

TECHNICAL REPORT ON THE Black Dog Lake Property QUEBEC, CANADA

Prepared for Valorem Resources Inc. Report for NI 43-101

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Abbreviation	Definition	Abbreviation	Definition
u	micron	L	liter
°C	degrees Celsius	L/s	litres per second
°F	degree Fahrenheit	LREE	light rare earth elements
μg	microgram	LREO	light rare earth oxides
Α	ampere	m	metre
а	annum	Μ	mega (million)
bbl	barrels	m ²	square metre
Btu	British thermal units	m ³	cubic metre
C\$	Canadian dollars	Ма	million years
cal	calorie	MASL	metres above sea level
cfm	cubic feet per minute	min	minute
cm	centimetre	mm	millimetre
cm ²	square centimetre	mph	miles per hour
cps	counts per second	MVA	megavolt-amperes
d	day	MW	megawatt
dia.	diameter	MWh	megawatt-hour
dmt	dry metric tonne	m³/h	cubic metres per hour
dwt	dead-weight ton	opt, oz/st	ounce per short ton
ft	foot	OZ	Troy ounce (31.1035g)
ft/s	foot per second	oz/dmt	ounce per dry metric tonne
ft²	square foot	pop.	population
ft ³	cubic foot	ppb	part per billion
g	gram	ppm	part per million
G	giga (billion)	QA	quality assurance
Gal	Imperial gallon	QC	quality control
g/L	gram per litre	REE	rare earth elements
g/t	gram per tonne	RL	relative elevation
gpm	Imperial gallons per minute	S	second
gr/ft ³	grain per cubic foot	st	short ton
gr/m ³	grain per cubic metre	stpa	short ton per year
hr	hour	stpd	short ton per day
ha	hectare	t	metric tonne
hp	horsepower	Th equiv.	equivalent; gamma counts of
HREE	heavy rare earth elements		Tl ²⁰⁸
HREO	heavy rare earth oxides	tpa	metric tonne per year
in	inch	tpd	metric tonne per day
in ²	square inch	TREO	total rare earth element
J	joule		oxides
k	kilo (thousand)	tpa	metric tonne per year
kcal	kilocalorie	tpd	metric tonne per day
kg	kilogram	US\$	United States dollar
km	kilometre	USg	United States gallon
km/h	kilometre per hour	USgpm	US gallon per minute
km ²	square kilometre	V	volt
кРа	kilopascal	W .	watt
KVA	kilovolt-amperes	wmt	wet metric tonne
KW	kilowatt	yd ³	cubic yard
kWh	kilowatt-hour	yr	year



1 SUMMARY

Valorem Resources Inc. ("Valorem" or the "Company") has retained Mr. Darren L. Smith, M.Sc., P.Geo., and Mr. Louis Caron, P.Geo., (collectively, the "Authors") of Dahrouge Geological Consulting Ltd., to prepare an independent Technical Report on the Black Dog Lake Property (the "Property" or "Project"), located in the James Bay Region of Quebec, Canada.

This report was commissioned by the Company to comply with regulatory disclosure and reporting requirements outlined in Canadian National Instrument 43-101 ("NI 43-101"), companion policy NI 43-101CP, and Form 43-101F. The purpose of this report is to summarize and review the historical exploration, including diamond drilling, on the Property and to provide an assessment of the mineral exploration potential.

1.1 PROPERTY DESCRIPTION

The Black Dog Lake Property is located in the James Bay Region of Quebec, approximately 150 km east the town of Eastmain, and approximately 60 km north of the town of Nemiscau. The Property is comprised of 25 contiguous mineral claims that cover an area of approximately 1,319.4 ha and are within NTS map sheet 33C01. The centre of the Property is situated at approximately 413800 m Easting and 5786000 m Northing, UTM NAD83 Zone 18.

The area topography is comprised of forested, gently rolling hills typical of the James Bay Region. The Property may be accessed by road from the all-season gravel Muskeg-Eastmain-1 Road, which runs approximately eastwest to the south of the claim group, coming within 300 metres of the Property border. The Muskeg-Eastmain-1 Road connects with the regional provincial road network, with Nemiscau the nearest town. The Eastmain-1-Sarcelle 315 kV power line runs along the Muskeg-Eastmain-1 Road, coming within a kilometer of the Property.

1.2 MINERAL TENURE

On August 6th, 2020, JDF Explorations Inc. (a company subsequently renamed Valorem Resources Inc.) entered into an Option Agreement (the "Agreement") with Mr. Fayz Yacoub and Mr. Ramy Yacoub (the "Vendors"), whereby the Company will have an exclusive option to acquire an undivided 100% interest in the Black Dog Lake Property (19 claims) in consideration of \$195,000 in cash payments, 2,750,000 common shares, and \$750,000 in work exploration expenditures over a three-year period. Subsequent to the original Agreement, an additional six (6) claims were added to the Property, at the cost of staking, and fall under the same terms and conditions as the original Agreement. All 25 claims that currently comprise the Property – and the Option Agreement – are currently registered in the name of Fayz Yacoub, as the sole title holder.

1.3 GEOLOGY AND MINERALIZATION

The Black Dog Lake Property is located within the Middle and Lower Eastmain Greenstone Belt (the "Eastmain Greenstone Belt"), which is part of the La Grande Subprovince. The Eastmain Greenstone Belt is an extensive Archean volcano-sedimentary sequence trending east-west over a significant lateral distance (300 km), ranging



from approximately 10 to 70 km in width, through the James Bay Region of Quebec. The sequence is derived from volcanic activity in an oceanic setting (volcanic arcs, ridges, platforms) and was later cut by calc-alkaline intrusions. The rocks dip steeply, are tightly folded, and range in metamorphic grade from greenschist to amphibolite facies.

The Property primarily overlies the Anatacau-Pivert Formation of the Eastmain Greenstone Belt. The formation represents the third volcanic cycle of the belt's formation and is composed of metabasalts, andesites (amphibolitized), rhyolites, and tuffs, which are overlain by sedimentary derived rocks (mudslate, siltslate, conglomerate). A gabbro unit is also present in the north central area of the Property.

The intercalated sequence of volcanics (mafic to felsic), pyroclastic, and sediments that comprise the Property are also intermingled with concordant and parallel bands of silicate and sulphide iron formation, the latter of which has been found to be auriferous at some locations (i.e., Black Dog Zone).

The Black Dog Zone is described as an auriferous (i.e., gold-bearing) horizon of "*silicified and carbonatized sulphide facies iron formation.*" The zone is sheared, banded, and locally brecciated with up to 30% pyrrhotite, 5% pyrite, and trace chalcopyrite, and magnesium rich carbonate present as veinlets and disseminations. The zone is hosted in a sequence of felsic and mafic volcanics and banded felsic to mafic tuffs. The gold mineralization from the iron formation is also accompanied by anomalous levels of zinc and copper. The best drill result is reported by Eastmain Resources Inc. from their 1988 drill program with 15.2 g/t Au, 22.3 g/t Ag, 0.10% Cu, and 0.52% Zn over 0.6 m (LH-88-01) (Shelp, 1989 - GM49584). The mineralization is further described as conductive, magnetic, and stratabound.

1.4 EXPLORATION

Field exploration completed by the Company has been focused on the Black Dog Lake Showing and includes surface rock sampling (10 samples) completed by On Track Exploration Ltd, and a ground OreVision® IP - Resistivity survey as well as a ground magnetic survey, carried out by Abitibi Geophysics in fall 2021. Historical exploration of the Property is summarized in ITEM 6: History.

1.5 DEVELOPMENT AND OPERATIONS

No infrastructure is present on the Property and no mineral resources or reserves have been defined. The Property has not been the subject of any mining operations.

1.6 CONCLUSIONS AND RECOMMENDATIONS

The Black Dog Lake Property is an early-stage exploration project, which has been the subject of several exploration campaigns by multiple companies since the 1970s. Appreciable gold mineralization has been confirmed to be present on the Property within a sulphide-facies banded iron formation (the "Black Dog Zone") and represents the primary exploration target on the Property.



The mineralization at the Black Dog Zone has a current interpreted length of least 600 m and extends at least 100 m down-dip, is steeply dipping, and has an apparent thickness of 0.6 to 3.6 m. The zone remains open along strike and at depth and has been tested at wide drill spacings. Significant grades of drill core intercepts (15.2 g/t Au over 0.6 m (in LH-88-01); 5.6 g/t Au over 1.1 m (in LH-88-02); and 4.3 g/t Au over 0.88 m (in LH-88-03)), indicate a favourable environment for mineralization, and therefore, the potential to extend to other areas of the Property. The zone is coincident with local EM conductors, magnetic trends, and anomalous gold in surface samples, which collectively indicate that additional strike potential is present.

Based on the favourable geological setting and gold mineralized occurrences present at surface and in drill holes, most notably the Black Dog Zone, the Black Dog Lake Property is of sufficient geological merit to warrant further mineral exploration. A total of five (5) target areas of interest have been identified based on exploration to date; Black Dog, LK, BDLE, NWI, and GAB.

The following two (2) phase exploration program is proposed. The first phase (Phase 1) is recommended to be comprised of an initial data compilation (& digitization), followed by surface exploration including trenching, prospecting, and mapping, and potentially ground geophysics. The second phase (Phase II) is recommended to focus on diamond drilling of 15 holes for approximately 2,500 m over the Property with at least half focused on delineation of the Black Dog Zone. Phase I has a total estimated budget of \$275,000 and Phase II a total estimated budget of \$1,170,400 for a combined total Phase I+II budget of \$1,445,400. The full scope of Phase II is dependent on the results of Phase I.



2 INTRODUCTION

Valorem Resources Inc. ("Valorem" or the "Company") has retained Mr. Darren L. Smith, M.Sc., P.Geo., and Mr. Louis Caron, P.Geo., (collectively, the "Authors") of Dahrouge Geological Consulting Ltd., to prepare an independent Technical Report on the Black Dog Lake Property (the "Property" or "Project"), located in the James Bay Region of Quebec, Canada.

This report was commissioned by the Company to comply with regulatory disclosure and reporting requirements outlined in Canadian National Instrument 43-101 ("NI 43-101"), companion policy NI 43-101CP, and Form 43-101F. The purpose of this report is to summarize and review the historical exploration, including diamond drilling, on the Property and to provide an assessment of the mineral exploration potential.

