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. John Langton (the "Author"), fulfills the requirements of 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.

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 status and nature of mineralization on the Logan Property.

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 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.

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, and is centred at roughly 52°53.05N by 75°15.52W over 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 135 km west of the Property. Additional road access is available to the Eleonore Mine and its 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 triaxial-magnetic gradiometer survey over the Logan Property between September 17th and September 19th, 2021. The 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. The Property is in the easternmost domain of the FEGB, known as the Frotet-Troilus area, which has recently received increased exploration attention due to its increased regional economic development. The regional geophysical magnetic signature is consistent with the trend and pattern of the geophysical anomaly identified by the 2021 Axiom magnetic gradient survey on the Property, which are also consistent with geophysical survey results completed in 2007 and 2008. The regional geological mapping suggests favourable contacts between gabbro – norite lithologies and biotite migmatites; these contacts are coincident with partly mapped granitic pegmatites that 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. Five catalogued mineral showings occur along a generally ESE-WNW trending contact between gabbro – norite diabase to the north, and biotite migmatite paragneiss to the south. Mineralization is associated with granitic pegmatite dykes that trend between 290° and 325°, following the main foliation of the paragneiss, and dip shallowly to the north between 20° and 40°. During 2008, two-hundred and eighty (280) samples were collected from the Property area, 20 of which contained elevated Rare-Earth Element (REE) concentrations (Lalancette and Girard, 2008). Sample number 68790252 returned the highest concentrations of REE.

1.6 Conclusions and Recommendations

The Logan Property comprises an early-stage exploration project which merits further exploration.

The Property is underexplored with few recent reported surveys. Results of historic sampling are encouraging, and the distribution and extent of granitic pegmatite dykes should be studied. Systematic geochemical and mineralogical characterization should be undertaken across the Property to better define the continuity and tenor of potential mineralization underlying the Property. An initial field prospecting and systematic lithological characterization should be carried out, followed by comprehensive soil geochemistry surveys 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 underlying the Property. The two recommended exploration phases are summarized as follows:

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 field-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 potential mineral processing.
- A drill program (approximately 500 m) 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.

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. John Langton, P. Geo. to prepare an independent NI 43-101 Technical Report on the Logan Property, located in the Baie James Area, Québec.

Mr. Langton fulfills the requirements of 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.

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 population and local information for the Property area was obtained from Statistics Canada and *wikipedia.org*.

2.3 Site Visit

Mr. Langton visited the Logan Property on Aug 7, 2022, to evaluate the geological environment, assess the Property, and confirm the technical and geological information presented herein.

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.

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	Со
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
Lithium	Li
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	<u>C</u>
degrees Fahrenheit	F
Off-Piste Opportunities II Inc.	Off-Piste

Table 2-1: Abbreviations and Units of Measurement

phosphorus	Р
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	Те
thorium	Th
Total rare earth oxide	TREO
Logan Property	the Property
Logan REE Property	The Property or The Logan Property
titanium	Ti
total magnetic intensity	ТМІ
uranium	U
triuranium octoxide	U ₃ O ₈
Universal Transverse Mercator	UTM
west	W

3 RELIANCE ON OTHER EXPERTS

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

The QP has not independently researched the title or mineral rights for the Property and express no legal opinion as to the ownership status of the Property. For disclosure relating to these matters in Section 4, the QP has relied on information provided by Dark Star Minerals Inc in a document titled "Share Exchange Agreement" dated October 21st, 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 are essentially complete and correct to the best of their 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 at the effective date of this report, all claims are in good standing.

The work expenses associated with Axiom's 2021 Tri-Axial Magnetics Survey, exceed the minimum required assessment work expenditures for the Logan Property for the current claim term. This work will be filed prior to the claim expiry date in order to renew the claims and maintain them in good standing.

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

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

 Table 4-1: Logan Property Mineral Tenures

Dark Star Minerals Inc. Logan Property |Québec, Canada



Figure 4-2: Logan Property Claims Map

4.3 Mineral Rights in 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 Table 4-2 and Table 4-3, and payment of an administrative fee.

Administrative Fees for claims North of 52nd degree of latitude are: \$160 per claim greater than 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 52nd degree of latitude are: \$104 per claim greater than 100 ha; \$68.75 per claim between 25 and 100 ha; \$35.25 for claims less than 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 that are wholly within a 4.5 km radius of the centre 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.

Number of Terms	Area of Claim							
of the Claims	Under 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					

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

Source: MERN website (<u>www.mern.gouv.qc.ca</u>)

Number of Terms	Area of Claim						
of the Claim	Under 25 ha	25 to 100 ha	Over 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				

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

Source: MERN website (<u>www.mern.gouv.qc.ca</u>)

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 as at the effective 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.

