



2021 Exploration Program Commences at Cape Ray Gold Project

Matador Mining Limited (ASX: MZZ; OTCQX: MZZMF; FSE: MA3) (“**Matador**” or the “**Company**”) is pleased to announce exploration activities at the Company’s 100% owned Cape Ray Gold Project (the “**Project**”) in Newfoundland, Canada have commenced for the 2021 exploration season.

Highlights

- **Exploration activities have started at the Cape Ray Gold Project, and are anticipated to continue through 2021 and into 2022:**
 - The 2021 program commenced three months earlier than previous year’s programs and is anticipated to incorporate the first winter exploration drilling undertaken by the Company.
- **Largest diamond drilling program ever undertaken by the Company with upwards of 20,000 metres planned**
 - Average drill hole depth in 2020 was 120 metres from surface with 80% of gold mineralisation encountered less than 80 metres from surface.
- **The 2021 drilling program is aimed at expanding gold mineralisation around known deposits while testing up to nine new greenfield target areas**
- **Innovative ATV-mounted power-auger multi-element geochemistry drilling program will be used for systematic and rapid definition of advanced targets for follow-up diamond drilling**
 - Pathfinder elements from basement multi-element geochemistry to be used to map the mineralisation halo below shallow till cover, which previous work has indicated can extend up to 100 metres from the gold mineralisation.
- **Detailed heli-magnetic geophysics program to improve targeting of potentially mineralised structures beneath the shallow till cover over 45 kilometers of Project strike**
- **The Company is in a strong financial position with ~\$8million cash as at 31 March 2021:**
 - In-the-money options valued at ~\$5 million with an expiry date of 2 July 2022 continue to be exercised early (21.3 million options at \$0.23/share remain unexercised).

Executive Chairman Ian Murray commented:

“Following our successful 2020 exploration season, we are excited to start this year’s program in what is shaping up to be the largest undertaken by the Company. Significant planning occurred during the northern winter season to allow for the early start to the drilling campaign, and I would like to thank our geological team and in-country contractors for the effort they have put in.

We see excellent potential for Mineral Resource growth at each of our known deposits, which will be the initial focus of our diamond drilling program. However, the potential for transformational new discoveries across our under explored package is the most exciting part of the program.

Preliminary work on the first of nine new high priority target areas is underway. Importantly, each of these target areas is within only 15 kilometres of existing Mineral Resources and our Central Project Area.

This year promises to be an exciting one for the Company on a number of fronts, and should ensure strong on-going news flow throughout. We would like to thank all existing shareholders for your continuing support and look forward to keeping you regularly updated on our activities throughout the year.”



Snow cleared at the Cape Ray Camp site for 2021 exploration program



Work about to commence at the Angus prospect

“Near-Mine” Target Areas

The exploration program is designed to grow the existing Mineral Resource (840koz Au at 2.0g/t) within the Project area, as defined in the Cape Ray Gold Project Scoping Study¹. Focusing on this area has the potential to deliver Mineral Resources that can be added into the future Pre-feasibility Study.

The 2021 drilling will initially focus on targets identified through interpretation of 2020 exploration results. Specifically, the extensions at depth and laterally around Window Glass Hill (**WGH**) and further definition and step-out drilling at the new Angus discovery. Additional extensional drilling is also anticipated to take place at Isle aux Morts (**IAM**) during 2H21 following the identification of untested down-plunge potential in 2020. In each case, the primary focus will be on growing the Mineral Resource base.

While initial diamond drilling commences, the first phase of the ATV-mounted power-auger and backpack geochemistry drilling will ramp-up, targeting areas selected from last year’s ground magnetics and historic soil samples (Figure 1), all within the vicinity of WGH, Angus and Big Pond (**BP**). This work will refine the targeting for the second phase of diamond drilling that will begin on completion of the WGH and Angus diamond drilling program, referred to in Greenfields Target Areas below.