Information, conclusions, and recommendations contained in this report are based on a review of data available in the public domain as well as personal communications with the Company's independent geological consultant, Mr. Harrison Cookenboo, Ph.D., P.Geo. Details are provided in ITEM 27: References.

The Qualified Person responsible for ITEMS 1 through 6, 9 through 11, and 13 through 26 of this report is Darren L. Smith, M.Sc., P.Geo., a geological consultant, independent of the Company, employed by Dahrouge Geological Consulting Ltd., an entity that is independent from the Company. Mr. Smith has more than 15 years experience in the mineral exploration industry covering various commodities and deposit models, including base and precious metals in the James Bay Region.

The Qualified Person responsible for ITEMS 7, 8, and 12 of this report is Mr. Louis Caron, P.Geo., a geological consultant, independent of the Company, employed by Dahrouge Geological Consulting Ltd., an entity that is independent from the Company. Mr. Caron has more than 40 years experience in the mineral exploration industry covering various commodities and deposit models, including base and precious metals in the James Bay Region.

A site visit was completed to the Property by Mr. Louis Caron on Sept 15th, 2021. The main Black Dog Lake Showing was accessed by foot from approximately KM-68 on Muskeg Road, northeast of Nemiscau. A total of 3 samples were collected. The Property site visit is described in more detail in ITEM 12: Data Verification.



3 RELIANCE ON OTHER EXPERTS

This report has been prepared by the Authors for Valorem Resources Inc. The information, conclusions, opinions, and interpretations contained herein are based on assumptions, conditions, and qualifications as set forth in this report.

The Authors have no reason to believe that the information used in the preparation of this report is false or purposefully misleading and have relied on the accuracy and integrity of the data referenced in ITEM 27 of this report.

For the purpose of this report, specifically ITEM 4.2 Mineral Tenure, the Authors have relied upon registered title information available on the Quebec Ministère de l'Énergie et des Ressources Naturelles (MERN) website known as GESTIM. This information was last accessed on October 30th, 2021. The Authors have also reviewed the Property agreement between JDF Explorations Inc. (a company subsequently renamed Valorem Resources Inc.) and the vendors, Mr. Fayz Yacoub and Mr. Ramy Yacoub. The Authors have not further researched Property title or mineral rights and expresses no opinion as to the legal ownership status of the Property.

Except for the purposes legislated under provincial securities laws, any use of this report by any third party is at that party's sole risk.

As of the effective date of this report, the Authors are not aware of any material fact or material change with respect to the subject matter of this report that is not presented herein, or which the omission to disclose could make this report misleading.



4 **PROPERTY DESCRIPTION AND LOCATION**

4.1 LOCATION

The Black Dog Lake Property is located in the James Bay Region of Quebec, approximately 150 km east the town of Eastmain, and approximately 60 km north of the town of Nemiscau (also referred to as 'Nemaska'). The Property is comprised of 25 contiguous mineral claims that cover an area of approximately 1,319.4 ha and are within NTS map sheet 33C01. The centre of the Property is situated at approximately 413800 m Easting and 5786000 m Northing, UTM NAD83 Zone 18.

The Property is situated on Category III Land within Eeyou Istchee Cree Territory (Cree Nation of Eastmain), as defined under the James Bay and Northern Quebec Agreement (JBNQA).

A Property Map and Claim Map are presented in Figure 1 and Figure 2.

4.2 MINERAL TENURE

The Black Dog Lake Property consists of 25 map designated claims (CDC), totalling 1,319.4 ha, which are registered under and subject to, the Mining Act of the Province of Quebec. Full claim details can be found on the GESTIM website (<u>https://gestim.mines.gouv.qc.ca/</u>) and is the source of tenure information used in this report. The GESTIM database was accessed by Darren L. Smith on October 30th, 2021, and information obtained with respect to the claims that comprise the Property is listed Table 1.

	Property	NTS	Title Type	Title No.	Area (ha)	Registration Date	Expiry Date	Title Holder	Excess Credit	Work Required	Renewal Fee
1	Black Dog Lake	33C01	CDC	2480177	52.79	22-Feb-2017	21-Feb- 2024	Fayz Yacoub	\$110	\$900	\$156
2	Black Dog Lake	33C01	CDC	2480178	52.78	22-Feb-2017	21-Feb- 2024	Fayz Yacoub	\$650	\$900	\$156
3	Black Dog Lake	33C01	CDC	2485077	52.78	21-Mar-2017	20-Mar- 2024	Fayz Yacoub	\$245	\$900	\$156
4	Black Dog Lake	33C01	CDC	2485078	52.78	21-Mar-2017	20-Mar- 2024	Fayz Yacoub	\$110	\$900	\$156
5	Black Dog Lake	33C01	CDC	2485079	52.78	21-Mar-2017	20-Mar- 2024	Fayz Yacoub	\$650	\$900	\$156
6	Black Dog Lake	33C01	CDC	2488485	52.79	12-Apr-2017	11-Apr- 2024	Fayz Yacoub	\$650	\$900	\$156
7	Black Dog Lake	33C01	CDC	2488486	52.79	12-Apr-2017	11-Apr- 2024	Fayz Yacoub	\$650	\$900	\$156
8	Black Dog Lake	33C01	CDC	2535533	52.78	2-Apr-2019	1-Apr- 2024	Fayz Yacoub	\$0	\$450	\$156
9	Black Dog Lake	33C01	CDC	2535534	52.78	2-Apr-2019	1-Apr- 2024	Fayz Yacoub	\$0	\$450	\$156
10	Black Dog Lake	33C01	CDC	2535535	52.78	2-Apr-2019	1-Apr- 2024	Fayz Yacoub	\$0	\$450	\$156
11	Black Dog Lake	33C01	CDC	2535536	52.78	2-Apr-2019	1-Apr- 2024	Fayz Yacoub	\$0	\$450	\$156
12	Black Dog Lake	33C01	CDC	2535537	52.79	2-Apr-2019	1-Apr- 2022	Fayz Yacoub	\$0	\$135	\$156
13	Black Dog Lake	33C01	CDC	2536583	52.78	23-Apr-2019	22-Apr- 2024	Fayz Yacoub	\$0	\$450	\$156
14	Black Dog Lake	33C01	CDC	2572839	52.77	17-Jul-2020	16-Jul- 2024	Fayz Yacoub	\$0	\$450	\$156

Table 1: Claim Details for the Black Dog Lake Property



15	Black Dog Lake	33C01	CDC	2572840	52.77	17-Jul-2020	16-Jul- 2024	Fayz Yacoub	\$0	\$450	\$156
16	Black Dog Lake	33C01	CDC	2572841	52.77	17-Jul-2020	16-Jul- 2024	Fayz Yacoub	\$0	\$450	\$156
17	Black Dog Lake	33C01	CDC	2575718	52.77	5-Aug-2020	4-Aug- 2022	Fayz Yacoub	\$0	\$135	\$156
18	Black Dog Lake	33C01	CDC	2575719	52.77	5-Aug-2020	4-Aug- 2024	Fayz Yacoub	\$0	\$450	\$156
19	Black Dog Lake	33C01	CDC	2575720	52.77	5-Aug-2020	4-Aug- 2024	Fayz Yacoub	\$0	\$450	\$156
20	Black Dog Lake	33C01	CDC	2615530	52.79	26-Jul-2021	25-Jul- 2025	Fayz Yacoub	\$0	\$450	\$156
21	Black Dog Lake	33C01	CDC	2622013	52.77	21-0ct-2021	20-0ct- 2023	Fayz Yacoub	\$0	\$135	\$156
22	Black Dog Lake	33C01	CDC	2622014	52.77	21-0ct-2021	20-0ct- 2023	Fayz Yacoub	\$0	\$135	\$156
23	Black Dog Lake	33C01	CDC	2622015	52.77	21-0ct-2021	20-0ct- 2023	Fayz Yacoub	\$0	\$135	\$156
24	Black Dog Lake	33C01	CDC	2622016	52.77	21-0ct-2021	20-Oct- 2023	Fayz Yacoub	\$0	\$135	\$156
25	Black Dog Lake	33C01	CDC	2622017	52.77	21-0ct-2021	20-0ct- 2023	Fayz Yacoub	\$0	\$135	\$156
			Total	24	1,319.4				\$3,063	\$12,195	\$3,900

GESTIM Download Date: 2021-10-30

On August 6th, 2020, JDF Explorations Inc. (a company subsequently renamed Valorem Resources Inc.) entered into an Option Agreement (the "Agreement") with Mr. Fayz Yacoub and Mr. Ramy Yacoub (the "Vendors"), whereby the Company will have an exclusive option to acquire an undivided 100% interest in the Black Dog Lake Property by satisfying the following terms and conditions:

- 1. Issue \$195,000 in cash payments as follows:
 - a. \$35,000 within five business days of the Effective Date (August 6th, 2020)
 - b. \$45,000 upon the first anniversary of the Effective Date
 - c. \$55,000 on or before the second anniversary of the Effective Date
 - d. \$60,000 on or before the third anniversary of the Effective Date
- 2. Issue 2,750,000 common shares of the Company as follows:
 - a. 500,000 shares upon execution of the Agreement (the "Effective Date")
 - b. 500,000 shares on or before the first anniversary of the Effective Date
 - c. 750,000 shares on or before the second anniversary of the Effective Date
 - d. 1,000,000 shares on or before the third anniversary of the Effective Date
- 3. Incur \$750,000 in expenditures on the Property
 - a. \$50,000 on or before the first anniversary of the Effective Date
 - b. \$200,000 on or before the second anniversary of the Effective Date



c. \$500,000 on or before the third anniversary of the Effective Date

In addition, the Company agrees to issue a one-time payment of 1,000,000 common shares ".... on the declaration of proven reserve supported by a technical 43/101 reserve calculation report that the Optionee [Valorem Resources] deems economically feasible to continue developing the property."

The Vendors will retain a 2.0% Net Smelter Royalty (NSR) on all metals, of which half (1.0% NSR) may be purchased by the Company for \$1,000,000. The Agreement further includes a 2-km area of interest clause and a requirement by the Company to keep the Property in good standing for the duration of the Agreement.

Fayz Yacoub is the sole registered title holder for the claims that comprise the Property. However, with respect to the Agreement, Fayz Yacoub is allocated 90% of the compensation and Ramy Yacoub the remaining 10%.