As at the effective date of this technical report 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 (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 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. The Property is wholly underlain by Crown Land.

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 a mineral claim, in connection with 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 exploration 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

As 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 mineral exploration work.

5 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

5.1 Accessibility

The Logan Property is 340 km north of Chibougamau, Québec (Figure 5-1) and can be accessed by either helicopter or float plane from the airport in Chibougamau, which is serviced by commercial airlines. The nearest major road access to the Property is the all-season Trans-Taiga highway, that runs roughly east-west, about 65 km north of the Property. A power-line access road that leads south from the Lemoyne electrical substation on the Trans-Taiga highway passes some 22 km east of the Property. Highway 109, which connects Raddisson and Maniwaki, Québec, runs roughly north-south and is located 135 km west of the Property. The Eleonore Mine and airstrip, located approximately 60 km south of the Property, where project staging can occur, has road access to Highway 109.

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 (Table 5-1). The nearest active weather station to the Property is in Chapais, Québec, 45 west of Chibougamau.

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

Temperature	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year Total
Daily Average (°C)	-18.8	-16.2	-9.5	-0.3	8.1	14.1	16.4	15.0	9.7	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	-
Avg Precipitation (mm)	61.9	39.4	50.3	56.6	82.4	100.1	124.3	100.2	129.7	93.9	93.2	63.5	995.8
Avg Rainfall (mm)	3.2	2.4	8.8	28.7	75.5	100.1	124.3	100.2	128.6	70.9	36.7	5.0	684.5
Avg Snowfall (cm)	58.8	37.0	41.6	29.5	6.9	0.0	0.0	0.0	1.2	23.0	56.5	58.5	312.9

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 mineral exploration programs and limited local mining and mineral exploration personnel are available.

Grid power is available along provincial highway routes and within the surrounding communities. The closest powered infrastructure to the Property is the Eleonore Mine site, some 60 km west of the Property. Local onsite water sources are available 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 community of Nemiscau is approximately 150 km to the south-southwest, whereas the community of Sakami is located approximately 100 km to the north-northwest of the Property.

5.5 Physiography

The rugged topography is interrupted by lakes, ponds, and wetlands. Elevation ranges 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. An abundance of outcropping rock persists over the Property along numerous exposed ridges and topographical high points. The intervening areas are covered with shallow soils and localized areas of glacial till type deposits.



Figure 5-2: View facing Northeast at the location of the Upin 2 showing. Typical physiography at the Logan Property. (Source: Longford, 2022)

6 HISTORY

Research in the Logan Property area began in 1978, when Societe de Developpement de la Baie James carried out a regional stream sediment survey and collected 22 samples from the immediate vicinity of the Property. These samples returned 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). An airborne radiometry survey conducted in 1975, did not indicate any anomalies, although it is possible this could have been due to the influence of overburden (Marchand, 1978).

Following this research, activity on the Logan Property did not resume until 2008 when Dios Exploration Inc. ("Dios") and Resources Sirois executed a geological survey on their Upinor property. A total of 31 samples were collected for Uranium analysis. (Lalancette and Girard, 2008). 29 samples had been collected from this area, with scintillometer readings varying from 5,000 cps to 35,000 cps (Lalancette and Girard, 2008). Of these 29 samples from the Kawipapiskasi block, 9 had U308 grades greater than 0.1%, and an additional 9 showed grades between 0.05% to just below 0.1%. Additionally, as the Uranium-rich samples were also rich in Lead, it was inferred that the lead was of radiogenic origin. 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 and Girard, 2008)

In 2009, Dios and Resources Sirois expanded upon their Upinor project by conducting further geological surveys (St. Hilaire, 2009). In 2007 – 2008 Geo Data Solutions (GDS) on behalf of Dios, completed a high-resolution Airborne Magnetic and Gamma-ray Spectrometric ("AGS") survey on 3 blocks (West, North and South) located in the Baie James Area of Northern Quebec. Traverse lines were oriented North-West with a spacing of 100 metres, whereas 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 part of the current Logan Property. A total of 437 line-km was flown over the grid (Figure 6.1 and Figure 6.2).

Their investigation determined Potassium %, equivalent Uranium ppm, equivalent Thorium ppm, Total Count, uranium equivalent/thorium equivalent ratio (eqU/eqTh), potassium/thorium equivalent ratio (K/eqTh), shaded magnetic Total Field, and shaded magnetic first vertical derivative (St. Hilaire, 2009).

