REPORT DATE: October 5, 2023

IMPORTANT NOTICE

Qualified Persons working for T. Maunula & Associates Consulting Inc. (TMAC) prepared this report as a National Instrument 43-101 Technical Report in accordance with Form 43-101F1, for Cosa Resources Corp. (Client or Cosa). The quality of information, conclusions, and estimates contained in this report are based on: (i) information available at the time of preparation as of data; (ii) data from outside sources; and (iii) the assumptions, conditions, and qualifications as put forth by the report writer. This report is intended to be used by the Client, subject to terms and conditions of TMAC. The relationship permits the Client to file this report as a Technical Report with applicable securities regulatory authorities pursuant to provincial securities legislation.

Date and Signature Page

The undersigned prepared this Technical Report, titled *National Instrument 43-101 Technical Report on the Ursa Project, Northern Saskatchewan, Canada*, and dated October 5, 2022, in support of Cosa Resources Corp. The format and content of this report conforms to National Instrument 43-101 of the Canadian Securities Administrators.

Original Signed and Sealed

Tim Maunula, P.Geo.
Principal Geologist
T. Maunula & Associates Consulting Inc.

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Units of Measure

C	Celsius
cm	centimetre
°	degrees
Ga	giga annum
ha	hectare
Hz	hertz
km	kilometre
m	metre
'	minute
nT	nanotesla
ppm	parts per million
"	seconds

Abbreviations and Acronyms

$	Canadian dollar
2-D	two-dimensional
3-D	three-dimensional
AMT	audio-magnetotelluric
Areva	Areva Resources
As	arsenic
Cameco	Cameco Corp.
CanAlaska	CanAlaska Uranium Ltd.
CBSZ	Cable Bay Shear Zone
Client	Cosa Resources Corp.
Co	cobalt
COGEMA	COGEMA Resources Inc.
Cosa	Cosa Resources Corp.
Cu	copper
E&B	E. & B. Exploration Ltd.
EGL	Expert Geophysics Ltd.
EM	electromagnetic
FLTEM	fixed-loop transient electromagnetic
IGRF	International Geomagnetic Reference Field
IOCG	iron oxide–copper–gold

masl	metres above sea level
MEGATEM	MEGATEM Airborne Transient EM Survey
ML-SQUID-TEM	moving-loop superconductive quantum-interference device transient electromagnetic
MLEM	moving-loop EM
MLTA	MLT Aikins LLP
MLTEM	moving-loop transient electromagnetic
MT	magnetotelluric
NAD	North American Datum
NI	National Instrument
Ni	nickel
NSR	net smelter return
NTS	National Topographic System
O	oxygen
Orano	Orano Canada Inc.
P.Geo.	Professional Geoscientist
PNC	PNC Exploration (Canada) Co. Ltd.
Polaris	Polaris Uranium Corp.
Project	Ursa Project
QP	Qualified Person
Raytec	Raytec Development Corp.
SI	International System of Units
TEM	transient electromagnetic
TMAC	T. Maunula & Associates Consulting Inc.
U	uranium
U.S.A.	United States of America
UEC	Uranium Energy Corp.
Uranerz	Uranerz Exploration and Mining Limited
UTEM3	UTEM Transient EM Survey
UTM	Universal Transverse Mercator
VLF	very-low-frequency
VTEM	Versatile Time Domain Electromagnetic

1 SUMMARY

1.1 Introduction

T. Maunula & Associates Consulting Inc. (TMAC) prepared this Technical Report for Cosa Resources Corp. (Cosa or the Client) in accordance with the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1, collectively referred to as National Instrument (NI) 43-101 for the Ursa Project (or the Project) located in Saskatchewan, Canada.

1.2 Property Description and Location

1.2.1 Location

The Project is in the Athabasca Basin, northern Saskatchewan, Canada (Figure 1-1). The Project's southern limit is adjacent to Cree Lake; from there it extends approximately 75 km to the northeast along the Cable Bay Shear Zone. The Project lies 61 km northwest of Cameco Corp's (Cameco) Key Lake uranium mill and 45 km west of Cameco's McArthur River uranium mine.

The approximate geographic center of the Project is at UTM Zone 13 (North American Datum [NAD] 83) coordinates 432,150 m east and 6,409,700 m north, or latitude 57° 49' 27" and longitude 106° 08' 32". The Project is in National Topographic System (NTS) sheets 074G, 074H, and 074I.

1.2.2 Land Tenure

The Project comprises 60,599 ha in 17 contiguous mineral claims. Cosa has not obtained the surface rights to the Project.

In June 2022, Cosa acquired Polaris Uranium Corp. (Polaris) and its 100% interest in four properties totalling 46,700 ha. Included in the four properties were three claims totalling 15,951 ha that form part of the present-day Project. In December 2022, Cosa staked 10 additional claims totalling 37,649 ha. Later in 2022, two additional claims totalling 3,470 ha were purchased from an arm's-length vendor. In August 2023, two additional claims totalling 3,530 ha were staked, bringing the Project to its current size of 60,599 ha.

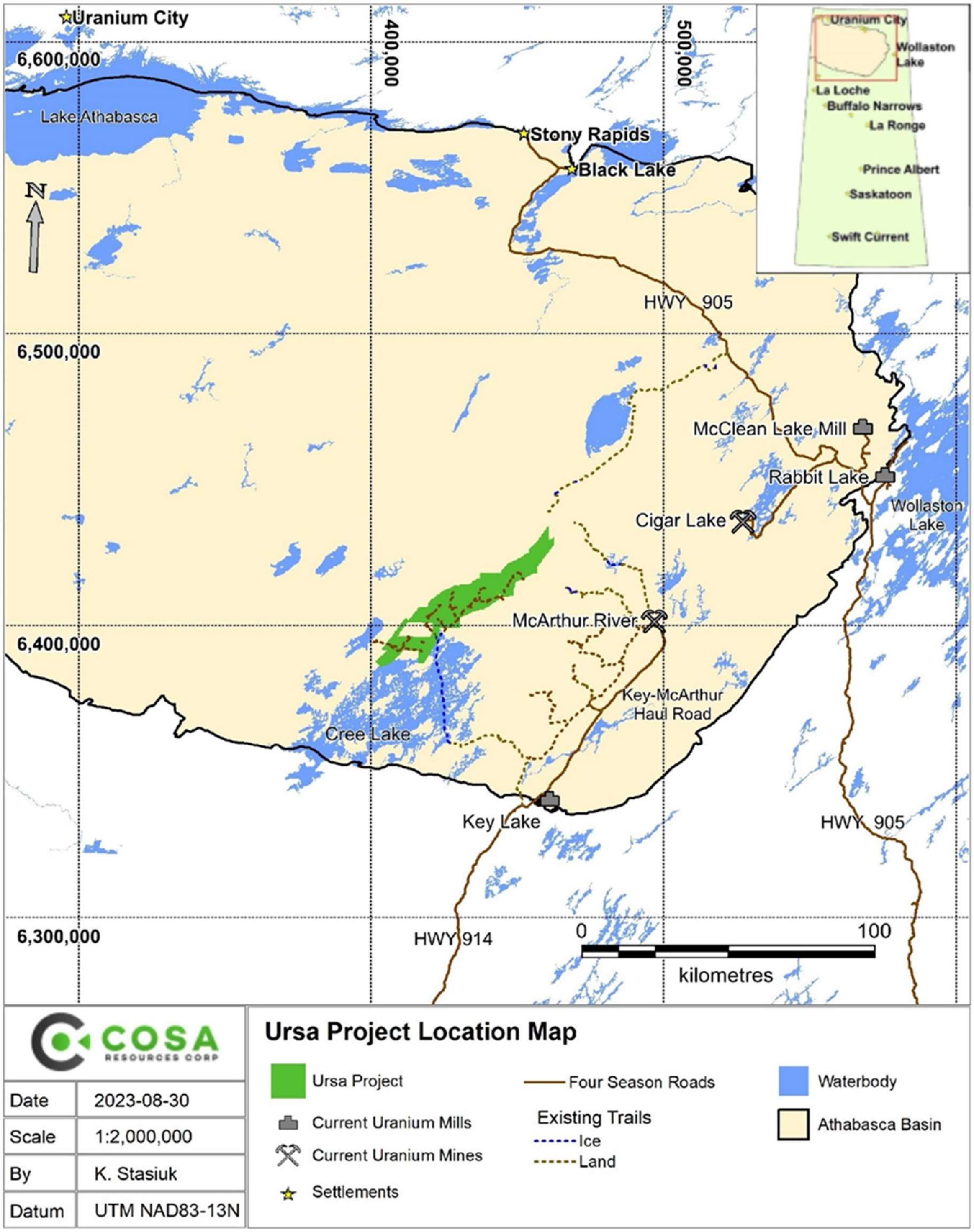


Figure 1-1: Ursa Project Location Map

1.2.3 Royalties

Claims MC00016494 and MC0001696, which were purchased from an arm's-length vendor and comprise 6% of the Project's total area, are subject to a 2% net smelter return (NSR) royalty which can be reduced to 1% with a payment of $1,000,000 to the royalty holder. (NOTE: All dollar figures are quoted in this report in Canadian dollars [$] unless otherwise noted.)

1.3 History

The Project and adjacent areas have been the target of exploration programs since the 1970s. This work has included airborne geophysical and radiometric surveys. Prospecting, geological mapping, and lake sediment geochemical surveys were also conducted.

Historical drilling on the Project is sparse, with 15 NQ-sized drill holes completed between 1995 and 2002 for a total of 15,342.8 m. Although drill holes dominantly targeted conductors defined by ground electromagnetic (EM) surveys, relatively few drill holes intersected conductive basement lithologies that could explain their targets. The low target-explanation success rate for historical drilling is considered to indicate insufficient technology in contemporary geophysical surveying and modelling efforts rather than the absence of conductors, as some drill holes (e.g., CR-02) did intersect strongly graphitic basement rocks. This conclusion is further supported by the results of exploration conducted by Cosa in 2023 and presented in Section 9.

1.4 Geology and Mineralization

The Project lies within the eastern Athabasca Basin, a Paleoproterozoic to Mesoproterozoic basin containing the relatively undeformed, unmetamorphosed Athabasca Supergroup with an aggregate thickness of approximately 1,500 m. In the eastern Athabasca Basin, the Athabasca Supergroup is dominated by clastic rocks, primarily sandstones and conglomerates of the Manitou Falls Group.

Athabasca Supergroup rocks unconformably overlie highly deformed and metamorphosed rocks of the Hearne Domain of the Western Churchill Province of the Canadian Shield (Jefferson, et al., 2007). The Hearne Craton comprises Archean orthogneisses and Paleoproterozoic supracrustals and volcanic rocks that were tectonically intercalated and variably metamorphosed during the Trans-Hudson orogeny, resulting in a generally north-northeast to northeast-southwest fabric.

No uranium deposits are known on the Project. Three historical drill holes completed within the Project have intersected weak uranium mineralization.

In 1995, CR-03 intersected 0.05% U_3O_8 over 0.1 m (1017.1 to 1017.2 m) within a 5 cm band of fine-grained pyritic pelitic gneiss in a pegmatite.

In 1998, CR-08 intersected 0.11% U_3O_8 at 934.2 m (grab sample, width unknown), 0.03% U_3O_8 over 0.2 m (934.3 to 934.5 m) within a broken and friable pegmatite, and 0.18% U_3O_8 over 0.2 m of (936.5 to 936.7 m) within pelitic gneiss.

In 2002, CR-14 intersected 0.04% U_3O_8 over 0.5 m (869.8 to 870.3 m) and 0.05% U_3O_8 over 0.5 m (877.9 to 878.4 m) while following up CR-08. The upper weakly mineralized interval is within hematized pelitic gneiss below the unconformity, while the lower, weakly mineralized interval is at the contact between pelitic and psammopelitic gneisses.

The orientation and true thickness are unknown for all historical intersections of weak mineralization.

1.5 Exploration Status

Exploration completed to date consists of an extensive MobileMT airborne survey that Expert Geophysics Ltd. (EGL) of Aurora, Ontario, completed in June and July 2023, on behalf of Cosa. MobileMT is a modern, helicopter-borne, MT survey system capable of detecting both the basement-hosted EM conductors and sandstone-hosted zones of anomalous resistivity commonly associated with significant Athabasca Basin uranium deposits. MobileMT can resolve resistivity contrasts to depths exceeding 1,000 m, and MT surveys have mapped basement conductors and sandstone alteration zones at both the McArthur River and Shea Creek uranium deposits.

The survey grid covered the entire Project at 300 m spacing, excluding the along-strike extremities. A total of 2764 line-km were flown at the Ursa Project, including 132 line-km which overlapped Cosa's neighbouring Astro Project. The intent of the survey was to assess the entire Project for the presence of basement-hosted EM conductors potentially reflecting faulted graphitic rocks, to characterize the strength, orientation, and position of EM conductors; to identify zones of anomalous resistivity in the sandstone; and to acquire magnetic data to improve understanding of basement geology.

Following processing and finalization of the airborne survey dataset, Convolutions Geoscience Corporation (Surrey, B.C.) and Computational Geosciences Inc. (Vancouver, B.C.) were engaged to complete a geologically constrained inversion to generate a 3D voxel model of apparent conductivity within the survey area. The conductivity model includes curvilinear trends of basement-hosted conductivity which are broadly consistent with the historical interpretation of ground EM surveys. The model also includes zones of increased conductivity in the sandstone. Based on the presence of kilometre-scale strike lengths of increased conductivity in the sandstone associated with conductive basement zones, Cosa has identified five high-priority follow-up areas: Grizzly, Kodiak, Polar, Bruin, and Panda.

1.6 Interpretation and Conclusions

The target on the Project is an economically viable unconformity-associated uranium deposit. In the Eastern Athabasca Basin region, these deposits are typically associated with brittlely-reactivated ductile deformation zones typically rooted in graphitic or pyritic metasedimentary basement rocks. Electromagnetic surveys are commonly employed to map basement-hosted EM conductors used as proxies for these conductive metasediments.

The Project is interpreted to be underlain by the regional-scale Cable Bay Shear Zone (CBSZ), a major ductile structural corridor analogous to the fertile Wollaston-Mudjatik transition zone which hosts past- and currently producing uranium mines, most notably the McArthur River and Cigar Lake mines. Historical drilling within the

Project has intersected broad zones of faulting in the sandstone, indicating post-Athabasca reactivation of the CBSZ has occurred.

Within the Project, basement lithologies intersected by historical drilling include graphitic pelitic gneisses similar to those closely associated with major uranium mines and deposits in the eastern Athabasca Basin. Drilling has also intersected cordierite-augen pelitic gneisses similar to those underlying the Hurricane and Cigar Lake deposits.

Intersections of weak uranium mineralization by historical drilling within and to the south of the Project, and the presence of anomalous uranium geochemistry locally in the sandstones, indicates mineralizing hydrothermal systems may have operated along the CBSZ and within the Project.

With only 15 diamond drill holes completed over the greater-than 60,000 ha, the Project is considered to be highly underexplored. As the majority of historical drill holes on the Project missed their targeted conductors, only a small proportion of the prospective, historically defined conductive strike length on the Project has been effectively tested. The low target-intersection rate in historical drilling may be the result of improper survey design, or limitations in contemporary geophysical survey instrumentation or data-interpretation tools.

