

Graphite is on Ontario's Proposed Critical Minerals List March 10, 2021 ENDM

Option: A working interest in Black Mountain Graphite Claims is offered in exchange for optionee contribution of expertise and work to advance this property through exploration and potentially development. A brief review of the project is provided here. More information and samples are available. Property inspection can be arranged.

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Location: SE Ontario - Matawatchan Twp., Renfrew County and Miller Twp., Frontenac County.
Road access to contiguous claims at 335110 Easting, 4995540 Northing (NAD 83 zone 18).

Mineralization: 28 contiguous mining claims cover a total of 9 km strike length of favourable, graphite-bearing units. Graphitic schist with flake graphite content of 2 to 3.5% has been identified over a strike of about 7.5 km on the claim group. Preliminary prospecting indicates width of zones is up to 30 m (OGS Mancini 2020).

On strike surface flake graphite occurrences differ up to 75 m in elevation. This is measured as the elevation difference from the OGS 2015 occurrence (275-280 m) at the base of Black Mountain to an elevation high (350-355 m) 3.6 km SW at a location in the central zone where graphite was assayed at 3.47%. Assays average 3.0% graphite (Fig. 1) for 14 surface bedrock samples taken over the extent of the NE - striking steeply dipping rock units.

Canada's largest past-producing graphite mine, the Black Donald Mine, is located 13 km along strike to the northeast from the Black Mountain property, where the deposit is associated with rusty-pyrite-pyrrhotite-graphite-bearing schists and calc-silicates near the contact with carbonate metasedimentary rocks, similar to the graphite mineralization on the Black Mountain property (OGS Tessier, 2019)(Pg.3).

Geological Setting: Canadian Shield, Grenville Province, Central Metasedimentary Belt, Bancroft Terrane, south west portion of Black Donald Domain, south eastern flank of Centennial Lake synform. This flank strikes NE and is steeply dipping. The synform plunges and widens to north east, while to the south west it pinches, approaching a fold hinge. The synform rises in the SW and meets the Grimsthorpe Domain (OGS Duquet 2018).

Local Geology: per OGS Map P3437 Precambrian Geology Denbigh 2001 (Lumbers & Vertolli) host rocks:

- Legend **13b**: late intrusive rocks (1280-1270 Ma) - gneissic trondhjemite and minor granodiorite with laminated structure and metamorphic fabric.
- Legend **5**: siliceous clastic metasedimentary rocks – calcareous and micaceous shaly metasedimentary
- Legend **RS**: rusty-weathering, graphitic, pyrite -and pyrrhotite- bearing schist.

The foregoing rock units are associated with a 2VD aeromagnetic anomaly. They are generally higher in elevation than adjacent parallel calcitic marble units:

- Legend **8b**: calcitic marble (medium to high metamorphic grade)- medium to coarse grained, gneissic siliceous calcitic marble containing 20 to 60 % siliceous impurities.

Activity: Work carried out 2016-9 includes grass roots prospecting with beep mat and, for the **Pg. 2 of 4** the northern portion of the claims, resistivity surveys and a ground mag survey by a Queen's University geophysics professor/grad student team. Thirty-two (32) graphite occurrences were identified and 14 assayed. A graphite analysis was undertaken on a composite of 7 of the assay samples from the central zone of the claims. This included modal mineralogy, graphite grain size analysis, graphite association and liberation, and grain images. OGS resources include aeromagnetic and geological bedrock surveys and reports, sampling reviews, geological and geophysical guidance, assay support, a property visit, and writeups in OGS annual reports. Communication regularly takes place with the Algonquin First Nation and nearby surface rights owners. Prospecting and ground geophysics is being continued, with focus.

Access: The claims are easy to access and close to power supply and major transportation routes: Hwy. 41, 17 TransCanada, 401. Distance to: Ottawa 150 km, Toronto 328 km, Montreal 345 km. To drive there: from Napanee on Hwy 401 go north 113 km on Hwy 41. Or, from Pembroke on TransCanada Hwy 17 go south 100 km on Hwy 41. At Vennachar Junction drive 5 km east on paved Buckshot Lake Rd (Road 30) to Vennachar. Proceed north-east 15 km on paved Matawatchan Rd to Quackenbush Rd (pg.3). With appropriate transportation, e.g.:4x4 with good road clearance, turn south and go about 1 km on unpaved 4x4 Quackenbush Rd to the start of the Black Mountain Graphite claim group, situated on crown land starting at 335110 easting, 4995540 northing NAD 83 UTM zone 18.

Fig. 1 Graphite Assays from Surface Bedrock listed north to south
NAD 83

Claim Zone	Graphite Grade	UTM zone 18		Elevation metres
		Northing	Easting	
north	2.77 %	5000863	338691	315
central	3.32 %	4999470	338166	315-320
	3.37 %	4999456	338107	315
	3.16 %	4999338	338200	285-290
	2.86 %	4999337	338192	"
	1.67 %	4998112	337471	335-340
	3.27 %	4997992	337405	340-345
	3.47 %	4997913	337410	350-355
south	2.24 %	4995235	336472	340-345
	3.39 %	4995234	336475	"
	2.81 %	4995194	336349	345-350
	3.72 %	4995188	336345	"
	3.00 %	4995178	336337	"
	2.98 %	4995103	336291	345

Average Grade for 14 samples: 3.0 %

Pg. 3: Black Mountain Graphite Claims, proximity to historic Black Donald Mine, scale 1: 144 448