In 2009, Dios conducted geological mapping on their Upinor properties, including collection of 298 rock samples that were analyzed for Uranium and an additional 6 samples that were analyzed for gold and base metals. The results of the preliminary groundwork on the Upinor North block shows 66 surface samples in excess of 0.050% U3O8, of which 31 were in excess of 0.1% U3O8 (St. Hilaire, 2009). These occurrences are predominantly found on targets A1, A5, and A6 (St. Hilaire, 2009). The Upinor South block had less exploration work carried out compared to the Northern block. 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 et al., 2009).

Subsequent to the Dios explorations of 2008 – 2009 the claims were dropped. The claims were re-staked on the 19th of April 2021, and the 7th 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, P.	Societe de Development de la Baie James	Geological Survey	22 stream sediment samples	There were twenty-two (22) stream sediment samples collected in the immediate region the 12 elements analyzed). This is most likely a false anomaly caused by multiple con geochemistry of lake bottom sediments indicated no anomalies in the neighboring lakes does not indicate any anomalies, although this can be explained by							
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 (survey of lake bottom sediments of the SDBJ), there are many bedrock exposures. The lit and amphibolites. The noise scintillometric background of these lithologies oscillates bet sector. In the south-central part, a cross has been made at the north of a lake with anom: NAD27 478293/5868128, zone 18). This area is underlain by migmatites with a noise scir small area shows a scintillometer reading of 2,100 cps (highest observed value) (map 2 western part, north of a lake with a uranium content of 149 ppm (UTM coordinates NAD2 dykes was mapped. This network of sub-horizontal dykes (dip between 20° and 30°) is n the regional foliation observed in the paragneiss and have a thickness of 1-5 metres. Trapatite and molybdenite. The network of dykes was followed for two kilometres from ear to north. A total of 29 samples were taken in this area (5519730 to 5519742, 5519862 it sectors sampled show scintillometric readings at the outcrop varying between 5,000 and grades in U308 greater than 0.1% and nine others between 0.05% and 0.1% (Map 5). Sam It is likely that this lead is of radiogenic origin and that makes the secular balance of the othus belong to the primary mineralization, probably magmatic. We also notice the absen ratio greater than 5. We can also see on the survey partial spectrometry of uranium (figure the north. The hinge of the suspected fold southwest of the eastern sample Kapistusciskaw Block: Only one day was devoted to this block. A traverse was made sout (UTM coordinates NAD27 479082/5861410, zone 18). We find in this sector granitic rocc background noise oscillates between 100 and 200 cps. Locally, values of 3000 and 7000 and ble to be sampled. An only sample was taken at this location (5519729, 5400 cps outcrot taken from a pegmatite, rich in biotite (Content of 335 ppm (survey of SDBJ lake-bottom sediments) located at coordinates UT outcrop in this area. At the top of the hill, pegmatites hosted in parag							
2007- 2008	St-Hilaire, C.	GDS	Geophysical Survey	flight-line spacing: 100m (N-S); Control-line spacing: 1000m (E-W); Terrain clearance: 43.5m	Deliverables: Maps: Potassium %, equivalent Uranium ppm, equivalent Thorium ppm, Tot Shaded magnetic Total Field, Shaded magnetic First v							

n of the anomaly. With only one anomalous value (of atamination or by poor localization of sample.The s. The airborne radiometry survey conducted in 1975 y the presence of overburden.

465955/5851500, zone 18) with a 128 ppm uranium thologies observed in outcrop are paragneiss, granites tween 80 and 120 cps. No samples were taken in this alous uranium contents (239 ppm) (UTM coordinates ntillometric background between 100 and 150 cps. A). No samples were taken in this area. In the north-27 474474/5870542, zone 18), a network of pegmatite more or less oriented east-west. Dykes run parallel to he high-value sectors are rich in biotite with locally ast to west and repeats about 550 metres from south to 5519870 and 5519926 to 5519932) (map 3). The d 35,000 cps (map 4). Among these samples, 9 show nples enriched in uranium were also enriched in lead. chain of disintegration is not broken. Uranium would ice of rare earth element coenrichment and the U/Th re 2) that the samples were taken from what appears w kilometres to the east and a few hundred metres to ed area, is also open to new discoveries.

th of a small lake with a uranium content of 266 ppm cks with some pegmatitic sectors. The scintillometric cps were observed (Map 2) without, however, being op) but the uranium content is zero. The sample was e.

ocated on a hill to the south of a lake with a uranium M NAD27 464380/5853130 (zone 18). There is little observed. Paragneiss are dominant (70%) compared to and 200 cps. Some outcrops of amphibolite were also 861) but the uranium content was negligible. Some being sampled. The perimeter of a lake with a content AD27 465490/5851490, zone 18) was then visited. s. A local outcrop registered 1,330 cps but no sample

tal Count, Ratio et the eqU/eqTh, Ratio of the K/eqTh, /ertical derivitive.