The airborne MobileMT™ survey completed in 2023 by Cosa confirmed the presence of curvilinear, basement-hosted zones of conductivity broadly consistent in distribution and orientation with those defined by historical ground-based EM surveying. These conductive trends are interpreted to reflect the presence of graphitic and/or pyritic pelitic gneisses. A conductivity model voxel product generated by geologically constrained, 3-D inversion of the airborne dataset holds kilometre-scale strike lengths of anomalously high conductivity (three to four times background sandstone conductivity) spatially associated with basement-hosted conductive trends. Anomalously high conductivity in the sandstone is interpreted to potentially reflect zones of hydrothermal alteration including clay enrichment commonly associated with unconformity-related uranium deposits in the Athabasca Basin. Based on the conductivity model, five high-priority target areas have been identified where significant zones of anomalously sandstone conductivity are associated with conductive basement trends within the Ursa Project. Confirmation by diamond drilling of hydrothermal alteration zones would upgrade the prospectivity of the target area(s) and Project in general. Intersection of conductive basement rocks without hydrothermal alteration in the sandstone or basement would downgrade the prospectivity of the target area(s), but not necessarily the Project in general.

There is risk that modelled zones of higher sandstone conductivity are not related to hydrothermal clay enrichment. Zones of anomalously high sandstone conductivity mapped by geophysical methods and unexplained by drill testing in the Athabasca Basin have been attributed to the presence of saline (conductive) brines at depth. The geologically constrained 3-D inversion process to generate the conductivity voxel model domained relatively higher basement conductivity and relatively lower basement conductivity utilizing an unconformity surface based on widely-spaced historical drilling results within and adjacent to the project. If this unconformity surface is materially different from the actual unconformity surface, there is increased risk of inaccuracy in the conductivity model. Drill testing within the Project will determine the validity and improve the resolution of the modelled unconformity surface, and significant changes could be incorporated into a new conductivity model.

Based on the Project's geology and underexplored nature, the Project is considered to be prospective for unconformity-related uranium deposits.

1.7 Recommendations

A program of modern ground-based geophysical surveying is recommended to advance the Project to diamond drill readiness. Given the large size of the Project, it is expected that several rounds of exploration will be required to effectively evaluate the Project for the presence of significant uranium mineralization. It is recommended that the next round of exploration by Cosa be completed in two phases.

1.7.1 Phase I – Geophysical Surveying

Modern, best-quality ground-based EM surveying should be completed to follow-up the airborne survey results. An initial program comprising five, 5 to 7 km EM profiles over target areas identified by the 2023 airborne survey can be expected to generate a minimum of five high-confidence conductor picks. As there is potential for multiple conductive units within broader conductive packages, the ground surveys may result in an inventory of more than five conductor picks.

1.7.2 Phase II – Diamond Drilling

Contingent upon the recommended ground surveys identifying basement-hosted EM conductors, first-pass diamond drilling should test the best-quality EM conductor picks. Initial diamond drilling should comprise geological evaluation of each target area with the goal of coring the full thickness of conductive basement.

Brittle structures rooted in graphitic or pyritic basement rocks would upgrade an individual target area. Widely spaced follow-up along strike preceded by additional ground EM surveys would be warranted. Intersections of strong alteration and/or anomalous radioactivity/geochemistry in the sandstone or basement would significantly upgrade a target area and warrant more proximal follow-up along strike or on section, depending on results.

Table 1-1 summarizes the budget for the recommended work.

Table 1-1: Budget for Recommended Exploration Work on the Ursa Project

Phase	Item	Amount	Unit	Unit Cost ($)	Total Cost ($)
I	Ground EM Surveying	30	km	11,000	330,000
II	Diamond drilling, five holes	5,000	m	450	2,250,000
				Total	**2,580,000**

2 INTRODUCTION

T. Maunula & Associates Consulting Inc. (TMAC) prepared this Technical Report for Cosa Resources Corp. (Cosa or the Client) in accordance with the Canadian Securities Administrators' National Instrument 43-101 and Form 43-101F1, collectively referred to as National Instrument (NI) 43-101 for the Ursa Project (or the Project) located in Saskatchewan, Canada.

This Technical Report supersedes all prior technical reports prepared for the Project.

The address of the Company's registered and records office is Suite 801–1295 Richards Street, Vancouver, BC, Canada, V6B 1B7. The principal business of the Client is to acquire, explore, evaluate, and develop mineral properties.

2.1 Sources of Information

This Technical Report is based, in part, on internal Company technical reports and maps, published government reports, company letters and memoranda, and public information as listed in Section 27. Several sections from reports authored by other consultants have been directly quoted or summarized in this Technical Report and so indicated where appropriate.

Cosa has reviewed a draft copy of this Technical Report for factual errors regarding Cosa, history of the property, and the current status of the Project as reported by TMAC.

TMAC has relied on Cosa's historical and current knowledge of the Project and work performed thereon. Any statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of this Technical Report.

2.2 Qualifications and Responsibilities

The Qualified Person (QP) preparing this report is a specialist in the fields of geology, exploration, and Mineral Resource estimation.

Neither the QP or any associates employed in the preparation of this report have any beneficial interest in Cosa, nor are insiders, associates, or affiliates of Cosa. The results of this report are not dependent upon any prior agreements concerning the conclusions to be reached, nor are there any undisclosed understandings concerning any future business dealings between Cosa and the QP. The QP is being paid a fee for their work in accordance with normal professional consulting practice fees.

The following individual, by virtue of their education, experience, and professional association, is considered a QP as defined in the NI 43-101, and is a member in good standing of appropriate professional institutions and associations. The QP is responsible for the specific report sections listed in Table 2-1.

Table 2-1: QP Responsibilities

Qualified Persons	Company	QP Responsibility/Role	Report Section(s)
Tim Maunula, P.Geo.	T. Maunula & Associates Consulting Inc.	Geology, Quality Assurance/Quality Control, Data Verification, Drilling, Resource Estimate	All

Source: TMAC (2023)

2.3 Site Visit

In accordance with NI 43-101 guidelines, a site visit was conducted by Mr. Maunula.

Table 2-2: QP Site Visit

Qualified Person	Company	Date	Description of Inspection
Tim Maunula, P.Geo.	T. Maunula & Associates Consulting Inc.	July 11, 2023	The site visit included an inspection of the property and review of historic drill core.

Source: TMAC (2023)

2.4 Units, Currency, and Rounding

The units of measure used in this report are those of the International System of Units (SI) (or metric), except for imperial units commonly used in the industry.

All dollar figures are quoted in this report in Canadian dollars ($) unless otherwise noted.

Frequently used abbreviations and acronyms are included below the table of contents.

This report includes technical information that required subsequent calculations to derive subtotals, totals, and weighted averages. Such calculations inherently involve a degree of rounding and consequently introduce a margin of error. Where these occur, the QP does not consider them to be material.

3 RELIANCE ON OTHER EXPERTS

Tenure documents and permits were reviewed but an independent verification of land title and tenure was not performed by the QP. The QP relied upon a title opinion dated October 4, 2023 and completed by MLT Aitkins LLP, Saskatoon, Saskatchewan, which states the mineral tenure comprising the Ursa Project is in good standing as of the effective date of this report (MLT Aikins, 2023).

The QP did not independently verify the legality of any underlying agreement(s) that may exist concerning the licences or other agreement(s) between third parties.

4 PROPERTY DESCRIPTION AND LOCATION

4.1 Location

The Ursa Project (the Project) is in the Athabasca Basin, northern Saskatchewan, Canada. The Project's southern limit is adjacent to Cree Lake; from there it extends approximately 75 km to the northeast along the Cable Bay Shear Zone. The Project lies 61 km northwest of Cameco Corp.'s (Cameco) Key Lake uranium mill and 45 km west of Cameco's McArthur River uranium mine (Figure 4-1).

The approximate geographic center of the Project is at UTM Zone 13 (North American Datum [NAD] 83) coordinates 432,150 m east and 6,409,700 m north, or latitude 57° 49' 27" and longitude 106° 08' 32". The Project is in National Topographic System (NTS) sheets 074G, 074H, and 074I.

4.2 Land Tenure

The Project comprises 60,599 ha in 17 contiguous mineral claims as summarized in Table 4-1 and shown on Figure 4-2. In Saskatchewan, the registered owner of a mineral claim is granted the right to explore for minerals by the Saskatchewan Mineral Dispositions Regulations and the Saskatchewan *Crown Minerals Act*. Cosa Resources Corp. (Client or Cosa) has not obtained the surface rights to the Project.

In June 2022, Cosa acquired Polaris Uranium Corp. (Polaris) and its 100% interest in four properties totalling 46,700 ha. Included in the four properties were three claims totalling 15,951 ha that form part of the present-day Project. In December 2022, Cosa staked 10 additional claims totalling 37,649 ha. Later in 2022, two additional claims totalling 3,470 ha were purchased from an arm's-length vendor. In August 2023, two additional claim totalling 3,530 ha were staked, bringing the Project to its current size of 60,599 ha.

To maintain the Project in good standing, annual exploration expenditures are required. Expenditure requirements are $15/ha for the second through tenth years, and $25/ha for subsequent years.

Table 4-1: Mineral Disposition Summary for the Ursa Project

Mineral Claim	Owner	Effective Date	Expiry Date	Area (ha)
MC00015138	Cosa Resources Corp. 100%	16-Sep-21	15-Dec-23	5,851.5
MC00015139	Cosa Resources Corp. 100%	16-Sep-21	15-Dec-23	5,561.1
MC00015140	Cosa Resources Corp. 100%	16-Sep-21	15-Dec-23	4,538.4
MC00016494	Cosa Resources Corp. 100%	07-Dec-22	07-Mar-25	3,038.1
MC00016496	Cosa Resources Corp. 100%	07-Dec-22	07-Mar-25	431.7
MC00016500	Cosa Resources Corp. 100%	07-Dec-22	07-Mar-25	3,806.6
MC00016505	Cosa Resources Corp. 100%	07-Dec-22	07-Mar-25	2,039.4
MC00016519	Cosa Resources Corp. 100%	07-Dec-22	07-Mar-25	4,632.2
MC00016520	Cosa Resources Corp. 100%	07-Dec-22	07-Mar-25	5,740.5
MC00016522	Cosa Resources Corp. 100%	07-Dec-22	07-Mar-25	5,375.1

Mineral Claim	Owner	Effective Date	Expiry Date	Area (ha)
MC00016524	Cosa Resources Corp. 100%	07-Dec-22	07-Mar-25	2,853.6
MC00016525	Cosa Resources Corp. 100%	07-Dec-22	07-Mar-25	4,496.2
MC00016534	Cosa Resources Corp. 100%	13-Dec-22	13-Mar-25	1,136.5
MC00016568	Cosa Resources Corp. 100%	20-Dec-22	20-Mar-25	3,938.9
MC00016569	Cosa Resources Corp. 100%	20-Dec-22	20-Mar-25	3,629.6
MC00017538	Cosa Resources Corp. 100%	29-Aug-23	27-Nov-25	3,365.6
MC00017539	Cosa Resources Corp. 100%	29-Aug-23	27-Nov-25	164.2

Source: Cosa (2023)

