# NATIONAL INSTRUMENT 43-101 TECHNICAL REPORT

On the

# **LOGAN PROPERTY**

BAIE JAMES AREA, QUÉBEC, CANADA

#### **Located Within:**

NTS Map Sheet: 33B14

## **Centred at Approximately:**

Latitude 52°53'5.78" North by Longitude 75°15'49.33" West

## **Report Prepared for:**

# Dark Star Minerals Inc.,

1056 Handsworth Road, North Vancouver, BC, V7R2A6

## **Report Prepared by:**

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# 1 EXECUTIVE SUMMARY

## 1.1 Introduction

Dark Star Minerals Inc (the "Company" or "Dark Star") engaged the services of Longford Exploration Services Ltd to prepare an independent National Instrument 43-101 (NI 43-101) Technical Report on the Logan Property located near Chibougamau, Québec.

Mr. van der Meer is an independent qualified person ("QP") as defined by Canadian Securities Administrators, NI 43-101 *Standards of Disclosure for Mineral Projects* and in compliance with Form 43-101F1, and he fulfills the requirements of an "independent qualified person".

## 1.2 Property Ownership

On October 19, 2021, Dark Star Minerals Inc. (the "Company" or "Dark Star") entered into a Share Exchange Agreement with Off-Piste Opportunities (II) Inc., a company incorporated under the laws of the Province of Ontario ("Off-Piste"), and each shareholder of Off-Piste (collectively, the "Off-Piste Shareholders"), pursuant to which Dark Star agreed to acquire all of the issued and outstanding common shares of Off-Piste (each, an "Off-Piste Share") from the Off-Piste Shareholders. On December 2, 2021, the Company completed the Off-Piste acquisition, and, upon the closing of the transaction, the Company issued an aggregate of 41,050,000 Common Shares to the former Off-Piste Shareholders in exchange for all of the then issued and outstanding Off-Piste Shares. Accordingly, each holder of Off-Piste Shares received one Common Share at a deemed price of \$0.05 per Common Share for each Off-Piste Share held, representing aggregate consideration of \$2,052,500. Following the closing of the Off-Piste acquisition, Off-Piste became a wholly-owned subsidiary of the Company.

## 1.3 Property Description

The Logan Property (the 'Property" or the "Logan Property") is located roughly 340 km north-northeast of Chibougamau, Québec, Canada, in the Baie James Area within NTS Map Sheets 033B14, centred at roughly 52°53.05N by 75°15.52W and covering an approximate area of 555 ha.

The Property can be accessed by either helicopter or float plane from the airport in Chibougamau which is serviced by commercial airlines. The nearest road access to the property is Highway 109 which is located 135 km west of the property. Additional mine road access is available to Eleonore Mine and Airstrip located approximately 60 km south of the property, where project staging can occur.

## 1.4 Status of Exploration

In 2021, Dark Star commissioned Axiom Group (Axiom) to fly a high-resolution helicopter-borne tri-axial-magnetic gradiometer survey over the Logan Property between September 17th to September 19th, 2021.

The Logan heliborne-magnetic survey data received from Axiom included the final survey deliverables; all raw, helicopter-borne, magnetic data; base-station data; a final levelled dataset, including all measured gradients; and the following maps: flight paths, measured vertical gradient ("MVG"), residual magnetic intensity ("RMI"), and total magnetic intensity ("TMI").

# 1.5 Geology and Mineralization

The Property is located in the Frotet-Evans Greenstone Belt ("FEGB") within the Opatica sub-province of the Superior Province in Quebec. Logan is situated in the easternmost domain of the FEGB, known as Frotet-Troilus, an area which has recently received increased exploration attention due to its increased regional economic development. The regional geophysical magnetic anomaly is consistent with the trend and pattern of the geophysical anomaly identified by the 2021 magnetic gradient survey on the Property which are also consistent with Geophysical survey results completed in 2007 to 2008. The regional geological mapping suggests favourable contacts between gabbro — norite lithologies and biotite migmatites; these contacts are coincident with partly mapped granitic pegmatites which have potential for REE mineralization and follow the disposition of the magnetic anomaly.

The Property is believed to have a favourable geological setting for Li-Cs-Ta Pegmatite style deposits. The five REE mineral showings occur along a contact with gabbro – norite diabase to the north, and biotite migmatite paragneiss to the south. The contract oriented approximately 300° to 120°. Mineralization is associated with granitic pegmatite dyke swarms which follow along the foliation of the paragneiss between 290° and 325° with a weak dip to the north of 20° to 40°. During the 2008 season 280 samples were collected, of which, 20 samples contained elevated Rear Earth Elements ("REE"). Sample-252 returned the highest concentration of REE.

## 1.6 Conclusions and Recommendations

The Logan Property comprises an early-stage exploration project of merit which supports further exploration.

The Property is underexplored with few recent results. Historic sampling is encouraging, and the distribution and extent of granitic pegmatite dyke swarms should be better understood. Systematic geochemical and mineralogical characterization should be undertaken across the Property to better define the continuity and tenor of potential mineralization on the Property. An initial field prospecting and systematic lithological characterization should be undertaken, complementary with the comprehensive soil geochemistry survey across any potentially mineralized areas.

Because this is an early-stage, grassroots exploration project, there is always the risk that the proposed work may not result in the discovery of an economically viable deposit. The author can attest that there are no significant, foreseeable risks or uncertainties with respect to the Property's potential economic viability or continued viability directly arising from the quality of the data provided within this technical report.

A two-phase exploration program is recommended to define any potential zones of anomalous indicator geochemistry and mineralization that correspond to the geophysical magnetic-high anomaly and neighbouring intrusive suite of rocks present at the Property. The two phases will include soil potentially basal till sampling: general prospecting, pegmatite dyke and structural mapping, including an intensive outcrop sampling program.

#### Phase 1:

- Conduct a geochemical sampling program on a 100 m x 100 m grid. A systematic soil sampling program, with selected areas of infill over known mineral showings. This survey may detect elevated REE and trace element geochemistry, and other sources of metals to aid in generating follow up targets for Phase 2.
- Up to 600 Soil samples will be collected during the 21-Day field program. The work will be completed by a four-person field crew based in a fly-in camp on the property; it is likely float plane assistance will be required to access the Property.
- Additionally, the field crew would undertake a program of detailed geological mapping and sampling to delineate the extent and continuity of REE bearing pegmatites in the local area.
   Sampling work would include rock chip and channel sampling across favourable pegmatitic dykes and other prospective areas of mineralization.
- The estimated cost for phase 1 is approximately \$110,000.

#### Phase 2

Based on the results from Phase 1, infill geochemical sampling and a reconnaissance drilling program is recommended for Phase 2. Advancing to Phase 2 is contingent on positive results in Phase 1

- Follow up Ground Geophysics, soil sampling, and additional mapping with a focus on defining and filed verifying potential drill targets, trenching should be considered.
- Additionally, a preliminary metallurgical sample should be collected from the known showings
  where REE concentrations have been previously identified. The purpose of this sample should be
  to better understand controls and limitations of future mineral processing.
- A drill program (approx. 500m) to test the best targets generated from the field mapping with oriented core, following up the results and most prospective areas and aiming to better define the orientation of potential mineralized structures.
- The estimated cost for phase 1 is approximately \$630,000.

Phase 1 is to include a geochemical sampling program on a 100 m x 100 m grid. A systematic soil sampling program, with selected areas of infill over known mineral showings. This survey may detect elevated REE and trace element geochemistry, and other sources of metals to aid in generating follow up targets for Phase 2. Additionally, up to 575 Soil samples will be collected during the 16-Day field program. The work will be completed by a four-person field crew based in a fly-in camp on the property; it is likely helicopter assistance will be required to access the Property.

The field crew would undertake a program of detailed geological mapping and sampling to delineate the extent and continuity of REE bearing pegmatites in the local area. Sampling work would include rock chip and channel sampling across favourable pegmatitic dykes and other prospective areas of mineralization. A preliminary metallurgical sample should be collected from the known showings where REE concentrations have been previously identified. The purpose of this sample should be to better

understand controls and limitations of future mineral processing. The estimated cost for phase 1 is approximately \$100,800 (Table 26.1).

Based on the results from Phase 1, infill geochemical sampling and a reconnaissance Reverse Circulation ("RC") drilling program is recommended for Phase 2. Advancing to Phase 2 is contingent on positive results in Phase 1.

# 2 INTRODUCTION

# 2.1 Purpose of Report

This technical report has been prepared for Dark Star Minerals Inc (the "Company" or "Dark Star") of 1056 Handsworth Road, North Vancouver, BC, V7R2A6. Dark Star is a British Columbia company involved in mineral exploration and development.

On October 27, 2021, Dark Star Mineral Inc engaged the services of the Longford Exploration Services Ltd. ("Longford Exploration" or "Longford") and Mr. Luke van der Meer, P. Geo. to prepare an independent Technical Report (NI 43-101) on the Logan Property located in the James Bay Area, Québec.

Mr. van der Meer is an independent qualified person (QP) as defined by Canadian Securities Administrators NI 43-101 *Standards of Disclosure for Mineral Projects* and in compliance with Form 43-101F1, and he fulfills the requirements of an "independent qualified person".

This technical report has been prepared in accordance with NI 43-101 guidelines, and its purpose is to provide the basis for an informed opinion as to the history of property exploration, geology, mineralization, and status of current exploration on the Logan Property.

#### 2.2 Sources of Information

Reports and documents listed in Section 27 References were used to support the preparation of this technical report. Additional information was requested from Dark Star where required.

The author has also reviewed geological data obtained from Québec's provincial government reports and publicly available information from the Québec Ministry of Energy and Natural Resources ("MERN") website (mern.gouv.qc.ca) for historical property assessment reports and mineral tenure information.

The author also reviewed the Québec Système d'information géominière's ("SIGÉOM") digital publication database for regional geological data and mineral occurrence information (sigeom.mines.gouv.qc.ca). Climate information was obtained from Environment Canada, and populationand local information for the Property area was obtained from Statistics Canada and wikipedia.org.

#### 2.3 Site Visit

The QP of this report has not completed a current inspection of the property that is the subject of this technical report.

The issuer is relying on section 6.2(2) of NI 43-101.

- The QP confirms that the property is an early-stage exploration property.
- The current seasonal weather conditions prevent the QP from accessing any part of the property
  and obtaining beneficial information from it. The property topography is hilly (approximately 380
  m to 450 m above sea level) and is marked by several lakes and swamps. It is expected that access
  will be limited, and any outcrop will be obscured by snow.

 The QP on behalf of the issuer will complete the required site visit (as per section 6.2.1 of NI 43-101) as soon as weather conditions at the property facilitate the QP in obtaining beneficial information from the site visit. A confirmation check sample verification is proposed to compare historical results from 2008.

In accordance with section 6.2(3) of NI 43-101, the QP will complete the current inspection at the Logan Property within the next three (3) months then allowing the Issuer to promptly file a technical report, certificates, and consents.

## 2.4 Abbreviations and Units of Measurement

Metric units are used throughout this report, and all currency is reported in Canadian dollars (CAD\$) unless otherwise stated. Coordinates within this report use EPSG 26918 NAD83 UTM Zone 18N unless otherwise stated.

A list of abbreviations and acronyms are shown in Table 2.1 below.

Table 2-1: Abbreviations and Units of Measurement

Description	Abbreviation or Acronym
percent	%
three dimensional	3D
silver	Ag
Airborne Magnetic and Gamma-ray Spectrometric	AGS
gold	Au
bismuth	Bi
Canadian dollar	CAD\$
cadmium	Cd
chlorite	Cl
centimetre	cm
cobalt	Co
counts per second	cps
copper	Cu
Dark Star Minerals Ins	Dark Star, the Issuer, or the Company
Dios Exploration Inc	DIOS
east	E
uranium equivalent/thorium equivalent ratio	eqU/eqTh
Frotet-Evans Greenstone Belt	FEGB
feet	ft
billion years ago	Ga
gallium	Ga
Geo Data Solutions	GDS
germanium	Ge
Mining Title Management System in Québec	GESTIM
Geographical Information System	GIS
Global Positioning System	GPS
hectare	ha
inertial measurement unit	IMU
indium	In
potassium/thorium equivalent ratio	K/eqTh
kilometre	km
Li-Cs-Ta Pegmatite Deposit Model	LCT

Longford Exploration Services Ltd	Longford Exploration, or Longford
metre	m
million years ago	Ma
Québec Ministry of Energy and Natural Resources	MERN
Ministère des Forêts, de la Faune et des Parcs	MFFP
millimetre	mm
manganese	Mn
Ministry of Natural Resources and Wildlife of Quebec	MNRW
measured vertical gradient	MVG
north	N
North American Datum	NAD
nickel	Ni
National Instrument 43-101	NI 43-101
net smelter return	NSR
National Topographic System	NTS
degrees Celsius	°C
degrees Fahrenheit	°F
Off-Piste Opportunities II Inc.	Off-Piste
phosphorus	P
Professional Geoscientist	P. Geo.
lead	Pb
palladium	Pd
parts per billion	ppb
parts per million	ppm
quality assurance/quality control	QA/QC
Quantum geographic information system	QGIS
qualified person	QP
Reverse Circulation Drilling	RC or RC Drilling
Rear earth elements	REE
residual magnetic intensity	RMI
reduced to pole	RTP
south	S
selenium	Se
tonne	t
tellurium	Te
thorium	Th
Logan Property	the Property
Logan REE Property	The Property or The Logan Property
titanium	Ti
total magnetic intensity	TMI
uranium	U
triuranium octoxide	U <sub>3</sub> O <sub>8</sub>
Universal Transverse Mercator	UTM
west	W

# 3 RELIANCE ON OTHER EXPERTS

The technical report was prepared by Mr. Luke van der Meer, P. Geo. Mr. van der Meer is a qualified person (QP) for the purposes of NI 43-101 and fulfills the requirements of an "independent qualified person".