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 Upinor North block shows 66 surface same excess of $0.1\% U_3O_8$. These occurrences are predominantly found on targets A1, A5, and work carried out compared to the Northern block, making it more difficult to evaluate. The values are isolated and non-continuous. The area with the highest radiometric anomalies the best Uranium value returned was 0.03
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mples in excess of 0.050% U_3O_8 , of which 31 were in A 6. The **Upinor South block** has had less exploration he best uranium values were located on target C2. The es were on target A3, and of the 10 samples collected D38%.

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 supracrustal rocks of the FEGB, which were formed between 2793 Ma and 2755 Ma (Pilote et al., 1997).

The FEGB was divided into four domains 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 greater economic potential. The FEGB comprises tholeiitic 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 rare-earth elements.
- Archean greenstone-related quartz carbonate gold.



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

Dark Star Minerals Inc. Logan Property |Québec, Canada



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 kilometres; whereas proximal intrusive rocks are predominantly tabular and are intercalated within the metatexite horizons.

Lineaments may be used as vectors to potentially locate pegmatite dykes.

7.4 Property Mineralization

The Property contains five catalogued mineralized showings (Ech. 68790236, Ech. 98790194, Upin 1, Upin 2 and Upin 3). These mineral showings are known for Thorium and 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 dykes that roughly follow the foliation of the paragneiss between 290° and 325° with a shallow to moderate dip to the north of 20° to 40°.

During a 2008 exploration program, 280 historic samples were collected, 20 of which contained elevated REE grades. Sample #68790252 returned the highest concentration of REE, with 116,654 ppm total REE+Th+U (Table 7.1, Figure 7.6 and Figure 7.7). 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 the sampled granitic pegmatite dykes (Lalancette and Girard, 2008).

Sampla	Light Rare-earth elements (ppm)					Total	Heavy Rare-earth elements (ppm)							Total Other REE (ppm)		Others (ppm)			
Sample	Ce	La	Nd	Pr	Sm	LREE	Dy	Er	Eu	Gd	Но	Tb	Yb	HREE	Y	Sc	Th	U	TOTAL REE
68790250	11800	6220	4460	1240	795	24515	289.0	123.0	11.4	615	50	78	39.0	1205.4	1200	64	5540	460	32984
68790251	50	22	16	5	3	96	2.3	1.8	0.3	3	BD	1	2.7	11.1	14	2	322	72	517
68790252	49800	23500	18000	9440	2600	103340	524.0	169.0	40.5	1470	62	150	83.4	2498.9	1620	195	8530	72	116256
68790253	4130	2240	1450	439	211	8470	44.6	24.4	4.0	116	9	13	9.3	220.3	163	27	797	85	9762
68790254	7	BD	1	1	1	10	3.9	3.6	-0.2	2	BD	2	3.1	14.4	21	2	1190	171	1408
68790255	60	19	17	4	4	104	3.9	3.3	0.4	4	1	4	8.2	24.8	34	16	227	114	520
68790256	68	33	26	7	5	139	3.6	1.9	0.2	4	1	BD	2.5	13.2	18	3	87	296	556
68790257	716	433	223	70	36	1478	11.4	5.8	1.7	24	2	2	3.1	50.0	53	17	417	57	2072
68790258	13800	7830	4520	1370	634	28154	134.0	75.2	16.2	348	28	38	23.5	662.9	423	52	2440	10	31742
68790259	493	269	178	48	31	1019	15.1	7.9	1.4	25	3	2	6.3	60.7	79	16	287	381	1843
68790260	1190	574	598	136	159	2657	153.0	89.2	5.9	180	30	31	76.4	565.5	1060	12	1240	185	5720
68790261	6	1	1	BD	BD	8	1.8	1.2	0.2	1	BD	BD	1.9	6.1	9	3	152	101	279
68790262	3200	1580	1200	335	243	6558	91.8	35.8	3.4	190	15	24	11.0	371.0	380	28	1470	61	8868
68790263	7	2	2	BD	BD	11	0.5	0.4	BD	BD	BD	BD	0.8	1.7	3	BD	12	55	83
68790264	6	3	4	1	1	15	2.3	1.4	0.4	1	BD	BD	1.5	6.6	10	1	108	228	369
68790265	5	2	2	BD	1	10	1.8	1.0	0.3	1	BD	BD	1.0	5.1	7	BD	47	100	169
68790266	43	25	18	5	3	94	2.3	1.1	0.5	2	BD	BD	1.2	7.1	12	2	90	306	511
68790267	49	28	20	6	3	106	2.9	1.5	0.6	3	BD	BD	1.6	9.6	15	2	100	375	608
BD = below	v detecti	on																	

Table 7-1: Selected REE, Th ad U Results from the Historic 2008 Field Program (Lalancette and Girard, 2008).