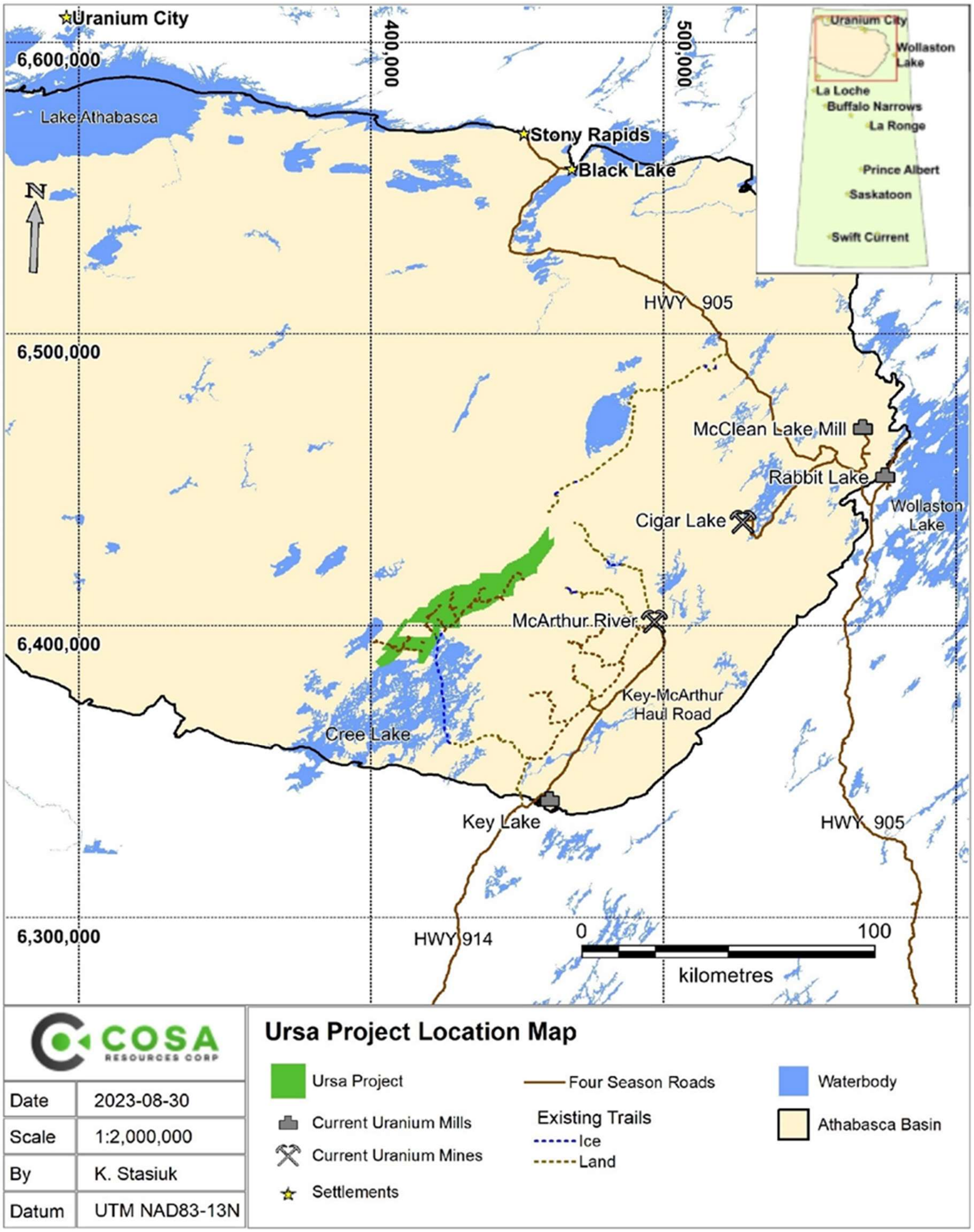


Figure 4-1: Ursa Project Location Map

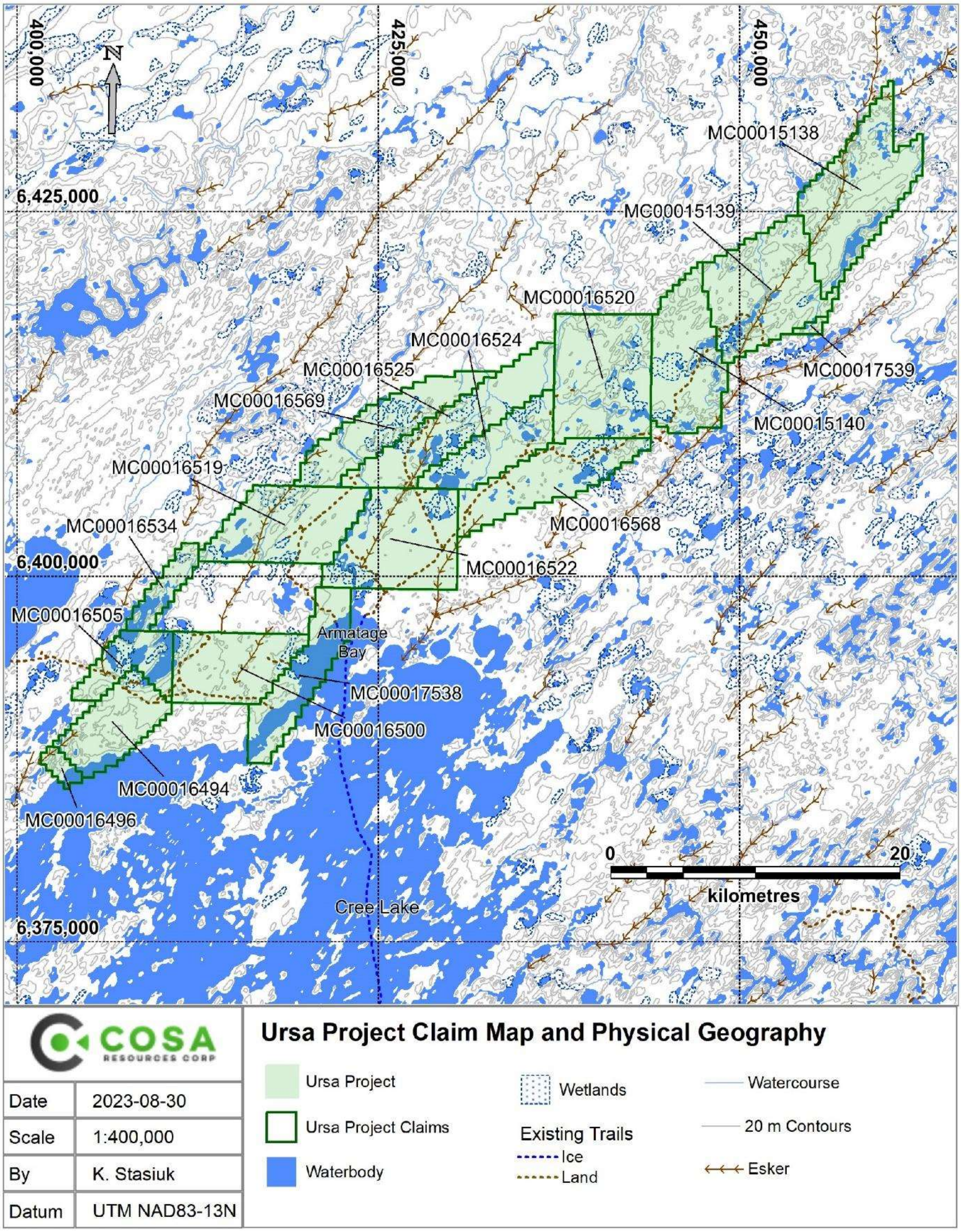


Figure 4-2: Ursa Project Claim Location and Physical Geography

4.3 Permits for Exploration

Authorization permits for exploration activities must be obtained prior to any surface disturbance. The Saskatchewan Ministry of Environment issues a general-use permit that lists the rules and regulations to be followed; forest product permits if trees are to be cut; a camp permit if a temporary work camp will be established; hazardous material permits for fuel storage and dangerous goods; and water-use permits for camp and drilling.

A review of endangered or threatened species occurrences that may be encountered or impacted, and a review of archaeological sites by the Heritage Conservation Branch are also required; neither require issuance of permits.

Cosa has applied for permits required to complete the proposed exploration work, except for water permits, which will be obtained prior to camp establishment and commencement of drilling.

4.4 Encumbrances

The Qualified Person (QP) is not aware of any encumbrances to the Project, including permitting requirements and timelines, permit conditions, environmental violations, or fines.

No environmental liabilities on the Project are known.

4.5 Royalties

Claims MC00016494 and MC0001696, which were purchased from an arm's-length vendor and comprise 6% of the Project's total area, are subject to a 2% net smelter return (NSR) royalty which can be reduced to 1% with a payment of $1,000,000 to the royalty holder.

4.6 Property Risks

The QP is not aware of any significant factors and risks that may affect Ursa's access, title, or the right or ability to perform work on the property.

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

5.1 Accessibility

Air access to the Project is by ski- or float-equipped fixed-wing aircraft or by helicopter from Points North Landing (96 km), Missinipe (248 km), or La Ronge (290 km). Historically, ground access to the Project area was by winter trails extending north and west from Kilometre 212 on Provincial Highway 914, and thereafter by ice crossings from Binkley Bay to Armatage Bay on Cree Lake (Figure 4-1 and Figure 4-2). Drill trails extending northwest from the McArthur River Mine pass within 9 km of the Project's northern limit. Several trails originating from the McArthur River–Key Lake haul road extend to between 12 and 25 km from the Project's eastern limit. A trail extending southwest from Kilometre 61 on Provincial Highway 905 and using an ice crossing at Pasfield Lake extends to within 6 km of the Project's northern limit.

An existing network of drill trails extending west and northeast from Armatage Bay on northern Cree Lake provides access throughout the majority of the Project (Figure 4-1).

5.2 Climate

The Project is within the Athabasca Plain Ecoregion and Boreal Shield ecozone, a subhumid high boreal ecoclimate. This region is marked by short cool summers (mean 12°C, high 30°C) and long, cold winters (mean −20.5°C, low −45°C). The winter season can start in late October and continue until May (Environment Canada, 2008). Exploration can generally be conducted throughout the year, but ground and fixed-wing access are affected during breakup (April and May) and freeze-up (October and November).

5.3 Vegetation

The ground surface is approximately 15% lakes, wetlands, and watercourses, with the remaining vegetation dominated by jack pine with an understory of shrubs, wild blueberries, and lichen (Environment Canada, 2008).

5.4 Local Resources

Exploration services and supplies are readily obtainable at La Ronge, and some services are available at Points North Landing, including accommodation, meals, bulk fuel, trucking, and heavy equipment rental. Skilled labour for a mining operation would likely be sourced from the northern communities of Wollaston Lake, Black Lake, Stony Rapids, Patuanak, and Pinehouse, as well as communities in southern Saskatchewan. Saskatoon, approximately 630 km south of the Project, is a major population centre with highway, rail, and air links to the rest of North America.

5.5 Infrastructure

There are no temporary or permanent structures currently on the Project.

The Project has sufficient space for an open pit or underground mining operation, including space for waste rock piles, milling facilities, and tailings facilities. Water is readily available in the Project area. A surface lease would be required from the Provincial government in advance of construction of permanent surface facilities on the Project.

Electrical power is available from the provincial grid. A 138 kV power line connecting the Key Lake Mill, McArthur River Mine, and Cigar Lake Mine to the provincial grid is within 45 km of the Project.

5.6 Physiography

Significant glaciation has imparted a northeast–southwest trend for most topographic features in the Project area, including lakes, drumlins, and eskers. The lowest elevation on the Project is 420 metres above sea level (masl) and the highest elevation is 570 masl. The most significant topographic features in the area are Cree Lake, a more-than 121,000 ha water body which partly covers the southern edge of the Project, and the Cree River, which flows 180 km from Armatage Bay on Cree Lake northward to Black Lake.

6 HISTORY

The prior ownership and exploration history presented here are composited from several historical projects completely or partially overlapped by the extent of the present-day Project.

Prior Ownership

E. & B. Exploration Ltd. (E&B) in partnership with Silver Acorn Development Ltd. Originally staked the Project by Kercher Lake in 1978. PNC Exploration Canada (PNC) staked claims north of Cree Lake in 1980. Both groups subsequently allowed their claims to lapse.

In 1993 Uranerz Exploration and Mining Limited (Uranerz) staked the majority of what is now the Project as their Cree River Project.

In 1998 Cameco acquired 100% of Uranerz and its properties, then subsequently sold 50% to COGEMA Resources Inc. (COGEMA) and renamed Uranerz to UEM Inc.

In 1999 COGEMA assumed operatorship of the property (renamed Areva Resources [Areva] in 2004 and Orano Canada Inc. {Orano} in 2018). COGEMA allowed several claims to lapse, reducing the Cree River Project to what is now the northeast portion of the Project between Kearns and Little Cree Lakes. Areva completed their final work on the Project in 2013, then allowed the claims to lapse.

In 2006 several companies staked claims within the current Project bounds. CanAlaska Uranium (CanAlaska) staked McPhail Lake to Kearns Lake in the southwest region of the Project. Thunder Sword Resources and 101073531 Saskatchewan Ltd. Staked Kercher Lake, Groat Lake, and surrounding area in the southwestern portion of the Project and allowed the claims to lapse in 2009. North-Sask Ventures staked claims in the north-central region east of the northmost drill holes on the Project and Cosa's neighbouring Astro Project.

In 2007 Raytec Development Corp. (Raytec) purchased the claims from North-Sask Ventures. In 2008 Solitaire Minerals purchased these claims from Raytec.

In 2007 ESO Uranium Corp. staked significant land packages from northwest of Cree Lake to Pasfield Lake and allowed these claims to lapse between 2009 and 2010.

In 2011 Raven Mineral Corp. staked claims in the area from north Kercher Lake to the northeast extent of the present-day Project.

In June 2022, Cosa acquired Polaris and its four properties totaling 46,700 ha; Ursa, Orion, Castor, and Charcoal. In late 2022 through mid-2023 Cosa staked and purchased additional claims at the Ursa Project, enlarging the Project to its present state.

6.1 Exploration and Development History

In 1978, an E&B and Silver Acorn Development Ltd. joint venture conducted a combined airborne electromagnetic (EM), magnetic, and radiometric survey in the Kercher Lake area in the Project's southwestern portion. The aeromagnetic signatures were low amplitude with little relief, which was interpreted to indicate an appreciable thickness of the sandstone cover above the basement rocks. The EM anomalies detected were low conductivity and interpreted to reflect surficial features associated with lakes; no basement-hosted conductors were detected. The single anomaly outlined by the airborne radiometric survey was considered to be possibly related to a mineralized boulder or drift material (Stemp, 1978).

In 1979, Silver Acorn Developments conducted a prospecting program in the Kercher Lake area to investigate anomalies defined by the 1978 airborne surveys. Radioactive boulders measuring 1.5 to 2 times background levels were located but were interpreted to originate from outside the claims. Several outcrops were mapped, including one hosting a northeast–southwest-trending fault with no elevated radioactivity or fault gouge (Meagher, 1979).

In 1979, PNC conducted a combined aeromagnetic/very-low-frequency (VLF)-EM spectrometric survey from west of Hawk Rapids (Cree River) to Little Cree River. The geophysical surveys found major northeast–southwest to north-northeast–south-southwest structural features (PNC, 1980).

In 1980, PNC conducted geological mapping, lake sediment geochemical surveying, helicopter-borne radiometric surveying, and follow-up boulder prospecting in the Cree Lake Area, between west of Hawk Rapids (Cree River) and Little Cree Rivers near the center of the Project and directly north of Cree Lake. Outcrops of diabase and sandstone with no elevated radioactivity were encountered in the southern portion of the study area. Samples collected during the program comprised 486 lake sediment samples, 28 soil samples, and 8 stream sediment samples. Over 80% of the samples were below the contemporary 0.5 ppm detection limit for uranium. Lake sediments southeast of Kearns Lake defined an area of anomalous uranium geochemistry. The helicopter-borne radiometric survey identified 207 anomalies; ground-truthing determined the anomalies were attributable to clusters of radioactive basement boulders not sourced from within the Project area (PNC, 1981).

In 1993 and 1994, Uranerz conducted an airborne magnetic survey, fixed-loop and moving-loop transient electromagnetic (FLTEM and MLTEM) surveys, Athabasca Group boulder and outcrop sampling, and lake-bottom sediment sampling over most of the Project. The airborne magnetic survey defined the major magnetic features in the Project area while the ground TEM surveys defined conductive strata believed to represent graphitic metasediments in the basement. The outcrop and boulder sampling defined illite anomalies in one main zone up to 30 km long and up to 8 km wide surrounding the Kearns Lake area. A secondary zone was identified east-northeast of Seaby Lake. Lake sediment sampling identified weak uranium anomalies in the Cree River and Kearns Lake areas and east-northeast of Seaby Lake, all of which were within illite anomalies identified by boulder sampling (Cutts & Leppin, 1994).

In 1995, Uranerz conducted line cutting and FLTEM surveying, additional boulder sampling, drilled three diamond drill holes (CR-01 to CR-03), and completed downhole TEM surveys. The FLTEM survey results were interpreted to reflect the presence of graphite concentrated in shear zones in the southeastern portion of the survey area and relatively narrow zones of graphite in the northwestern portion of the survey area. Drill holes intersected Mudjatik Domain basement rocks comprising pelitic gneiss, pegmatite/anatexite, and calc-silicate gneiss with sections of graphitic and pyritic pelitic gneisses. All three drill holes intersect sooty pyrite, siderite, and interstitial green clay alteration. The CR-02 sandstone is strongly illitic, while the sandstones of CR-01 and CR-03 are kaolinite-dominant. Elevated uranium was intersected in CR-03 (0.05% U_3O_8 from 1017.1 to 1017.2 m) in a 5 cm band of pyritic pelitic gneiss within a pegmatite (Cutts, Leppin, & Belyk, 1995).

In 1996 Uranerz staked 23 additional claims in the area and engaged Dr. Steven Earle of Grasswood Geoscience to complete a study of reflectance spectroscopy analyses collected from the sandstones of the 1995 drill cores (Belyk & Leppin, 1997).

In 1997 Uranerz staked 10 additional claims. Line cutting and FLTEM surveys identified three main conductive trends striking in an east–west to northeast–southwest fashion—N1 and N2 (northern conductive trend), C1 and C2 (central conductive trend), and S1 (southern conductive trend). Drill holes CR-04, CR-05, CR-06, and CR-07 were completed in winter 1997 to test the N1, N2, C2, and C1 conductive trends respectively. Only CR-04 intersected the same sandstone alteration as the 1995 program of sooty pyrite, siderite, and interstitial green clay. The sandstone of CR-07 is kaolinite (dickite)-dominant, while the sandstones of CR-04, CR-05, and CR-06 are illitic. Drill hole CR-06 returned the best results, with a 200 m zone of illitization and vanadium enrichment associated with subvertical quartz healed fractures in the MFd member (MFd) and a 100 m zone of fracturing and friable core with elevated uranium geochemistry in the MFa member (MFa). Mudjatik domain basement lithologies were intersected in all four drill holes including pelitic- and psammopelitic gneiss with local intervals of anatexis, with the characteristic paleo-weathering alteration immediately below the unconformity. CR-04, CR-05, and CR-06 intersected graphitic and pyritic pelitic gneisses, interpreted as possibly explaining the EM conductors targeted by those three drill holes. No elevated radioactivity was intersected.