The QP has not independently researched the Property title or mineral rights for the Logan Property and expresses no legal opinion as to the ownership status of the Property. For disclosure relating to these matters in Section 4, the author has relied on information provided by Dark Star Minerals Inc in a document titled "Share Exchange Agreement" dated October 21<sup>st</sup>, 2021 between Off Piste Opportunities Inc, and Dark Star Minerals Inc. that describes the mineral rights and the Company's ownership interest in the Property.

The QP believes the data and information provided by Dark Star Minerals Inc., and the public information available on the property is essentially complete and correct to the best of his knowledge and that no information was intentionally withheld that would affect the conclusions made herein.

# 4 PROPERTY DESCRIPTION AND LOCATION

# 4.1 Property Location

The Logan Property is located roughly 340 km north-northeast of Chibougamau, Québec, Canada, in the Baie James Area within NTS Map Sheets 033B14, centred at roughly 52°53'5.78" N by 75°15'49.33" W and covering an approximate area of 555 ha (Figure 4-1).

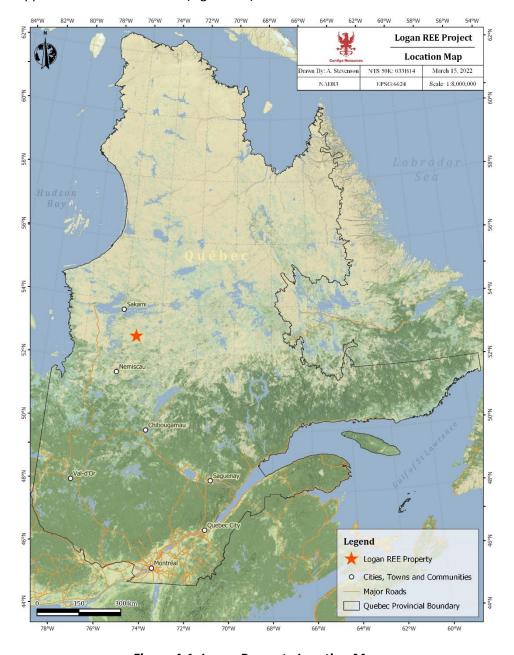


Figure 4-1: Logan Property Location Map

## 4.2 Mineral Tenure

The Property consists of 14 mineral claims that are 100% owned and registered in the name of Contigo Resources Ltd (Table 4-1 and Figure 4-2). As of the date of this report, all claims are in good standing.

Based on Axiom's 2021 Tri-Axial Magnetics Survey, the owners have exceeded the minimum required assessment work for the Logan Property during the required time period. This work will be filed in order to extend the claim expiry dates.

A summary of the Logan Property's mineral tenure is shown in Table 4-1.

**Table 4-1: Logan Property Mineral Tenures** 

Claim Number	Holder	Registration Date	Expiry Date	Work Deadline	Status	Area (ha)
2606276	Contigo Resources Itd. (98302)	2021-04-19	2024-04-18	2024-02-18	Active	51.98
2606277	Contigo Resources Itd. (98302)	2021-04-19	2024-04-18	2024-02-18	Active	51.98
2606278	Contigo Resources Itd. (98302)	2021-04-19	2024-04-18	2024-02-18	Active	51.98
2606279	Contigo Resources Itd. (98302)	2021-04-19	2024-04-18	2024-02-18	Active	51.98
2606280	Contigo Resources Itd. (98302)	2021-04-19	2024-04-18	2024-02-18	Active	51.98
2606281	Contigo Resources Itd. (98302)	2021-04-19	2024-04-18	2024-02-18	Active	51.98
2606282	Contigo Resources Itd. (98302)	2021-04-19	2024-04-18	2024-02-18	Active	51.98
2606283	Contigo Resources Itd. (98302)	2021-04-19	2024-04-18	2024-02-18	Active	51.98
2607225	Contigo Resources Itd. (98302)	2021-05-07	2024-05-06	2024-03-07	Active	51.19
2607226	Contigo Resources Itd. (98302)	2021-05-07	2024-05-06	2024-03-07	Active	22.48
2607227	Contigo Resources Itd. (98302)	2021-05-07	2024-05-06	2024-03-07	Active	17.26
2607228	Contigo Resources Itd. (98302)	2021-05-07	2024-05-06	2024-03-07	Active	12.05
2607229	Contigo Resources Itd. (98302)	2021-05-07	2024-05-06	2024-03-07	Active	35.84
2607230	Contigo Resources Itd. (98302)	2021-05-07	2024-05-06	2024-03-07	Active	0.94
Total	14					555.6

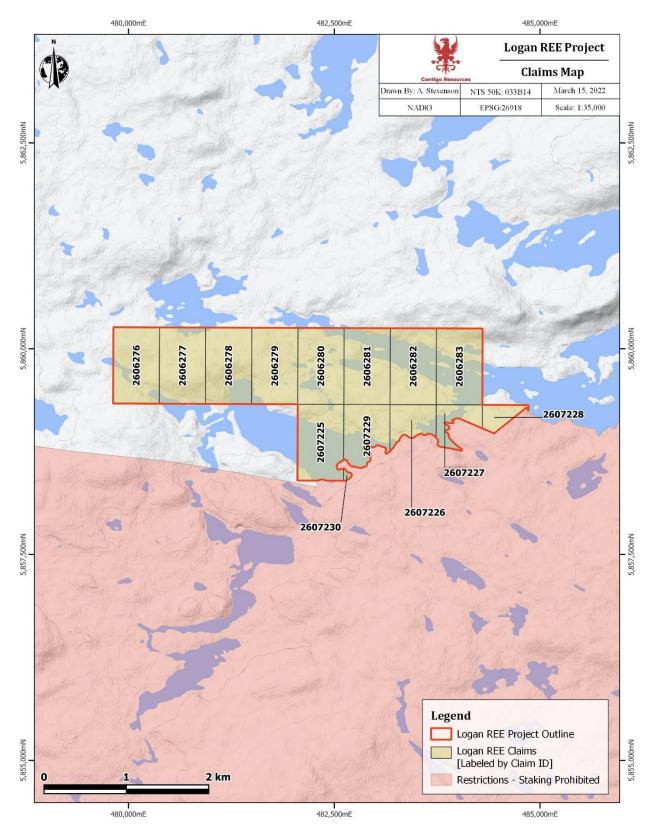


Figure 4-2: Logan Property Claims Map.

# 4.3 Mineral Rights in the Québec

Mineral exploration rights are granted by the provincial Ministry of Natural Resources and Wildlife of Quebec ("MNRW") providing the holder the exclusive right to explore.

Claims are valid for two-year periods and can be extended indefinitely for successive two-year periods (terms) by application of approved assessment work in variable amounts based on the size of the claim and the number of times it has been renewed, as shown in Tables 4-2 and Table 4-3, and payment of an administrative fee.

Administrative Fees for claims North of 52<sup>nd</sup> degree of latitude is: \$160 per claim >50 ha, \$143 per claim between 45 and 50 ha, \$127 per claim between 25 and 45 ha, and \$35.25 per claim less than 25 ha.

Administrative Fees for claims South of 52<sup>nd</sup> degree of latitude is: \$104 per claim >100 ha; \$68.75 per claim between 25 and 100 ha; \$35.25 for claims less <25 ha.

Excess work credits are banked against the title of the claim for use in future renewals. Assessment work and/or banked credits may be applied to a title holder's surrounding claims located within 4.5 km radius of the center of the credited claim.

Claims may be converted in a mining lease with an initial term of 20 years (renewable at least 3 times, for ten years each time) upon demonstrating that a minable resource exists on the claims.

Table 4-2: Minimum Required Assessment Work for Claims North of Latitude 52.

Number of Terms	Area of Claim		
of the Claims	<25 ha	25 to 45 ha	Over 45 ha
1	\$48/claim	\$120/claim	\$135/claim
2	\$160/claim	\$400/claim	\$450/claim
3	\$320/claim	\$800/claim	\$900/claim
4	\$480/claim	\$1,200/claim	\$1,350/claim
5	\$640/claim	\$1,600/claim	\$1,800/claim
6	\$750/claim	\$1,800/claim	\$1,800/claim
7+	\$1,000/claim	\$2,500/claim	\$2,500/claim

Source: MERN website (www.mern.gouv.qc.ca)

Table 4-3: Minimum Required Assessment Work for Claims South of Latitude 52.

Number of Terms	Area of Claim		
of the Claim	<25 ha	25 to 100 ha	>100 ha
1	\$500/claim	\$1,200/claim	\$1,800/claim
2	\$500/claim	\$1,200/claim	\$1,800/claim
3	\$500/claim	\$1,200/claim	\$1,800/claim
4	\$750/claim	\$1,800/claim	\$2,700/claim
5	\$750/claim	\$1,800/claim	\$2,700/claim
6	\$750/claim	\$1,800/claim	\$2,700/claim
7+	\$1,000/claim	\$2,500/claim	\$3,600/claim

Source: MERN website (www.mern.gouv.gc.ca)

# 4.4 Property Legal Status

The MERN mineral title management website GESTIM confirms that all Property claims as described in Table 4-1 are in good standing at the date of this report, and that no legal encumbrances were registered with MERN against the titles at that date. The author makes no assertion regarding the legal status of the Property. The Property has not been legally surveyed to date, and no requirement to do so has existed.

At the effective date of this technical report (February 1, 2022), there are no other known royalties, back-in rights, payments, environmental liabilities, or other known risks to which the Logan Property is subject.

No previous mining activities have occurred on the Property; therefore, no liabilities from mining or waste disposal from mining are evident.

# 4.5 Nature of Title to Property

On October 19, 2021, Dark Star Minerals Inc. (the "Company" or "Dark Star") entered into a Share Exchange Agreement with Off-Piste Opportunities (II) Inc., a company incorporated under the laws of the Province of Ontario ("Off-Piste"), and each shareholder of Off-Piste (collectively, the "Off-Piste Shareholders"), pursuant to which Dark Star agreed to acquire all of the issued and outstanding common shares of Off-Piste (each, an "Off-Piste Share") from the Off-Piste Shareholders. On December 2, 2021, the Company completed the Off-Piste acquisition, and, upon the closing of the transaction, the Company issued an aggregate of 41,050,000 Common Shares to the former Off-Piste Shareholders in exchange for all the then issued and outstanding Off-Piste Shares. Accordingly, each holder of Off-Piste Shares received one Common Share at a deemed price of \$0.05 per Common Share for each Off-Piste Share held, representing aggregate consideration of \$2,052,500. Following the closing of the Off-Piste acquisition, Off-Piste became a wholly owned subsidiary of the Company.

## 4.6 Surface Rights in Québec

In Québec, surface rights are not included with mineral claims. Claim holders do not require permission to access and conduct work on Crown Land unless the land is being used to store public equipment. On private land, the claim holder must obtain permission from the landowner and acquire, through amicable agreement or through expropriation, the necessary access rights to carry out the exploration work. On land leased by the provincial government, the claim holder must obtain the consent of the lessee. If an

agreement between the lessee and claim holder cannot be met, the claim holder must pay the lessee an amount fixed by a court with jurisdiction.

# 4.7 Permitting in Québec

The government of Québec requires the owner of a claim to consult with the Ministère des Forêts, de la Faune et des Parcs ("MFFP") when a tree needs to be cut down (any size or type) or a permanent structure needs to be built on the property as a result of exploration work. For example, line-cutting and diamond drilling activities require a permit (Permis d'intervention) and a consultation with First Nations groups before any work can begin. Also, a forestry technician needs to be hired to estimate the volume of merchantable timber that will be cut down during the work to assess the proper stumpage fees.

Because First Nations must be consulted before any type of major work is performed on a claim (for example, construction, diamond drilling, line-cutting, stripping or trenching), it is possible that any disruption in communication between the provincial government and First Nations could result in unforeseen delays with respect to issuing the permits required to begin work. A proactive working dialogue with the relevant First Nations groups and stakeholders is essential to expedite permitting and land access.

Dark Star does not currently hold any permits for the Logan Property.

## 4.8 Environmental

At the effective date of this technical report, there are no known environmental liabilities to which the Logan Property is subject, and no other known significant factors or risks exist that may affect access, title, or the right or ability to perform work on the Logan Property.

