



## Matador to accelerate work on a development study at Cape Ray

### Highlights

- **Matador has commenced work on a development study to assess the potential for gold production at its 100% owned Cape Ray Project**
- **The Development Study will initially target high-grade, shallow mineralisation (open-pit) at Central Zone, which hosts an existing resource of 810,000oz at 2.6g/t Au (81% classified in the indicated category)<sup>1</sup>**
  - Mineralisation at Central Zone starts from surface with a JORC resource of 310koz at 3.10g/t Au 100m from surface and 605koz at 2.9g/t 200m from surface (Table 1)
- **The Development Study will assess throughput scenarios of 1Mt to 1.5Mt per annum, with aspirations for production of up to 100,000oz per annum**
- **Results of previous metallurgical testwork have shown favourable gold recoveries averaging 96%<sup>2</sup> (Table 2)**
- **In addition to Central Zone, the Window Glass Hill, Isle Aux Mort and Big Pond deposits will be assessed as satellite deposits in the Development Study**
  - Window Glass Hill is located 2km from Central Zone and has the potential to provide a large long-term base load feed for the Project
- **The Development Study has been accelerated following significant progress made regarding environmental assessments and strong local support, such that construction can now be targeted for 2022**
- **The Company anticipates releasing the results of the Development Study during Q1 2020**

**Matador Mining Limited (ASX: MZZ, MZZO)** ("Matador" or the "Company") is pleased to announce that it has commenced a development study ("Development Study") to assess the potential for gold production at its 100% owned Cape Ray Project ("Project") in Newfoundland, Canada.

With a substantial Indicated Mineral Resource and significant progress being made with environmental approvals, Cape Ray represents a development opportunity with a short lead time, in the Canadian context, to potential production as early as 2023 (See Table 3 – Development timeline). The Development Study will assess an open-pit operation, with the majority of ore expected to be sourced from the flagship Central Zone deposit which hosts an indicated resource of 660,000oz at 2.7g/t Au.<sup>1</sup> Other deposits at the Project – Window Glass Hill, Isle Aux Mort and Big Pond – are less than 7km from Central Zone and will be assessed as satellite deposits. Window Glass Hill, the largest of these satellite deposits (134,000oz Au)<sup>1</sup> is located only 2km from Central Zone. As high-grade mineralisation outcrops at surface in Central Zone (and Isle Aux Mort), it is expected that pre-strip will be relatively low.

The Company anticipates completing the Development Study in Q1 2020. The Development Study will be underpinned by an updated Mineral Resource that will include any additional resources generated from the current 12,000m drill program.

<sup>1</sup> ASX announcement 30<sup>th</sup> January 2019

<sup>2</sup> ASZ announcement 31<sup>st</sup> January 2019

## Executive Director Keith Bowes commented:

"The aim of the Development Study is to highlight the potential of the current resource to produce 100,000oz Au per annum, it will also determine if a viable platform can be developed that will form the core of the operation and from which future growth can be based.

"A differentiator for the Project is the higher grades at shallower depths (see Table 1) which is fundamentally different to most Australian projects and which we believe will drive lower capital and operating costs.

"With a strong possibility for further discoveries along the Cape Ray Shear (the Company's tenements now cover 80km of the shear), the potential for expanding the resource further supports the current development opportunity.

"The Company has also been working hard behind the scenes to advance the environmental assessment process, with a number of baseline studies already undertaken this year. These studies will be completed next year with the Environmental Impact Statement documentation submitted before the end of 2020 and construction permitting targeted for approval in late 2021.

"With the progress made on the environmental approvals, together with the existing resources, exploration upside and the significant increase in the gold price, the timing is right to commence this Development Study."

## High-grade shallow resources underpin the Development Study

The Cape Ray Gold Project has a current resource of 1.02Moz Au at an average grade of 2.2g/t<sup>1</sup>. The resource is spread across four deposits, with Central Zone providing approximately 80% of the resource and containing 660,000oz Au classified in the indicated category. A distinct characteristic of the Cape Ray Project is that at each of the individual deposits, mineralisation not only starts from surface, but in most cases has high-grade material within the upper portion of the resource. This has the potential to benefit an open-pit mining operation, as high-grade material would be mined from the commencement of production, with a favourable pre-strip.