In 1998 UEM Inc. conducted an FLTEM survey and completed two diamond drill holes totalling 1,967 m in the southern portion of the present-day Project. The FLTEM survey identified four conductive trends interpreted to represent the southern extension of previously mapped N1 and N3, C3, and S3 conductive trends. Drill holes CR-08 and CR-09 tested the N1 and N3 conductors, respectively. Both drill holes intersected the sooty pyrite, siderite, and interstitial green clay sandstone alteration of the 1995 and 1997 programs. The sandstone of CR-08 and CR-09 is kaolinite (dickite)-dominant, with minor illite. Despite intersecting sandstones with background macroscopic alteration signatures and limited structure above non-conductive basement, drill hole CR-08 intersected weak, basement-hosted uranium mineralization of 0.11% U_3O_8 at 934.2 m, 0.03% U_3O_8 over 0.2 m (934.3 to 934.5 m), and 0.18% U_3O_8 over 0.2 m (936.5 to 936.7 m) within hematitic and chloritic, weakly tectonized pelitic gneiss and pegmatite. Drill hole CR-09 intersected an extensive structural zone from 105 to 170 m (MFd) with intense fracturing, brecciation, fault gouge, weak silicification, and clay enrichment and minor illitization in several structural horizons, but no elevated radiation or conductive rocks were intersected in the basement. The drill holes intersected pelitic gneiss, graphitic and pyritic pelitic gneiss, and pegmatite (Belyk, Leppin, & Bell, 1998).

COGEMA assumed operatorship of the property in 1999 and completed an in-house compilation using existing drill-hole and geophysical data. Several drill targets were generated from this compilation (Wheatley, 2000).

In 2000 COGEMA conducted a moving-loop EM (MLEM) survey and drilled two diamond drill holes (CR-10 and CR-11) for a total of 1,951 m targeting basement-hosted EM conductors. The geophysical survey defined three subparallel, basement-hosted EM conductors along the Esker Lake magnetic high (Wheatley, Bingham, & Lee, 2000). East of Kercher Lake, drill hole CR-10 intersected weak structures throughout the sandstone, but no radiometric anomalies. The sandstone of CR-10 is kaolinite (dickite)-dominant with minor illite close to the unconformity. In the central portion of the Project, CR-11 intersected structures in the upper part of the sandstone column and a fault zone in the basement with no radiometric anomalies. The sandstone is illite-dominant, with subordinate dickite in the upper section and kaolinite/dravite from 840 to 900 m. Basement lithologies intersected by both drill holes include pelitic gneisses with anatectic segments, with CR-10 intersecting weakly graphitic and pyritic rocks suggesting proximity to the targeted conductor (Wheatley, 2000).

In 2001 COGEMA completed diamond drill holes CR-12 and CR-13 for a total of 2,035 m targeting the S1 and N1 conductive trends, respectively. South of CR-07 in the central region of the Project, drill hole CR-12 targeted an interpreted conductor on the northwestern flank of a northeast-trending magnetic high. Weak structures were intersected in the sandstone 600 m above basement rocks that included graphitic pelitic gneiss and granitoid. Sandstones in CR-12 are illitic. Drill hole CR-13 tested the interpreted up-dip projection of the weak mineralization intersected in CR-03. Background sandstones were intersected above locally weakly graphitic and pyritic pelitic gneiss bearing no significant structure. No offset of the unconformity was noted relative to CR-03 (Wheatley, 2001).

In 2002 COGEMA completed diamond drill holes CR-14 and CR-15 for a total of 2,032 m. Drill hole CR-14 followed-up the results of CR-08, which intersected weak uranium mineralization in the basement well below the sub-Athabasca unconformity. Below-background dickite-dominant sandstones, the basement consisted of pelitic and psammopelitic gneisses; no conductor was intersected. Anomalous radioactivity at and below the unconformity was coincident with visually identified coffinite blebs in the drill core. Geochemical analysis determined that CR-14 intersected 0.04% U_3O_8 over 0.5 m (869.8-870.3 m) and 0.05% U_3O_8 over 0.5 m (877.9 to 878.4 m). The upper weakly mineralized interval is within hematized pelitic gneiss below the unconformity, while the lower, weakly mineralized interval is at the contact between pelitic and psammopelitic gneisses. Drill hole CR-14 is interpreted to have overshot the up-dip extension of the weakly mineralized basement structure intersected by CR-08. Drill hole CR-15 targeted the down-dip extension of a 100 m structural zone with anomalous uranium geochemistry intersected well above the unconformity in drill hole CR-06. Although local dravite is present in the lower sandstone, CR-15 failed to intersect the structural zone in the sandstone, or basement, and no conductive rocks were intersected (Wheatley, 2002).

In 2004 Areva completed a historical review of geophysical information with an emphasis on the fixed-loop EM37 data collected in 1995, 1997, and 1998 (Pendrigh, 2006).

In 2006 Areva conducted MEGATEM airborne transient EM (MEGATEM) surveying from Kearns Lake to Little Cree Lake that provided higher definition of conductive trends of the basement (Pendrigh, 2006). A ground gravity-survey was also completed to evaluate possible moderate-to-shallow alteration effects in the sandstone associated with basement conductors and interpreted structures. The combination of EM and gravity surveys highlighted priority areas for follow-up work including an east-northeast–west-southwest-trending lineament that transects the main gravity high, an inferred complex structure neighbouring CR-12 and a conductive feature neighbouring CR-06 (Pendrigh & Koch, 2006).

In 2006 CanAlaska conducted Versatile Time Domain Electromagnetic geophysical surveys (VTEM) to explore for both basement- and sandstone-hosted unconformity-related uranium deposits in the McPhail Lake to Kearns Lake area where Cree River enters Cree Lake. Relatively weak conductors interpreted to be graphitic zones in the basement yielded several target areas (Condor Consulting, 2006). As well, a lake-sediment sampling program was completed over the same area, with several anomalous uranium samples returned in and around McPhail Lake (Lopatka & Schimann, 2006).

In 2006 Thunder Sword Resources and 101073531 Saskatchewan Ltd. conducted an airborne EM and magnetic survey in the Kercher Lake, Groat Lake, and surrounding area. The surveys identified seven conductive anomalies with three anomalies interpreted to be of surficial origin and four anomalies considered to be of basement origin (Grunerud, 2006).

In 2006 North-Sask Ventures conducted airborne magnetic and VTEM surveys west of CR-15 in the north-central portion of the Project. The magnetic data defined a "boot"-shaped magnetic-low trough flanked by magnetic highs. Conductive trends occur along the flanks of the magnetic low, and shorter strike-length conductive responses occur within the central portion of the magnetic low (Studer, 2006).

In 2007 CanAlaska conducted an audio-magnetotelluric (AMT) survey from McPhail Lake to Kearns Lake where Cree River enters Cree Lake. Using inverted two-dimensional (2-D) and 3-D techniques, the AMT data characterized resistivity of the sandstone and basement to over 2,000 m depth. The survey defined an arcuate, northeast–southwest-trending basement-hosted EM conductor that appears to plunge to the northeast (Geosystems Canada Inc, 2007). Also in 2007, CanAlaska completed a sandstone-boulder and lake-sediment sampling program. The boulder survey defined coincident anomalous concentrations of illite, boron, and dravite, while uranium anomalies were identified in lake sediments (Shirmohammad & Schimann, 2007).

In 2007 Thunder Sword Resources conducted a ground TEM survey and gravity survey between Groat Lake and Kercher Lake. The ground TEM anomalies coincide with the Cable Bay Shear Zone. The conductor closely follows the edge of a wide magnetic low outlining the shear zone and suggesting a "step" in the structure of the basement rock. The gravity survey results indicate a gravity high is coincident with a circular topographic low and early-channel conductivity from airborne surveys in the James and Kercher Lakes area. This set of features was hypothesized to represent a 7 km-diameter astrobleme (Grunerud, 2008).

In 2007 Raytec purchased North-Sask Ventures' claims and hired Condor Consulting to assess the 2006 VTEM survey data and provide further targets (Condor Consulting, 2007).

In 2007 ESO Uranium Corp. conducted an infill composite sandstone boulder survey, a water sample survey, and an airborne MEGATEM survey from north of Kercher Lake to the Project's northeasternmost claim neighbouring Arnold River. The boulder sampling survey found an increased illite content compared to the studies Uranerz completed in the 1990s. As well, there is increased dravite content between Kearns Lake and Cree River, and north of Rainville Lake. The water survey did not find elevated values in the Project area. The magnetic study found numerous domains characterized by magnetic lows, which are interpreted as possible basement metasedimentary units/metapelites (Greening, Cote, & Brett, 2007).

In 2008 Solitaire Minerals Corp. purchased Raytec's claims and conducted a transient electromagnetic UTEM3 combined loop survey east of CR-15 in the central area of the Project and Cosa's neighbouring Astro Project. The survey defined two west-northwest-trending conductive zones, one of which is within the present-day Project. (Studer & Elson, 2008).

In 2008 Areva conducted a tensor magnetotelluric (MT) survey from Kearns Lake to Little Cree Lake to image the subsurface resistivity to a depth of 2 km and locate and characterize interpreted basement EM conductors outlined in the 2006 MEGATEM survey. While magnetic results from both surveys were consistent, the MT–2-D inversion models only partially agreed with earlier EM interpretations; the differences may be due to variations in depth penetration and resolution of each method (Morales, 2008). Also in 2008, Areva completed physical property measurements on core samples from drill holes CR-06, CR-07, CR-11, and CR-15, and integrated the results with the 2008 MT survey. A total of 280 samples was sent to the University of Saskatchewan Rock Mechanics Lab for density, porosity, P-wave and S-wave sonic velocities, resistivity, and magnetic susceptibility determinations. The Manitou Falls Formation's resistivity signature indicates an overall fining-up sequence, and the porosity increases with depth likely due to the shallower uniform sandstone units transitioning to the deeper conglomeratic units, while the resistivity decreases with depth. In general, major deviations in density, resistivity, and porosity in the sandstone column appear to be the result of alteration zones, fracturing, and/or chemical enrichment. The correlation between the physical property sampling and MT models assisted in identifying potential alteration zones (Escalante, Hutchinson, & Wiggins, 2010).

In 2011 Raven Minerals Corp. conducted AMT surveying and core logging and sampling on seven of the historical drill holes, as well as dendrogeochemical (tree core), soil, outcrop, and boulder sampling from north of Kercher Lake to the northeast extent of the Project. Using historical data, a follow-up program in 2012 focused on areas with basement conductors, magnetic lows and surficial illite content where soil, outcrop, boulder and tree core samples were collected. The results from the drill core data suggest migration of radiogenic Pb from a uranium source much larger than the mineralized intersection in CR-08. The outcrop, soil, and boulder sampling mapped increased illite and dravite content (Drever & Beyer, 2013). The tree core sampling density was determined to be too low to effectively generate defined targets, and future work at a smaller grid size is suggested (Drever & Beyer, 2014).

In 2013 Areva conducted a moving-loop superconductive quantum-interference device transient electromagnetic (ML-SQUID-TEM) survey from Kearns Lake to Little Cree Lake to investigate the conductive areas and targets outlined by the 2008 MT survey, and to refine the location of future drill targets. The 2013 survey outlined late time anomalies interpreted as three basement conductors with a combined length of 10.0 km that correlate with the 2008 MLTEM survey results. The relationship between interpreted ML-EM conductors, MT signatures, and MAG lineaments suggests discontinuities in the conductive trends that may relate to structures (Morales, 2013).

6.1.1 Drill Hole Summary

Historical drilling on the Project is sparse, with 15 NQ-sized drill holes completed between 1995 and 2002 for a total of 15,342.8 m (Table 6-1, Figure 6-1). Although drill holes dominantly targeted conductors defined by ground EM surveys, relatively few drill holes intersected conductive basement lithologies that could explain their targets. The low target-explanation success rate for historical drilling is considered to indicate insufficient technology in contemporary geophysical surveying and modelling efforts rather than the absence of conductors, as some drill holes (e.g., CR-02) did intersect strongly graphitic basement rocks. This conclusion is further supported by the results of exploration conducted by Cosa in 2023 and presented in Section 9.

Table 6-1: Historical Diamond Drill Hole Parameters

Hole Name	Year	Company	UTM Zone 13 (NAD 83)		Elevation (masl)	Azimuth (true)	Dip (°)	Unconformity Depth (m)	Length (m)
			Easting	Northing					
CR-01	1995	Uranerz	422920	6401981	487	N/A	-90	915.2	971
CR-02	1995	Uranerz	423053	6406774	488	N/A	-90	972.6	1,066.5
CR-03	1995	Uranerz	419648	6403399	491	N/A	-90	954.6	1,048.3
CR-04	1997	Uranerz	427394	6410727	479	N/A	-90	1,001.1	1,101.5
CR-05	1997	Uranerz	439327	6413831	479	N/A	-90	943.8	1,033
CR-06	1997	Uranerz	443244	6409664	503	N/A	-90	977.8	1,074.5
CR-07	1997	Uranerz	435208	6408503	482	N/A	-90	982.5	1,063
CR-08	1998	Uranerz	407926	6392792	503	N/A	-90	872.7	961.5
CR-09	1998	Uranerz	413304	6395822	524	N/A	-90	902.3	1,005.5
CR-10	2000	Uranerz	417358	6394441	508	N/A	-90	876.5	950
CR-11	2000	Uranerz	439979	6408473	491	N/A	-90	995.3	1,001
CR-12	2001	Cogema	434337	6405901	485	N/A	-90	964.7	1,028
CR-13	2001	Cogema	419613	6403434	490	N/A	-90	957.1	1,007
CR-14	2002	Cogema	407872	6392851	503	N/A	-90	869.3	950
CR-15	2002	Cogema	443227	6409741	498	N/A	-90	986.1	1,082
								Total	**15,342.8**

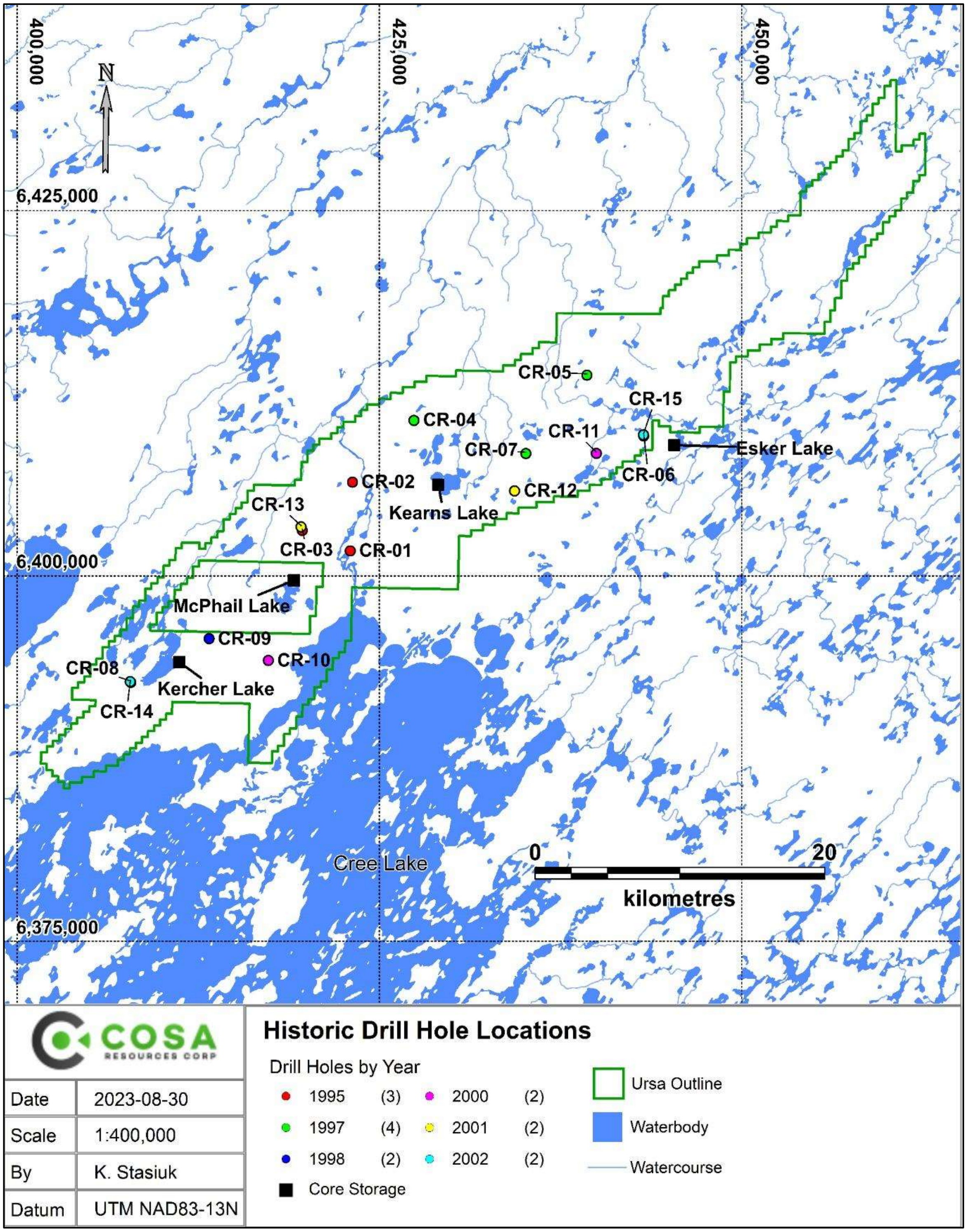


Figure 6-1: Historical Drill Hole Location Map

6.2 Historical Mineral Resource Estimates

No Mineral Resource estimates have been previously completed on the Project.