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

# 5.1 Accessibility

The Logan Property (the Property) is situated 340 km north of Chibougamau, Québec (Figure 5-1). The Property can be accessed by either helicopter or float plane from the airport in Chibougamau which is serviced by commercial airlines. The nearest road access to the property is Highway 109 which is located 135km west of the Property. Additional mine road access is available to Eleonore Mine and Airstrip located approximately 60 km south of the Property, where project staging can occur.

# 5.2 Climate and Physiography

The climate in the vicinity of the Property is typical of central Québec with extreme temperature ranges. The region is under the influence of a continental climate marked by cold, dry winters and hot, humid summers. The average daily temperature for July is 16.4°C, and average temperatures for January hover around -18.8°C. Average rainfall is highest in September with 128.6 mm, and average snowfall is highest in January with 58.8 cm. Snow accumulates from October to May, with peak accumulations occurring between November and March. The nearest active weather station to the Property is located 89 km northeast in Chapais, Québec (Table 5-1).

The property is currently only suitable for summer seasonal work between the months of late May until early October.

**Dec Year Total Temperature** Feb Mar Apr May Jun Jul Sep Oct Nov Jan Aug -0.3 9.7 Daily Average (°C) -18.8 -16.2 -9.5 8.1 14.1 16.4 15.0 3.1 -5.2 -13.6 0.2 Record High (°C) 8.5 9.0 16.0 28.0 31.5 34.5 35.0 33.3 29.0 24.4 17.8 11.0 Record Low (°C) -43.3 -42.8 -38.0 -27.2 -16.1 -5.6 -0.6 -2.2 -6.0 -13.3 -30.0 -42.0 100.1 124.3 100.2 129.7 93.9 Avg Precipitation (mm) 61.9 39.4 50.3 56.6 82.4 93.2 63.5 995.8 75.5 | 100.1 | 124.3 | 100.2 | 128.6 28.7 70.9 36.7 Avg Rainfall (mm) 3.2 2.4 8.8 5.0 684.5 37.0 41.6 29.5 6.9 0.0 0.0 0.0 1.2 23.0 56.5 58.5 312.9 Avg Snowfall (cm) 58.8

Table 5-1: Climate Data from Chapais Weather Station

Source: 1981 to 2010 Canadian Climate Normals station data

#### 5.3 Local Resources

Chibougamau is the largest town in Nord-du-Québec, central Québec, Canada. Located on Lake Gilman; it has a population of 7,504 people (2016 Canadian Census). Some lodging and limited support services are also available in Chapais (population 1,610; 2011), located approximately 45 km west of Chibougamau. Limited local resources are available to facilitate exploration, and limited local mining and mineral exploration personnel are available.

Grid power is available along provincial highway routes and within the surrounding communities, additionally two, at their closest these are located a minimum of 60 km from the property at the Eleonore Mine. Local onsite water sources are available on the property from the numerous lakes and streams that the property encompasses.

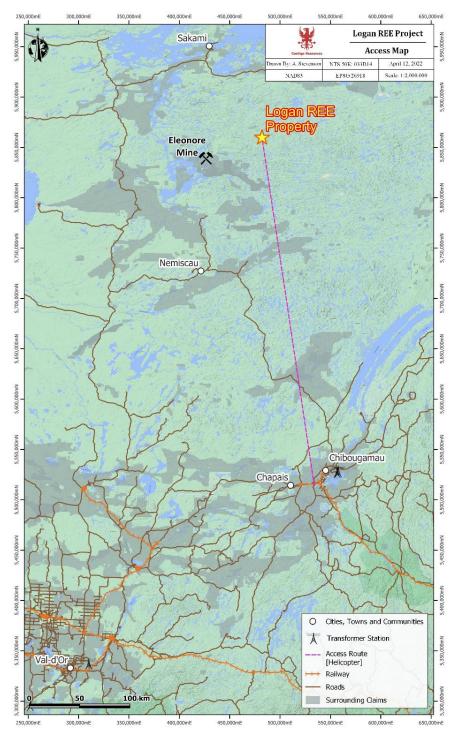


Figure 5-1: Logan Property Access Map

## 5.4 Infrastructure

There is no developed infrastructure on the Property.

With respect to surface rights, they are not included with mineral claims in Québec.

The First Nations communities of Nemiscau are located approximately 150 km to the south-southwest, while the community of Sakami is located approximately 100 km to the north-northwest of the Property.

# 5.5 Physiography

A hilly topography is marked by several lakes and swamps. Elevation varies across the Property, ranging from approximately 380 m to 450 m above sea level. Tree cover is typical of taiga and consists of black spruce and jack pine. Muskeg swamps occupy low-lying areas.

# 6 HISTORY

Research along the Logan property began in 1978, as Societe de Developpement de la Baie James, had administered 22 stream sediment samples. Of the twenty-two samples that had been collected in the immediate region of the anomaly, only one anomalous value (Marchand, 1978). From their findings, it was determined that the geochemistry of the lake indicated no anomalies would be present in neighboring lakes (Marchand, 1978). And the airborne radiometry survey conducted in 1975, did not indicate any anomalies, although it is possible this could be due to overburden upon the surface (Marchand, 1978).

Following this research, activity on the Logan Property did not resume until 2008 when Dios Exploration Inc. and Resources Sirois executed a geological survey on the Upinor property. A total of 31 samples were collected for Uranium analysis, a majority of which returned as such in the Kawipapiskasi Block (Lalancette, J., & Girard, R., 2008). 29 samples had been collected from this area, with scintillometer readings varying from 5,000 cps to 35,000 cps (Lalancette, J., & Girard, R., 2008). Of these 29 samples from the Kawipapiskasi block, nine had shown grades in U308 greater than 0.1%, and an additional nine showing grades between 0.05% to just below 0.1%. (Lalancette, J., & Girard, R., 2008). Additionally, as Uranium rich samples had also been rich in Lead, it can be inferred that this lead is of radiogenic origin (Lalancette, J., & Girard, R., 2008). In effect, the secular balance of the chain of disintegration would not be broken, and so, Uranium would be the primary mineralization, and most likely magmatic. (Lalancette, J., & Girard, R., 2008)

In the following year, Dios Exploration Inc. and Resources Sirois expanded upon the Upinor project, by conducting further geological surveys (St. Hilaire, 2009). In 2007 – 2008 Geo Data Solutions (GDS) on behalf of Dios Exploration Inc (DIOS), completed a high-resolution Airborne Magnetic and Gamma-ray Spectrometric (AGS) survey on 3 blocks (West, North and South) located in the James Bay area, Northern Quebec. Traverse lines were oriented North-West with a spacing of 100 metres while control-lines were oriented East-West with a spacing of 1 000 metres. The survey was flown with a mean ground clearance of 43.5 metres, for a total of 3,712 line-km flown over three blocks in the greater area including the Logan Property. The Unipor South block covers in part the current Logan Property claims. A total of 437 line-km was flown over the grid (See figures 6.1 and 6.2 below).

Through their investigation they had been able to determine Potassium % (colour interval), equivalent Uranium ppm (colour interval), equivalent Thorium ppm (colour interval), Total Count (colour interval), uranium equivalent/thorium equivalent ratio (eqU/eqTh), potassium/thorium equivalent ratio (K/eqTh), shaded magnetic Total Field (colour interval), shaded magnetic first vertical derivative (colour interval) (St. Hilaire, 2009).

In 2009, Dios conducted geological mapping on the Upinor property, including collection of 298 rock samples, and analyzed for Uranium. Additionally, six more samples were collected and analyzed for gold and base metals. The results of the preliminary groundwork on the Upinor North Project shows 66 surface samples in excess of 0.050% U308, of which 31 were in excess of 0.1% U308 (St. Hilaire, 2009). These occurrences are predominantly found on targets A1, A5, and A6 (St. Hilaire, 2009). Results of the preliminary groundwork on the Upinor South Project have had less exploration work carried out compared

to the Northern portion. The best uranium values were located on target C2 (St. Hilaire, 2009). The values are isolated and non-continuous (St. Hilaire, 2009). The area with the highest radiometric anomalies on target A3 and of the 10 samples collected, the best Uranium value returned was 0.038% (Tremblay, P., Lalancette, J., Girard, R., 2009).

Subsequent to the Dios explorations of 2008 - 2009 the claims were dropped. The claims were staked on the  $19^{th}$  of April 2021, and the  $7^{th}$  of May 2021, by Contigo Resources Inc. in their current disposition and the project was accordingly named the Logan Property.

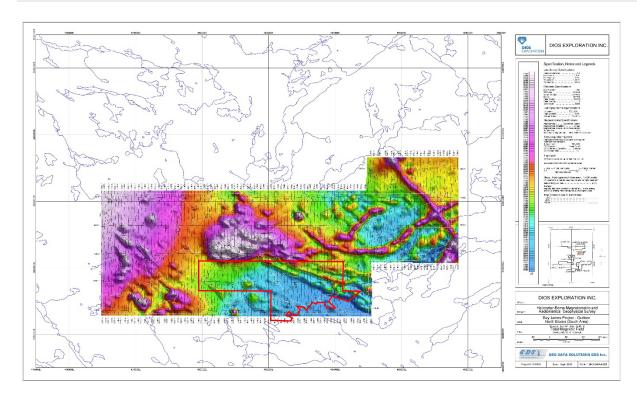


Figure 6-1: Total Magnetic Field - Heliborne Magnetometric Survey 2008, with current Logan property outline. (St. Hilaire, 2009)

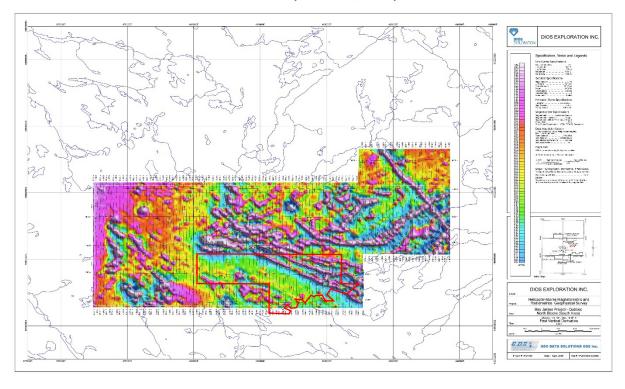


Figure 6-2: First Vertical Derivative - Heliborne Magnetometric Survey 2008, with current Logan property outline. (St. Hilaire, 2009)

Table 6-1: Work History Summary.

Year	Author	Operator	Work	Summary	Comments
1978	Marchand, Pierre	Societe de Development de la Baie James	Geological Survey	22 stream sediment samples	There were twenty-two (22) stream sediment samples clected in the immediate region of the anomaly. With only one amalous value (and for 12 elements). The geochemistry of lake bottom sediments indicates no anomalies in the neighboring lakes. The airborne radiometry survey conducted in 1975 does not indicate any anomalies, although this can be explained by the presence of overburden. This is most likely a false anomaly caused by multiple contamination or by poor localization of sample.
2008	Lalancette, J., & Girard, R.	los Services Geoscientifiques Inc.	Geological Survey	31 Samples collected for Uranium analysis	Kawipapiskasi Bock: In the south-eastern part, around a lake (UTM coordinates NAD27 465955/5851500, zone 18) with a 128 ppm uranium (survey of lake bottom sediments of the SDBJ), there are many outcropping areas. The lithologies observed in outcrops are paragneiss, granites and amphibolites. The noise scintillometric background of these lithologies oscillates between 80 and 120 cps. No samples were taken in this sector. In the south central part, a cross has been made at the north of a lake with anomalous uranium contents (239 ppm) (UTM coordinates NAD27 478293/5868128, zone 18). We find especially migmatites with a noise scintillometric background between 100 and 150 cps. A sector locally shows a scintillometer reading of 2100 cps (highest observed value) (map 2). No samples were taken in this area. In the north-western part, north of a lake with a uranium content of 149 ppm (UTM coordinates NAD27 474474/5870542, zone 18), a network of dyke's pegmatites collected in paragneiss in summer observed. This network of sub-horizontal dykes (dip between 20° and 30°) is more or less oriented eastwest. Dykes run parallel to regional foliation observed in paragneiss and have a thickness varying between one meter up to about 5 meters. The high-value sectors are rich in biotite with locally apatite and molybdenite. The network of dykes was followed for two kilometers from east to west and repeats about 550 meters from south to north. A total of 29 samples were taken in this area (5519730 to 5519742, 5519862 to 5519870 and 5519926 to 5519932) (map 3). The sectors sampled show scintillometric readings at the outcrop varying between 0.05% and 0.1% (Map 5). Enriched samples uranium is also enriched in lead. It is likely that this lead is of radiogenic origin and that makes the secular balance of the chain of disintegration is not broken. Uranium would thus belong to the primary mineralization probably magmatic. We also notice the absence of rare earth coenrichment and the ratio U / Th greater than 5. We can also see on the sur
2007- 2008	St-Hilaire, C.	GDS	Geophysical Survey	flight-line spacing: 100m (N-S); Control-line spacing: 1000m (E-W); Terrain clearance: 43.5m	<b>Deliverables:</b> Maps: Potassium % (colour interval), equivalent Uranium ppm (colour interval), equivalent Thorium ppm (colour interval), Total Count (colour interval), Ratio et the eqU/eqTh, Ratio of the K/eqTh, Shaded magnetic Total Field (colour interval), Shaded magnetic First vertical derivitive (colour interval)

2009	Tremblay, P., Lalancette, J., Girard, R.	los Services Geoscientifiques Inc.	Geological Mapping	298 rock samples and analyzed for Uranium, 6 additional samples were collected and analyzed for gold and base metals	Results of the preliminary groundwork on the <b>Upinor North Project</b> shows 66 surface samples in excess of 0.050% U <sub>3</sub> O <sub>8</sub> , of which 31 were inn excess of 0.1% U <sub>3</sub> O <sub>8</sub> . These occurrences are predominantly found on targets A1, A5, and A6. Results of the preliminary groundwork on the <b>Upinor South Project</b> has had less exploration work carried out compared to the Northern portion. The lack of exploration work makes it more difficult to evaluate. The best uranium values were located on target C2. The values are isolated and non continous. The area with the highest radiometric anomalies on target A3 and of the 10 samples collected, the best Uranium value returned was 0.038%.
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# 7 GEOLOGICAL SETTING AND MINERALIZATION

# 7.1 Regional Geology

The Logan Property is situated in the most eastern segment of the Frotet-Evans Greenstone Belt (FEGB) within the Opatica sub-province of the Superior Province (Figure 7-1). The sub-province contains intrusive rocks which were formed between 2820 Ma and 2680 Ma (Davis et al., 1995) and the supracrustal rocks of the FEGB which were formed between 2793 Ma and 2755 Ma (Pilote et al., 1997).