Subsequent to the original Agreement, an additional six (6) claims were added to the Property, at the cost of staking, and fall under the same terms and conditions as the original Agreement. All 25 claims that currently comprise the Property – and the Option Agreement – are currently registered in the name of Fayz Yacoub, as the sole title holder.

According to Quebec's Mining Act, to maintain the claim after the anniversary date the following is required: (i) A renewal application must be submitted at a minimum 60 days prior to the anniversary date. (ii) Payment of applicable renewal fees must be submitted at a minimum 60 days prior to the anniversary date, or subject to double the fees if submitted after 60 days. (iii) A work declaration form followed by an assessment report must be submitted 60 days prior to the anniversary date, or subject to late fees. If sufficient work is not completed on the claim(s) prior to the anniversary date, the claim holder may pay an amount equal to double the required work expenditure that is deficient.

Minerals claims in Quebec may be split into two categories based on their location, those north of the 52nd parallel and those south of 52nd parallel, with the category determining the fee and work-expenditure requirement framework the claim will be subject to. The claims which comprise the Property are situated north of the 52nd parallel (Figure 1).

A minimum work expenditure per claim must be satisfied each term for the claim renewal to be completed for that term. The minimum work expenditure required to maintain a mineral claim increases as the term increases and is presented in Table 2. Excess work expenditures (i.e., expenditure credit) may be used to satisfy work period expenditures, up to the amount necessary for renewal, for claims within a 4.5 km radius. Renewal fees, akin to rental fees, must be paid independently of work expenditures, and thus, cannot be satisfied with excess work expenditure credits. Renewal fees are due each term (2 years), with the fee doubling if not paid prior to the 60th day preceding the expiry date of the claim.

Table 2: Minimum Work Requirements in Quebec (North of 52nd degree of latitude)



	Area of Claim								
Term	Less than 25 ha	25 - 45 ha	Over 45 ha						
1	\$48	\$120	\$135						
2	\$160	\$400	\$450						
3	\$320	\$800	\$900						
4	\$480	\$1,200	\$1,350						
5	\$640	\$1,600	\$1,800						
6	\$750	\$1,800	\$1,800						
7 and over	\$1,000	\$2,500	\$2,500						

The Authors makes no further assertion with regard to the legal status of the Property. The Property has not been legally surveyed to date and, to the Authors' knowledge, no requirement to do so exists.

As of the date of this report, all 25 claims that comprise the Black Dog Lake Property are in good standing and have expiry dates of April 1st, 2022 (1 claims), February 21st, 2024 (2 claims), March 20th, 2024 (3 claims), April 1st, 2024 (4 claims), April 11th, 2024 (2 claims), April 22nd, 2024 (1 claim), July 16th, 2024 (3 claims), August 4th, 2022 (1 claims), August 4th, 2024 (2 claims), October 20th, 2023 (5 claims), and July 25th, 2025 (1 claim). The collective work expenditure requirements for the current term of the Property are \$12,195 and the renewal fees \$3,900 (\$156 per claim). There is an excess expenditure credit of \$3,063, attributed to seven (7) claims, that may be used to satisfy the current term's required work expenditures for the majority of, if not all the Property claims, based on claim proximity within a 4.5 km radius.





Figure 1: Property location





Figure 2: Property claims



4.3 Environmental Liabilities

There are no environmental liabilities associated with the Property to the knowledge of the Authors.

4.4 **PERMITS AND AUTHORIZATIONS**

The provincial ministries from which permits, and authorizations are issued for normal exploration activities are the Ministère de l'Environnement et de la Lutte contre les changements climatiques (MELCC), Ministère des Forêts, de la Faune et des Parcs (MFFP), and the Ministère de l'Énergie et des Ressources naturelles (MERN). Normal exploration activities such as prospecting, rock sampling, channel sampling, and soil sampling do not require specific authorizations from the ministries to be carried out as they are effectively granted when the claim is acquired. Permission for activities such as ground geophysical surveys (if line-cutting is required), trenching, and drilling may take several weeks to acquire from the MFFP due to deforestation typically required. Activities such as drilling being completed over lake ice or in wetlands will require a Certification of Authorization from the MELCC which is typically a 3-month process. Authorizations from the various ministries are also required for construction of temporary or permanent camps.

In addition to the provincial ministries, a formal notification is required to be submitted to the local municipality and landowner at least 30 days prior to the commencement of exploration activities. A courtesy notification should also be submitted to the local Cree Nation and Tally-Person(s) to ensure they are informed of pending activities and presented with the appropriate contact information.

The Black Dog Lake Property is situated on Category III Land within Eeyou Istchee Cree Territory (Cree Nation of Eastmain), as defined under the James Bay and Northern Quebec Agreement (JBNQA). The Eeyou Istchee James Bay Regional Government (EIJBRG) is the designed municipality for the region including the Property. In addition, for certain activities such as camp construction, a permit from the EIJBRG may also be required.

Due to the COVID-19 pandemic, prior to entering the James Bay Region, a COVID Management Plan is required to be submitted to and approved by the Cree Nation Government. This process can be completed in 1 to 2 weeks.

As of the date of this report, and to the knowledge of the Authors, the Company has not completed the notification process, or obtained any permits or authorizations relevant to the exploration of the Property.

4.5 OTHER SIGNIFICANT FACTORS AND RISKS

A portion of claim 2535537 overlaps with a corridor reserved by the province for the potential future development of the Eastmain 1 / La Sarcelle power transmission line. This reserved zone is unlikely to impose any significant limitations to potential development on the Property. However, some engagement with Hydro-Quebec should be expected.



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

The Black Dog Lake Property is located in the James Bay Region of Quebec, approximately 150 km east the town of Eastmain, and approximately 60 km north of the town of Nemiscau. The Property may be accessed by road from the all-season gravel Muskeg-Eastmain-1 Road, which runs approximately east-west to the south of the claim group, coming within 300 metres of the claim border. The Muskeg-Eastmain-1 Road connects with the regional provincial road network, with Nemiscau the nearest town. The Eastmain-1-Sarcelle 315 kV power line runs along the Muskeg-Eastmain-1 Road, coming within a kilometre of the Property.

5.1 TOPOGRAPHY, ELEVATION, AND VEGETATION

The Property topography comprises forested gently rolling hills, drainages, and muskeg swamps between approximately 260 and 350 m elevation, typical of the James Bay Region. Vegetation is characteristic of the Boreal Vegetation Zone in Quebec and consists mainly of black spruce, and lesser alder, poplar, birch, and various shrubs. This region is typically inhabited by moose, woodland caribou, and black bears, as well as numerous smaller mammals.

5.2 INFRASTRUCTURE AND LOCAL RESOURCES

No infrastructure is present on the Property. The Eastmain-1-Sarcelle 315 kV power line runs along the Muskeg-Eastmain-1 Road, coming within a kilometer of the Property. The road runs approximately east-west to the south of the claim group, coming within a few hundred metres of the claim border (Figure 2). This road follows the Eastmain River, servicing Quebec's hydroelectrical system infrastructure, including the dam (and an airstrip) for the Opinaca Reservoir, located 20 km northwest of the Property

The nearest community is Nemiscau, located approximately 60 km south of the Property, and is accessible by road. Basic amenities including general store, accommodation, and post office are available locally. Designated as the Cree Nation's administrative centre, the local economy is driven by sales and service, social sciences, education, and government-related jobs. Nemiscau is serviced daily by Air Creebec using the local Airport. Nemiscau is also connected by road to the main provincial road network. Additional accommodation and services are provided at Relais Routier Nemiscau Camp, located approximately 15 km east of Nemiscau.

5.3 CLIMATE

The Property is located in a sub-arctic climate region. Average annual temperatures, precipitation, and snowfall are presented in Figure 3 as recorded at the La Grande Rivíère Airport (also referred to as "LG2"), near Radisson, QC, located approximately 185 km north-northwest from the Property, within the James Bay Region (Weather Spark, 2020). Over the course of the year, the temperature typically varies from -27°C to 20°C with rare extremes of -35°C and 26°C. Snow covers the ground from mid-October to late May, limiting field work in this winter period to drilling and geophysics.





Average High and Low Temperature





The average rainfall (solid line) accumulated over the course of a sliding 31-day period centered on the day in question, with 25th to 75th and 10th to 90th percentile bands. The thin dotted line is the corresponding average liquid-equivalent snowfall.



Average Liquid-Equivalent Monthly Snowfall

The average liquid-equivalent snowfall (solid line) accumulated over the course of a sliding 31day period centered on the day in question, with 25th to 75th and 10th to 90th percentile bands. The thin dotted line is the corresponding average rainfall.

Figure 3: Average temperature, rainfall, and snowfall of region (Weather Spark, 2020)



6 HISTORY

6.1 **PREVIOUS EXPLORATION AND DEVELOPMENT**

In the 1960s and 1970s, regional geological mapping of the Eastman Greenstone Belt, which includes portions of the Property, was completed by the provincial government (Eakins, 1968; Franconi, 1978). In 1972, the Hudson Bay Mining and Smelting Co. Ltd. ("Hudson Bay Mining") explored the region for base metals, including areas of the Property, with ground geophysics (horizontal loop EM) and reportedly completed at least one drill hole on the Property (drill hole "A5") (Shelp, 1989 - GM49584; Eastmain Resources Inc., 1996 - GM54627). In the mid 1970s, several companies completed further regional work which overlapped with areas of the Property, including geological surveys, lake sediment survey, and airborne EM, magnetic, and radiometric surveys (Canico, 1975 - GM34027; Canico, 1976 - GM34028; Pride, 1974 - GM34044).

Following the regional work, Eastman Resources Ltd. ("Eastmain") began exploration of the Property area and in 1987 discovered an old camp with historical drill core during a reconnaissance field program. They collected and analyzed some of the historical core (believed to be from hole "A5") from a siliceous sulphide rich zone which returned a grade 0.15 oz/ton Au over five (5) feet (~5.1 g/t Au over 1.5 m) (Shelp, 1989 - GM49584). The Authors notes that very little documentation appears to exist regarding the historical drill program carried-out by Hudson Bay Mining that resulted in the drill core library that was subsequently discovered by Eastmain, most notably drill hole A5. This drill hole is not included in the Quebec Government's online SIGEOM database.