Dark Star Minerals Inc. Logan Property |Québec, Canada



Figure 7-4: Logan Property Geology and Catalogued Mineral Showings

Legend
Logan REE Outline
Lineament
Metallic deposit
Regional fold
Bedrock Geology
Amphibolite, locally of gabbroic and dioritic origin, partly migmatized
Diabase of gabbronoritic composition, oriented NW-SE
Biotite paragneiss migmatite, with or without garnet, orthopyroxene and cordierite
Tonalitic biotite gneiss, with or without hornblende and magnetite, foliated to banded
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 7-5: Legend of the Regional Geology Shown in Figure 7.4



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+Nd+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 metres to tens of metres 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 and typically distributed over a 10 to 20 km² 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 (H₂O, Li⁺, F⁻, BO₃³⁻, and PO₄³⁻) 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 thirdorder 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 ("Axiom") to fly a high-resolution helicopter-borne triaxial-magnetic gradiometer survey over the Logan Property from September 17th to September 19th, 2021.

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 magnetic survey data received from Axiom included the following 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 triaxial 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 basestation 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 lineament discontinuities 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



Logan Measured vertical gradient

Coordinate System: WGS 1984 UTM Zone 18N Projection: Transverse Mercator Datum: WGS 1984



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 over 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.

One sample was collected by the Author during the 2022 site visit. The sample was marked on site with flagging tape. Typical sample location data (Easting, Northing coordinate data) were collected, and geological observations were noted as per Section 12.1 below.

11.1 Sample Analysis

The rock sample analysis was carried out by Saskatchewan Research Council's Geoanalytical Laboratories ("SRC") in Saskatoon, Saskatchewan. SRC is I.S.O. 17025 Accredited in numerous analysis suites, including Base Metals in solid samples by ICP-OES. The analysis methods requested from the lab for the samples collected in the 2022 field exploration program are set out in Table 11.1 below:

Analytical	Description				
Methods					
ICP1 Aqua	Partial digestions are performed on an aliquot of sample for the analysis of the				
Regia Digestion	requested elements by ICP-OES (Inductively Coupled Plasma Optical Emission				
(ICP1-AR)	spectroscopy). An aliquot of pulp is digested in a test tube in a mixture of HNO3:				
	HCl, in a hot water bath and then diluted using deionized water. Elements analyzed				
	included: Ag, As, Bi, Co, Cu, Ge, Hg, Mo, Ni, Pb, Sb, Se, Te, U, V, Zn				
ICP1 Total	Total digestions are performed on an aliquot of sample pulp for the analysis of the				
Digestion	requested elements by ICP-OES Elements analyzed included: Ag, Al2O3, Ba, Be, Cd,				
(ICP1-TD)	CaO, Ce, Cr, Co, Cu, Dy, Er, Eu, Gd, Ga, Hf, Ho, Fe2O3, La, Pb, Li, MgO, MnO, Mo, Nd,				
	Ni, Nb, P2O5, K2O, Pr, Sm, Sc, Na2O, Sr, S, Ta, Tb, Th, Sn, TiO2, W, U, V, Yb, Y, Zn, Zr				

Table 11-1: Analytical Methods Requested from SRC

11.2 Adequacy of Procedures

The Author has reviewed surface sample collection procedures, sample preparation, security and analytical procedures and can verify that they conform to accepted industry standards.

12 DATA VERIFICATION

The Author has 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 and noted that no duplicate or QAQC was completed by historical operators.

The Author has reviewed the geophysical data from the magnetic gradiometer survey conducted by Axiom in 2021 and believe that the procedures and methods used by Axiom are consistent with industry standards and are suitable for the purposes intended. Additionally, the Author verified the data by looking for any spurious magnetic signatures, or anything that departed significantly from the coarse regional government magnetics. Generally, the magnetic signatures represented in the Axiom survey correspond well to the coarse regional government magnetics. The Author also compared the magnetics to the regional geology and previously interpreted large structural features in the area and found the gross features to reconcile well with the new, more detailed magnetic data provided by Axiom.

12.1 2022 Site Visit

Mr. Langton completed a one-day site visit to the property on Aug 7, 2022, accompanied by support staff from Longford Exploration Services. Access to the property was achieved by helicopter from Chibougamau, Quebec. During the site visit Mr. Langton examined the general landscape and surface features of the property. Special attention was paid to catalogued mineral occurrence Upin 2 where historic samples 68790250 to 68790254 (Tremblay et al., 2009) had returned noteworthy uranium and both light- and heavy-REE analytical values (see Figure 7-6, Figure 7-7 and Table 7-1).