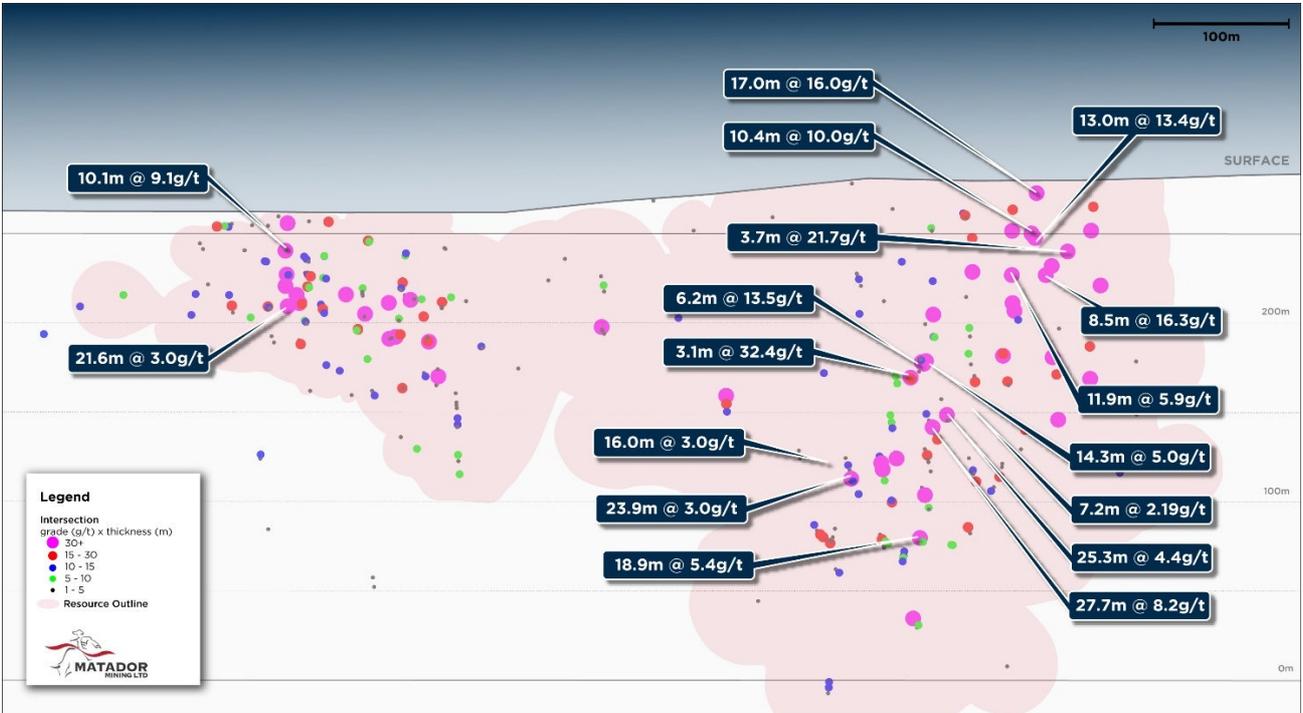
Table 1 below highlights the contained gold resource and grade at each of the four projects at 50m intervals, to a depth of 200m, the likely maximum depth of an open pit operation.

**TABLE 1: CONTAINED GOLD RESOURCE AT DIFFERENT DEPTHS**

	Central Zone		Isle Aux Mort		WGH		Big Pond		Total	
	Au (g/t)	Koz (Au)	Au (g/t)	Koz (Au)	Au (g/t)	Koz (Au)	Au (g/t)	Koz (Au)	Koz (Au)	Koz (Au)
0-50m	3.16	108	3.14	30	1.27	15	5.33	7	2.80	160
0-100m	3.05	303	2.77	47	1.16	57	5.30	18	2.50	425
0-150m	2.99	432	2.42	57	1.19	100			2.37	605
0-200m	2.90	605	2.39	60	1.15	134			2.30	816
<b>Total</b>	<b>2.60</b>	<b>810</b>	<b>2.39</b>	<b>60</b>	<b>1.15</b>	<b>134</b>	<b>5.30</b>	<b>18</b>	<b>2.20</b>	<b>1,020</b>