In early 1988, Eastmain completed a VLF-EM survey over the Property. The survey outlined several conductive zones which were interpreted to represent *"shear zones and/or metallic sulphide deposits containing possible gold mineralization"* (Henriksen, 1988 - GM49407).

During the summer-fall of 1988, Eastmain executed a surface program (prospecting and rock sampling, till and humus survey, magnetic survey) and drill exploration program to evaluate the gold potential of the anomalies, and to locate the drill hole collar from the core they had discovered and assayed the year prior (Shelp, 1989 - GM49584). A total of five (5) ADBGM size (~30 mm core diameter) diamond drill holes, totalling 484.7 m, were completed (LH-88-01, 02, 03, 04, and 05) and resulted in the discovery of a gold-bearing sulphide facies iron formation that was termed the Black Dog Lake (Lac Hudson) Zone (termed herein the "Black Dog Zone"). Drill holes LH-88-01, 02, 03, and 04 were all completed approximately 400 m west of Black Dog Lake (on Property claim 2480178) and from the same collar location. This location was interpreted by Eastmain to be the same location as historical drill hole A5, which is the hole they had discovered at an old camp and sampled the year prior, and which assayed 0.15 oz/ton Au over five (5) feet. These four (4) drill holes completed by Eastmain targeted a coincident geochemical and geophysical anomaly (VLF-EM) and encountered similar geology downhole described as "...felsic and mafic volcanics, banded felsic to mafic tuffs and sulphide facies (±cherty) iron formation ..." The Black Dog Zone was intersected in drill holes LH-88-01, 02, and 03 starting from core length depths of 43.3 m, 66.5 m, and 66.1 m, respectively, with assays reported of 15.2 g/t Au, 22.3 g/t Ag, 0.10% Cu, and 0.52% Zn over 0.6 m (LH-88-01); 5.6 g/t Au and 4.5 g/t Ag over 1.1 m (LH-88-02); and 4.3 g/t Au and 2.5



g/t Ag over 0.88 m (LH-88-03). All drill intersection widths noted are core length (i.e., apparent widths). Drill hole LH-88-04 did not intersect the zone and was interpreted to have ended before it would have intersected it due to a displacement of the zone as indicated by the magnetic survey. The Black Dog Zone is described as an auriferous (i.e., gold-bearing) horizon of *"silicified and carbonatized sulphide facies iron formation."* The zone is sheared, banded, and locally brecciated with up to 30% pyrrhotite, 5% pyrite, and trace chalcopyrite, and magnesium rich carbonate present as veinlets and disseminations. The mineralization is further described as conductive, magnetic, and stratabound.

The till and humus geochemical survey identified four (4) anomalous areas over the present-day Property, including the area of the Black Dog Zone (Anomaly 1) where values ranged from 6 to 2,539 ppb Au over an east-west strike of more than 350 m. Drill hole LH-88-05 targeted geochemical Anomaly 2 (6 to 59 ppb Au), located approximately 3 km to east of the Black Dog Zone. It returned 0.018 oz/ton Au (0.62 g/t Au) over 0.8 m from a quartz/carbonate breccia lithology. Both Anomaly 1 and 2 are spatially associated with VLF (EM) anomalies.

No further exploration was completed on the property until the summer of 1995, when Eastmain followed-up with three (3) NQ size diamond drill holes (LH-95-01, 02, and 03) totalling 525.4 m, focused on the Black Dog Zone (Eastmain Resources Inc., 1996 - GM54627). Drill hole LH-95-01 undercut drill hole LH-88-01 to test the zone at depth, while drill holes LH-95-02 and 03 were completed as step-outs to test the mineralized horizon along strike to the east and west, respectively. Each of the program's drill holes intersected "narrow bands of sulphide -facies iron formation.... generally consisting of narrow bands of massive pyrrhotite with lessor amounts of pyrite and chert or siliceous exhalate containing disseminated iron sulphides. The sulphide portion of the iron formation is geochemically enriched in gold." Drill hole LH-95-01 intersected sulphide iron formation at 98 m depth within an intermediate to felsic tuffaceous sequence, assaying 3.0 g/t Au over 1.0 m. Drill hole LH-95-02 was completed 150 m east of the LH-88-01 and intersected sulphide facies iron formation near the contact between mafic volcanics and intermediate to felsic tuffaceous rocks, returning a mineralized interval of 1.1 g/t Au over 3.0 m (88.0 to 91.0 m) within a broader anomalous gold interval of 23 m. Drill hole LH-95-03 was completed 150 m west of the LH-88-01 and intersected a "mixed sequence of intermediate to felsic tuffaceous rocks with intercalated cherty iron formation", returning a mineralized interval of 0.70 g/t Au over 1 m from 105 m core depth. Collectively, the 1988 and 1995 drill program traced mineralization approximately 300 m along strike and to at least 100 m down dip, remaining open at depth and along strike, and having an apparent thickness of 0.6 to 3.6 m.

The property was subsequently optioned to Orezone Resources Inc. ("Orezone") for a 50% interest (Orezone as operator) and in 1996 a surface exploration program was completed that included ground magnetic, VLF, and induced polarization (IP) geophysical surveys as well as a geological survey. The Black Dog Zone was found to correlate with an "... *IP conductor that locally is strongly magnetic and weakly resistive.*" With respect to the Black Dog Zone, the conductor was interpreted to extend east beneath Black Dog Lake and to the west for at least two (2) km (Gillgrass, C., 1997 - GM56194)



In 1997, Orezone followed up 11 BQ size diamond drill holes totalling 1,100.4 m on the present-day Property, including three (3) holes that targeted extensions of the Black Dog Zone with the remaining holes testing other geophysical anomalies (VLF-Mag-IP-Beep Map) across the property (Barrette, 1997 - GM56195). The best gold intercept was to the west and along strike of the Black Dog Zone returning 1.44 g/t Au over 1.2 m from 64.4 m depth (LH97-03). Drill hole LH97-03 was a 100 m step-out to the west of LH-95-03 and therefore extended the zone a further 100 m in that direction. The zone was also extended eastwardly with drill intersections of 1.13 g/t Au over 1.24 m (LH97-01) and 1.19 g/t Au over 1.00 m (LH97-02). Following the program, the Black Dog Zone was estimated to be "…more than 600 m in length grading around 1.0 g/t Au between 1 to 3 m thick." The other drill holes completed during the program returned trace to "a few hundred ppb Au", although the intersections largely explained the targeted geophysical anomalies with zones of sulphides and/or graphite.

In 1998, Orezone continued its exploration and completed five (5) diamond drill holes totalling 472.1 m on the present-day Property (Kovala, 1998 - GM56196). Three (3) drill holes targeted the Black Dog Zone's eastern and western extensions, with the remaining targeting untested geophysical anomalies. The program failed to extend the mineralization to the west at the Black Dog Zone which was interpreted to be due to faulting disrupting the stratigraphy. Drilling beneath the lake the east also failed to locate an extension of the zone. The more regional drilling was able to explain most of the geophysical anomalies though intersections of sulphide zones, iron formations, and graphitic horizons; however, 330 ppb Au was the highest gold grade returned. Although the program was met with limited success, additional systematic exploration was recommended; although, the option, along with the claim group, eventually lapsed.

To date, at least 24 drill holes, totalling 2,582.6 m, have been completed on the Black Dog Lake Property with no additional drilling documented since the 1997 program by Orezone. Details of the known diamond drill holes completed on the Property are listed in Table 3.

In 2006, Eastmain Resources contracted Geotech Ltd. and completed a heli-borne VTEM and magnetic survey (100 m line spacing) over an area which included the present-day Property (Geotech Ltd., 2007 - GM62824). It is not clear if Eastmain held the property block at this time or if it had lapsed previously.

In or around 2006, the claims were acquired by Arianne Resources Inc. and subsequently optioned for a 50% interest to Vantex Resources Ltd. ("Vantex"). A technical evaluation of the property was completed for Vantex in early 2007 and further work was recommended (O'Dowd, 2007 - GM63604). In June 2007, a surface exploration program was completed, comprised of reconnaissance prospecting, rock sampling, and channel sampling, which included the Black Dog Zone. A total of 125 samples were collected with a peak assay obtained of 150 ppb Au. Despite the poor results, a data compilation, correlation, and targeting program was recommended (Boulianne, 2008 - GM63605).

In 2011, a regional a fixed-wing high-resolution airborne magnetics survey was completed over the James Bay Region by the Ministère des Ressources naturelles et de la Faune (MRNF) and included the Property (D'Amours,



2011 - DP 2011-08). The survey was completed at a line spacing of 250 m and was part of a larger campaign to obtain a complete map set of total field and first derivative magnetics for the James Bay Region.

In 2014, Virginia Mines Inc. acquired the Property from Arianne Resources Inc. and completed a surface sampling program focused on the Black Dog Zone (Lavoie, 2014 - GM68876). The best results came from a sample collected approximately 100 m west-southwest of the Black Dog Zone, which returned 0.69 g/t Au, 2.4 g/t Ag, and >1% As. The sample was collected from a "… sulphide-facies iron formation composed of amphibole-quartz-feldspars-chlorite-graphite and contains 5% pyrite. The iron formation is injected by 2% quartz veinlet stockwork. This sulphide-facies banded iron formation horizon is probably the same horizon that hosts the Black Dog Lake zone." A rigorous prospecting campaign and trenching program was recommended.

The property subsequently lapsed and was staked again in the name of Fayz Yacoub between February 2017 and November 2021. An assessment report was completed which summarized historical work on the claim group and greater region and additional work at the Black Dog Zone and immediate area was recommended (Yacoub F. , 2017 - GM70370). Fayz Yacoub is the current registered title holder of the present-day Property, which has been Optioned to Valorem Resources Inc. and is the subject of this report.

A summary of historical data for the Property is presented in Table 3 and Figure 4 through Figure 9.