Mr. Langton confirmed that the lithology of the Property is consistent with the available published geological maps of the area, and that the descriptions and observations recorded by earlier mappers in the historic work reports are accurate and reliable.

The location of Upin 2, one of the five catalogued mineral showings, was positively confirmed, as evidenced by the discovery of a flagged rock at the outcrop site (Figure 12-1 and Figure 12.2).

During the site visit Mr. Langton collected a single sample at this site for verification purposes (Table 12-1). The results of the sample collected from the Upin2 showing compare favourably with samples 68790251 and 68790254 results from the historic 2008 field program (Lalancette and Girard, 2008).

Sample ID		J353979		ICP4 AR	Мо	ppm	18	
Longitude (deg)		-75.2589806		ICP1 TD	Na2O	wt %	2.72	
Latitude (deg)		52.88469702		ICP1 TD	Nb	ppm	<1	
Sample Type		Rock Grab		ICP1 TD	Nd	ppm	8	
		Qtz+ F'sp+Biot		ICP1 TD	Ni	ppm	8	
Description	Description		+Hornblende		ICP4 AR	Ni	ppm	6
		Pegmatite		ICP1 TD	P2O5	wt %	0.01	
Analytical	Analyte	Unit	Concentration		ICP1 TD	Pb	ppm	95
Method	Symbol	Symbol			ICP4 AR	Pb	ppm	47
ICP1 TD	Ag	ppm	<0.2		ICP1 TD	Pr	ppm	1
ICP4 AR	Ag	ppm	<0.2		ICP1 TD	S	ppm	21
ICP1 TD	Al2O3	wt %	14.1		ICP4 AR	S	ppm	16
ICP4 AR	As	ppm	<1		ICP4 AR	Sb	ppm	<1
ICP1 TD	Ва	ppm	844		ICP1 TD	Sc	ppm	2
ICP1 TD	Ве	ppm	1.2		ICP4 AR	Se	ppm	1
ICP4 AR	Bi	ppm	1		ICP1 TD	Sm	ppm	1
ICP1 TD	CaO	wt %	0.62		ICP1 TD	Sn	ppm	1
ICP1 TD	Cd	ppm	<1		ICP1 TD	Sr	ppm	249
ICP1 TD	Ce	ppm	24		ICP1 TD	Та	ppm	<1
ICP1 TD	Со	ppm	1		ICP1 TD	Tb	ppm	<1
ICP4 AR	Со	ppm	1		ICP4 AR	Те	ppm	<1
ICP1 TD	Cr	ppm	141		ICP1 TD	Th	ppm	151
ICP1 TD	Cu	ppm	4		ICP1 TD	TiO2	wt %	0.06
ICP4 AR	Cu	ppm	1		ICP1 TD	U	ppm	63
ICP1 TD	Dy	ppm	1.7		ICP5 AR	U,	ppm	54
ICP1 TD	Er	ppm	0.5		ICP1 TD	V	ppm	11
ICP1 TD	Eu	ppm	0.6		ICP4 AR	V	ppm	9
ICP1 TD	Fe2O3	wt %	0.95		ICP1 TD	W	ppm	1
ICP1 TD	Ga	ppm	12		ICP1 TD	Y	ppm	8
ICP1 TD	Gd	ppm	1		ICP1 TD	Yb	ppm	1
ICP4 AR	Ge	ppm	<1		ICP1 TD	Zn	ppm	14
ICP1 TD	Hf	ppm	3		ICP4 AR	Zn	ppm	10
ICP4 AR	Hg	ppm	<1		ICP1 TD	Zr	ppm	188
ICP1 TD	Но	ppm	<1		REE TI		eo totals	
ICP1 TD	К2О	wt %	6.72		Others (Sc+Y)		ppm	10
ICP1 TD	La	ppm	11		Lights (Ce+La+Nd+Pr)		ppm	44
ICP1 TD	Li	ppm	7		Heavies (Sm+Eu+Gd+			
ICP1 TD	MgO	wt %	0.34		Tb+Dy+Ho+Er+Yb+Th+U)		ppm	217.3
ICP1 TD	MnO	wt %	0.01		REE		ppm	261.3
ICP1 TD	Мо	ppm	20		Total		ppm	271.3

Table 12-1: Details of Sample Collected at the Upin2 Showing on the Property.

Analysis of the sample collected during the Author's 2022 site visit was conducted by SRC, a wellrecognized and certified laboratory in Canada. The Author did not submit standards or duplicate samples; however, SRC maintains a rigorous internal (blind) QA/QC program throughout the sample preparation and analysis processes.