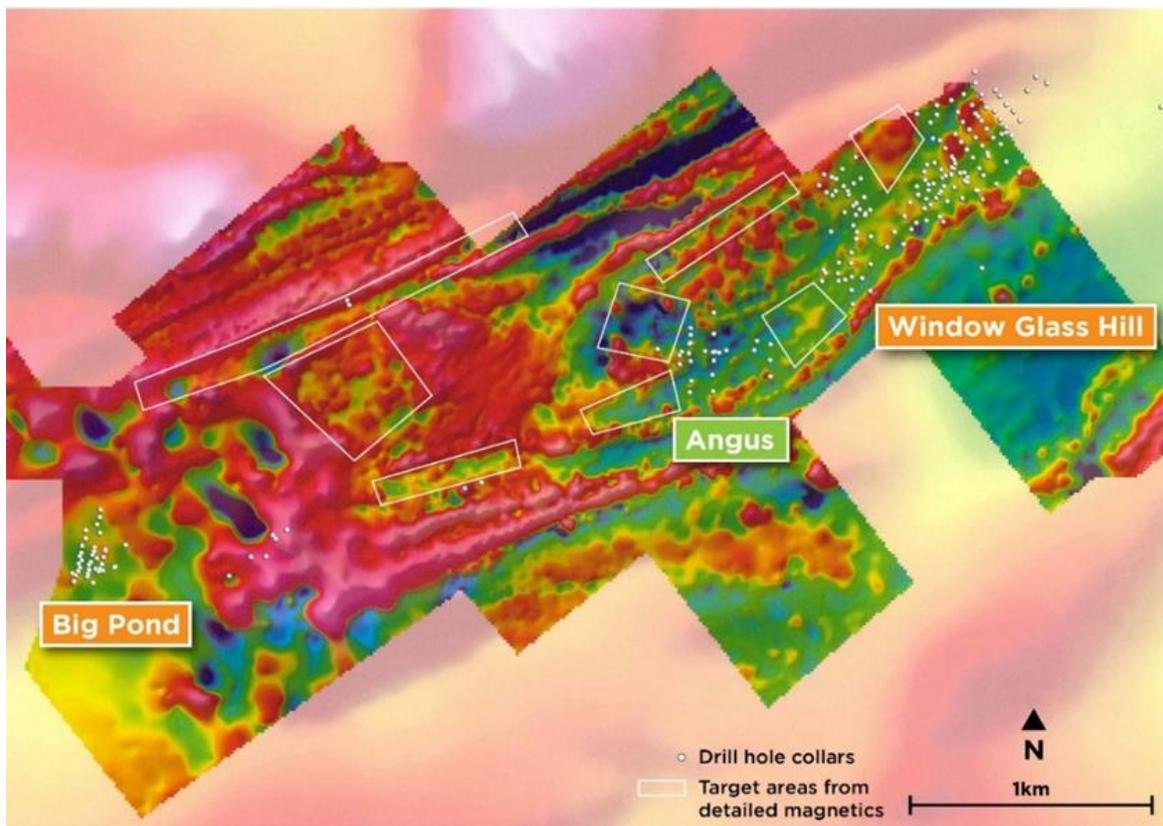


Figure 1: Detailed 40 metre line spaced ground magnetics data acquired in 2020 for the area between Big Pond and Window Glass Hill. White polygons define untested greenfield and extensional target areas identified by interpreting the detailed magnetics in conjunction with existing surface geochemistry pathfinders.

Greenfield Target Areas

As previously announced², a detailed 30 metre line-spaced heli-magnetic survey will be completed covering a 45 kilometre section of the tenement package from BP in the south-west up to the Benton Five anomaly in the north-east (Figure 2). This detailed survey will provide high resolution geophysical data of similar quality and resolution to the highly effective ground magnetics surveys we conducted last year.

¹ ASX Announcement 6 May 2020

² ASX Announcements 14 April 2021 and 21 April 2021

Structural interpretation of the heli-magnetic data will support planning and design of the power-auger and backpack drilling programs. The combination of multi-element geochemical data from auger / backpack drilling with the geophysical data, along with other criteria defined in our exploration targeting matrix, will drive the definition and ranking of discrete targets for follow-up diamond drilling.