The FEGB was divided into four segments by Boily and Dion (2002): Evans-Ouagama, Storm-Evans, Assinica, and Frotet-Troilus. The easternmost domain, known as Frotet-Troilus, is where the Logan Property is located; it has received the most exploration attention due to its increased economic potential. The FEGB comprises tholeitic and magnesian basalts which occur alongside felsic to intermediate calcalkaline lava flows and pyroclastic rocks (Figure 7-2). Gabbroic and monzogranite plutonic rocks occur throughout the belt and are syn- to post-deformational.

# 7.2 Regional Mineralization

The following types of mineralization have been reported in the region:

- Pegmatite associated Uranium and Rear Earth Elements.
- Archean Greenstone Related Quartz Carbonate Gold.

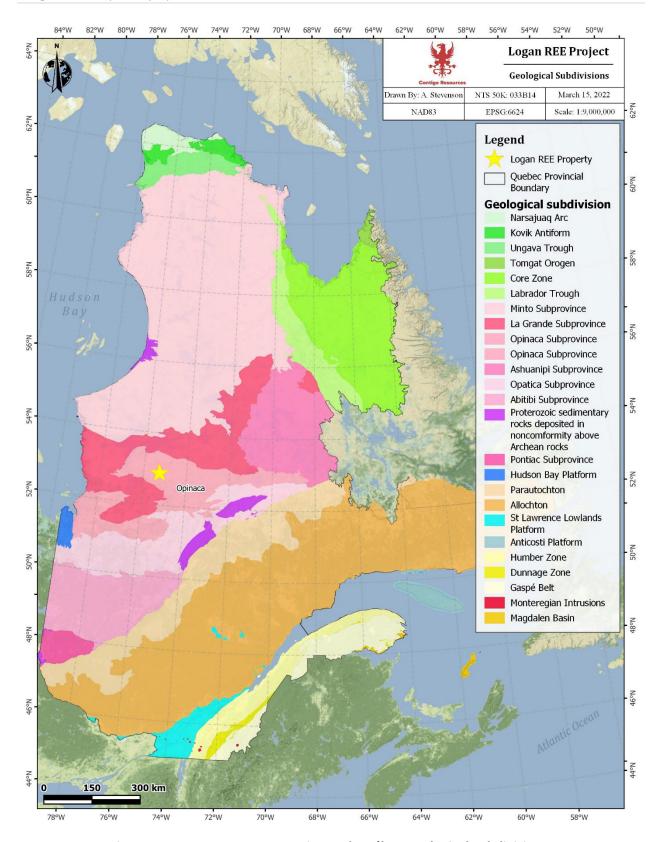


Figure 7-1: Logan Property Location and Québec Geological Subdivisions.

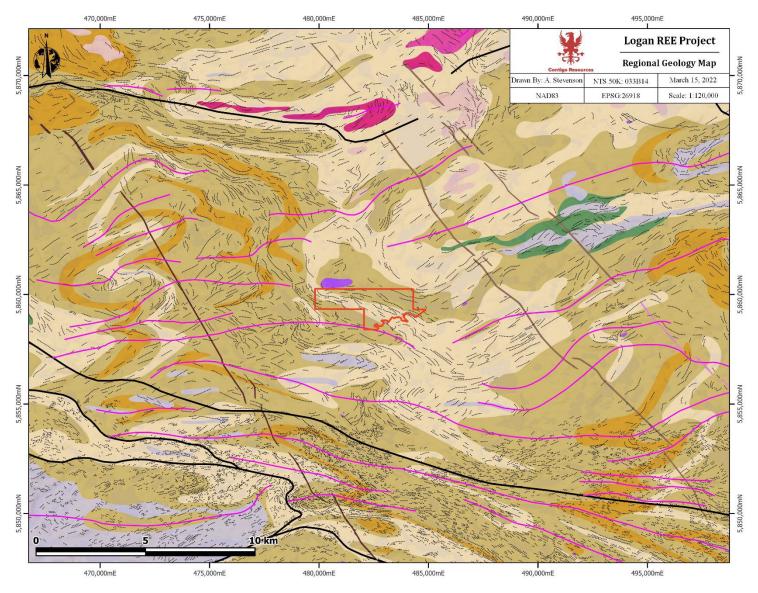


Figure 7-2: Logan Regional Geology.

Legend
Logan REE Outline
Lineament
Regional fold
Regional fault
Bedrock Geology
Amphibolite, locally of gabbroic and dioritic origin, partly migmatized
Aphyric diabase
Diabase of gabbronoritic composition, oriented NW-SE
Porphyritic diabase with plagioglase phenocrysts
Biotite paragneiss migmatite, with or without garnet, orthopyroxene and cordierite
Tonalitic biotite gneiss, with or without hornblende and magnetite, foliated to banded
Granite
Biotite-magnetite granite, with or without hornblende and epidote, massive to slightly foliated
Granite and granodiorite
Biotite paragneiss migmatite, with or without garnet, orthopyroxene and cordierite
Olivine metawebsterite, with or without phlogopite, commonly porphyroblastic with orthopyroxene and anthophyllite
Biotite wacke paragneiss, with or without garnet, orthopyroxene and cordierite

Figure 7-3: Legend of the Regional Geology - Figure 7.2 above.

# 7.3 Property Geology

Limited historical mapping has been conducted on the Property.

The Property is predominantly underlain by the Neoarchean Laguiche Metasedimentary complex and is found within the Opinaca subprovince of the Archean Superior Province.

This complex mainly consists of banded biotite ± garnet paragneiss to metatexites and diatexties, with local areas of orthopyroxene and amphibole. These metasediments have been intruded by dykes of dioritic to granodioritic composition.

The metasedimentary units appear relatively continuous, forming folded horizons that can be followed for tens of kms. While proximal intrusive rocks are predominantly tabular and are intercalated within the metatexite horizons.

Lineaments may be used as vectors to locate REE mineralized pegmatite dykes.

# 7.4 Property Mineralization

The Project contains four known mineralized showings (Ech. 68790236, Ech. 98790194, Upin 2 and Upin 3). These mineral showings are known for Uranium mineralization as well as notable REE mineralization.

The five-mineral showings occur along a contact with gabbro – norite diabase to the north, and biotite migmatite paragneiss to the south. The contract oriented approximately 300° to 120°. Mineralization is

associated with granitic pegmatite dyke swarms which follow along the foliation of the paragneiss between 290° and 325° with a weak dip to the north of 20° to 40°.

During the 2008 season 280 samples were collected, of which, 20 samples contained elevated REE. Sample-252 returned the highest concentration of REE, with up to 116,654 (ppm) total REE (see table 7.1 below, and Figures 7.6 & 7.7 below). Uranium values were low, with the majority of results below the reporting limit of 800 ppm  $U_3O_8$ . REE mineralization is directly associated with granitic pegmatite dykes.

Table 7-1: Selected REE results from the 2008 field program.

Sample	Others (ppm)	Lights (ppm)	Heavies (ppm)	REE (ppm)	Total (ppm)
250	1,264	23,720	8,000	31,720	32,984
251	16	93	408	501	517
252	1,815	100,740	14,099	114,839	116,654
253	190	8,259	1,313	9,572	9,762
254	23	9	1,377	1,386	1,409
255	50	100	370	470	520
256	21	134	401	535	556
257	70	1,442	560	2,002	2,072
258	475	27,520	3,747	31,267	31,742
259	95	988	760	1,748	1,843
260	1,072	2,498	2,150	4,648	5,720
261	12	8	259	267	279
262	408	6,315	2,145	8,460	8,868
263	3	11	69	80	83
264	11	14	344	358	369
265	7	9	153	162	169
266	14	91	406	497	511
267	17	103	488	591	608

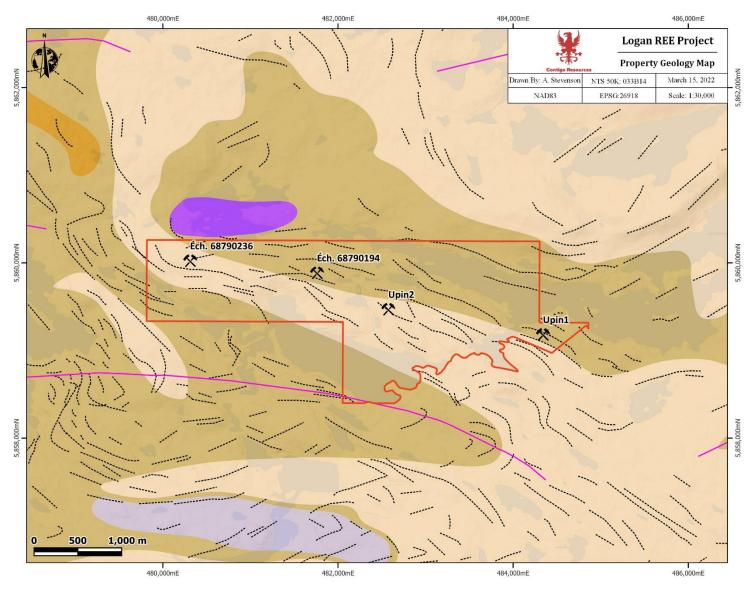


Figure 7-4: Logan Property Geology.

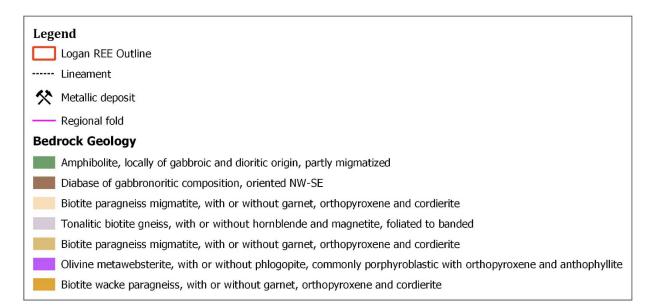


Figure 7-5: Legend of the Regional Geology - Figure 7.4 above.

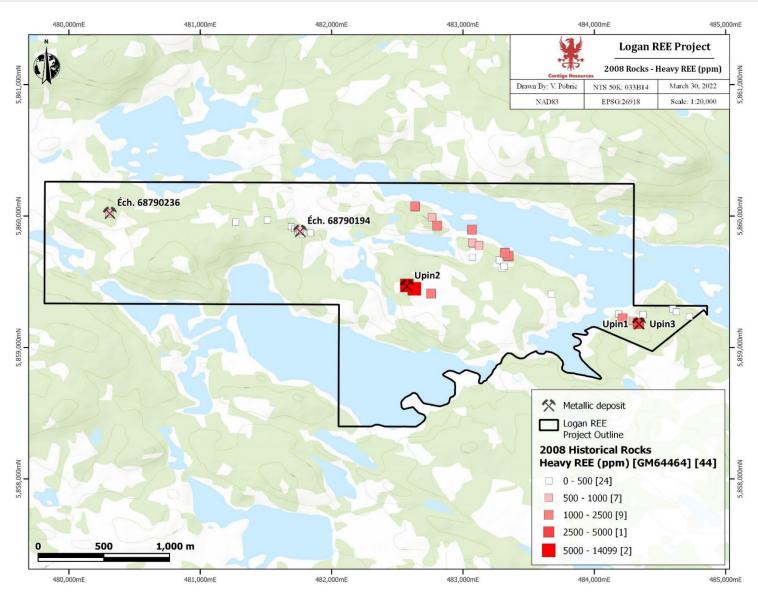


Figure 7-6: Logan Property rock sample results for Heavy REE elements as derived from the 2008 Upinor rock sample collection (Heavy REE = Dy+Er+Eu+Gd+Ho+Sm+Tb+Th+U+Yb).