Figure 12-1: Flagged location at mineral showing Upin 2, Logan Property.

Figure 12-2: Pegmatitic coarse grained, massive, quartz + feldspar, sampled material for sample Upin2_JPL22 (Table 12-1).

It is the Author's opinion that the verification of the available historic analytical data is adequate for the purposes of this technical report, and it meets industry standards commonly accepted for this level of exploration.

The Property is at the early/prospecting stage. There were no limitations placed on the Author with respect to data verification or site visits, and no other data verification measures were completed. The results from the collected mineral samples will not be used to calculate mineral resource or mineral reserve estimates.

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

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.

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

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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.

25 INTERPRETATION AND CONCLUSIONS

The Logan Property comprises an early-stage exploration property of merit that 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 that can be used to target potential mineralization on the Property. Follow-up geochemical sampling is lacking and, therefore, drilling targets have not yet been established. 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. The Property 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 signature is consistent with the trend and pattern of the geophysical results 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 that have potential for REE mineralization and follow the disposition of the magnetic response anomalies.

Mineralization

- The Property is believed to have a favourable geological setting for Li-Cs-Ta Pegmatite style deposits.
- The five catalogued mineral showings occur along a contact with gabbro norite diabase to the north, and biotite migmatite paragneiss to the south. The contact is oriented approximately ESE-WNW. Mineralization is associated with granitic pegmatite dykes which follow along the foliation of the paragneiss between 290° and 325° with a dip to the north of 20° to 40°.
- During the 2008 season, 280 historic samples were collected, 20 of which contained elevated REE concentrations. Sample #68790252 returned the highest concentration of REE (see Table 7.1), with a TREO value of 13.96%.

Exploration

- The Property is underexplored with few recent results. REE grades of historic samples are encouraging, and the distribution and extent of granitic pegmatite dykes needs to be better understood.
- Systematic geochemical and mineralogical characterization should be carried out 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 completed in combination with a comprehensive soil geochemistry survey across any potentially mineralized areas.

Mineral Tenure

• Mineral tenure appears to be in good standing. The Property 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, geological and structural mapping, including an intensive outcrop sampling program described in Table 26.1.

	Description	No	Amount
1	All in cost of soil sampling and field exploration program, Mob-Demob, Accommodation, Lodging. Personnel: 4 crew for 21 days	21 Days	\$80,000
2	All in laboratory costs	670 Samples	\$30,000
Phase 1 Total		\$110,000	
3	All-in metallurgical test work costs + reporting	1	\$20,000
4	Additional Ground based Geophysics and Geology, similar to investigations in Phase 1	1	\$110,000
5	All in cost for drilling, pad building, mob-demob, geologist, and helicopter assistance is \$1,000 CAD per metre	500 metres	\$500,000
Phase 2 Total		\$630,000	
Grand Total			\$740,000

Table 26-1: Proposed Phase 1 and 2 Budget for Exploration at the Logan Property.

Phase 1:

- Conduct a geochemical sampling program on a 100 m x 100 m grid (Figure 26-1). 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 500 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 that 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), a detailed breakdown for Phase 1 costs is provided in Table 26.2.

Logan 2022 Exploration				
Personnel		Days	Rate	Line Total
Geologist	ТВА	21	\$ 800.00	\$ 16,800.00
Junior Geologist	ТВА	21	\$ 650.00	\$ 13,650.00
Field Assistant	TBA	21	\$ 400.00	\$ 8,400.00
Field Assistant	ТВА	21	\$ 400.00	\$ 8,400.00
	Total Field Man Days	84		\$ -
Crew Mobilization	Three Days (Flights and Driving)	12	\$ 562.50	\$ 6,750.00
	Total Man Days:	96	Cat. Tota	l \$ 54,000.00
Food and Lodging		Units	Rate	Line Total
Food and Groceries	Per diem	96	\$ 75.00	\$ 7,200.00
Lodging	Hotel (off site staging and mobilization)	12	\$ 120.00	\$ 1,440.00
	4 Person Fly camp including 4 pup tents, wall	24	÷ 500.00	40.500.00
Camp 4 person	tent, kitchen, safety gear	21	\$ 500.00	\$ 10,500.00
			Cat. Tota	l \$ 19,140.00
Transportation		Units/Days	Unit Price	Line Total
Float Plane	ex Chibougamau return	2	\$ 2,500.00	\$ 5,000.00
Fuel (incl Mob)	per km for truck (to/from Eleonore Mine)	3000	\$ 0.65	\$ 1,950.00
· · ·			Cat. Tota	6,950.00
Equipment Rentals	entals Units Unit Price		Line Total	
Electronics Kit	Radio, Sat phone, GPS, per person per diem	21	\$ 20.00	\$ 420.00
Hand Tools	Hammers, shovels, axes, soil augers	21.5	\$ 20.00	\$ 430.00
Rock Saw and PPE	Rock Saw and Saftey Gear	21	\$ 75.00	\$ 1,575.00
Chain saw and PPE	Cainsaw and Saftey gear (Heli Access)	21	\$ 25.00	\$ 525.00
			Cat. Tota	1 \$ 2,950.00
Consumable		Units	Unit Price	Line Total
Field / Office Consumables		21	\$ 35.00	\$ 735.00
· · · · · · · · · · · · · · · · · · ·			Cat. Tota	1 \$ 735.00
Analytical		Units	Unit Price	Line Total
Analysis - Rock	PRP70-250, MA200, GC820 overlimit ~30%	150	\$ 45.00	\$ 6,750.00
Analysis - Soil - Phase 1	SS80, AQ250 + QAQC	375	\$ 25.00	\$ 9,375.00
Analysis - Soil - Selected infill	SS80, AQ250 + QAQC	144	\$ 25.00	\$ 3,600.00
Meturalugical Sample	TBA (Allownace)	1	\$ 2,500.00	\$ 2,500.00
Sample Shipping		1	\$ 1,000.00	\$ 1,000.00
			Cat. Tota	1 \$ 23,225.00
Mobilization		Units	Unit Price	Line Total
Flights	4 x YVR to YXY	4	\$ 750.00	\$ 3,000.00
			Cat. Tota	I \$ 3,000.00
•		Estima	ated Subtota	l \$ 110,000.00