A second phase of heli-magnetic data acquisition, covering the majority of the north-eastern portion of Matador’s tenement package, will be undertaken ahead of expanding ground exploration activities in this area (Figure 2²).

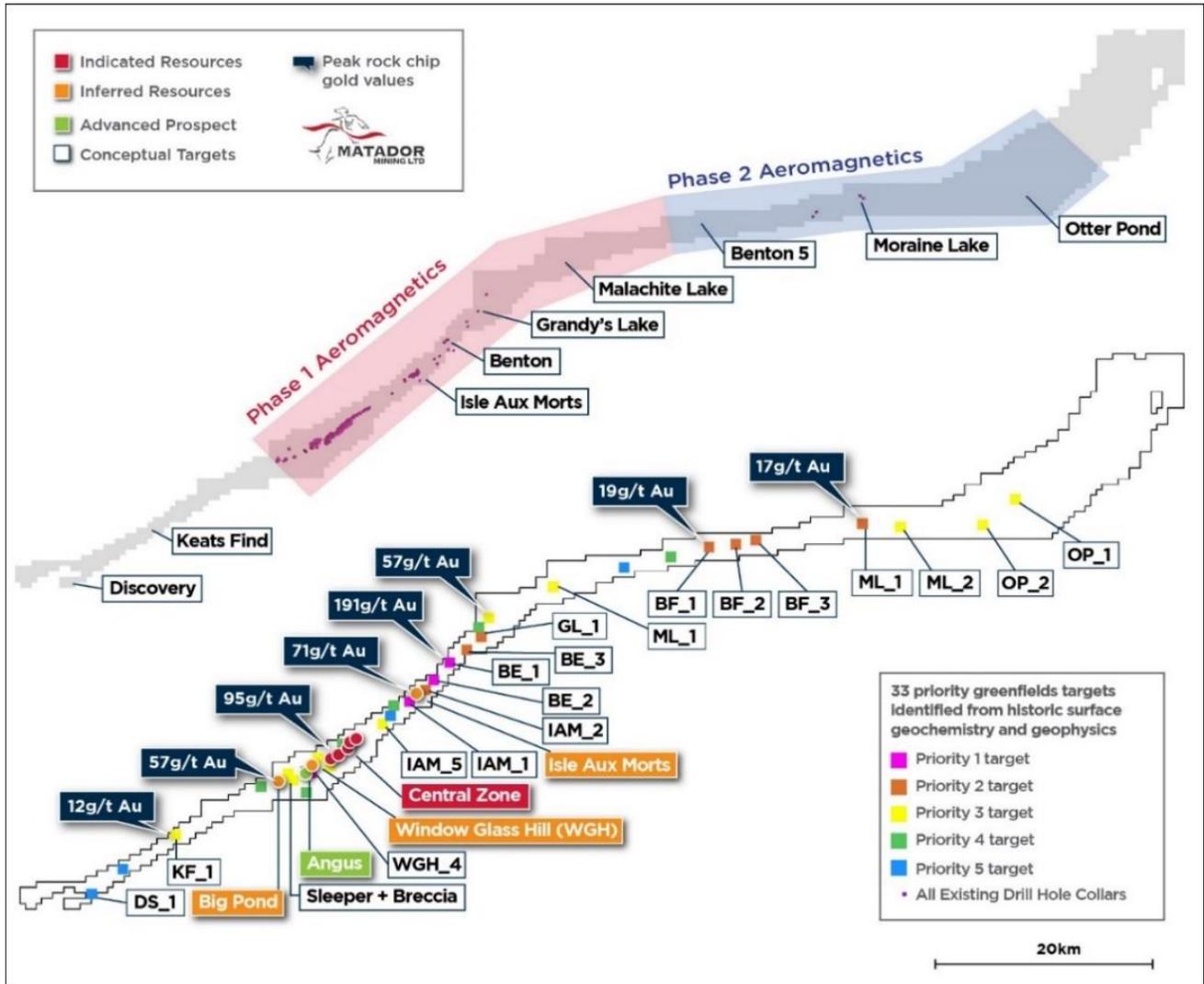


Figure 2: Proposed extent of Phase 1 and Phase 2 detailed (30 metre line-spaced) aeromagnetic surveys at Cape Ray, juxtaposed with Matador’s 33 prioritized exploration target areas and existing Mineral Resource locations

The initial greenfield auger geochemistry drilling³, referred to in “Near Mine” Target Areas above, will focus on the areas between BP and IAM with the intention that any refined target within this area can be diamond drilled during the current summer season on completion of the WGH and Angus diamond drilling program (Figure 3). An additional drill rig will be mobilised to site at the opportune time to facilitate concurrent drilling of both extensional/infill and greenfields targets.