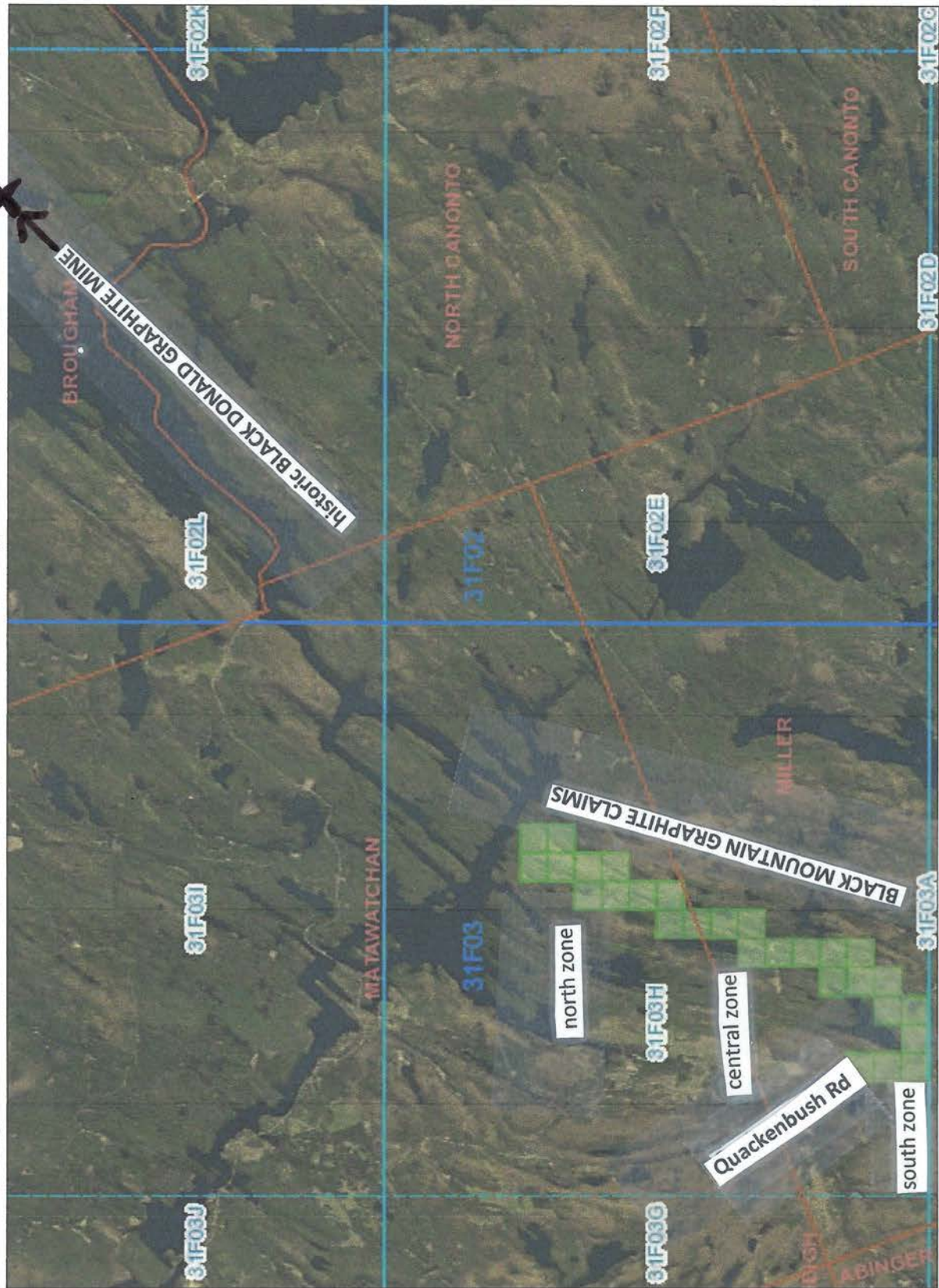
Pg. 4: Black Mountain Graphite Claims, scale 1: 72 224



MINISTRY OF ENERGY, NORTHERN DEVELOPMENT AND MINES
MLAS Map Viewer

Black Mountain Graphite Claims

Notes:
Scale 1: 144448 MLAS Map
historic Black Donald Graphite Mine



Legend

Provincial Grid Cell	Available	Withdrawal	Notice	ENDM Administrative Boundaries	Geographic Ld Fabric	UTM Grid 1K	UTM Grid 10K	Mining Division	Mineral Exploration and Development Region	CLUPA Protected Area - Far North	Resident Geologist District	Federal Land Other	Native Reserves	AMIS Sites	AMIS Features	Drill Hole	Mineral Occurrences	MLAS Mining History	Withdrawal - History	Notice - History	Mining Claim - History	Mining Land Tenure - History	Legacy Claim	Provincial Grid	Provincial Grid 250K	Provincial Grid 50K	Provincial Grid Group	Land Tenure	Surface Rights	Mining Rights	Mining and Surface Rights	Order-in-Council
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0 5.17 km
Projection: Web Mercator

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Black Mountain Graphite Claims

Notes:
Scale 1: 72224 MLAS Map



Legend

Provincial Grid Cell	Available	Withdrawal	Notice	ENDM Administrative Boundaries	ENDM Townships and Areas	Geographic Lot Fabric	UTM Grid 1K	UTM Grid 10K	Mining Division	Mineral Exploration and Development Region	CLUPA Protected Area - Far North	Resident Geologist District	Federal Land Other	Native Reserves	AMIS Sites	AMIS Features	Drill Hole	Mineral Occurrences	MLAS Mining History	Withdrawal - History	Notice - History	Mining Claim - History	Mining Land Tenure - History	Legacy Claim	Provincial Grid	Provincial Grid 250K	Provincial Grid 50K	Provincial Grid Group	Land Tenure	Surface Rights	Mining Rights	Mining and Surface Rights	Order-in-Council
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0 2.59 km

Projection: Web Mercator

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