6.3 Past Production

No production has occurred on the Project.

7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 Regional Geology

Table 7-1 summarizes the regional stratigraphy while Figure 7-1 presents the regional Precambrian geology.

The Project lies within the eastern Athabasca Basin, a Paleoproterozoic to Mesoproterozoic basin containing the relatively undeformed, unmetamorphosed Athabasca Supergroup with an aggregate thickness of approximately 1,500 m. In the eastern Athabasca Basin, the Athabasca Supergroup is dominated by clastic rocks, primarily sandstones and conglomerates of the Manitou Falls Group.

Athabasca Supergroup rocks unconformably overlie highly deformed and metamorphosed rocks of the Hearne Domain of the Western Churchill Province of the Canadian Shield (Jefferson, et al., 2007). The Hearne Craton comprises Archean orthogneisses and Paleoproterozoic supracrustals and volcanic rocks that were tectonically intercalated and variably metamorphosed during the Trans-Hudson orogeny, resulting in a generally north-northeast to northeast-southwest fabric.

7.1.1 Metamorphic Basement

The Hearne Province is subdivided into the Virgin River (west), Mudjatik (central), and Wollaston (east) domains primarily on the basis of lithostructural fabrics and the relative abundance of metasedimentary rocks. However, it is generally recognized that the constituent rocks of each domain are broadly similar (Lewry & Sibbald, 1977; Wallis, 1970). The oldest rocks in the Hearne Province are Archean granitoid gneisses (Lewry & Sibbald, 1980). During the Trans-Hudson Orogen, Paleoproterozoic supracrustals, comprising pelitic to psammitic gneisses (including a basal graphitic unit), quartzite, calc-silicate, and iron formation, were tectonically interlayered with the Archean orthogneisses and are consequently dismembered and discontinuous. Widespread Paleoproterozoic intrusive units were also emplaced as a result of the Trans-Hudson Orogen (Harper et al., 2001).

The western boundary of the Hearne Province is the Snowbird Tectonic Zone, the most prominent fault system in the Athabasca region (Card et al., 2007). The boundary between the southern Virgin River and Mudjatik domains follows the Cable Bay Shear Zone, which is exposed south of the Athabasca Basin and forms a well-defined magnetic linear structure extending across the Athabasca Basin and into the Mudjatik Domain beyond. The boundary between the Mudjatik and Wollaston domains is marked by a shift from the dome-and-basin lithostructural pattern of the Mudjatik to a linear pattern within the Wollaston (Lewry & Sibbald, 1977), as well as an increase in the proportion of metasedimentary rocks (Yeo & Delaney, 2007).

High-grade metamorphism dated at 1.82–1.80 Ga is widespread in the Hearne Province (Lewry & Sibbald, 1977). Polyphase ductile deformation is recognized in the three domains of the Hearne Province, all of which are attributed to the Trans-Hudson Orogen (Lewry & Sibbald, 1977, 1980).

Table 7-1: Stratigraphic Column for the Athabasca Supergroup

Basin	Sequence Athabasca Supergroup	Higher Rank (Rock Code)	Group (Rock Code)	Formation (Rock Code)	Member (Rock Code)	General Lithofacies Description
		Quaternary (Q)				Glacial deposits
WCSB		Phanerozoic (P)				Rocks of the Devonian and Cretaceous
Mirror	III	Athabasca supergroup	McFarlane (MC)	Carswell (C)		Siliciclastics and stromatolitic carbonate
				Douglas (D)		Mudstone, fine- to very fine- grained quartz arenite
				Otherside (O)	Davy (Od)	Pebbly quartz arenite and quartz arenite
					Birkbeck (Ob)	Quartz arenite
					Archibald (Oa)	Pebbly quartz arenite, quartz arenite
				Locker Lake (LL)	Marsin (LLm)	Pebbly quartz arenite
					Brudell (LLb)	Conglomeratic quartz arenite
					Snare (LLs)	Lower pebbly quartz arenite
Cree	II-4		Wolverine Point (W)	Claussen (Wc)		Clay-rich quartz arenite, mudstone; arenite much more abundant than mudstone
				Brule (Wb)		Mudstone ± quartz arenite ± phosphatic hardgrounds, replaced tuff
			Lazenby Lake (LZ)	Larter (LZl)		Pebbly quartz arenite, quartz arenite, siltstone + mudstone; arenite much more abundant than siltstone + mudstone
				Shiels (LZs)		Quartz arenite with pebbly layers
	II-3		Manitou Falls (MF)	Clampitt-Dunlop (MFcl, MFd)	Upper	Clay-intraclast–rich quartz arenite, siltstone + mudstone (Dunlop and Upper Clampitt members); arenite more abundant than siltstone + mudstone
					Lower	Quartz arenite, minor pebbly quartz arenite, minor clay intraclasts
				Hodge (MFh)		Pebbly quartz arenite ± conglomerate
	II-2			Warnes (MFw)		Clay-intraclast–rich quartz arenite
				Collins (MFc)	Sandy member	Quartz arenite
					Pebbly member	Pebbly quartz arenite
				Bird (MFb)		Conglomeratic quartz arenite; one to five fining-up cycles
	II-1			Read (MFr)	Three informal members	1) Conglomerate to mudstone; 2) quartz arenite; 3) quartz arenite with intraclasts. Multiple fining-up cycles proximally.

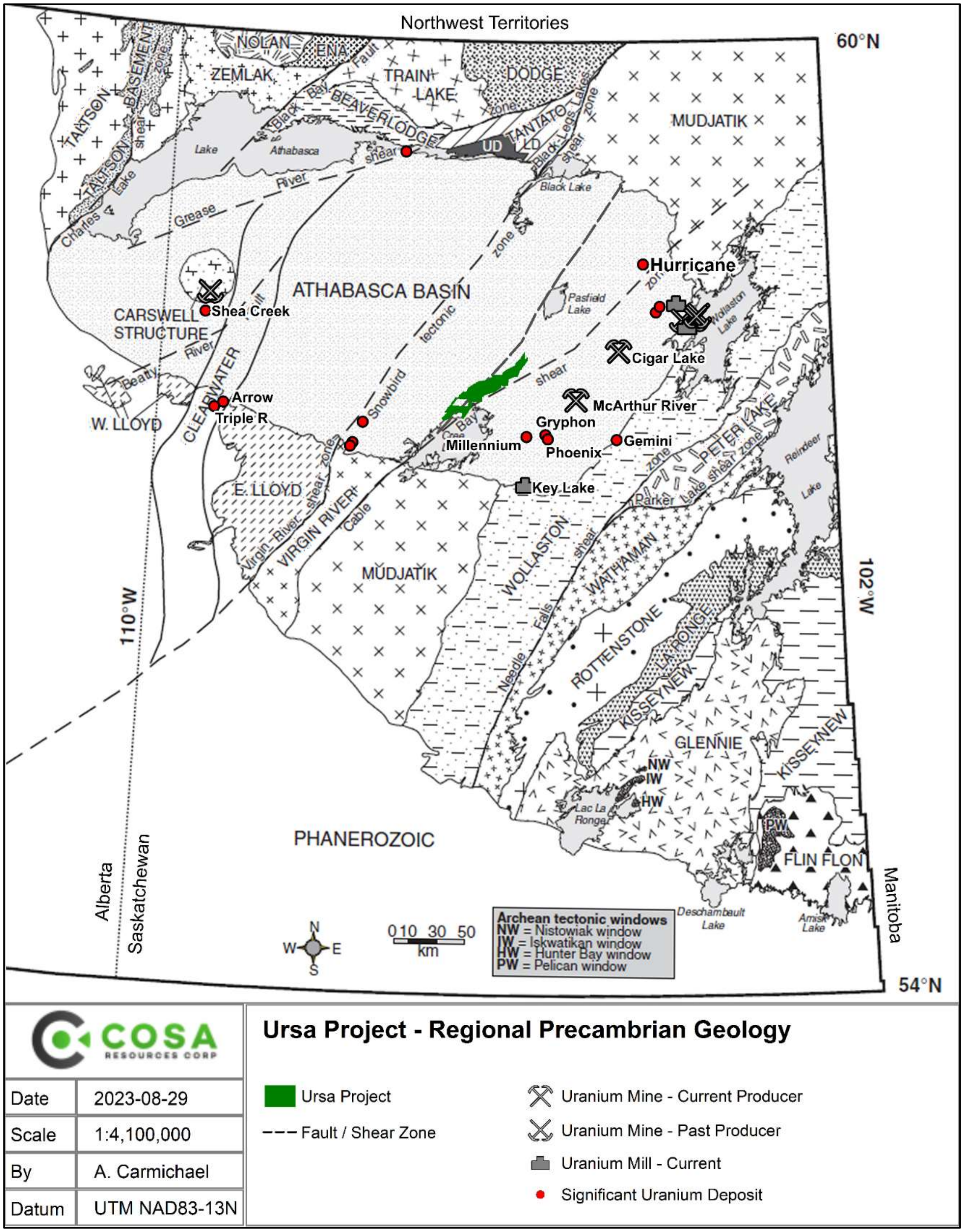
Basin	Sequence Athabasca Supergroup	Higher Rank (Rock Code)	Group (Rock Code)	Formation (Rock Code)	Member (Rock Code)	General Lithofacies Description
				Smart (MFs)		Quartz arenite, much of it fine grained, horizontally bedded
Jackfish	I		Fair Point (FP)	Beartooth (FPb)		Pebbly quartz arenite
				Lobstick Island (FPl)		Conglomeratic quartz arenite
Martin	*Extending sequences into the Martin Group will be considered in the future*		Martin (MG)	Melville Lake		Sandstone, siltstone, minor conglomerate
				Seaplane Base		Sandstone, conglomerate, minor siltstone
				Gillies Channel		Conglomerate, sandstone, mafic flows
				Beaverlodge		Conglomerate, arkose, minor siltstone
				Taz		Sandstone and conglomerate
				Pebble Island		Conglomerate and sandstone
				Charlot Point		Conglomerate, sandstone
				Jug Bay		Siliceous sandstone/arkose
		Crystalline Basement (CB)				Rocks pre-dating deposition of the Athabasca Group
Reilly				Reilly (RY)		Conglomeratic quartz arenite in the Reilly Basin (deposition interpreted as contemporaneous with Manitou Falls Group)

Source: Bosman & Ramaekers, 2015

Note: 'Quaternary', 'Phanerozoic', and 'Crystalline Basement' have been added to the table as a reference. Western Canada Sedimentary Basin (WCSB).

Recumbent regional gneissosity is followed by west-northwest-striking upright folds and two sets of north-northeast- to northeast-striking folds (Card et al., 2007). Widespread brittle reactivation of early ductile structures occurred repeatedly (Portella & Annesley, 2000) over a protracted period extending from at least syn-Athabasca to post-emplacement of the approximately 1.27–1.267 Ga McKenzie dyke swarm (Card et al., 2007; Yeo et al., 2002).

Following the end of the Trans-Hudson orogeny at approximately 1.8 Ga, metamorphic basement rocks were eroded and deeply weathered prior to deposition of the Athabasca Supergroup. Basement beneath the Athabasca Supergroup shows a lateritic weathering profile comprising an upper, thin, bleached zone immediately below the unconformity, a hematite-stained zone (red zone), a mixed zone of hematite and chlorite alteration (red-green zone), grading into a zone of chloritic alteration of mafic minerals (green zone) (MacDonald, 1980).



Source: Modified from Card et al., 2007; Hanmer et al., 1994; Ramaekers et al., 2007.

Figure 7-1: Ursa Project Regional Geology with Selected Uranium Mines, Deposits and Mills

7.1.2 *Athabasca Supergroup*

Sedimentary rocks of the Athabasca Basin comprise six groups within the Athabasca Supergroup defined by Bosman and Ramaekers (2015), with the majority having several constituent formations and members. Sedimentation of the Athabasca Supergroup may have commenced as early as 1.73 Ga (Jefferson et al., 2007). In the eastern Athabasca Basin, the Athabasca Supergroup is dominated by unmetamorphosed and largely undeformed continental clastic sediments ranging from conglomerate to fine-grained and clay-clast bearing sandstones of the Manitou Falls Group (Table 7-1).

7.1.3 *Quaternary Deposits*

The present-day topography of the Athabasca Basin region is primarily the result of Quaternary glaciation (Campbell, 2002). Extant glacial landforms include drumlins and fluted terrains, end moraines or rock ridges, ridged moraines, glaciofluvial terrain and ice-walled channels, strandlines of Glacial Cree Lake, and sand dunes that can extend over five km long and 100 m high (E.A. Christiansen Consulting Ltd., 1978). Multiple ice-flow directions have been documented, but are primarily southwesterly trending, forming northeast–southwest-trending glacial landforms (Campbell, 2002).

7.2 Property Geology

7.2.1 *Crystalline Basement*

No outcrop of basement is present on the Project. The limited drilling on the Project primarily targeted electromagnetic conductors attributed to graphitic and pyritic pelitic gneisses within a broad northeast–southwest-trending magnetic low interpreted to reflect the Cable Bay Shear Zone. Lithologies intersected include pelitic, psammopelitic, and calc-silicate gneisses, as well as pegmatites and/or anatectic melts, biotite–feldspar–quartz gneisses, and diabase dykes (possibly logged as amphibolite gneisses). While intersections of strongly graphitic and/or pyritic basement rocks are relatively rare in historical drilling, cordierite augen pelitic gneisses have been intersected, similar to those intersected at several uranium deposits in the Wollaston and Mudjatik domains, including at the Hurricane Zone and the Cigar Lake Mine.