³ Refer ASX Announcement 14 April 2021

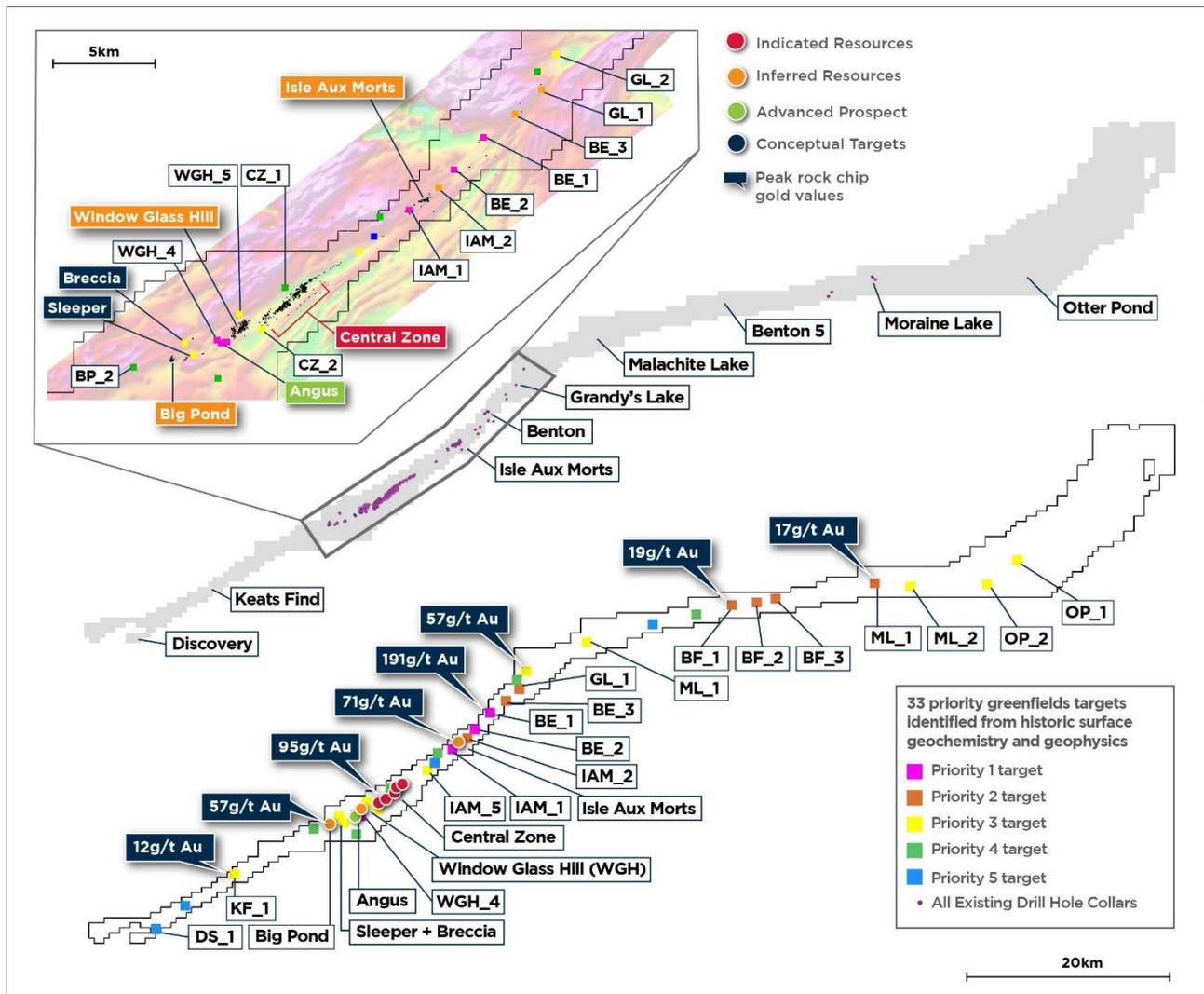


Figure 3: Map of prioritized exploration target areas, peak rock chip values and existing diamond drill holes.