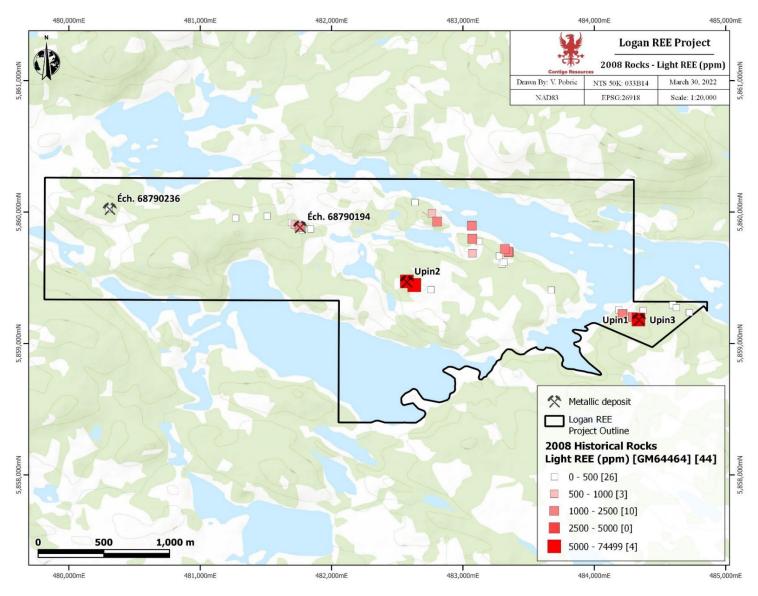


Figure 7-7: Logan Property rock sample results for Light REE elements as derived from the 2008 Upinor rock sample collection (Light REE = Ce+La+Nb+Pr).

## 8 DEPOSIT TYPES

## 8.1 Li-Cs-Ta (LCT) Pegmatite Deposit Model

Lithium-cesium-tantalum enriched pegmatites (LCT) originate in the hinterlands of orogenic belts of Archean and/or Paleoproterozoic age and are the indirect result of plate convergence. Many of the world's largest LCT pegmatites are predominantly hosted in metasedimentary or metavolcanic country rocks which have been metamorphosed to upper greenschist to amphibolite facies. LCT pegmatites are typically associated with S-type, peraluminous (aluminum-rich), quartz-rich granites which form by the partial melting of pre-existing sedimentary source rocks. Pegmatites are known for their massive crystals which can reach meters to tens of meters long and LCT pegmatites, in particular, are characterized the presence of biotite, muscovite, and the absence of hornblende.

Pegmatites are derived from a fertile granite intrusion which are typically distributed over a 10 to 20 km<sup>2</sup> area within 10 km of the fertile granite. Most LCT pegmatites display structural control, with the resultant body being a function of the depth of emplacement and are typically concordant with the regional foliation and thus form lenticular, ellipsoidal, or "turnip-shaped" bodies. This bodies are concentrated along or near major deep-crustal faults.

A fertile granite is the parental granite to rare-element pegmatite dykes, which, due to its evolving melt composition (crystal fractionation) produces a residual melt enriched in rare elements. It is the crystal fractionation process that concentrates incompatible elements (Li, Be, Rb, Cs, Nb, Ta, Sn) within the melt. As the common rock forming minerals crystallize (quartz, K-feldspar, plagioclase, and mica) the residual melt becomes increasingly enriched in incompatible rare elements and volatiles. Volatiles (H<sub>2</sub>O, Li<sup>+</sup>, F<sup>-</sup>, BO<sub>3</sub><sup>3-</sup>, and PO<sub>4</sub><sup>3-</sup>) within the residual melt act as fluxes, reducing the crystallization temperature of pegmatite minerals (Selway et al., 2005). This promotes the crystallization of fewer, but larger crystals and enables the melt to travel greater distances into the host rock, producing pegmatite dykes.

Fertile granite intrusions are predominantly heterogenous, consisting of several units that are transitional to one another, and are often thought to be derived from a single batch of magma (Selway et al., 2005). Possible rock types, from the most primitive to the most fractionated include (Selway et al., 2005):

- Fine grained or porphyroblastic biotite granite
- Fine-grained leucogranite
- Pegmatitic leucogranite
- Sodic aplite
- Potassic pegmatite
- Rare element-enriched pegmatite (dykes external to the fertile granite)

LCT pegmatites typically show district-scale mineralogical and geochemical zonation (Figure 7.2) that is broadly concentric around the exposed or inferred granitic pluton (USGS, 2010). The zone most proximal to the parental granite is the least evolved zone and only contains rock forming minerals such as quartz, potassium feldspar, sodic plagioclase, muscovite, and biotite with lesser garnet, apatite, tourmaline, and/or zircon. Further outwards are pegmatites containing beryl. In the next zone outward columbite

forms with beryl. The following zone outward precipitates tantalite and lithium aluminosilicates, and the most evolved and distal zone contains pollucite.

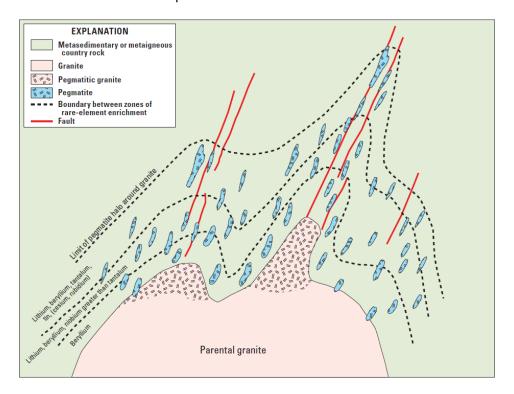


Figure 8-1: Simplified Concentric, Regional Zoning Pattern in a Pegmatitic Field (USGS, 2010)

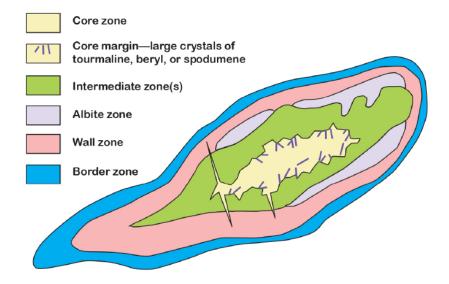


Figure 8-2: Deposit-Scale Zoning patterns in an idealized Pegmatite (after USGS, 2016).

## 8.2 Greenstone-Hosted Quartz-Carbonate-Gold-Vein Style Deposit

The geological setting of the Property is also favourable for quartz-carbonate vein-hosted gold mineralization. Dube and Gosselin (2007) provide a detailed overview of the key features and genesis of Canadian examples of this deposit type (Figure 8-1). Generally, quartz-carbonate vein-hosted gold deposits occur in greenstone belts. They are most abundant and significant, in terms of total gold content, in Archean terranes. However, a significant number of world-class deposits are also found in Proterozoic and Paleozoic terranes.

The deposits of this type are structurally controlled, complex epigenetic deposits hosted in deformed and metamorphosed terranes. They consist of simple to complex networks of gold-bearing, laminated quartz-carbonate fault-fill veins in moderately to steeply dipping, compressional brittle-ductile shear zones and faults, with locally associated extensional veins and hydrothermal breccias. They are dominantly hosted by mafic volcanic rocks metamorphosed at greenschist to amphibolite facies conditions and formed at depths of 5 to 10 km.

Main ore minerals include native gold with pyrite, pyrrhotite and chalcopyrite in decreasing amounts. Sulphide minerals typically constitute less than 5% of the ore body. Main gangue minerals include quartz and carbonate with variable amounts of white micas, chlorite, tourmaline, and sometimes scheelite.

Quartz-vein textures vary according to the nature of the host structure. Extensional veins typically show quartz and carbonate fibres at a high angle to the vein walls and with multiple stages of mineral growth. Laminated veins are usually composed of massive fine-grained layers. When present in laminated veins, mineral fibres are sub-parallel to vein walls. Individual vein thicknesses vary from a few centimetres to up to 10 m, and their length varies from 10 m to up to 1,000 m. The vertical extent of orebodies commonly exceeds 1 km and, in a few cases, reaches 2.5 km.

The gold-bearing shear zones and faults associated with quartz-carbonate vein-hosted deposits commonly display a complex geometry with anastomosing and/or conjugate arrays. Laminated quartz-carbonate veins typically infill the central part of, and are subparallel to, the host structures. Extensional veins are either confined within shear zones, in which case they are relatively small and sigmoidal in shape, or they extend outside the shear zone and are planer and laterally much more extensive.

Exploration for this deposit type is well understood, based on a rich history of discovery over approximately a century. On a continental scale, this type of gold deposit is typically distributed along crustal scale fault zones characterized by several increments of strain, and, consequently, multiple generations of steeply dipping foliations and folds resulting in a complex deformational history. These crustal-scale deformation zones represent the main hydrothermal pathway towards higher crustal levels. Critically, however, deposits are often spatially and genetically associated with second- and third-order compressional reverse-oblique to oblique high-angle shear/strain zones that are best developed within 5 km of the first-order structure, often in its hanging wall. In many cases, brittle faults also host major zones of gold mineralization.

On a district scale, large gold camps are commonly associated with curvatures, flexures, and dilatational jogs along major compressional fault zones, such as the Porcupine-Destor fault in Timmins. Regional unconformities distributed along major faults or stratigraphic discontinuities are also typical of large gold camps. The presence of other deposit types in a district, such as volcanogenic massive sulphide deposits and/or magmatic nickel-copper deposits, is also commonly thought to be a favourable factor.

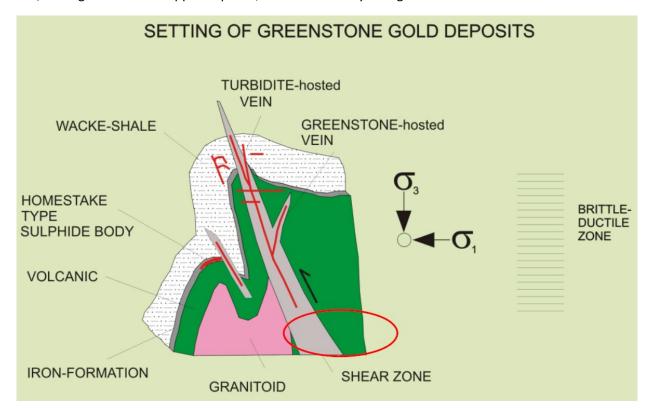


Figure 8-3: Setting of GQC Gold-Vein Deposits (Dube and Gosselin, 2007)

## 9 EXPLORATION

## 9.1 Helicopter-borne Triaxial Magnetic Gradiometer Survey

In 2021, Dark Star commissioned Axiom Group to fly a high-resolution helicopter-borne tri-axial-magnetic gradiometer survey over the Logan Property over 2 days between September 17th to September 19th, 2021.

The Logan Property survey block was centred at approximately 60 km north (by air) of the Eleonore Mine Airstrip, Québec. A total of 123 line-km of gradient magnetic data was collected over an area of 555.6 ha. The survey was flown at 50 m traverse-line spacing and 500m tie-line spacing (Table 9.1).

Survey Block	Line Type	Line Spacing (m)	Flight Direction (°)	Actual Line-km Flown
Logan	Traverse	50	45–225	112
	Tie	500	135–315	11
			Total	123

**Table 9-1: Axiom Magnetic Survey Parameters** 

The Logan heliborne-magnetic survey data received from Axiom included the final survey deliverables; all raw, helicopter-borne, magnetic data; base-station data; a final levelled dataset, including all measured gradients; and the following maps: flight paths, measured vertical gradient, residual magnetic intensity, and total magnetic intensity (Figures 9-1 to 9-5). A 3D inversion of the magnetic data was also completed by Axiom, the unconstrained susceptibility inversion depth slices are presented in figures 9.6 to 9.11.

## 9.2 2021 Tri-Axial Magnetic Data Acquisition and Processing Procedures

The tri-axial system is composed of three GSMP-35A high-precision potassium magnetometers mounted on a tri-directional bird that is towed by a Robinson helicopter platform separated by a 100 ft cable that guarantees separation between the helicopter and the magnetic survey platform. Included in the tri-axial system is a GPS that marks the data point location, radar altimeter for recording the height, and an inertial measurement unit ("IMU") for recording the roll, pitch, and yaw of the unit in flight.

The GPS of the tri-axial system is complimented by the helicopter's Satloc system providing a real-time moving map which is cross-referenced and provides quality control and redundancy.

Supporting the helicopter is a base station which has a single GEM's GSM-19 magnetometer that is equipped with a high-resolution (0.07 m) integrated GPS. This was used to calculate final diurnal corrections from data collected at three-second intervals.

The magnetic data that lacked georeferenced data, and were also excessively noisy, were removed. These lines were re-flown and interpolated with the acceptable data resulting in mosaics. The base-station recording was also processed and filtered, and spikes were removed to derive data for diurnal correction.

All processing of post-field program data was carried out using Geosoft Oasis Montaj and Microsoft Excel software, and the presentation of final maps used QGIS. Results were gridded using a minimum curvature method and a grid-cell size of approximately ¼ of flight line spacing.