The upper basement rocks have undergone paleo-weathering typical for the region with an upper bleached zone (white zone), followed by a hematized (red zone), hematized and chloritized (red-green zone) and chloritized (green zone) zones. Not every alteration is seen in every hole and the paleo-weathering zone can extend up to 40 m into the basement.

Depth from the surface to the top of the crystalline basement (sub-Athabasca unconformity) ranges from 872 to 1001 m in the drill holes on the Project.

7.2.2 *Athabasca Supergroup*

Unconformably overlying the crystalline basement is the flat-lying Athabasca Supergroup sandstones comprising quartz arenite and conglomerates of the Manitou Falls Group's Read, Bird, Collins, and Clampitt-

Dunlop Formations. The limited drilling on the Project indicates that the true vertical thickness of the Athabasca Supergroup sandstones is between 858 and 991 m.

The Read Formation is composed of marine and fluvial sandstones, pebbly sandstones, and minor conglomerates. The Read Formation is 120 to 170 m thick in the drilled zone of the Project, but can reach a maximum thickness of 600 m in the Athabasca Basin.

The Bird Formation is composed of interbedded sandstones and clast-supported conglomerates. The Bird Member is between 60 and 130 m thick within the Project, but can reach over 200 m thick along the eastern edge of the Athabasca Basin.

The Collins Formation is composed of sandy, braided-stream deposits with planar and trough cross-bedding. Clay intraclasts are locally present but not abundant. The Collins Member is from 120 to 185 m thick in the Project but can reach over 400 m thick in the central part of the Athabasca Basin.

The Clampitt-Dunlop Formation forms the top of bedrock within the Project and is composed of fine- to medium-grained sandstone with lenses of siltstone and mudstone and abundant clay intraclasts. The Clampitt-Dunlop Member is 488 to 559 m thick in the Project but can reach over 700 m thick in the Cree sub-basin.

7.2.3 Quaternary Geology

Quaternary geology (overburden) is the result of Quaternary glaciation and its resulting glacial till deposits. Short-wavelength topographic features are nearly exclusively glacial landforms. Based on historical drilling results, the overburden thickness on the Project is up to 19 m.

7.3 Mineralization

No uranium deposits are known on the Project. Three historical drill holes completed within the Project have intersected weak uranium mineralization.

In 1995, CR-03 intersected 0.05% U_3O_8 over 0.1 m (1017.1 to 1017.2 m) within a 5 cm band of fine-grained pyritic pelitic gneiss in a pegmatite.

In 1998, CR-08 intersected 0.11% U_3O_8 at 934.2 m (grab sample, width unknown), 0.03% U_3O_8 over 0.2 m (934.3 to 934.5 m) within a broken and friable pegmatite, and 0.18% U_3O_8 over 0.2 m of (936.5 to 936.7 m) within pelitic gneiss.

In 2002, CR-14 intersected 0.04% U_3O_8 over 0.5 m (869.8 to 870.3 m) and 0.05% U_3O_8 over 0.5 m (877.9 to 878.4 m) while following up CR-08. The upper weakly mineralized interval is within hematized pelitic gneiss below the unconformity, while the lower, weakly mineralized interval is at the contact between pelitic and psammopelitic gneisses.

The orientation and true thickness are unknown for all historical intersections of weak mineralization.

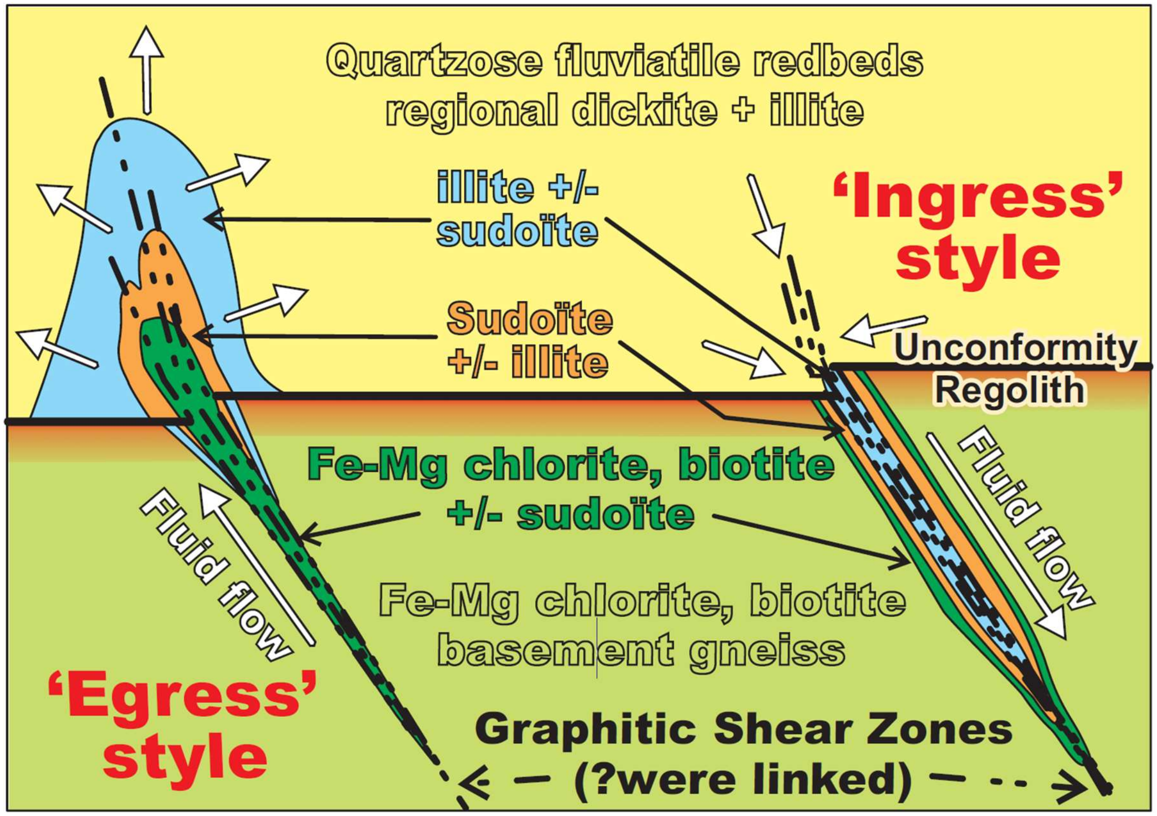
8 DEPOSIT TYPES

Uranium deposits worldwide are generally classified according to their geological setting. The dominant settings are unconformity-associated deposits (mainly in Canada and Australia), iron oxide–copper–gold (IOCG) deposits (the Olympic Dam deposit in South Australia), and sandstone uranium deposits of various types (Kazakhstan, Niger, and U.S.A.). Other deposit types include surficial calcrete-type deposits; conglomerate-hosted deposits; black shale-, phosphorite- and lignite-hosted sedimentary deposits; vein deposits; intrusive- and volcanic-hosted deposits; metasomatic deposits; and collapse-breccia pipe deposits (Cuney & Kyser, 2008).

The uranium deposits in the Athabasca Basin are unconformity-related deposits where uranium mineralization is observed at or near the unconformity between the Athabasca sandstones and the older metamorphosed basement rocks (Jefferson et al., 2007). The deposits are always associated with basement-reactivated faults that are often rooted in graphitic rocks. Two end members of the deposit model have been defined by Jefferson et al. (2007) after Hoeve & Quirt, (1984) (Figure 8-1).

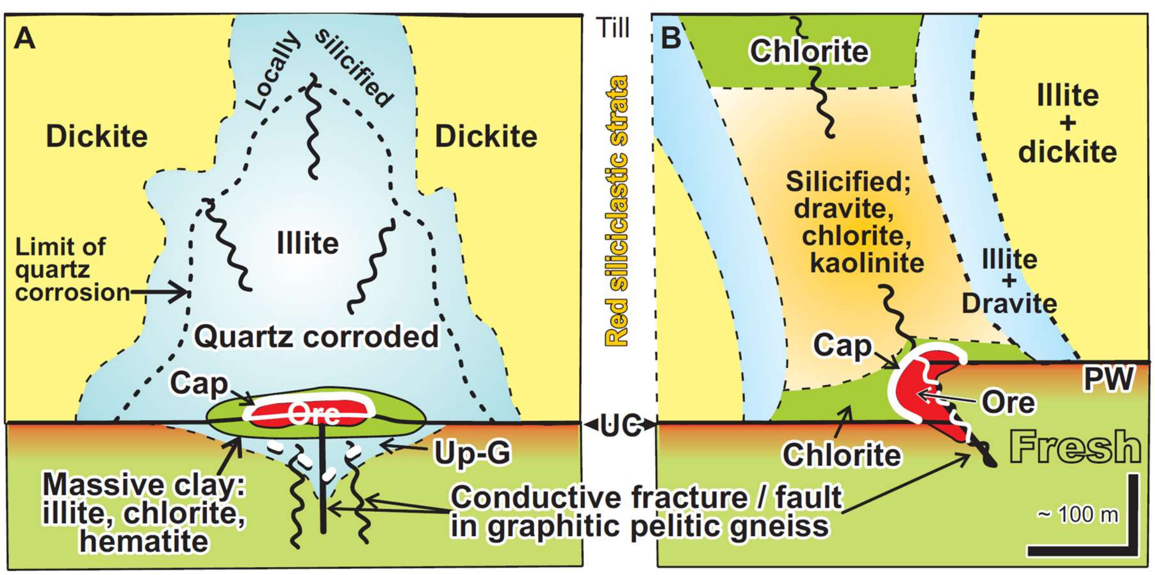
Sandstone-hosted egress-type deposits (e.g., Hurricane, Cigar Lake) are typically polymetallic (U-Ni-Co-Cu-As) and form from mixing of relatively reduced fluids from the basement with the relatively oxidized, uranium-bearing sandstone brines. Egress-type deposit geometry typically follows the intersection lineation of the trace of the underlying graphitic gneisses and associated faults with the unconformity. Egress-type alteration has two distinct endmembers (Figure 8-2) that can extend over 400 m wide and several thousand metres in strike length: deslicification + illite; and silicification + later illite–kaolinite–chlorite + dravite. Basement-hosted ingress-type deposits (e.g., Eagle Point, Gryphon, Arrow) are typically monometallic (uranium [U]) and form from the fluid–rock reactions where oxidizing sandstone brines are reduced by basement fault zones and wall rock, resulting in the precipitation of uranium mineralization. Ingress-type deposits have a more irregular geometry but are generally hosted in faults and follow their shape. Ingress-type alteration is less evident, as it is narrow, inverted alteration halos along the basement structure from illite ± sudoite within the structure to iron–magnesium chlorite ± sudoite against the fresh basement rock.

Exploration programs typically use geophysical techniques to indirectly explore for uranium mineralization. Airborne or ground electromagnetic surveys detect faulted basement rocks through identifying electromagnetic conductors, commonly attributed to faulted graphitic or pyritic basement rocks, while resistivity surveys are commonly employed to detect alteration in the sandstone. High resistivity in the sandstone may reflect silicification, while low resistivity in the sandstone may indicate a clay-rich alteration zone (Jefferson et al., 2007). As the basement in the unconformity-associated model is commonly conductive, resistivity surveys can also map conductive basement rocks as well as discordant zones of decreased resistivity in flanking units, which may represent cross-faulting.



Source: Jefferson et al., 2007

Figure 8-1: Schematic of Egress- Versus Ingress-Style Unconformity-Associated Uranium Deposits



Source: Jefferson et al., 2007.

Figure 8-2: Two End Members of Egress-Type Sandstone Alteration Models

9 EXPLORATION

9.1 2023 Field Program

Exploration completed to date consists of an extensive MobileMT airborne survey that Expert Geophysics Ltd. (EGL) of Aurora, Ontario, completed in June and July 2023, on behalf of Cosa. MobileMT is a modern, helicopter-borne, MT survey system capable of detecting both the basement-hosted EM conductors and sandstone-hosted zones of anomalous resistivity commonly associated with significant Athabasca Basin uranium deposits. MobileMT can resolve resistivity contrasts to depths exceeding 1,000 m, and MT surveys have mapped basement conductors and sandstone alteration zones at both the McArthur River and Shea Creek uranium deposits.

The survey grid covered the entire Project at 300 m spacing, excluding the along-strike extremities (Figure 9-1). A total of 2764 line-km were flown at the Ursa Project, including 132 line-km which overlapped Cosa's neighbouring Astro Project. The intent of the survey was to assess the entire Project for the presence of basement-hosted EM conductors potentially reflecting faulted graphitic rocks, to characterize the strength, orientation, and position of EM conductors; to identify zones of anomalous resistivity in the sandstone; and to acquire magnetic data to improve understanding of basement geology.

9.1.1 Airborne Geophysical Survey Procedure

The survey crew was based at Points North Landing and the Cree Lake Lodge for the duration of the survey. Navigation was by GPS with a positional accuracy of 2.5 m. Electromagnetic data were recorded at a rate of 73,728 Hz and processed at 2 Hz, resulting in data sampling every approximately 11 m along flight lines. Magnetic data were collected at 10 Hz, resulting in magnetic data sampling every approximately 2.2 m along flight lines.

The main instrumentation installed on the MobileMT tow-bird consisted of:

- Three orthogonal induction coils (1.4 m-diameter each) to measure naturally occurring magnetic fields in the frequency range 25–20,000 Hz
- Geometrics G822A Cesium Magnetometer, installed in a separate towed bird, 10 m above the MobileMT bird, sensitivity of 0.001 nT/10 Hz sampling
- GPS antenna, installed on the towed bird with the magnetometer.

The main instrumentation installed on the helicopter consisted of:

- EGL PC-104 based data acquisition system
- EGL Navigation system with Pilot Steering Indicator
- Smartmicro model UMRR-0A Radio Altimeter, 0–500 m range
- GPS antenna, installed on the helicopter tail.

Base stations and ground support instrumentation consisted of:

- MobileMT Ground Base Station, 4-channel to measure variations of the electric field in two directions with 4 pairs of electrodes (2 channels for signal and 2 channels for reference signal)
- GEM Systems GSM-19 base station magnetometer, 0.1 nT sensitivity, with data logger
- A field data-processing workstation and a full suite of software for the quality control and preliminary processing of the airborne geophysical data.