Drill Hole	Year	Work					Azimuth	Dip	Total Depth
ID	Completed	Report	Company	Easting	Northing	Zone	(°)	(°)	(m)
LH-88-01	1988	GM 49584	Eastmain Resources Inc.	411878	5785182	18	180	45	91.5
LH-88-02	1988	GM 49584	Eastmain Resources Inc.	411877	5785179	18	180	60	92.0
LH-88-03	1988	GM 49584	Eastmain Resources Inc.	411878	5785180	18	135	45	76.8
LH-88-04	1988	GM 49584	Eastmain Resources Inc.	411876	5785179	18	225	45	82.0
LH-88-05	1988	GM 49584	Eastmain Resources Inc.	415092	5785207	18	180	45	142.4
LH-95-01	1995	GM 54627	Eastmain Resources Inc.	412027	5785102	18	180	60	175.0
LH-95-02	1995	GM 54627	Eastmain Resources Inc.	412167	5785102	18	180	45	175.4
LH-95-03	1995	GM 54627	Eastmain Resources Inc.	411849	5785103	18	180	45	175.0
LH97-01	1997	GM 56195	Orezone Resources Inc.	412140	5785221	18	180	45	95.0
LH97-02	1997	GM 56195	Orezone Resources Inc.	412247	5785200	18	180	45	100.9
LH97-03	1997	GM 56195	Orezone Resources Inc.	411643	5785220	18	180	45	99.4
LH97-04	1997	GM 56195	Orezone Resources Inc.	411642	5785499	18	180	45	99.1
LH97-05	1997	GM 56195	Orezone Resources Inc.	411869	5785670	18	180	45	92.1
LH97-07	1997	GM 56195	Orezone Resources Inc.	413455	5785854	18	180	45	96.0
LH97-08	1997	GM 56195	Orezone Resources Inc.	413457	5785476	18	180	45	138.4
LH97-09	1997	GM 56195	Orezone Resources Inc.	413657	5785299	18	180	55	94.8
LH97-10	1997	GM 56195	Orezone Resources Inc.	414061	5785286	18	180	45	92.1
LH97-13	1997	GM 56195	Orezone Resources Inc.	410620	5785183	18	180	45	97.2
LH97-14	1997	GM 56195	Orezone Resources Inc.	410772	5785439	18	180	45	95.4
LH9801	1998	GM 56196	Orezone Resources Inc.	412232	5785041	18	180	45	93.9
LH9802	1998	GM 56196	Orezone Resources Inc.	411391	5785165	18	180	45	76.0
LH9805	1998	GM 56196	Orezone Resources Inc.	416479	5784752	18	180	45	91.4
LH9806	1998	GM 56196	Orezone Resources Inc.	416114	5785058	18	180	45	75.6
LH9808	1998	GM 56196	Orezone Resources Inc.	412941	5785268	18	170	45	135.2
LH-88-01	1988	GM 49584	Eastmain Resources Inc.	411878	5785182	18	180	45	91.5
LH-88-02	1988	GM 49584	Eastmain Resources Inc.	411877	5785179	18	180	60	92.0

Table 3: Summary of Historical Diamond Drill Holes Completed on the Property





Figure 4: Historical drill hole locations and rock sample highlights











Figure 6: Property scale 1VD magnetics





Figure 7: Historical data summary over Black Dog Zone/Showing area





Figure 8: Plan view of historical drill holes at Black Dog Zone (Eastmain Resources Inc., 1996 - GM54627)



Figure 9: Cross section of 1988 and 1995 drill holes at the Black Dog Zone (Eastmain Resources Inc., 1996 - GM54627)



7 GEOLOGICAL SETTING AND MINERALIZATION

7.1 **REGIONAL GEOLOGY**

The Black Dog Property is located in James Bay Region of Quebec, within the Superior Province of the Canadian Shield, which extends from Manitoba to Quebec and covers approximately 750,000 km² of Quebec. The Archean Province is divided into a number of subprovinces based off their lithological, metamorphic, geophysical, and structural characteristics. In the James Bay region, the east-west trending subprovinces consist of, from north to south, the La Grande, the Opinaca, the Nemiscau and the Opatica Subprovinces (Figure 10). These subprovinces of the Superior Province, many of which are fault-bounded, are transected by a series of E-W to WNW-ESE and NE-SW shear zones and consist of volcano-plutonic and sedimentary assemblages with sub-greenschist to granulite metamorphism.

The La Grande Subprovince consists of primarily volcano-plutonic sequences with ultramafic to felsic intrusions. The Opinaca Subprovince consists of mainly sedimentary supracrustal rocks that have been overprinted by high-grade metamorphism and migmatization and have been intruded by granodiorite and granitic pegmatites (Ravenelle, 2010). The Nemiscau Subprovince is a predominantly amphibolite-facies grade metasedimentary package with lesser amounts metavolcanic rocks. Typical rock types include biotite schist and amphibolite. The Opatica Subprovince is a volcano-plutonic complex made up of tonalite, granodiorite, granite, pegmatite, and tholeiitic and calc-alkaline volcanics.





Figure 10: Regional geology



7.2 LOCAL GEOLOGY

The Black Dog Lake Property is located within the Middle and Lower Eastmain Greenstone Belt (the "Eastmain Greenstone Belt"), which is part of the La Grande Subprovince (Figure 11). The Eastmain Greenstone Belt is an extensive Archean volcano-sedimentary sequence trending east-west over a significant lateral distance (300 km), ranging from approximately 10 to 70 km in width, through the James Bay Region of Quebec. The sequence is derived from volcanic activity in an oceanic setting (volcanic arcs, ridges, platforms) and was later cut by calcalkaline intrusions. The rocks dip steeply, are tightly folded, and range in metamorphic grade from greenschist to amphibolite facies. Three deformation phases are recognized (2,710 to 2,697 Ma; 2,668 to 2,706 Ma, and <2,668 Ma). The belt is cut by various Paleoproterozoic dyke swarms, including the Lac Esprit and Shpogan dykes located approximately 7 and 19 km west of the Property, respectively (Moukhsil, et al., 2007 - ET2007-01).

Within the Eastman Greenstone Belt, four (4) volcanic cycles, multiple periods of plutonism, and two (2) periods of sedimentation are recognized. The Kauputauch Formation comprises the first volcanic cycle and is composed of metabasalts (massive to pillowed) and andesitic basalts, as well as felsic flows and tuff sequences (felsic to mafic). Significant syn-volcanic plutonism also occurred. The Natal Formation comprises the second cycle and is composed of komatiites, komatiitic basalts, as well as massive to pillowed basalts and andesites. The Anatacau-Pivert Formation comprises the third cycle and is composed of metabasalts, andesites (amphibolitized), rhyolites, and tuffs, which are overlain by sedimentary derived rocks (mudslate, siltslate, conglomerate). This volcanic cycle is interpreted to have the strongest potential for volcanogenic mineralization, including sulphide iron formations. Moderate syn-volcanic plutonism also occurred during this cycle. The Komo and Kasak Formations comprise the fourth volcanic cycle. The two formations are composed primarily of amphibolitized units including basalts (massive to pillowed), komatiitic basalts, and lesser amounts of andesites and felsic ash tuff (Moukhsil, 2000 - RG2000-04; Moukhsil, et al., 2007 - ET2007-01).

The first period of sedimentation (2,703 to 2,697 Ma) is characterized by the Wabamisk, Anaconda, and Clarkie Formations. The Wabamisk and Anaconda Formations are comprised of intermediate to felsic tuffs covered predominantly by conglomerate and arkoses. The Clarkie Formation is comprised of arenites, arkoses, and conglomerates which are covered by lapilli and blocky tuffs. The Auclair Formation comprises the second period of sedimentation (2,697 to 2,674?) and is dominantly comprised of paragneiss (Moukhsil, et al., 2007 - ET2007-01; Moukhsil, 2000 - RG2000-04)





Figure 11: Local geology



7.3 **PROPERTY GEOLOGY**

The Property extends from the Mistumis Batholith contact along the southern boundary, northwards over the east-west oriented metavolcanic-metasedimentary sequence of the Eastmain Greenstone Belt, to the Le Caron Batholith to the northeast. The greenstone belt narrows between the two batholiths, suggesting an area of substantial deformation (Figure 12).

The Property primarily overlies the Anatacau-Pivert Formation of the Eastmain Greenstone Belt. The formation represents the third volcanic cycle of the belt's genesis and is composed of metabasalts, andesites (amphibolitized), rhyolites, and tuffs, which are overlain by sedimentary derived rocks (mudslate, siltslate, conglomerate). A gabbro unit is also present in the north central area of the Property.

The intercalated sequence of volcanics (mafic to felsic), pyroclastic, and sediments that comprise the Property are also intermingled with concordant and parallel bands of silicate and sulphide iron formation, the latter of which has been found to be auriferous at some locations (i.e., Black Dog Zone). The iron formation zones appear to be more prevalent in the southern areas of the Property and therefore proximal to the northern contact of the Mistumis Batholith.

Glacial till and humus cover much of the Property, and the dominant and youngest glacial transport direction is interpreted to be to the southwest (240° to 250°) (Lavoie, 2014 - GM68876; Shelp, 1989 - GM49584).





Figure 12: Property geology



7.4 MINERALIZED ZONES

The gold mineralization observed on the Property is associated with sulphide-facies (±cherty) banded iron formation with the most notable occurrence being the Black Dog Zone. These mineralized occurrences have been interpreted to be related to volcanogenic hydrothermal activity and may represent the distal portions of exhalative volcanogenic massive sulphide (VMS) deposits (Moukhsil, et al., 2007 - ET2007-01).

The Black Dog Zone is described as an auriferous (i.e., gold-bearing) horizon of "*silicified and carbonatized sulphide facies iron formation.*" The zone is sheared, banded, and locally brecciated with up to 30% pyrrhotite, 5% pyrite, and trace chalcopyrite, and magnesium rich carbonate present as veinlets and disseminations. The zone is hosted in a sequence of felsic and mafic volcanics and banded felsic to mafic tuffs. The gold mineralization from the iron formation is also accompanied by anomalous levels of silver, zinc, copper, and arsenic. The best drill result is reported by Eastmain Resources Inc. from their 1988 drill program with 15.2 g/t Au, 22.3 g/t Ag, 0.10% Cu, and 0.52% Zn over 0.6 m (LH-88-01) (Shelp, 1989 - GM49584). The mineralization is further described as conductive, magnetic, and stratabound (Figure 7, Figure 8, and Figure 9).

The mineralization at the Black Dog Zone has a current interpreted extent of least 600 m in length and extends at least 100 m down dip, is steeply-dipping, and has an apparent thickness of 0.6 to 3.6 m. The zone remains open along strike and at depth (Barrette, 1997 - GM56195; Eastmain Resources Inc., 1996 - GM54627).