The greenfield exploration program has also been designed to generate additional longer term drill targets. This second stage of the power-auger and backpack geochemistry drilling will extend further north-east, testing target areas beyond IAM. Drilling targets defined within these areas will form the basis for the diamond drill program that is being considered for either Matador’s first winter drill program at the start of 2022 or for the start of the 2022 summer drill season.

The overall strategy behind the greenfield program is to systematically explore target areas identified from historic data to build a solid pipeline of refined and ranked drill ready targets so that the diamond drilling can be planned well in advance, improving efficiency and reducing wasted drill metres.

As part of this strategy the Company will be updating the exploration pyramid (Figure 4) when the data from each of the heli-mag, geochemical and drilling programs become available, such that any new target areas (conceptual targets) can be added to the pyramid and the existing conceptual targets and/or advanced prospects can either be moved up or removed from the pyramid.

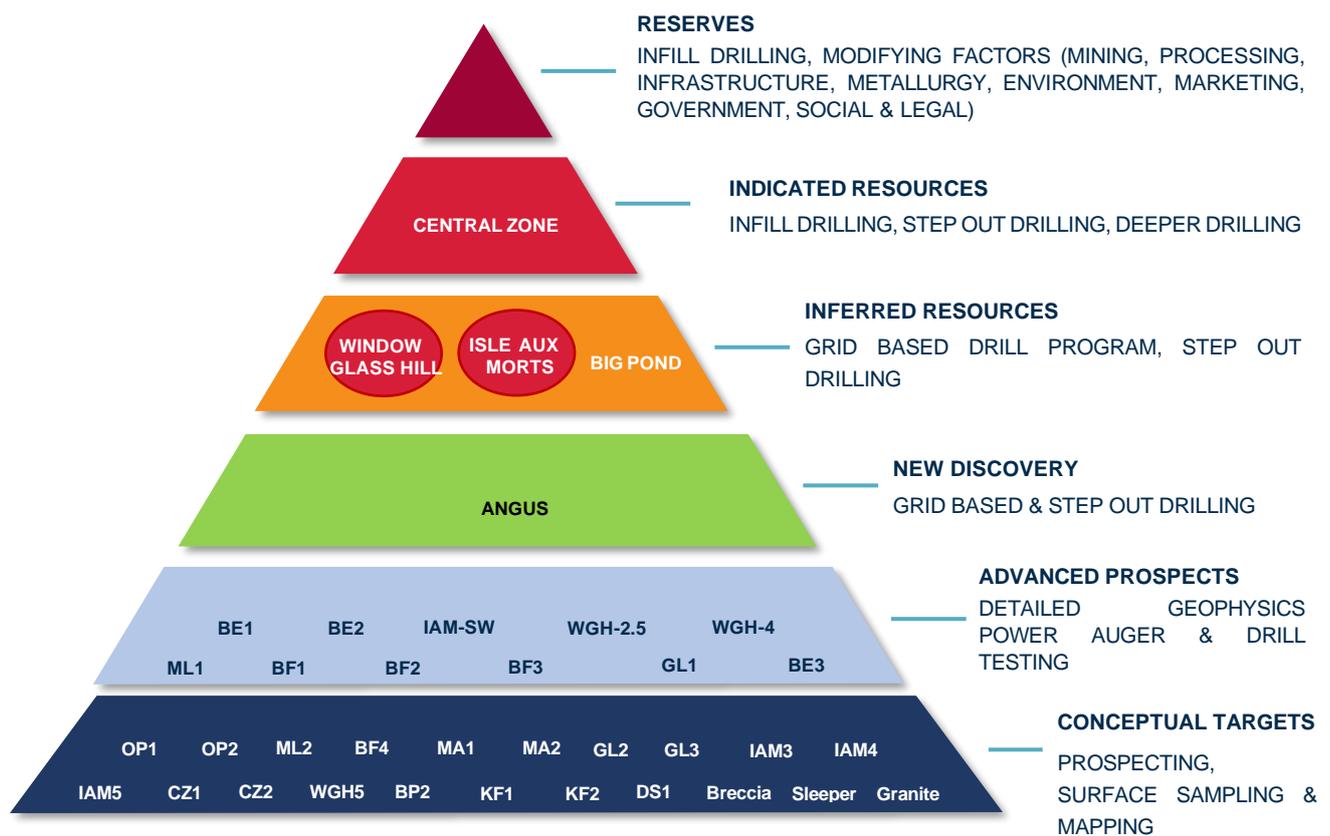


Figure 4: Current Exploration Pyramid, the aim is to move targets/prospects up, or out, based on exploration results.

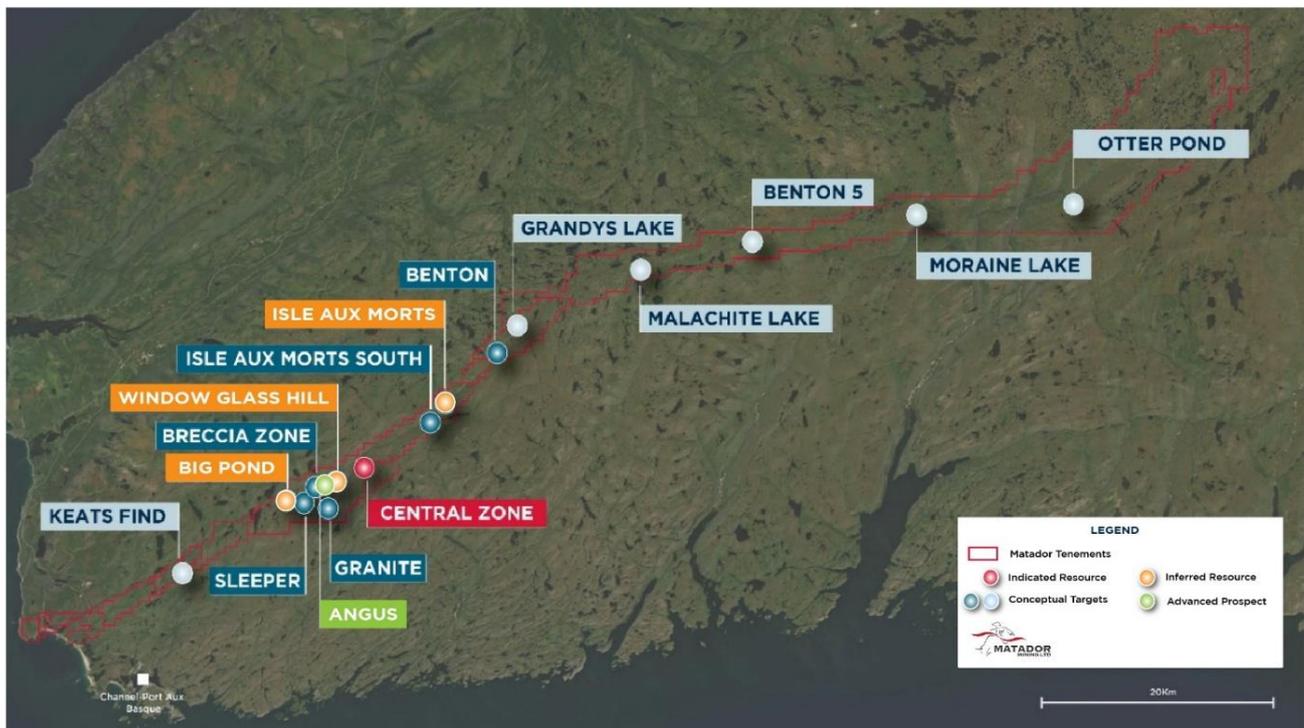
Supporting Activities

With 2021 expected to be the largest drilling program ever undertaken by Matador at Cape Ray, the Company has also strengthened its capabilities on site and in the nearby town of Port aux Basque to effectively manage and streamline the planned programs. This has included:

- Expansion and upgrading of core processing facilities in Port aux Basques;
- Installation of a dedicated sample preparation facility at the Port aux Basque core processing facility. This facility will be run by SGS Canada and includes guarantees on turnaround times for assays from the drilling and auger program that will fast-track the Company's ability to refine individual drill targets;
- Expansion of the field camp to accommodate the entire field crew (28 rooms), thereby eliminating commute time and reducing the risks associated with travelling to site on a daily basis;
- Despite the challenges of COVID restrictions, Matador's two Perth-based geologists, Exploration Manager Warren Potma and Consulting Geologist Charles Gilman have both arrived in Canada and will be onsite to provide direct supervision for the program; and
- Matador has also employed a full-time Principal Geologist who is a resident in Newfoundland and will be key to the local management of exploration programs while COVID restrictions continue to complicate travel for Australian based geologists.

About the Company

Matador Mining Limited (ASX: MZZ; OTCQX: MZZMF; FSE: MA3) is a gold exploration company with tenure covering 120 kilometres of continuous strike along the highly prospective, yet largely under-explored Cape Ray Shear in Newfoundland, Canada. The Company released a Scoping Study which outlined an initial potential seven-year mine life, with a forecast strong IRR (51% post Tax), rapid payback (1.75 year) and LOM AISC of US\$776/oz Au (ASX announcement 6 May 2020). The Company is currently undertaking the largest exploration program carried out at Cape Ray, with upwards of 20,000 metres of drilling, targeting brownfield expansion and greenfields exploration. Matador acknowledges the financial support of the Junior Exploration Assistance Program, Department of Industry, Energy and Technology, Provincial Government of Newfoundland and Labrador, Canada.



This announcement has been authorised for release by the Company's Board of Directors.

To learn more about the Company, please visit www.matadormining.com.au, or contact:

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Reference to Previous ASX Announcements

In relation to the results of the Scoping Study which were announced on 6 May 2020, Matador confirms that all material assumptions underpinning the production target and forecast financial information included in that announcement continue to apply and have not materially changed.

In relation to the Mineral Resource estimate announced on 6 May 2020, the Company confirms that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

In relation to the exploration results included in this announcement, the dates of which are referenced, the Company confirms that it is not aware of any new information or data that materially affects the information included in those announcements.

Mineral Resource Estimate – May 2020

Cape Ray Gold Project Summary Mineral Resource																		
Deposit	Cut-off	RL	Indicated					Inferred					Total					
			Tonnes (Mt)	Au (g/t)	Ag (g/t)	Contained Au (Koz)	Contained Ag (Koz)	Tonnes (Mt)	Au (g/t)	Ag (g/t)	Contained Au (Koz)	Contained Ag (Koz)	Tonnes (Mt)	Au (g/t)	Ag (g/t)	Contained Au (Koz)	Contained Ag (Koz)	
Z4/41	0.5	>100mRL	2.1	2.83	8	191	545	1.3	1.48	6	61	236	3.4	2.32	7	252	781	
	2	<100mRL	0.2	3.10	11	23	77	0.2	2.90	9	17	56	0.4	3.01	10	40	133	
Z51	0.5	>200mRL	0.8	4.25	9	103	211	0.0	1.43	5	1	3	0.8	4.18	9	104	214	
	2	<200mRL	0.2	4.41	11	32	77	0.1	2.59	3	12	15	0.4	3.71	8	43	92	
HZ	0.5	All	0.2	1.11	1	8	8	0.0	0.90	1	0	0	0.2	1.11	1	8	8	
PW	0.25	All	-	-	-	-	-	2.2	1.12	4	80	257	2.2	1.12	4	80	257	
IAM	0.5	All	-	-	-	-	-	0.8	2.39	2	60	60	0.8	2.39	2	60	60	
Big Pond	0.25	All	-	-	-	-	-	0.1	5.30	3	19	12	0.1	5.30	3	19	12	
WGH	0.5	All	-	-	-	-	-	4.7	1.55	10	232	1,455	4.7	1.55	10	232	1,455	
Total			3.5	3.15	8	356	918	9.4	1.60	7	481	2,094	12.9	2.02	7	837	3,012	