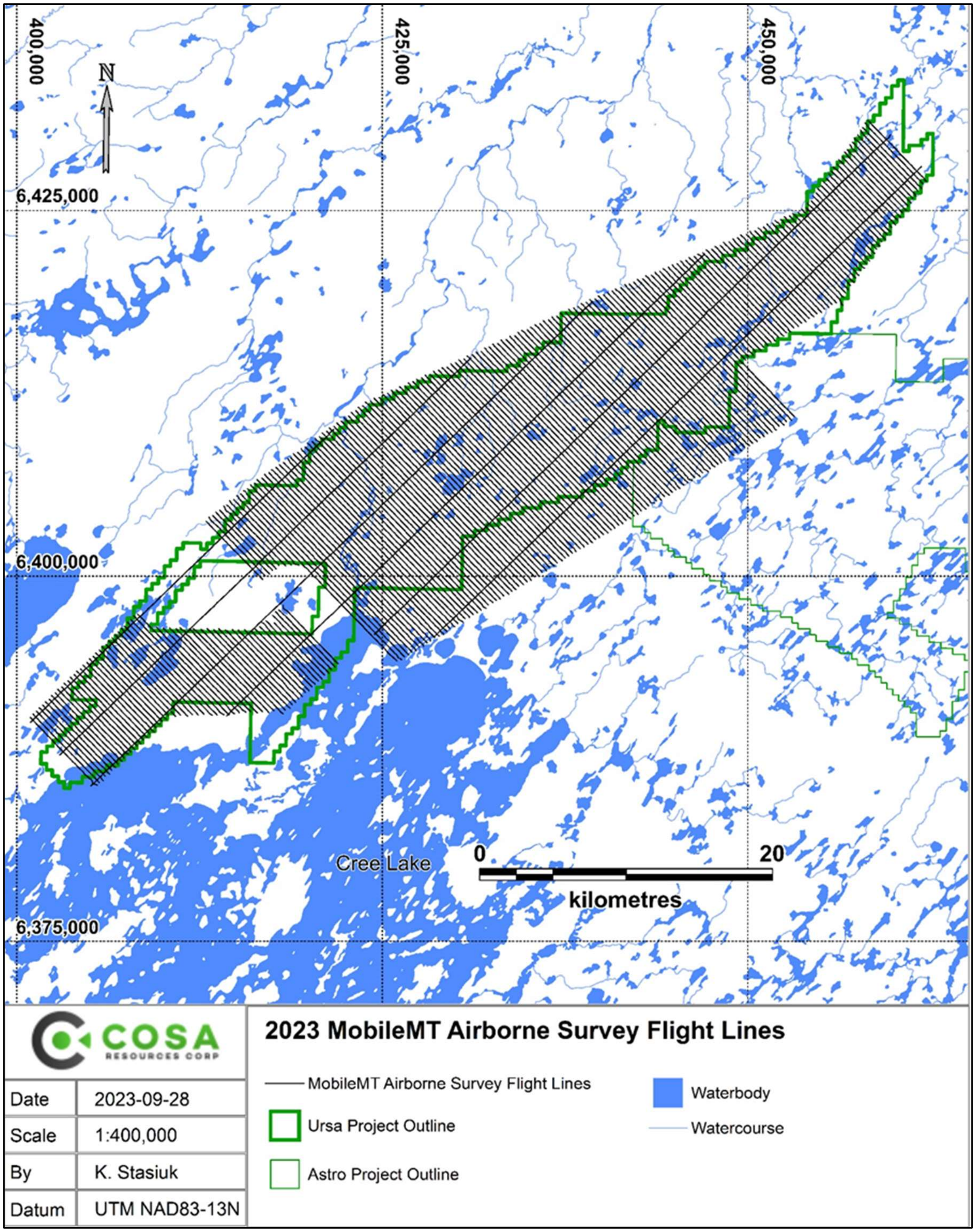


Figure 9-1: 2023 MobileMT Airborne Survey Flight Lines

9.1.2 Electromagnetic Data Processing Procedure

The data recorded by the towed-bird sensors (three mutually orthogonal dB/dt components of the EM field) is first merged with the recorded two mutually orthogonal electrical components of electric field on the stationary base station into one file. The program applies the fast Fourier transform to the records of the merged file and calculates the matrices of the relation between the magnetic and electrical field signals on the different time bases and in the different frequency bands. The module of the determinant of each matrix is a rotation-invariant parameter. The program calculates the apparent conductivity as an output parameter.

The frequency for the data processing is selected at the beginning of the survey based on the signal strength and the local noise interference. The minimum number of frequencies will be six, which will include:

- At least three frequencies from the low-frequency range—25 Hz–100 Hz interval
- At least two frequencies from the middle-frequency range—100 Hz–500 Hz interval
- At least one frequency from the high-frequency range—500 Hz–500 Hz interval.

9.1.3 Magnetic Data Reduction

Raw total magnetic field data are recorded at 0.1-second sampling intervals. The following steps are taken to reduce the magnetic field data to magnetic anomaly data.

International Geomagnetic Reference Field Removal

The raw total field magnetics data are first reduced by removing the Earth's normal magnetic field. To estimate this field, the International Geomagnetic Reference Field (IGRF) formula, updated to the time of the survey, is computed for each data sample location. The IGRF value for each data sample location is then subtracted from the observed raw magnetic data value to produce the total magnetic anomaly value for each data sample.

Removal of Diurnal and Transient Magnetic Events

Earth's magnetic field is known to vary as a function of time. Time-varying magnetic events such as magnetic storm transients and more regular diurnal variations that occur while acquiring magnetic data may affect the accuracy of the survey data and distort magnetic anomalies. Separation of the time-dependent variations in the magnetic field from a real geomagnetic anomaly requires an independent estimate of the transient magnetic field events. Base-station magnetometer data provide this independent estimate.

Base-station observations are typically made at the field camp. The base readings are compared to the survey data to determine if the survey data were contaminated by transient effects. If the base magnetic data indicate significant changes in the field, the survey lines are rejected and re-flown.

9.1.4 Data Levelling and Mapping

Levelling of the magnetic data is critical to the ability to discern meaningful anomalies. A multiple-stage process is used to arrive at the final levelled data sets.

In the first stage, all the magnetic data are processed by an adjustment procedure that statistically treats the line data. The procedure is designed to recognize and remove systematic bias and small random errors in the data that can cause survey line mis-ties. Bias errors in the magnetic data arise from changes in the level of the total field.

To remove bias errors, each profile of a given data set in the survey is shifted up or down systematically by an amount such that the sum of the square of the mis-tie errors for that data set over the entire survey network is minimized. The systematic corrections are further constrained such that the sum of the systematic corrections is zero, effectively eliminating direct-current shifts to the network as a whole. After this systematic adjustment, the remaining intersection mis-ties are studied and removed. This is done by giving each line a reliability weight that depends on the average absolute mis-tie of that line's data at intersections after systematic corrections. The final statistical choice of the data values at each intersection is a function of the reliability weights of each line for each data set. The random error correction for each data set is prorated between intersections.

After editing the adjusted line data for line pulls and data quality, they are input to a minimum-curvature gridding algorithm and a grid is produced.

The final measure of data quality is the ability of the data to map successfully. The coherence of the mappable anomalies and the contour interval that can be maintained without showing excessive noise are better indications of final data quality.

9.2 Airborne Survey Results

Following processing and finalization of the airborne survey dataset by EGL, geophysical experts Convolutions Geoscience Corporation (Surrey, B.C.) and Computational Geosciences Inc. (Vancouver, B.C.)were engaged to complete a geologically constrained inversion to generate a 3D voxel model of apparent conductivity within the survey area. The conductivity model includes curvilinear trends of basement-hosted conductivity which are broadly consistent historical interpretations of ground EM surveys (Figure 9-2). The model also holds zones of increased conductivity in the sandstone (Figure 9-3). Based on the presence of kilometre-scale strike lengths of increased conductivity in the sandstone associated with conductive basement zones, Cosa has identified five high-priority follow-up areas: Grizzly, Kodiak, Polar, Bruin, and Panda (Figure 9-3).

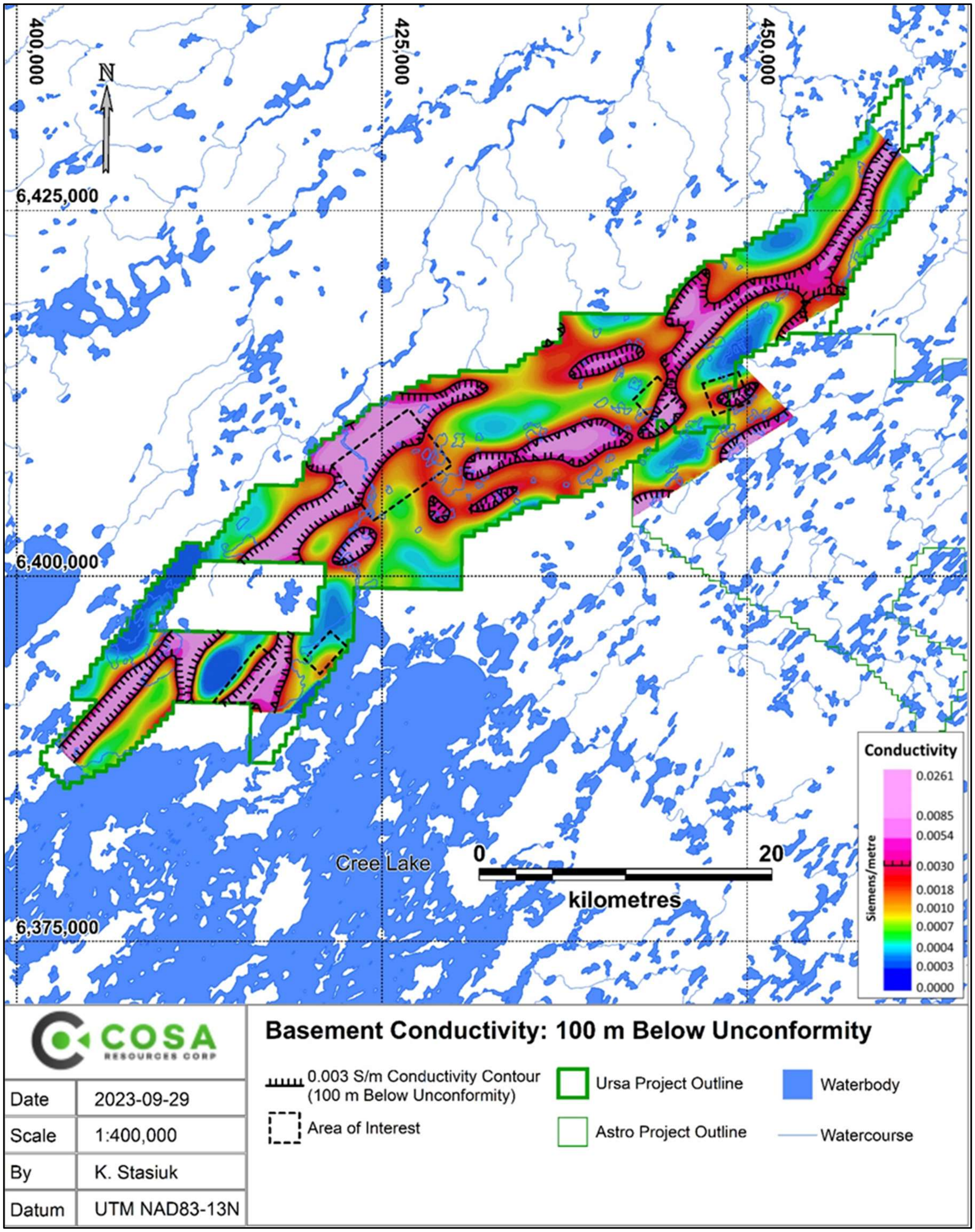


Figure 9-2: Plan View of Basement Conductivity (100 m Below Unconformity)

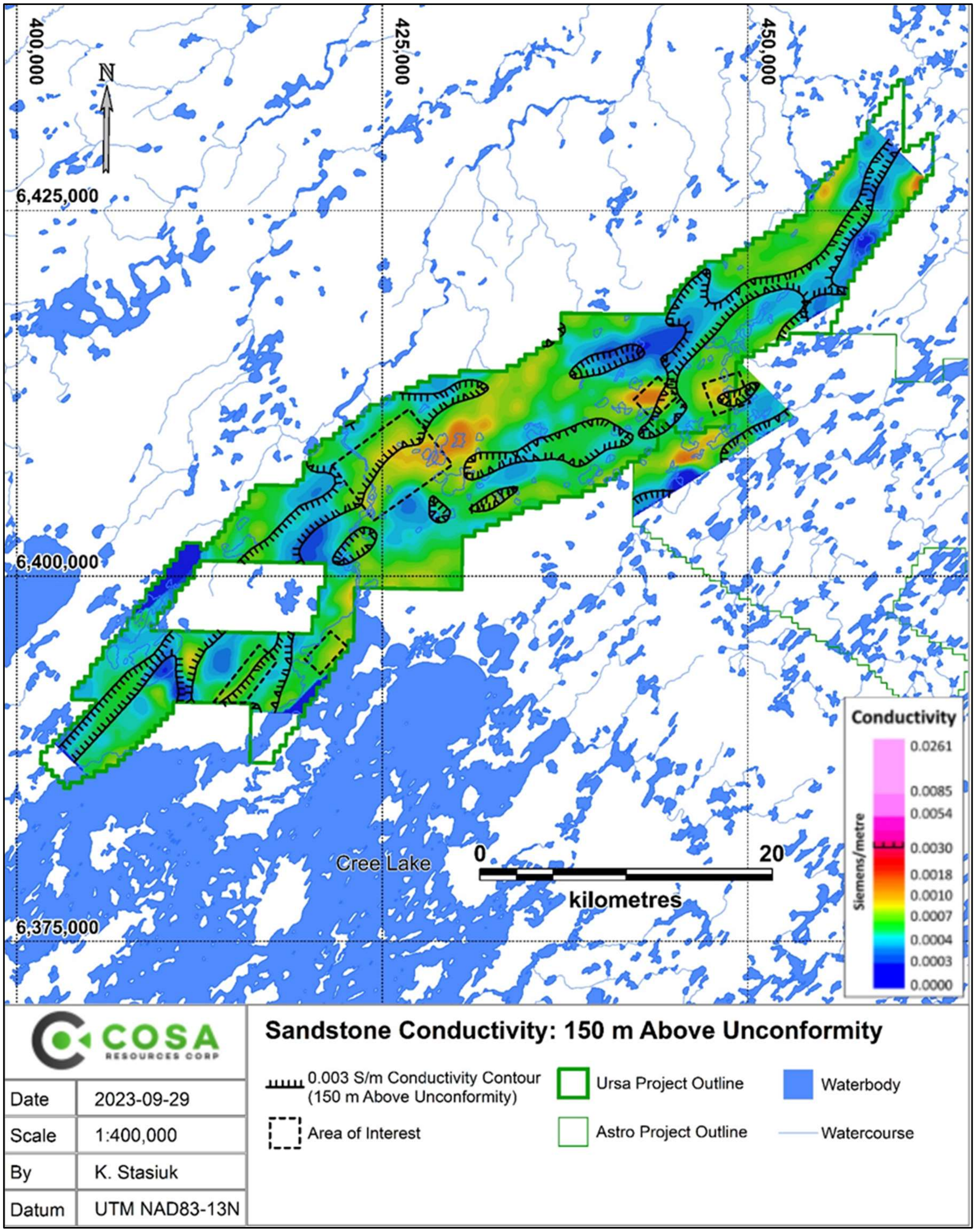


Figure 9-3: Plan View of Sandstone Conductivity (150 m Above Unconformity)

10 DRILLING

Cosa has not completed any drilling programs. Historical diamond drilling results are discussed in Section 6.

11 SAMPLE PREPARATION, ANALYSES AND SECURITY

Cosa has not completed any sampling to date.

12 DATA VERIFICATION

No geological data or samples were acquired by Cosa; therefore, no data verification was conducted.

12.1 Site Visit—July 2023

Data verification is the process of confirming that data have been generated with proper procedures, are transcribed accurately from the original source, and are suitable for use as described in this Technical Report.

Mr. Tim Maunula, Professional Geoscientist (P.Geo.) visited the site on July 11, 2023, accompanied by Cosa personnel Keith Bodnarchuk, P.Geo. (President and CEO), Andy Carmichael, P.Geo. (VP of Exploration), Justin Rodko, P.Geo. (Corporate Development Manager), Steve Blower (Chairman), Kelly Stasiuk, Geologist in Training (Exploration Geologist), and Brendon Leippi (Field Assistant). The site visit was completed to gain a general view of the Project and to verify historical drilling information and interpretations. Additionally, a visual inspection of the area surrounding McPhail Lake (Figure 12-1), Kercher Lake (Figure 12-2) and northwestern Cree Lake was completed from the air. There are no known outcrops of significance within the Project.