Additional mineralization occurs along the north shore of Lac Katatapiminakun (Lac Hudson) where iron formation is mapped near the contact of the Mistumis Batholith. Surface sampling in the area has returned anomalous Ag-Cu including 4.4 g/t Ag and 0.65% Cu at the 99-DF-2373 Showing. In 2014, a sample of 0.38 g/t Au and 1.2 g/t Ag was collected from a sulphide-facies banded iron formation exposure comprised of *"quartz-amphibole-plagioclase-graphite with 3% pyrite."* The zone is documented to be continuous over 600 m, oriented WNW-ESE and is up to 40 m in width. Another sample from the area, associated with a quartz vein hosted within a feldspar-amphibole-sericite meta-greywacke, returned 2.8 g/t Ag and 1,340 ppm Co (Lavoie, 2014 - GM68876).



8 **DEPOSIT TYPES**

The principal deposit type targeted on the Property is gold in banded iron formation (BIF) hosted within the Anatacau-Pivert Formation of the Eastmain Greenstone Belt. The horizons are formed as part of a chemical sedimentation process driven by volcanogenic hydrothermal activity and may represent the distal components of volcanogenic massive sulphide deposits. Such horizons tend to be conductive and magnetic due to their iron sulphide and oxide content (pyrite, pyrrhotite, magnetite) and are common in Archean greenstone terrains. Banded iron formations are key sources of Au and Fe production globally.

The strata-bound nature of BIFs provide an ideal trapping mechanism combined with shear and fault zones allowing for fluid flow into the BIF units (Figure 13). Banded iron formations act as a chemical trap for auriferous fluids, resulting from the chemical reactivity of the high Fe/Fe+Mg ratios within BIFs with Au bearing solutions through sulfidation reactions (Groves, Goldfarb, & Santosh, 2016). Due to the stratabound nature of BIFs, deformation and tight folding or thrusting provides opportunity for thickening or stacking of sequences to occur, increasing economic potential of the horizon. On a local scale, BIF-hosted deposits consist of sulphidic replacements of the Fe-rich layers and most commonly occur associated with the hinges of folds, synclines or anticlines, and the intersections of shear zones and faults (Robert, et al., 2007). Notable deposits of this type include the producing Musselwhite Mine in Ontario, and the past-producing Lupin and Meadowbank mines in Nunavut.





Figure 13: Illustration of Archean orogenic gold deposit setting (Groves, Goldfarb, & Santosh, 2016)

9 **EXPLORATION**

Field exploration completed by the Company has been focused on the Black Dog Lake Showing and includes surface rock sampling completed in May 2021, as well as ground geophysical surveys (OreVision® IP - Resistivity survey and a ground magnetic survey) completed in the fall of 2021. Historical exploration of the Property is summarized in ITEM 6: History.

9.1 2021 SURFACE SAMPLING

The 2021 field program was completed between May 15th to 21st on behalf of the Company by On Track Exploration Ltd., with the objective to locate and collect rock samples at the historical Black Dog Lake Showing, as well as locate some of the historical drill hole collars. The Block Dog Lake Showing was successfully located and a total of ten (10) rock samples collected from *"rusty altered banded iron formation outcrops contain[ing] disseminated to semi-massive sulphides with more than 30% pyrrhotite, 5% pyrite and traces of chalcopyrite and sphalerite"* (Yacoub F., 2021).

Rock samples were analysed for gold by fire assay (FA-GEO code – 30 g with AA finish) and base metals (AAT-7 code) at Laboratoires Expert Inc. in Rouyn-Noranda, QC., and returned gold values ranging from 76 ppb Au to 6,322 ppb Au (Table 4). Sample locations are in Figure 14. Sample B0037654 (high gold value) was also analyzed for gold by gravimetric (FA-GRAV – 30 g with gravimetric finish) at Laboratoires Expert Inc. and returned 6.34 g/t Au, which is consistent with the fire assay result. No information on sample preparation was provided to the Authors. The Authors note that they are not familiar with the analytical laboratory used (Laboratoires Expert Inc); however, the Author (Mr. Smith) did speak with the owner of Laboratoires Expert Inc who noted that the lab is a private company and does not currently hold any accreditation(s).

Sample ID	Easting	Northing	Au (ppb)	Cu (ppm)	Zn (ppm)
B0037651	411878	5785183	76	40	527
B0037652	411983	5785141	830	466	3,609
B0037653	412031	5785277	106	1,289	164
B0037654	411851	5785153	6,322	411	6,650
B0037655	411871	5785138	434	242	745
B0037656	411867	5785139	37	162	247
B0037657	411870	5785136	579	238	1,422
B0037658	411848	5785142	2,056	553	2,130
B0037659	411814	5785139	206	237	1,182
B0037660	411834	5785143	368	444	570

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таріе 4: 202 г зигіасе коск заш	DIE ANAIVUCAI RESUILS ITO	пі ціе біаск роў цаке зпожіну

1. prospecting surface rock samples and associated assays are selective by nature and represent a point location, and therefore may not necessarily be fully representative of the mineralized horizon sampled.



In addition, one drill hole is stated to have been located (Yacoub F., 2021) although no location information or collar ID was provided to the Authors.

9.2 2021 GEOPHYSICAL SURVEYS

The 2021 geophysical surveys were completed by Abitibi Geophysics of Val-d'Or, QC, and included a ground induced polarization (IP) and resistivity survey (OreVision® system) and a ground magnetic survey. The objective of the surveys was to identify occurrences of sulphides and banded iron formation at depth, which are associated with the known mineralization at the Black Dog Lake Showing. These features are expected to elucidate various geophysical responses using the applied methods and assist in drill hole targeting.

The OreVision® IP - Resistivity survey was completed along 17 lines (oriented north-south) at 50 line spacing and an a=25, n=1-10 configuration. OreVision® is a proprietary IP survey technology of Abitibi Geophysics and is described as an alternative IP *"survey technique capable of investigating 400% deeper with the same high resolution even through conductive overburden"* (Abitibi Geophysics, 2021).

The ground magnetic survey was completed using a GEM GSM-19W V6 unit with integrated GPS in a walking mag. configuration at 50 m line spacing. The unit has a resolution of 0.01nT and a tolerance of > 10,000 nT/m. Diurnal corrections were completed using a synchronized base station located proximal to the survey grid.

The surveys were successful at identifying four (4) *"conductive and chargeable axes mostly associated with high to strong magnetic lineaments that could reflect BIF [Banded Iron Formation]"*. Drilling was recommended to test the generated targets. An interpretation of the survey data and priority target ranking was also completed by Abitibi Geophysics (Abitibi Geophysics, 2021). Plan views of resistivity and chargeability responses are presented in Figure 15 and Figure 16, respectively.





Figure 14: 2021 rock sample locations with reference to historical sampling and drill hole (Yacoub F., 2021)





Figure 15: Resistivity slice at 230 m elevation (Abitibi Geophysics, 2021)



Figure 16: Chargeability slice at 260 m elevation (Abitibi Geophysics, 2021)



10 DRILLING

No drilling has been completed on the Property by the Company. Historical drilling that has been completed on the Property is summarized in ITEM 6: History.



11 SAMPLE PREPARATION, ANALYSES, AND SECURITY

To date, sampling on the Property, as competed by the Company or the underlying registered title holder, include ten (10) rock samples collected in May 2021. Sampling was completed by On Track Exploration LTD. Of British Columbia, Canada, and is detailed in a one-page report (Yacoub F. , 2021). Samples were submitted to Laboratoires Expert Inc. in Rouyn-Noranda, QC, by the field crew and included no control samples (e.g., blanks or standards). A lack of control samples inserted into surface sampling submissions for analysis is not uncommon in the industry, with Company's often relying on internal laboratory control samples during small grassroots exploration sampling programs, and prior to drilling.

Rock samples were analysed for gold by fire assay (FA-GEO code – 30 g with AA finish) and base metals (AAT-7 code) at Laboratoires Expert Inc. in Rouyn-Noranda, QC., and returned gold values ranging from 76 ppb Au to 6,322 ppb Au (Table 4). Sample locations are in Figure 14. Sample B0037654 (high gold value) was also analyzed for gold by gravimetric (FA-GRAV – 30 g with gravimetric finish) at Laboratoires Expert Inc. and returned 6.34 g/t Au, which is consistent with the fire assay result. No information on sample preparation was provided to the Authors. The Authors note that they are not familiar with the analytical laboratory used (Laboratoires Expert Inc); however, the Author (Mr. Smith) did speak with the owner of Laboratoires Expert Inc who noted that the lab is a private company and does not currently hold any accreditation(s).

Given the grassroots nature of the surface sampling, and results being in line with historical results – including internal lab duplicates and check analysis of the highest gold value – the Authors are of the opinion that the sampling, preparation, security, and analytical procedures used for the 2021 sampling (or that have been inferred used) are satisfactory for this level of exploration. However, the Authors recommend that more detailed data capture and reporting be completed for future field sampling programs. Further, as the exploration advances, a review of the current lab's procedures is recommended (due to a lack of the applicable accreditation), control samples incorporated into sample batches, and check lab analysis completed. Alternatively, a lab with appropriate accreditation may also be used, in addition to industry standard QAQC practices.



12 DATA VERIFICATION

A site visit was completed to the Property by Mr. Louis Caron on Sept 15th, 2021. The Black Dog Lake Showing, the main showing on the Property, was accessed by driving to approximately KM-68 on Muskeg Road, northeast of Nemiscau, and hiking to the Property on foot from the road. Weather conditions were cooperative and did not hinder the site-visit.