#### 9.3 2021 Tri-Axial Magnetic Results / Gradient Survey Interpretation

The magnetic maps and derived data products are presented in Figures 9-1 to 9-11, mainly as total magnetic intensity (TMI), reduction to pole (RTP), residual magnetic intensity (RMI) and measured vertical gradient (MVG).

The magnetic gradiometer survey identified a distinct southeast to northwest-trending magnetic high through the centre of the Property which corresponds to the mapped contact in this area between gabbro – norite diabase to the north, and biotite migmatite paragneiss to the south. Other parallel trends adjacent to this magnetic high likely define more detailed lithological contacts in the local stratigraphy as well as the other mapped contacts between migmatites and adjacent gabbro – norite rocks, which shows a banded pattern of high to moderately magnetically susceptible rock which may be indicative of internal layering or banding within the gabbro – norite rocks to the north.

The magnetic signature across the dominant NW – SE trend also shows distinct segmentation of magnetic highs which conform to breaks in the northwest-trending mapped lineaments, and as seen on satellite images. Occasional breaks in these highs could suggest cross-cutting structures and the more subdued response along the northern margin of the property.

At various locations across the Property magnetic susceptibility liniment discontinuities in the are coincident with topographical features and lineaments in the landscape which may confirm the presence of larger scale structures across the property. These can also be seen to continue at depth based on the results of the survey inversion as illustrated in figures 9.6 to 9.11.

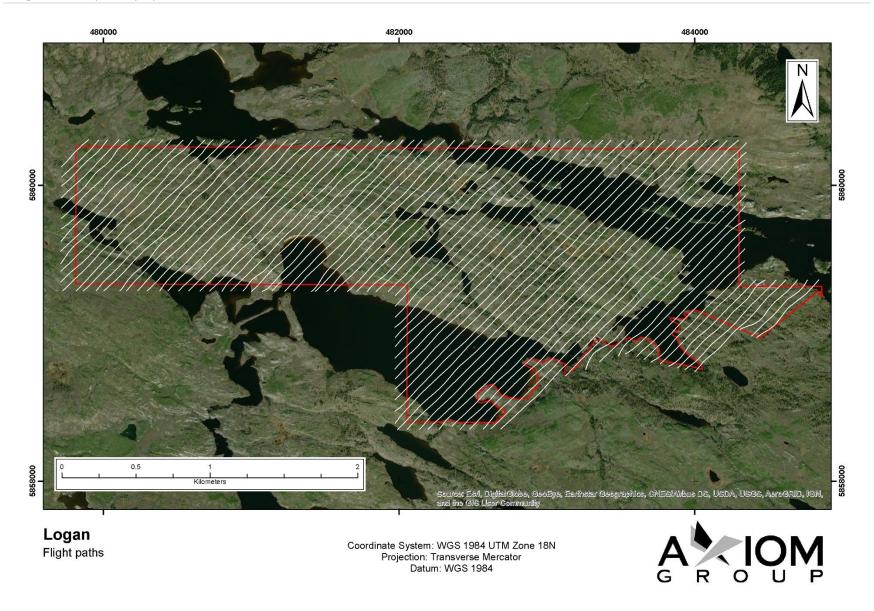


Figure 9-1: Logan Property North Block Geophysical Survey Flights Paths

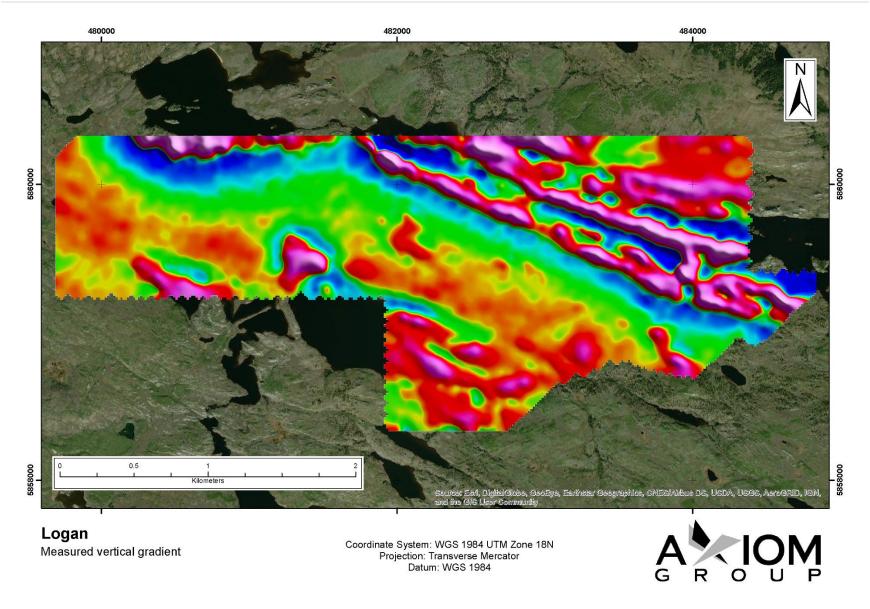


Figure 9-2: Logan Property Measured Vertical Gradient

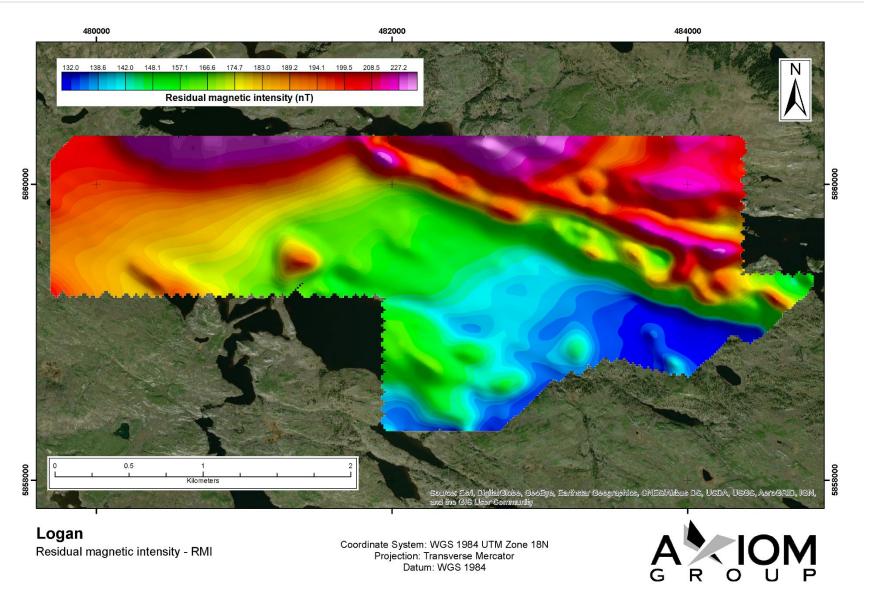


Figure 9-3: Logan Property Residual Magnetic Intensity

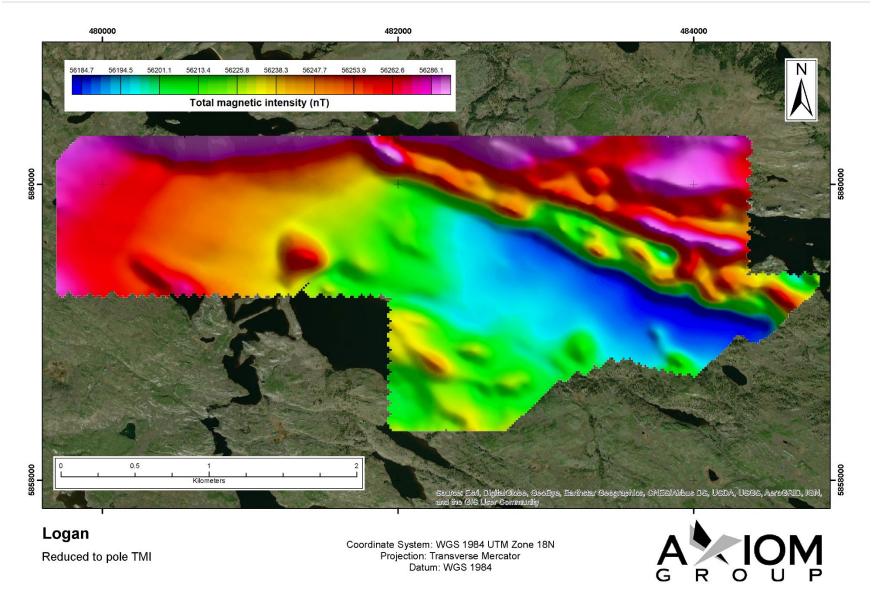


Figure 9-4: Logan Property Reduced to Pole Total Magnetic Intensity

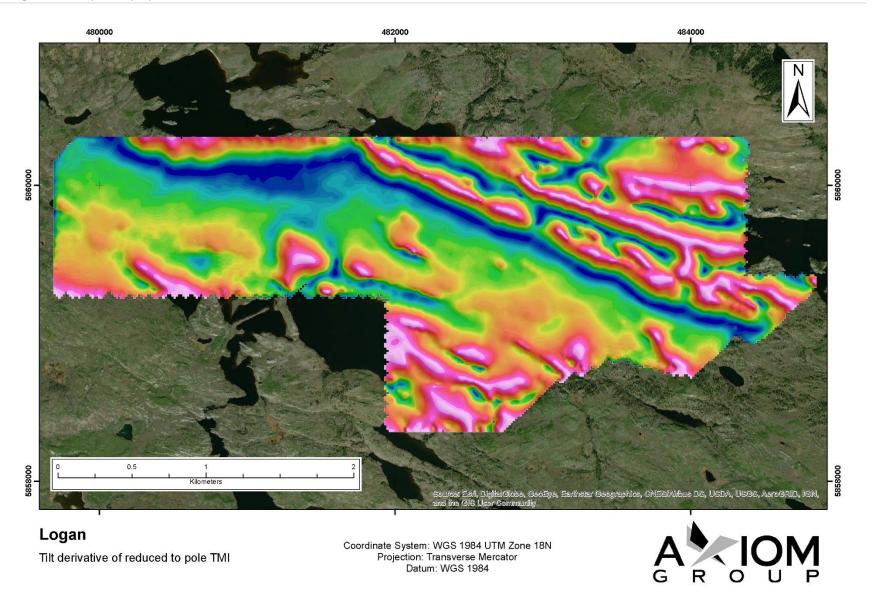


Figure 9-5: Logan Property Vertical Gradient Tilt Derivative of Reduced to Pole Total Magnetic Intensity.

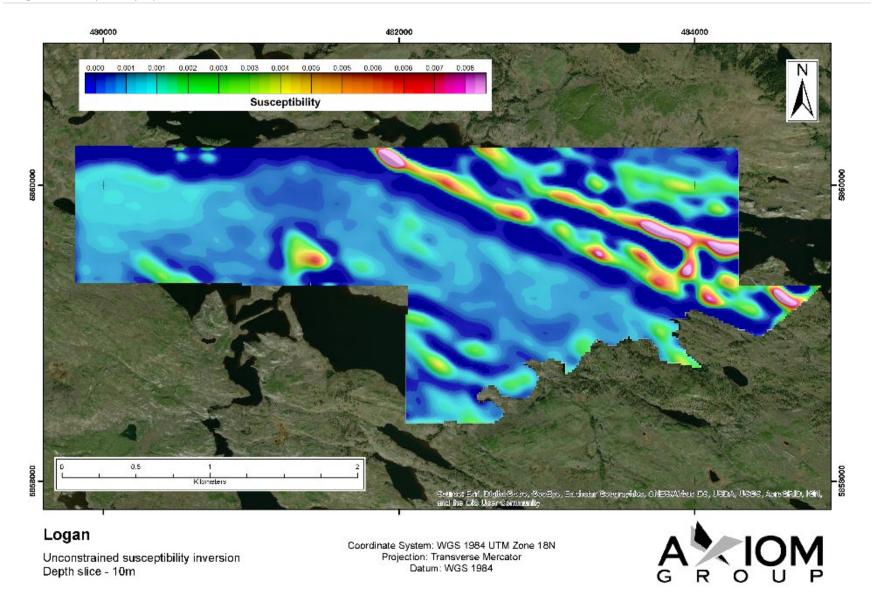


Figure 9-6: Unconstrained susceptibility inversion 25 m depth slice.