Table 26-2: Detailed Exploration Budget for Phase 1 explorations at the Logan Property.

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 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 help better understand controls and limitations of future mineral processing.
- A drill program (approximately 500 m) 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).

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

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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 August 15th, 2022 (Release Date of August 15th, 2022) was prepared by the following author:

Dated this 2nd day of October 2022

<u>"John Langton (M.Sc., P. Geo.)"</u> Consulting Geologist

CERTIFICATE OF QUALIFIED PERSON

John Langton, M.Sc., P.Geo.

I, John Langton do hereby certify that:

- a) This Certificate applies to "NATIONAL INSTRUMENT 43-101 TECHNICAL REPORT on the LOGAN PROPERTY, BAIE JAMES AREA, QUÉBEC, CANADA" dated August 15th, 2022, with an effective date of August 15th, 2022;
- b) I graduated from the University of New Brunswick in 1985 with a B.Sc. in Geology and from Queen's University, Kingston in 1993 with a M.Sc. in Geology, and I have practised my profession continuously since that time;
- c) I currently reside in New Brunswick and I am a Professional Geologist currently licensed by the Ordre des géologues du Québec (License 1231); the Association of Professional Engineers and Geoscientists of New Brunswick (Licence M5467); and a Temporary Member of the Association of Professional Geoscientists of Ontario (Licence 1716);
- d) I am the owner JPL GeoServices, a geological consulting firm based in Stanley, New Brunswick, Canada;
- e) I have read the definition of "qualified person" (QP) set out in National Instrument (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 QP for the purposes of NI 43-101;
- f) I have worked as an exploration and field geologist since 1985. I have knowledge and experience with regard to various mineral deposit types, and with the preparation of reports relating to them;
- g) I have been retained by Dark Star Minerals Inc., a body corporate having a registered office at 850 Kinsac Street, Coquitlam, BC, V3J 4T7, as a contract/consulting geologist, and not as an employee;
- h) I am "independent" of Dark Star Minerals Inc., and of the optionors of the Property, Off Piste Opportunities Inc., with respect to the conditions described in Item 1.5 of NI 43-101, and have had no prior involvement with the Property that is the subject of the Report;
- I have prepared and take responsibility for all Items of this Report entitled "NATIONAL INSTRUMENT 43-101 TECHNICAL REPORT on the LOGAN PROPERTY, BAIE JAMES AREA, QUÉBEC, CANADA", dated August 15th, 2022, with an effective date of August 15th, 2022;
- j) I visited the Property on August 7th, 2022;
- k) I have no personal knowledge, as at the date of this certificate, of any material fact or change, which is not reflected in the Report;
- I) I have read NI 43-101 and Form 43-101F1 and have prepared the technical report in compliance with them and in conformity with generally accepted Canadian mining industry practice.

Dark Star Minerals Inc. Logan Property |Québec, Canada

m) As at the date of the certificate, to the best of my knowledge, information and belief, this report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

GUE/GEO JOHN P. * LANGTON # 1231

DATED this 2nd Day of October 2022/EBEC (original signed and sealed) "Mr. John Langton"

John Langton (M.Sc., P. Geo.)