The showing is marked by a series of 5 small ditches ($\leq 1 \text{ m}^2$) found trending in a N280° direction. Quartz and dark grey (tourmaline) veins, as well as and parallel veinlets, striking N260° to N280° dipping 080°N were observed in sheared and laminated rhyolitic to felsic lapilli tuffs. The tuffs are strongly altered by coarse pink garnet (5 mm), biotite, and pale green sericite alteration. Very fine pyrite is disseminated in the dark grey quartz veins and veinlets. A total of 3 samples were collected – LC-21-01, LC-21-03, and BOO376054 – and submitted by the Author (Louis Caron) to Activation Laboratories Ltd. in Ancaster, ON, for multi-element analysis by four-acid digestion with ICP-OES finish (package 1F2) and for gold by fire-assay (package 1A2B-30). Sample descriptions, locations, and analytical results are as follows:

- LC-21-01: Felsic crystalline tuff rusty and greenish pale grey colour, laminated or parallel shear ≤0,5 mm with dark grey quartz vein (≤1 cm) and parallels veinlets, N260° to 280°/85°N, fine disseminated pyrite mainly in the quartz veins. Sericite and biotite impregnated alteration with coarse pink rounded garnet. Location UTM NAD83 Zone 18, 411844 m E / 5785136 m N. Sample geochemical analysis returned 14 ppb Au, <0.3 ppm Ag, 7 ppm Cu, and 638 ppm Zn.
- LC-21-03: In the north footwall of LC-21-01. Felsic to rhyolitic laminated tuff grey, cherty. Sericite, quartz, and biotite alteration. Pink rounded garnet (50%), trace pyrite. Location UTM NAD83 Zone 18, 411852 m E / 5785146 m N. Sample geochemical analysis returned <5 ppb Au, 0.3 ppm Ag, <1 ppm Cu, and 69 ppm Zn.
- BOO376054: Felsic lapilli tuff dark grey to rusty colour alteration, chlorite alteration, and fine disseminated pyrite (1-5%). Location UTM NAD83 Zone 18, 411851 m E / 5785138 m N. Sample geochemical analysis returned 45 ppb Au, 0.7 ppm Ag, 34 ppm Cu, and 254 ppm Zn.

The geochemical analysis of the site visit samples did not return any significant Au, Ag, Cu, or Zn mineralization; however, sample LC-21-01 did return anomalous gold values at 45 ppb Au. In addition, the local geology is reflective of that historical reported for the showing

In addition to the site visit, data verification for this report consists of the Author (Darren L. Smith) independently downloading, confirming, and reviewing existing technical data relevant to the Property. The reports and datasets used are referenced in ITEM 27 References and are all available in the public domain, except for the short one-page report on the 2021 field work completed by the Company (Yacoub F., 2021). It is the Authors' opinion that historical data used as the basis for this report meets the required standard for a NI 43-101 Technical Report and is sufficient to support the discussion, conclusions, and recommendations herein.





Photo 1A-B: Left – N260 to 280° sheared or laminated rhyolitic tuff with a black quartz vein (sample LC-21-01); Right: Felsic to rhyolitic tuff foliated with pink garnet (LC-21-03)



Photo 2B-C: Left: Felsic lapilli tuff with rusty colour. 1 to 5% disseminated fine pyrite and chlorite alteration (BOO376054); Right: Landscape on the property showing actual vegetation state



13 MINERAL PROCESSING AND METALLURGICAL TESTING

No mineral processing or metallurgical testing has been completed by the Company with respect to the Black Dog Property.



14 MINERAL RESOURCE ESTIMATES

No mineral resource or mineral reserve estimates have been completed by the Company with respect to the Black Dog Property.



15 TO **22** – NOT APPLICABLE (EARLY-STAGE PROPERTY)

The Property is an early-stage exploration property. Therefore, ITEMS 15 through 22, as defined by NI 43-101, are not relevant to this report and have been omitted.



23 Adjacent Properties

The Eastmain Greenstone Belt is an active region of exploration for base and precious metals in the James Bay Region of Quebec, and numerous occurrences of base and precious metals have been documented in the area. Therefore, several exploration companies are present in close proximity to the Black Dog Lake Property. These include Visible Gold Mines to the immediate east of the Property, and Dios Exploration to the south. To the immediate west of the Property are claims held by various individuals. The Authors have not confirmed whether these claims have been grouped and/or are held under option to a mineral exploration company. Other large land holdings in the area include Fury Gold Mines and their Reservoir Project to the northwest and the Eau Claire Project to the east, as well as Osisko Gold Mines' Wapamisk-Anatacau Project to the west-southwest.

Notable mineralized occurrences include the Wapamisk-Anatacau Project's Contact (43.75 g/t Au in grab sample), Isabelle (31.44 g/t Au over 2.6 m in drill hole), Bull (1.52 g/t Au over 13.6 m in drill hole), and Chino (14.58 g/t Au over 5.4 m in drill hole) zones. These gold occurrences within the greenstone belt and are associated with quartz veining in sedimentary rocks as well as intermediate to mafic tuff and basalt and are located approximately 15-20 km to the west-southwest of the Property.

Dios Exploration's AU33 Project hosts numerous gold occurrences within the Mistumis Batholith, which also borders the south of the Black Dog Property. They interpret an oxidized intrusion-associated gold system is present (Dios Exploration, 2020). Drill results at their Heberto Target include 3.65 g/t Au over 13 m.

For additional reference, the Eleonore Gold Mine is located approximately 55 km to the north of the Property, straddling the contact between the Opinaca and La Grande (Eastmain River Domain) subprovinces. The mine produced 246,000 oz of attributable gold in 2019 and demonstrates that Archean metasedimentary strata in the region hold the potential to host economic deposits (Newmont Corporation, 2020).

The Authors note that they have not verified the results that have been reported by the operators of the adjacent properties. Further, the Authors caution that past results or discoveries on geologically similar properties (i.e., adjacent properties to the Black Dog Lake Property) may not necessarily be indicative to the presence of mineralization on the Black Dog Lake Property, which is the subject of this report.





Figure 17: Adjacent properties



24 OTHER RELEVANT DATA AND INFORMATION

The Authors are not aware of any other data or information that may be relevant to this report.



25 INTERPRETATION AND CONCLUSIONS

The Black Dog Lake Property is an early-stage exploration project, which has been the subject of several exploration campaigns by multiple companies since the 1970s. Appreciable gold mineralization has been confirmed to be present on the Property within a sulphide-facies banded iron formation (the "Black Dog Zone") and represents the primary exploration target on the Property. In addition, a series of east-west trending conductors, IP anomalies, and magnetic trends are prevalent across the southern half of the Property and parallel the northern contact of the Mistumis Batholith. Collectively, these features demonstrate additional exploration potential on the Property.

In addition to the Black Dog Zone, two target areas have been identified along this southern corridor for focused exploration, as well as two areas over the northern portion of the Property, and are detailed as follows (Figure 18):

Black Dog Lake Zone (the "Black Dog Zone") – The mineralization at the Black Dog Zone has a current interpreted extent of least 600 m in length and extends at least 100 m down dip, is steeply dipping, and has an apparent thickness of 0.6 to 3.6 m. The zone remains open along strike and at depth and has been tested at wide drill spacings. The significant grades of drill core intercepts are; 15.2 g/t Au over 0.6 m (in LH-88-01); 5.6 g/t Au over 1.1 m (in LH-88-02); and 4.3 g/t Au over 0.88 m (in LH-88-03), and indicate a favourable environment for mineralization, and therefore, potential to extend to other areas of the Property.

The zone is coincident with local EM conductors, magnetic trends, and anomalous gold in surface samples, which collectively indicate additional strike potential is present. A focused and systematic exploration program is required to adequately evaluate the potential of the target to the western Property border, as well as to the east past claim 2480178 and on to claim 2535533 (Figure 2).

- Lac Katatapiminakun Target (the "LK Target") The LK Target is located at the eastern end of the Property and is characterized by an area of mapped banded iron formation with coincident anomalous Au-Ag-As-Cu-Co mineralization in surface samples, conductive trend, and magnetic trend. Surface sampling in the area has returned anomalous Ag-Cu including 4.4 g/t Ag and 0.65% Cu at the 99-DF-2373 Showing. In 2014, a sample of 0.38 g/t Au and 1.2 g/t Ag was collected from a sulphide-facies banded iron formation exposure comprised of *"quartz-amphibole-plagioclase-graphite with 3% pyrite."* The zone is documented to be continuous over 600 m, oriented WNW-ESE and is up to 40 m in width. Another sample from the area, associated with a quartz vein hosted within a feldspar-amphibole-sericite meta-greywacke, returned 2.8 g/t Ag and 1,340 ppm Co (Lavoie, 2014 GM68876).
- Black Dog Lake East Target (the "BDLE Target") the BDLE Target extends from the middle of Black Dog Lake to the east over a distance of approximately 700 m. It is characterized by coincident EM and IP



anomalies, anomalous Au in till samples (5 to 59 ppb Au) (Shelp, 1989 - GM49584), and a prominent magnetic fabric suggesting it could be and extension of the Black Dog Zone.

- Northwest Ironstone Target (the "NWI Target") The NWI Target forms the eastern extension of a mapped iron formation unit (Moukhsil, 2000 - RG2000-04), which is distinctly evident as a magnetic high. This area of the Property has seen relatively limited exploration attention by comparison to the southern targets.
- Gabbro Target (the "GAB Target") The GAB Target is a mapped gabbro unit that is coincident with a
 distinct magnetic high located in the northern portions of the Property. The gabbro unit appears to be
 cut/off-set on its west side by a large regional structure that can be interpreted from the airborne
 magnetic data. The intrusion of the gabbro may have provided a heat source leading to hydrothermal
 movement.

The Authors further note that this target list is not exhaustive and other areas of the Property may also hold good potential for gold mineralization as well. Numerous EM and IP anomalies remain to be tested.





Figure 18: Property target summary



26 Recommendations

Based on the favourable geological setting and gold mineralized occurrences present at surface and in drill hole, most notably the Black Dog Zone, the Black Dog Lake Property is of sufficient geological merit to warrant further mineral exploration. The following two (2) phase exploration program is proposed. The first phase (Phase 1) is recommended to be comprised of an initial data compilation (& digitization), followed by surface exploration including trenching, prospecting and mapping, and potentially ground geophysics. The second phase (Phase II) is recommended to focus on diamond drilling of 15 holes for approximately 2,500 m over the Property with at least half focused on delineation of the Black Dog Zone. Phase I has a total estimated budget of \$275,000 and Phase II a total estimated budget of \$1,170,400 for a combined total Phase I+II budget of \$1,445,400 (Table 5). The full scope of Phase II is dependent on the results of Phase I.