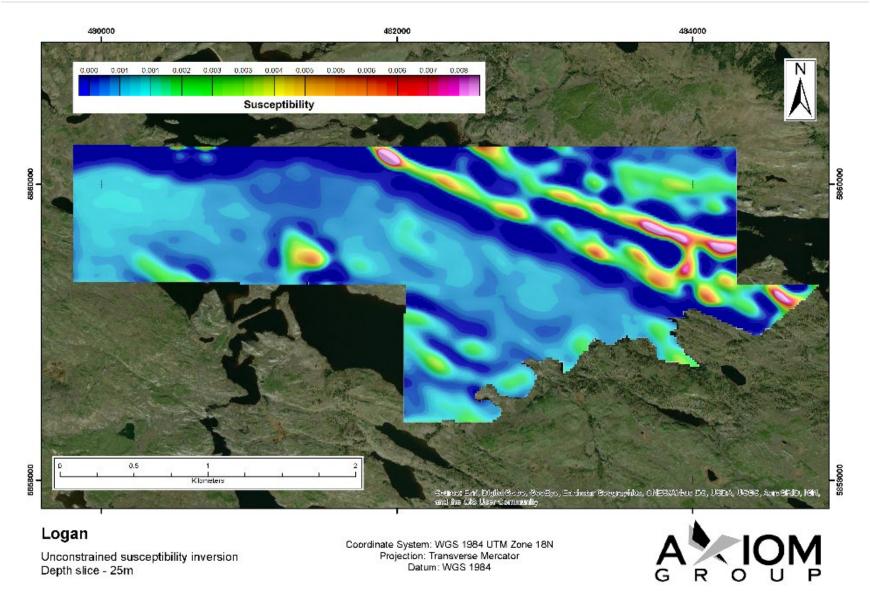


Figure 9-7: Unconstrained susceptibility inversion 10 m depth slice.

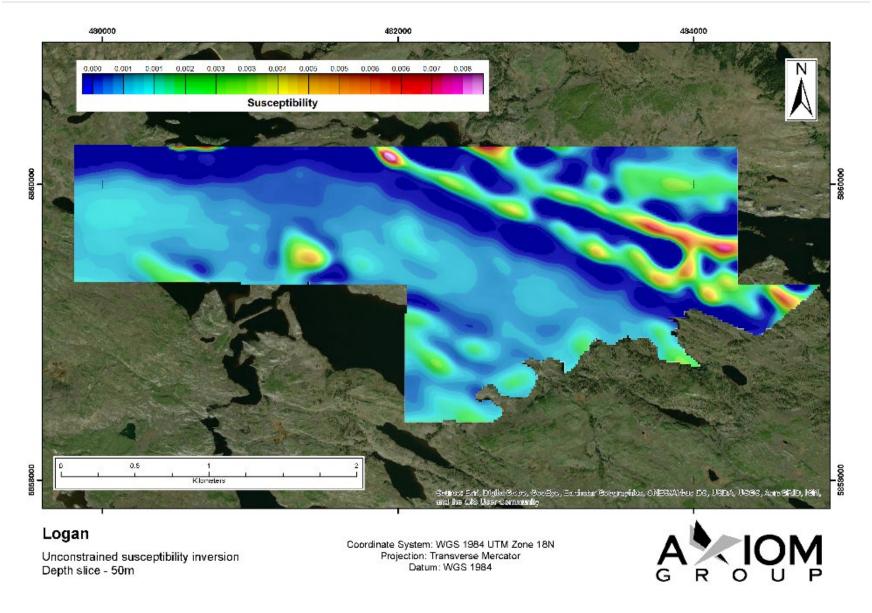


Figure 9-8: Unconstrained susceptibility inversion 50 m depth slice.

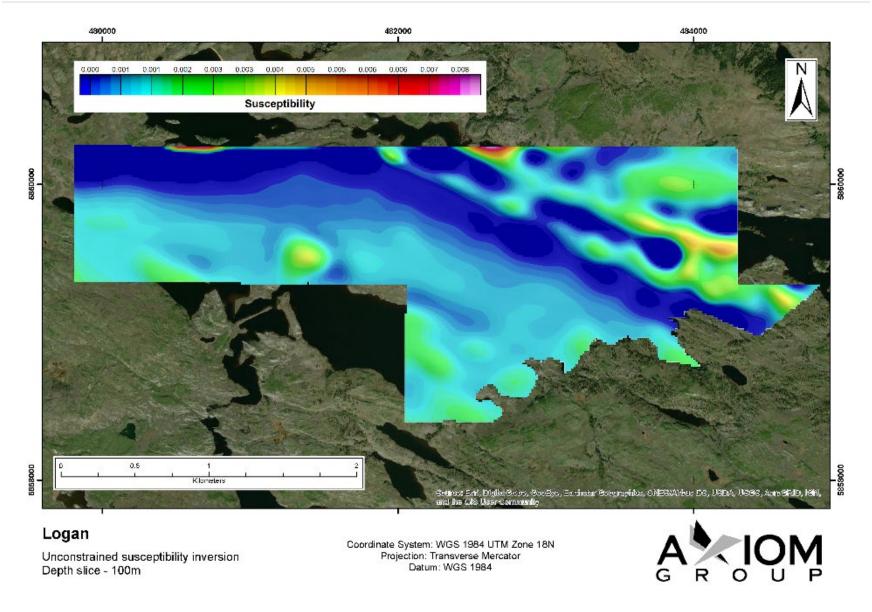


Figure 9-9: Unconstrained susceptibility inversion 100 m depth slice.

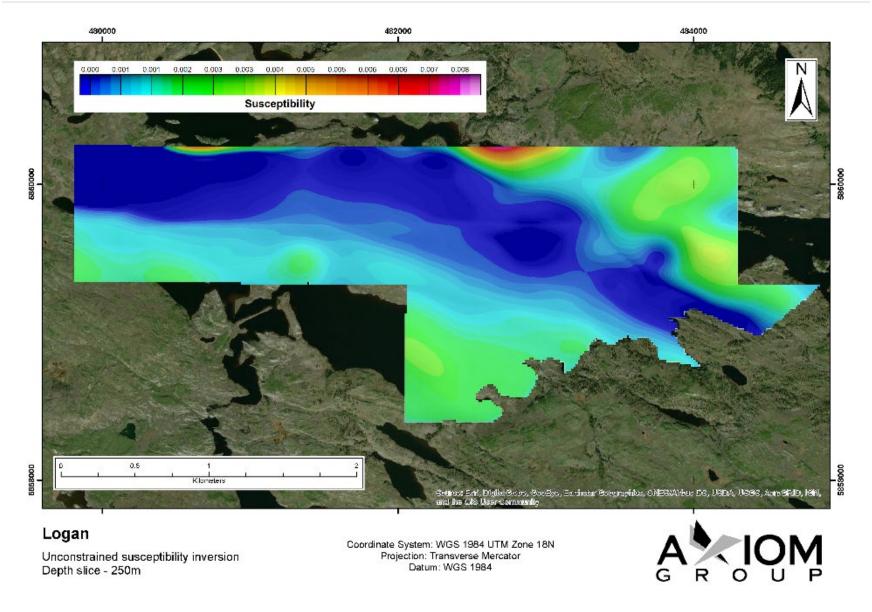


Figure 9-10: Unconstrained susceptibility inversion 250 m depth slice.

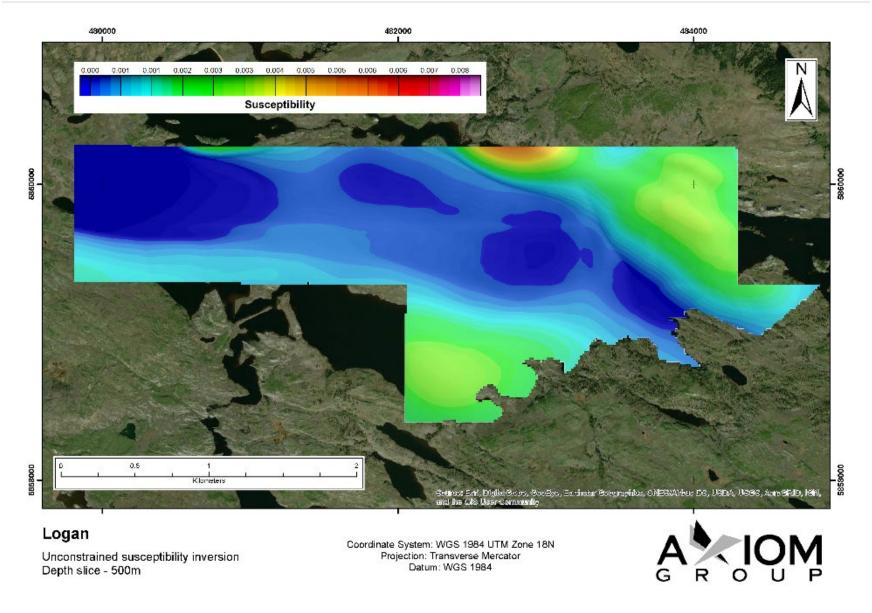


Figure 9-11: Unconstrained susceptibility inversion 500 m depth slice.

# 10 DRILLING

No historical drilling has occurred on the Property, and Dark Star has not conducted any drilling during the course of its ownership.

# 11 SAMPLE PREPARATION, ANALYSIS, AND SECURITY

No ground exploration activity was conducted by Dark Star on the Logan Property and, therefore, there are no sample preparation, analysis, or security protocols to report.

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#### 12 DATA VERIFICATION

The author also reviewed the Québec Système d'information géominière's (SIGÉOM) digital publication database for regional geological data and mineral occurrence information (sigeom.mines.gouv.qc.ca). Other geologic information, such as assay results with certificates, were compiled and georeferenced using GIS, of all the relevant project data was compiled for the purposes of evaluating and ratifying the historic data available. The assay certificates of the historical geochemical analysis were reviewed by the QP, it is noted that no duplicate or QAQC was completed by historical operators.

The author reviewed the geophysical data from the magnetic gradiometer survey conducted by Axiom in 2021 and believes that the procedures and methods used by Axiom are consistent with industry standards and are suitable for the purposes intended. Additionally.

The exploration is at the early/prospecting stage. There were no limitations placed on the author with respect to data verification and no other data verification measures were completed

In the author's opinion, the data used in this report are adequately reliable for the purposes of this technical report.

#### 12.1 2021 Site Visit

The QP of this report has not completed a current inspection of the property that is the subject of this technical report.

The issuer is relying on section 6.2.2 of NI 43-101.

- The QP confirms that the property is an early-stage exploration property.
- The current seasonal weather conditions prevent the QP from accessing any part of the property and obtaining beneficial information from it. The property topography is hilly (approximately 380 m to 450 m above sea level) and is marked by several lakes and swamps. It is expected that access will be limited, and any outcrop will be obscured by snow.
- The QP on behalf of the issuer will complete the required site visit (as per section 6.2.1 of NI 43-101) as soon as weather conditions at the property facilitate the QP in obtaining beneficial information from the site visit. A confirmation check sample verification is proposed to compare historical results from 2008.

In accordance with section 6.2.3 of NI 43-101, the QP will complete the current inspection at the Logan Property within the next three (3) months then allowing the Issuer to promptly file a technical report, certificates, and consents.

## 13 MINERAL PROCESSING AND METALLURGICAL TESTING

This is an early-stage exploration project. No mineral processing or metallurgical testing have been carried out at this time.

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# 14 MINERAL RESOURCE ESTIMATES

This is an early-stage exploration project. No mineral resource estimates have been carried out at this time.

# 15 MINERAL RESERVE ESTIMATES

This is an early-stage exploration project. No mineral reserve estimates have been carried out at this time.

# **16 MINING METHODS**

This is an early-stage exploration project. Mining methods are not relevant to the Logan Property at this time.

# 17 RECOVERY METHODS

This is an early-stage exploration project. Recovery methods are not relevant to the Logan Property at this time.

# 18 PROJECT INFRASTRUCTURE

This is an early-stage exploration project. Project infrastructure is not relevant to the Logan Property at this time.

# 19 MARKET STUDIES AND CONTRACTS

This is an early-stage exploration project. Market studies and contracts are not relevant to the Logan Property at this time.

# 20 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

This is an early-stage exploration project. Environmental studies, permitting and social or community impact are not relevant to the Logan Property at this time.

# 21 CAPITAL AND OPERATING COSTS

This is an early-stage exploration project. Capital and operating costs are not relevant to the Logan Property at this time.

# **22 ECONOMIC ANALYSIS**

This is an early-stage exploration project. Economic analysis is not relevant to the Logan Property at this time.

# **23 ADJACENT PROPERTIES**

This Property does not have any relevant adjacent properties of note.

# 24 OTHER RELEVANT DATA AND INFORMATION

To the author's best knowledge, all the relevant data and information have been provided in the preceding text.

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#### 25 INTERPRETATION AND CONCLUSIONS

The Logan Property comprises an early-stage exploration project of merit which supports further exploration.

In addition to the historical work conducted on the Property, the regional-scale mapping and recent geophysical survey have provided a baseline of information which can be used to target potential mineralization on the Property. Follow-up geochemical sampling is lacking and, therefore, drilling targets have not been identified yet. Systematic mineral exploration is required across the Property to identify any mineral potential that may be hosted on the Property.

Based on the geophysics and available Property information, the following findings are noteworthy:

#### Geology

- The Property is located in the Frotet-Evans Greenstone Belt (FEGB) within the Opatica subprovince of the Superior Province in Quebec. Logan is situated in the easternmost domain of the FEGB, known as Frotet-Troilus, an area which has recently received increased exploration attention due to its increased regional economic development.
- The regional geophysical magnetic anomaly is consistent with the trend and pattern of the geophysical anomaly identified by the 2021 magnetic gradient survey on the Property which are also consistent with Geophysical survey results completed in 2007 to 2008.
- The regional geological mapping suggests favourable contacts between gabbro norite lithologies and biotite migmatites; these contacts are coincident with partly mapped granitic pegmatites which have potential for REE mineralization and follow the disposition of the magnetic anomaly.