Source: Cosa 2023

Figure 12-1: McPhail Lake Historic Drill Hole Core

Source: Cosa 2023

Figure 12-2: Kercher Lake Historic Drill Hole Core

The QP examined drill core from historical drill holes CR-03, CR-13 (fence of CR-03), CR-08, CR-14 (fence of CR-08), and CR-12. Core from drill holes CR-04 through CR-07 and CR-15 stored at Kearns Lake were destroyed by historical wildfire, but piles of drill core are evident from the air. Drill core from CR-10 was not reviewed due to logistical constraints of visiting the storage site at Esker Lake. The core review was limited to the lower sandstone and full basement of the listed drill holes, as the wooden core boxes have deteriorated due to weathering. Most core boxes still retain aluminium tags bearing the hole ID, box number, and depth interval of core contained (Figure 12-3). Where tags were missing most boxes were able to be placed in the correct order as run-blocks with the hole depths remaining legible within the boxes.

Source: TMAC 2023

Figure 12-3: CR-13 Core Box Label

Generally, QP and Cosa personnel assessments of alteration, structure, lithology, and mineralization are consistent with those in the historical work reports. Reported unconformity depths were confirmed to be accurate in each reviewed drill hole. Basement foliation alpha angles observed in drill core were found to be consistent with interpretations on historical cross-sections. Basement-hosted graphite or sulphide content observed in drill core was commonly lower than expected from the qualitative descriptions in historical reports. Significantly, QP and Cosa personnel interpreted few of the reviewed drill holes to have clearly intersected their targeted EM conductor due to a near or complete absence of conductive rocks (i.e., graphitic or pyritic pelitic gneisses) intersected in the basement. Of the reviewed drill holes, only CR-02 is considered to have intersected basement rocks with sufficient graphite and/or pyrite content to have explained the targeted conductor.

Radioactive intervals reported in CR-08 and CR-03 were checked with a Radiation Solutions Inc. RS-125 Super-SPEC hand-held gamma ray spectrometer. Weakly elevated radioactivity was observed, suggesting that historical sampling collected the most radioactive sections of drill core. Intervals reported as being split-core sampled were confirmed.

No attempt was made to verify historical drill-hole collar locations due to distances from suitable landing sites. As historical work was completed based on local grids, Cosa has established UTM coordinates for the 15 historical drill holes to approximately ±20 m accuracy by mapping historical grid lines from air photos, plotting drill holes at their reported grid coordinates, and verifying a clearing (drill pad) is visible in the air photos at the drill hole's reported grid coordinate. By this method, drill holes were found to be between 50 and 300 m from their historically reported positions. Drill hole collar elevations were determined from NASA's Shuttle Radar Topographic Mission data set, which provides elevation data at 1 m accuracy for 30 by 30 m cells.

Drill trails and camp locations evident on aerial photographs taken in 2011–2012 remained clearly visible during the aerial inspection, although regrowth of vegetation and historical wildfire activity has obscured these features locally. No obvious environmental liabilities were evident during the inspection.

Cosa's current exploration work was an airborne geophysical survey (Section 9.1) so the QP conducted no data verification in the field. Exploration targets derived from the airborne survey were not provided prior to the site visit. No visible issues were identified in the Project area that could impact the airborne survey or its interpretation.

13 MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical testing has been completed for the Project.

14 MINERAL RESOURCE ESTIMATES

There is no Mineral Resource estimate for the Project.

15 ADJACENT PROPERTIES

Uranium Energy Corp.'s (UEC) Diabase Project is immediately southwest of and contiguous with the Project. A total of 67 historical diamond drill holes have been completed on the Diabase Project, including two drill holes that intersected weak uranium mineralization (Figure 15-1).

During the winter of 2008, Drill Hole ND0801 intersected 0.08% U_3O_8 over 0.25 m (392.0 to 392.25 m) in the basal sandstone immediately above the unconformity and shortly below two centimetre-scale diabase dykes. Also completed during winter 2008, drill hole ND0807 intersected 0.05% U_3O_8 over 0.40 m (486.4 to 486.8 m) within partially hematized, possibly bleached, sheared, graphitic and pyritic pelitic gneisses 190 m below the unconformity (Wagg & Giroux, 2009). No further details on these intercepts of weak mineralization are available.

The qualified person has been unable to verify the information from the Diabase Project, and the information is not necessarily indicative of mineralization on the Project.

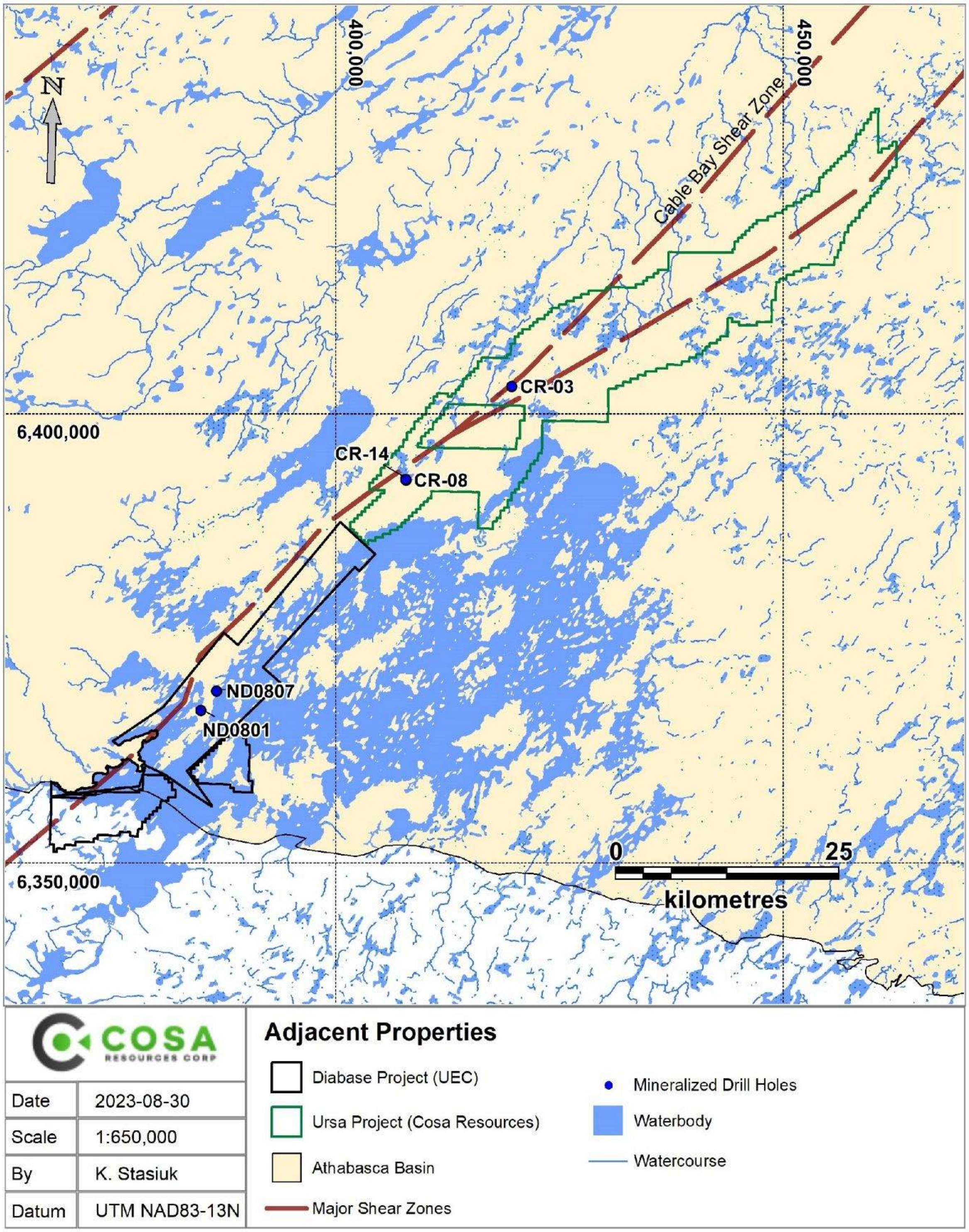


Figure 15-1: Adjacent Properties to the Ursa Project with Known Mineralization

16 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data or information to be included.

17 INTERPRETATION AND CONCLUSIONS

The target on the Project is an economically viable unconformity-associated uranium deposit. In the Eastern Athabasca Basin region, these deposits are typically associated with brittlely-reactivated ductile deformation zones typically rooted in graphitic or pyritic metasedimentary basement rocks. Electromagnetic surveys are commonly employed to map basement-hosted EM conductors used as proxies for these conductive metasediments.

The Project is interpreted to be underlain by the regional-scale Cable Bay Shear Zone (CBSZ), a major ductile structural corridor analogous to the fertile Wollaston-Mudjatik transition zone which hosts past- and currently producing uranium mines, most notably the McArthur River and Cigar Lake mines. Historical drilling within the Project has intersected broad zones of faulting in the sandstone, indicating post-Athabasca reactivation of the CBSZ has likely occurred.

Within the Project, basement lithologies intersected by historical drilling include graphitic pelitic gneisses similar to those closely associated with major uranium mines and deposits in the eastern Athabasca Basin. Drilling has also intersected cordierite-augen pelitic gneisses similar to those underlying the Hurricane and Cigar Lake deposits.

Intersections of weak uranium mineralization by historical drilling within and to the south of the Project, and the presence of anomalous uranium geochemistry locally in the sandstones, indicates mineralizing hydrothermal systems may have operated along the CBSZ and within the Project.

With only 15 diamond drill holes completed over the greater-than 57,000 ha, the Project is considered to be highly underexplored. As the majority of historical drill holes on the Project missed their targeted conductors, only a small proportion of the prospective, historically defined conductive strike length on the Project has been effectively tested. The low target-intersection rate in historical drilling may be the result of improper survey design, or limitations in contemporary geophysical survey instrumentation or data-interpretation tools.

The airborne MobileMT™ survey completed in 2023 by Cosa confirmed the presence of curvilinear, basement-hosted zones of conductivity broadly consistent in distribution and orientation with those defined by historical ground-based EM surveying. These conductive trends are interpreted to reflect the presence of graphitic and/or pyritic pelitic gneisses. A conductivity model voxel product generated by geologically constrained, 3-D inversion of the airborne dataset holds kilometre-scale strike lengths of anomalously high conductivity (three to four times background sandstone conductivity) spatially associated with basement-hosted conductive trends. Anomalously high conductivity in the sandstone is interpreted to potentially reflect zones of hydrothermal alteration including clay enrichment commonly associated with unconformity-related uranium deposits in the Athabasca Basin. Based on the conductivity model, five high-priority target areas have been identified where significant zones of anomalously sandstone conductivity are associated with conductive basement trends within the Ursa Project. Confirmation by diamond drilling of hydrothermal alteration zones would upgrade the prospectivity of the target area(s) and Project in general. Intersection of conductive basement rocks without hydrothermal alteration in the sandstone or basement would downgrade the prospectivity of the target area(s), but not necessarily the Project in general.

There is risk that modelled zones of higher sandstone conductivity are not related to hydrothermal clay enrichment. Zones of anomalously high sandstone conductivity mapped by geophysical methods and unexplained by drill testing in the Athabasca Basin have been attributed to the presence of saline (conductive) brines at depth. The geologically constrained 3-D inversion process to generate the conductivity voxel model domained relatively higher basement conductivity and relatively lower basement conductivity utilizing an unconformity surface based on widely-spaced historical drilling results within and adjacent to the project. If this unconformity surface is materially different from the actual unconformity surface, there is increased risk of inaccuracy in the conductivity model. Drill testing within the Project will determine the validity and improve the resolution of the modelled unconformity surface, and significant changes could be incorporated into a new conductivity model.

Based on the Project's geology and underexplored nature, the Project is considered to be prospective for unconformity-related uranium deposits.

18 RECOMMENDATIONS

A program of modern ground-based geophysical surveying is recommended to advance the Project to diamond drill readiness. Given the large size of the Project, it is expected that several rounds of exploration will be required to effectively evaluate the Project for the presence of significant uranium mineralization. It is recommended that the next round of exploration by Cosa be completed in two phases.

18.1 Phase I - Geophysical Surveying

Modern, best-quality ground-based EM surveying should be completed to follow-up the airborne survey results. An initial program comprising five, 5 to 7 km EM profiles over target areas identified by the 2023 airborne survey can be expected to generate a minimum of five high-confidence conductor picks. As there is potential for multiple conductive units within broader conductive packages, the ground surveys may result in an inventory of more than five conductor picks.

18.2 Phase II - Diamond Drilling

Contingent upon the recommended ground surveys identifying basement-hosted EM conductors, first-pass diamond drilling should test the best-quality EM conductor picks. Initial diamond drilling should comprise geological evaluation of each target area with the goal of coring the full thickness of conductive basement.

Brittle structures rooted in graphitic or pyritic basement rocks would upgrade an individual target area. Widely spaced follow-up along strike preceded by additional ground EM surveys would be warranted. Intersections of strong alteration or anomalous radioactivity/geochemistry in the sandstone or basement would significantly upgrade a target area and warrant more proximal follow-up along strike or on section, depending on results.

Table 18-1 summarizes the budget for the recommended work.

Table 18-1: Budget for Recommended Exploration Work on the Ursa Project

Phase	Item	Amount	Unit	Unit Cost ($)	Total Cost ($)
I	Ground EM Surveying	30	km	11,000	330,000
II	Diamond drilling, five holes	5,000	m	450	2,250,000
				Total	**2,580,000**

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20 CERTIFICATE

20.1 Tim Maunula, P.Geo.

I, Tim Maunula, P.Geo., of Chatham, Ontario, a QP of this Technical Report titled *National Instrument 43-101 Technical Report on the Ursa Project, Ontario,* dated October 5, 2023, do hereby certify that:

- I am Principal Geologist of T. Maunula & Associates Consulting Inc., 15 Valencia Drive, Chatham, Ontario, N7L 0A9, Canada.
- I am a graduate of Lakehead University with an H.B.Sc. Degree in Geology (1979). In addition, I earned a Citation in Geostatistics from the University of Alberta in 2004.
- I am a member in good standing of the Association of Professional Geoscientists of Ontario (Registration Number 1115).
- I have worked as a Geologist for over 40 years since my graduation from university. This experience comprised of more than 15 years in exploration (including airborne and ground geophysical surveys and data processing) and 25 years in Mineral Resource estimation and associated activities.
- I have read the definition of QP set out in NI 43-101 and certify that by reason of education, affiliation with a professional association, and past relevant work experience, I fulfill the requirements to be a QP for NI 43-101.
- I am responsible for all sections of this report.
- I have completed a site visit on July 11, 2023.
- I have no prior involvement with property that is the subject of this Technical Report.
- I am independent of the Issuer, the Vendor and the Property, applying all of the tests in Section 1.5 of the Instrument.
- I have read NI 43-101 and Form 43-101F1, and this Technical Report has been prepared in compliance with that instrument and form.
- As of the effective date of this Technical Report, to the best of my knowledge, information, and belief, the portions of this Technical Report for which I am responsible contain all scientific and technical information required to be disclosed to make this Technical Report not misleading.

Dated this 5th day of October 2023 in Chatham, Ontario.

Original Signed and Sealed

Tim Maunula, P.Geo.