26.1 PHASE 1

As a first step towards targeting, a detailed compilation of all existing data is recommended. This includes the historical till survey, surface samples, and ground geophysical survey data (e.g., IP data) which has not been digitized to the Authors' knowledge. This information should then be interpreted holistically with respect to drill holes completed to date on the Property. For example, certain IP anomalies were considered tested, and source of the anomaly determined through drilling; however, other anomalies remain unexplained and/or to be tested. Further, a relatively recent airborne magnetic survey was completed in 2006 (Geotech Ltd., 2007 - GM62824) and that digital data is available from SIGEOM providing a good base-magnetic dataset for the Property. However, the ground EM and IP data were collected in 1997 (Gillgrass, C., 1997 - GM56194) and is only available in paper copy to the Authors' knowledge. This data should be assessed in detail to determine if additional data collection using modern methods is warranted. The Authors consider this data compilation a key first step as it will determine if additional ground geophysical surveys are warranted as well as prioritize areas of interest prior to the Phase I field program. Given the size of the Property, optimal resolution should be prioritized (i.e., tight line spacing) if additional geophysical surveys are completed.

It should be noted that the area covered in these historical ground geochemical and geophysical surveys is mostly limited to the southern portions of the Property only. Therefore, if additional surface geochemical and geophysical surveys are completed, the survey configuration should consider the northern targets on the Property.

Following the compilation and targeting, a ground program is recommended to follow and include focused prospecting and mapping, till or soil sampling (property wide), and trenching at the Black Dog Zone. A detailed review and interpretation of the 2021 ground geophysics completed by the Company should be carried-out prior to the next exploration program.

In addition to the base data compilation outlined above, a compilation of the structural data with respect to existing drill holes and Property geology would aid in directing future surface and drill exploration at the Black



Dog Zone and other potentially auriferous iron formation horizons. Focus should be directed at areas of potential tight folding or thrusting that may allow for thickening or stacking of the target horizons at depth, as well as major and secondary structures that may have acted as conduits for fluid flow.

26.2 PHASE 2

An NQ or HQ size 15-hole (~2,500 m) diamond drill program is recommended for Phase 2 exploration of the Property; however, the full scope is largely dependent on the results of Phase I. Drill targets will be prioritized based on the results of Phase I exploration and recent ground geophysical data; although, a large focus is expected to remain at the Black Dog Zone as it is the most advanced and is a demonstrated gold-bearing target on the Property. The focus at Black Dog would be to extend the mineralized horizon along strike to the east and west to the claim borders as well as test the zone at depth. The targeted end-of-hole depths for each drill hole should be determined following the Phase I surface mapping and structural analysis. It is recommended approximately 10 holes (1,500 m) be allocated to delineating the Black Dog Zone and the remaining be completed at the LK Target and other secondary targets on the Property developed from the Phase I exploration. The proposed Phase I and II budgets assume a helicopter is used for access during the programs. However, depending on the final drill hole plan and local terrain, the program may be able to be carried out using the construction of new exploration trails for access.

Description	Est. Cost (\$)
PHASE I (Data compilation and surface exploration)	
Data Compilation & Project Planning (incl. structural interpretation)	\$30,000
Permitting, Notifications, COVID Management Plan	\$3,000
Prospecting, Mapping, Geochemical Sampling, Trenching (incl. travel, accommodation)	\$130,000
Sample Analysis (rock/soil/till)	\$75,000
Program Data Validation, Reporting, Project Management	\$12,000
Contingency (10%)	\$25,000
Total:	\$275,000
PHASE II (Diamond drilling)	
Project Planning and Final Targeting	\$50,000
Permitting, Notifications, COVID Management Plan	\$5,000
Drill Program (15 holes totalling 2,500 m)	
- Drill Contractor (\$200 m all in)	\$500,000
- Helicopter support + fuel + positioning (\$2000/hr, 130 hrs)	\$310,000
- Accommodations & Food (\$250/person/day)	\$63,000
- Travel/Transport (Commercial & Charter)	\$16,000
- Sample Analysis	\$70,000
Program Data Validation, Reporting, Project Management	\$50,000
Contingency (10%)	\$106,400
Total:	\$1,170,400
Total Phase I + Phase II	\$1,445,400

Table 5: Proposed Budgets for Phase I and Phase II



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28 DATE AND SIGNATURE PAGE

This report, entitled **"Technical Report on the Black Dog Lake Property, Quebec, Canada**", and with an effective date of November 18th, 2021 was prepared on behalf of Valorem Resources Inc. and is signed by the authors, Darren L. Smith, M.Sc., P.Geo., and Louis Caron, P.Geo.

"Signed and sealed"

November 22nd, 2021

Darren L. Smith, M.Sc., P. Geo. Suite 103, 10183 112th Street, Edmonton, AB, T5K 1M1

"Signed and sealed"

November 22nd, 2021

Louis Caron, P. Geo. 134, des Oblats St., Champlain, QC



29 CERTIFICATE OF QUALIFIED PERSON

I, Darren L. Smith, M.Sc., P.Geo., do hereby certify that:

- I am a Professional Geoscientist with a business address at Suite 103, 10183 112th Street, Edmonton, AB, T5K 1M1. I am employed by Dahrouge Geological Consulting Ltd. and work out of both the corporate head office as well as a home office in Edmonton, Alberta, Canada.
- I am the Author of the technical report entitled "Technical Report on the Black Dog Lake Property, Quebec, Canada", prepared on behalf of Valorem Resources Inc. and with an effective date of November 18th, 2021.
- 3. I graduated in 2005 with an M.Sc. in Geology from Carleton University in Ottawa.
- 4. I am a Registered Professional Geologist (P.Geo.) with the Ordre des Géologues du Québec with a Geologist Permit, number 1968. I have more than 15 years experience in the mineral exploration industry covering various commodities and deposit models, including base and precious metals in the James Bay Region, and is responsible for all items in this report.
- 5. I have been employed as a Professional Geologist continuously since October 2009.
- 6. I am a Qualified Person for purposes of National Instrument 43-101.
- 7. I did not attend the Property site visit; however, one was completed by my co-author Louis Caron.
- I am responsible for ITEMS 1 through 6, 9 through 11, and 13 through 26 of the report entitled "Technical Report on the Black Dog Lake Property, Quebec, Canada", prepared on behalf of Valorem Resources Inc. and with an effective date of November 18th, 2021.
- 9. I am independent of the issuer of this report, Valorem Resources Inc., and the vendors, Fayz Yacoub and Ramy Yacoub, as defined by Section 1.5 of NI 43-101.
- 10. My prior involvement with the Black Dog Lake Property is limited to preparation of several news releases for the Company as well as Author of the prior Technical Report on the Property (Effective date of December 8th, 2020).
- I have read National Instrument 43-101 and the report entitled "Technical Report on the Black Dog Lake Property, Quebec, Canada" which has been prepared in accordance with this Instrument.
- 12. On the effective date of the report, November 18th, 2021, to the best of my knowledge, information, and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

"Signed and sealed"

Darren L. Smith, M.Sc., P.Geo. November 22nd, 2021



I, Louis Caron, P.Geo., do hereby certify that:

- I am a Professional Geoscientist with a business address at 134, des Oblats St., Champlain, Quebec Province, Canada. I am employed by Dahrouge Geological Consulting Ltd. and work out of a home office in Champlain, Quebec Province, Canada.
- I am the Author of the section 12 Data verification in the technical report entitled "Technical Report on the Black Dog Lake Property, Quebec, Canada", prepared on behalf of Valorem Resources Inc. and with an effective date of November 18th, 2021.
- 3. I graduated in 1975 with an BSc. in Geology from Montreal University in Montreal.
- 4. I am a Registered Professional Geologist (P.Geo.) with the Ordre des géologues du Québec with a Geologist Permit, number 00330. I have more than 40 years experience in the mineral exploration industry covering various commodities and deposit models, including base and precious metals in the James Bay Region.
- 5. I have been employed as a Professional Geologist continuously since May 1975.
- 6. I am a Qualified Person for purposes of National Instrument 43-101.
- 7. I did attend the Property site visit in September 2021.
- I am responsible for ITEMS 7, 8, and 12 of the report entitled "Technical Report on the Black Dog Lake Property, Quebec, Canada", prepared on behalf of Valorem Resources Inc. and with an effective date of November 18th, 2021.
- 9. I am independent of the issuer of this report, Valorem Resources Inc., and the vendors, Fayz Yacoub and Ramy Yacoub, as defined by Section 1.5 of NI 43-101.
- 10. My prior involvement with the Black Dog Lake Property is limited to visit the Property in September 2021.
- I have read National Instrument 43-101 and the report entitled "Technical Report on the Black Dog Lake Property, Quebec, Canada" which has been prepared in accordance with this Instrument.
- 12. On the effective date of the report, November 18th, 2021, to the best of my knowledge, information, and belief, this technical report contains all scientific and technical information that is required to be disclosed to make the technical report not misleading.

"Signed and sealed"

Louis Caron, P.Geo. November 22nd, 2021



CONSENT OF QUALIFIED PERSON

To: Securities Regulatory Authority – British Columbia Securities Commission and the Alberta Securities Commission

I, Darren L. Smith, M.Sc., P.Geo., do hereby consent to the filing of the technical report entitled "**Technical Report on the Black Dog Lake Property, Quebec, Canada**" and dated November 18th, 2021 (the "Technical Report") by Valorem Resources Inc. (the "Issuer"), with the TSX Venture Exchange under its applicable policies and forms in connection with the option agreement dated as of August 6th, 2020, respecting the Black Dog Lake Property entered into by the Issuer and I acknowledge that the Technical Report will become part of the Issuer's public record.

"signed and sealed"

Darren L. Smith, M.Sc., P.Geo. November 22nd, 2021



CONSENT OF QUALIFIED PERSON

To: Securities Regulatory Authority – British Columbia Securities Commission and the Alberta Securities Commission

I, Louis Caron, P.Geo., do hereby consent to the filing of the technical report entitled "**Technical Report on the Black Dog Lake Property, Quebec, Canada**" and dated November 18th, 2021 (the "Technical Report") by Valorem Resources Inc. (the "Issuer"), with the TSX Venture Exchange under its applicable policies and forms in connection with the option agreement dated as of August 6th, 2020, respecting the Black Dog Lake Property entered into by the Issuer and I acknowledge that the Technical Report will become part of the Issuer's public record.

"signed and sealed"

Louis Caron, P.Geo. November 22nd, 2021