Note: Figures have been rounded and rounding errors may apply. Contained metal figures do not take metallurgical recovery into account. Reported cut-offs from Zones 51, 4/41 cover both open-pit resources scenario (0.5g/t Au cut off) and underground scenario (2g/t Au cut off). 2020 resource updates for Zones 4/41, 51, WGH and PW use 2.8t/m³ density.

- All Mineral Resources are completed in accordance with the JORC Code 2012 Edition
- All figures are rounded to reflect appropriate levels of confidence. Apparent differences may occur due to rounding
- Cut-off grade assumptions approximately reflect a US \$1,550 per ounce gold price as per the Cape Ray Scoping Study
- Open Pit Mineral Resources are reported at various cut-off grades to reflect assumed Reasonable Prospects of Eventual Economic Extraction as derived from the Cape Ray Gold Project Scoping Study: Z4/41 - 0.50 g/t Au cut-off above 100mRL; Z51 – 0.5 g/t Au cut-off above 200mRL; HZ, IAM and WGH all reported at 0.5 g/t Au cut-off with no constraint; Big Pond and PW reported at 0.25 g/t Au cut-off with no constraint
- Underground Mineral Resources are reported at a 2.0 g/t Au cut-off grade to reflect assumed Reasonable Prospects of Eventual Economic Extraction as derived from the Cape Ray Gold Project Scoping Study: Z4/41 – 2.0 g/t Au cut-off below 100mRL; Z51 – 2.0 g/t Au cut-off below 200mRL

Competent Person's Statement

The information in this announcement that relates to the Mineral Resource estimate for Zones 4/41 and 51, is based upon information compiled by Mr. Neil Inwood from Sigma Resources Consulting, an independent consultant to Matador Mining Limited. Mr. Inwood is a Fellow of the AUSIMM and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012). Mr. Inwood consents to the inclusion in the report of the matters based upon the information in the form and context in which it appears.

The information contained in this announcement that relates to Mineral Resource estimate for Zones 4/41 and 51 was undertaken by Mr. Brian Wolfe, an independent consultant to Matador Mining Limited, who is a Member of the Australian Institute of Geoscientists. The classification scheme for Zones 4/41 and 51 was developed by Mr Wolfe and reviewed by Mr Inwood. Mr. Wolfe was engaged as a consultant to Matador Mining Limited and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the JORC Code 2012. Mr. Wolfe consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information contained in this announcement that relates to Mineral Resource estimates for H Zone, Big Pond and IAM at the Cape Ray Project was first reported by the Company in an announcement to the ASX on 30 January 2019 is based on, and fairly reflects, information compiled by Mr. Alfred Gillman, an independent consultant to Matador Mining Limited. Mr. Alfred Gillman is a Fellow and Chartered Professional of the Australian Institute of Mining and Metallurgy and was engaged as a consultant to Matador Mining Limited to complete the JORC (2012) resource. Mr. Gillman has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Gillman consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information contained in this announcement that relates to the 2020 grade estimation for Window Glass Hill and PW Zone were reported to the ASX 4 February 2020 and was undertaken by Mr. Patrick Rice, an independent consultant to Matador Mining Limited. Mr. Rice is a Fellow of the Australian Institute of Mining and Metallurgy and was engaged as a consultant to Matador Mining Limited. Mr. Rice has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr. Rice consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information contained in this announcement that relates to exploration results is based upon information compiled by Mr. Warren Potma, who is an employee of Matador Mining Limited in the position of Exploration Manager. Mr. Potma is a Member of the Australasian Institute of Mining and Metallurgy and a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the December 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves" (JORC Code 2012). Mr Potma consents to the inclusion in the announcement of the matters based upon the information in the form and context in which it appears.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements, and in the case of estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.