#### Mineralization

- The Property is believed to have a favourable geological setting for Li-Cs-Ta Pegmatite style deposits.
- The five REE mineral showings occur along a contact with gabbro norite diabase to the north, and biotite migmatite paragneiss to the south. The contract oriented approximately 300° to 120°.
   Mineralization is associated with granitic pegmatite dyke swarms which follow along the foliation of the paragneiss between 290° and 325° with a weak dip to the north of 20° to 40°.
- During the 2008 season 280 samples were collected, of which, 20 samples contained elevated REE. Sample-252 returned the highest concentration of REE, with a TREO value of 13.96%.

#### **Exploration**

- The Property is underexplored with few recent results. Historic sampling is encouraging, and the distribution and extent of granitic pegmatite dyke swarms should be better understood.
- Systematic geochemical and mineralogical characterization should be undertaken across the Property to better define the continuity and tenor of potential mineralization on the Logan Property.

 An initial field prospecting and systematic lithological characterization should be undertaken, complementary with the comprehensive soil geochemistry survey across any potentially mineralized areas.

#### **Mineral Tenure**

 Mineral tenure appears to be in good standing, and access to the Property and is accessible by helicopter or float plane, no infrastructure is developed on the property. The Property is currently amenable to seasonal (Summertime) operations for potential drilling and exploration work.

#### **Other Considerations**

- The Property is situated in an economically and socio-politically stable area, and there are currently no known factors that would prevent further exploration or any future potential project development.
- There are currently no known factors that could impede future exploration programs or project development, with the exception of the surface rights (Note: Surface rights are not included with mineral claims in Québec).

Because this is an early-stage, grassroots exploration project, there is always the risk that the proposed work may not result in the discovery of an economically viable deposit. The author can attest that there are no significant, foreseeable risks or uncertainties with respect to the Property's potential economic viability or continued viability directly arising from the quality of the data provided within this technical report.

#### **26 RECOMMENDATIONS**

Based on conclusions outlined in Section 25 Interpretation and Conclusions, a two-phase exploration program is recommended to define any potential zones of anomalous indicator geochemistry and mineralization that correspond to the geophysical magnetic-high anomaly and neighbouring intrusive suite of rocks present at the property.

The two phases will include soil and basal till sampling, general prospecting, pegmatite dyke and structural mapping, including an intensive outcrop sampling program described in table 26.1 below.

Description No Amount All in cost of soil sampling and field exploration program, 21 Days \$80,000 1 Mob-Demob, Accommodation, Lodging. Personnel: 4 crew for 21 days 600 \$30,000 All in laboratory costs 2 Samples Phase 1 Total \$110,000 3 All in metallurgical testwork costs + reporting 1 \$20,000 Additional Ground based Geophysics and Geology similar to 1 \$110,000 4 investigations phase 1 All in cost for Drilling, pad building, Mod-Demob, geologist, 500 \$500,000 5 Helicopter Assistance is \$1000 CAD per metre metres Phase 2 Total \$630,000 **Grand Total** \$740,000

**Table 26-1: Proposed Budget** 

#### Phase 1:

- Conduct a geochemical sampling program on a 100 m x 100 m grid. A systematic soil sampling program, with selected areas of infill over known mineral showings. This survey may detect elevated REE and trace element geochemistry, and other sources of metals to aid in generating follow up targets for Phase 2.
- Up to 600 Soil samples will be collected during the 21-Day field program. The work will be completed by a four-person field crew based in a fly-in camp on the property; it is likely float plane assistance will be required to access the Property.
- Additionally, the field crew would undertake a program of detailed geological mapping and sampling to delineate the extent and continuity of REE bearing pegmatites in the local area.

Sampling work would include rock chip and channel sampling across favourable pegmatitic dykes and other prospective areas of mineralization.

The estimated cost for phase 1 is approximately \$110,000 (Table 26.1).

#### Phase 2

Based on the results from Phase 1, infill geochemical sampling and a reconnaissance drilling program is recommended for Phase 2. Advancing to Phase 2 is contingent on positive results in Phase 1

- Follow up Ground Geophysics, soil sampling, and additional mapping with a focus on defining and filed verifying potential drill targets, trenching should be considered.
- Additionally, a preliminary metallurgical sample should be collected from the known showings
  where REE concentrations have been previously identified. The purpose of this sample should be
  to better understand controls and limitations of future mineral processing.
- A drill program (approx. 500m) to test the best targets generated from the field mapping with oriented core, following up the results and most prospective areas and aiming to better define the orientation of potential mineralized structures.
- The estimated cost for phase 2 is approximately \$630,000 (Table 26.1).

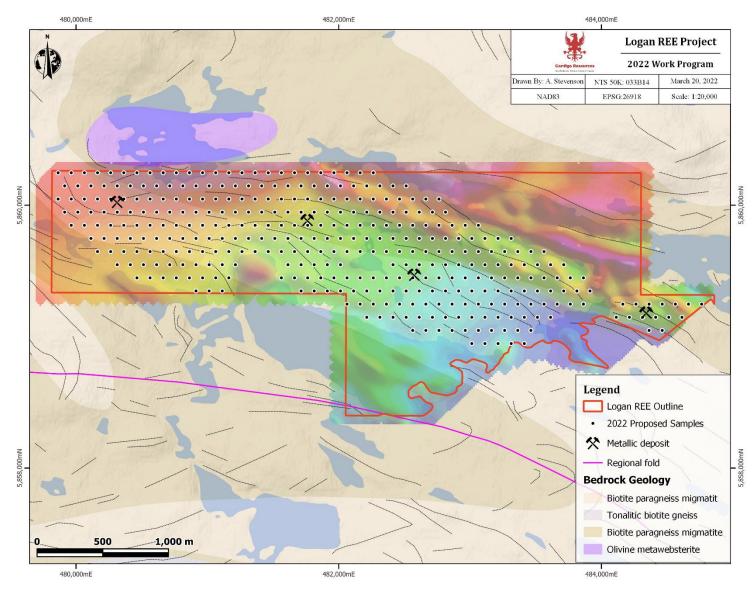


Figure 26-1: Logan 2022 Proposed Soil sample grid (100x100m Spacing) over property geology and Axiom TMI data.

## 27 REFERENCES

- Boily, M., Dion, C., 2002, Geochemistry of boninite-type volcanic rocks in the Frotet-Evans greenstone belt, Opatica subprovince, Québec: implications for the evolution of Archaean greenstone belts: Precambrian Research, v. 115, p. 349–371.
- Bradley, D., McCauley, A., 2016, A Preliminary Deposit Model for Lithium-Cesium-Tantalum (LCT)
  Pegmatites, USGS, Open-File Report 2013-1008, version 1.1, December 2016
- Davis, W.J., Machado, N., Gariépy, C., Sawyer, E.W., 1995, U–Pb geochronology of the Opatica tonalite-gneiss belt and its relationship to the Abitibi greenstone belt, Superior Province, Québec, Canada: Journal of Earth Sciences, v.32, p.113–127.
- Dubé, B. and Gosselin, P., 2007, Greenstone-Hosted Quartz-Carbonate Vein Deposits. In: Goodfellow, W.D., Ed., Mineral Deposits of Canada: A Synthesis of Major Deposit-Types, District Metallogeny, the Evolution of Geological Provinces, and Exploration Methods, Geological Association of Canada, Mineral Deposits Division, Special Publication 5, 49-73.
- Engdahl, D., Coetzee, T., 2021, Helicopter-Borne Triaxial Magnetic Gradiometer Survey, Logan, Québec, Canada, for Off Piste Opportunities Inc.
- Galeschuk, C., Vanstone, P., 2007, Exploration Techniques for Rare-Element Pegmatite in the Bird River Greenstone Belt, Southeast Manitoba, Ore Deposits and Exploration Technology,
- Lalancette, J., Girard, R., 2008. Travaux Geologiques de Reconnaissance pour L'Uranium Dans le Secteur D'Opinaca, Moyenne Baie James, Quebec, Projet Upinor, by IOS Geoscientifiques Inc., for Dios Exploration Inc. (GM69940)
- Marchand, Pierre., 1978. Verification D'Anomalies: Region Radiddon-Riviere Guillaume, Campagne D'Exploration 1977 (Volume 1), by Societe de Developpment de la Baie James. (GM34174)
- Pilote, P., et al., 1997, Géochronologie des minéralisations d'affiliation magmatique de l'Abitibi, secteur Chibougamau et de Troilus-Frotet: implications géotechniques, Ministère des Ressources naturelles, Québec, DV 95-04, p 14.
- Selway, J.B., Breaks, F.W., Tindle, A. G., 2005, A Review of rare-Element (Li-Cs-Ta) Pegmatite Exploration Techniques for the Superior Province, Canada, and Large Worldwide Tantalum Deposits, Exploration and Mining Geology, vol. 14, Nos. 1-4, pp. 1-30, 2005.
- St-Hilaire, Camiille., 2009. High Resolution Aeromagnetic and Gamma-Ray Spectrometric Survey: Final Technical Report, Upinor Project for Dios Exploration Inc. (GM64066)

Tremblay, P., Lalancette, J., Girard, R., 2009. Travaux D'Exploration et de Cartographie Geologiques pour L'Uranium dans le Secteur D'Opinaca, Menne Baie James, Quebec, Projet Upinor, by IOS Geoscientifiques, for Dios Exploration Inc. (GM64464)

## 28 DATE AND SIGNATURE PAGE

This technical report titled, "National Instrument 43-101 Technical Report on the Logan Property, Baie James Area, Québec, Canada" and dated February 1<sup>st</sup>, 2022 (Release Date of April 12<sup>th</sup>, 2022) was prepared by the following author:

Dated this 12<sup>th</sup> day of April 2022

L. P.A. VAN DER MEER

37848

ENTREPLES

SCIENCE VAN der Meer

"Luke van der Meer, B.Sc., P. Geo."

**Consulting Geologist** 

#### **CERTIFICATE OF QUALIFIED PERSON**

Luke van der Meer, B.Sc., P.Geo.

I, Luke van der Meer do hereby certify the following:

- a) I am a consulting geologist with Longford Exploration Services, where I am Vice President of Exploration, the company is headquartered at Suite 1680, 355 Burrard Street, Vancouver, BC V6C 2G8, Canada.
- b) For the purposes of the Technical Report titled "NATIONAL INSTRUMENT 43-101 TECHNICAL REPORT On the LOGAN PROPERTY, BAIE JAMES AREA, QUÉBEC, CANADA" dated April 12<sup>th</sup>, 2022, with an effective date of February 1<sup>st</sup>, 2022. I am the author and responsible person. I have read the definition of "qualified person" set out in National Instrument 43-101 Standards of Disclosure for Mineral Projects ("NI 43-101") and certify that by reason of my education, affiliation with a professional association (as defined in NI 43-101), and past relevant work experience, I fulfil the requirements to be a "qualified person" for the purposes of NI 43-101.
- c) I am a graduate of Otago University of Dunedin, New Zealand, with a B.Sc. in Geology, 2001. I am a Practicing Member in good standing of the Association of Professional Engineers and Geoscientists, British Columbia, license number 37848, since 2014. I have been practicing my profession continuously since 2001 and have been working in mineral exploration since 2001 in gold, precious, base metals, coal mineral, uranium, iron ore and other exploration. During which time I have used, applied geophysics/ geochemistry, across multiple deposit types. I have worked throughout Canada, United States, Mongolia, West Africa, Turkey, Australia, and New Zealand.
- d) I have read the definition of "qualified person" set out in National Instrument 43-101 ("NI 43-101") and certify that by reason of my education, affiliation with a professional organization (as defined in NI 43-101) and past relevant work experience, I fulfill the requirements to be a "qualified person" for the purposes of NI 43-101.
- e) I have not completed a site visit to the Logan property for the purposes of this report (see section 12.1; Data verification).
- f) I am responsible for and have read all sections of the report entitled "NATIONAL INSTRUMENT 43-101 TECHNICAL REPORT On the LOGAN PROPERTY, BAIE JAMES AREA, QUÉBEC, CANADA" dated April 12<sup>th</sup>, 2022, with an effective date of February 1<sup>st</sup>, 2022.
- g) I am independent of Dark Star Minerals Inc, or the optionors of the Property, Off-Piste Opportunities Inc., applying the tests in section 1.5 of National Instrument 43-101.
- h) I have no prior involvement with the Logan Property that is the subject of the Technical Report.
- i) I have read National Instrument 43-101, Form 43-101F1, and this technical report and this report has been prepared in compliance with the Instrument.

j) As of the effective date of this report, February, 1<sup>st</sup>, 2022, to the best of my knowledge, information and belief, the Technical Report contains all the scientific and technical information that is required to be disclosed to make the Technical Report not misleading.



Dated this 12<sup>th</sup> day of April, 2022. (original signed and sealed) "Mr. Luke van der Meer"

Luke van der Meer, BSc, P. Geo.