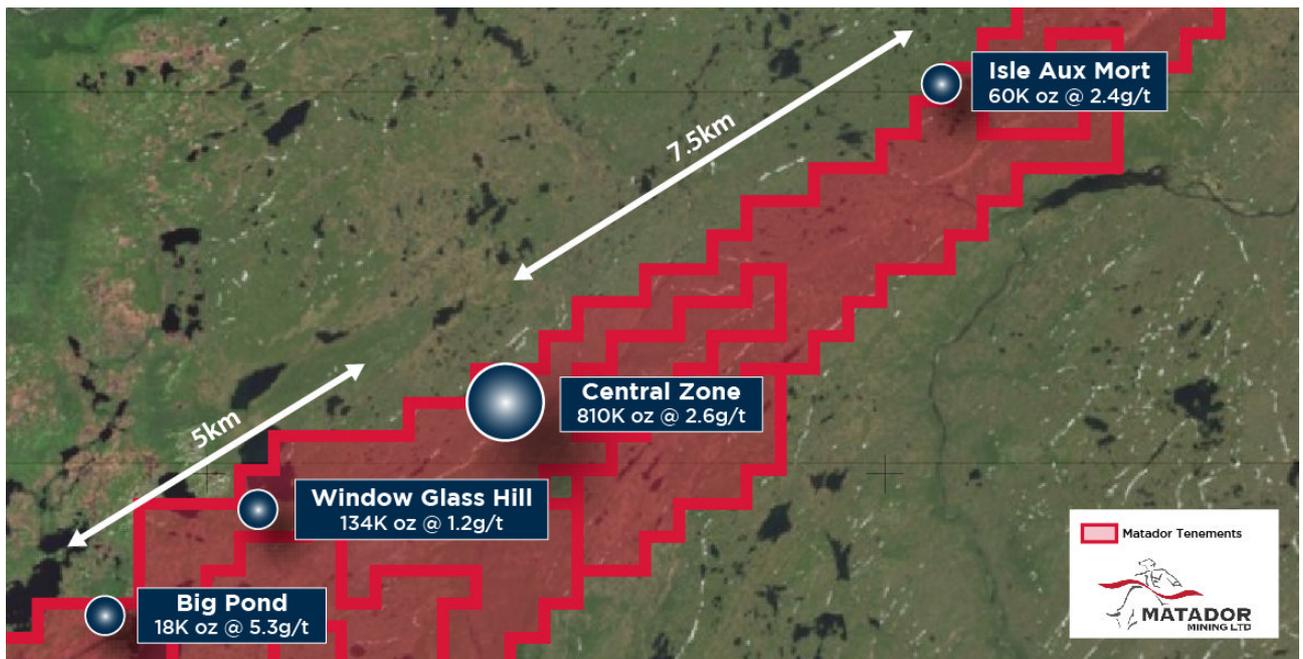
Central Zone consists of four deposits across a strike length of 2.5km. Given its size and classification, the resource at Central Zone is expected to be the core of future development studies. Image 1 below shows a long section of the 04/41 deposit within Central Zone, which contains the majority of mineralisation at this deposit.

**IMAGE 1: LONG SECTION 04/41 DEPOSIT - INTERPRETED LODGE TRENDS (+50G/T X M)**



The other deposits within the Project – Window Glass Hill, Big Pond and Isle aux Mort – are all relatively close to Central Zone with maximum distances of up to 7km, and most within 5km. Image 2 below highlights the location of each deposit, the resource size<sup>1</sup> as well as the distance from Central Zone.

**IMAGE 2: DISTANCE BETWEEN EACH DEPOSIT AT CAPE RAY**



The Window Glass Hill deposit hosts an existing resource of 134,000oz Au grading 1.2g/t Au<sup>1</sup> and is located approximately 2.5km from Central Zone. Unlike Central Zone, where mineralisation is hosted along the Cape Ray Shear or its secondary structures, mineralisation at Window Glass Hill is hosted within a large granitic intrusion, similar to Marathon Resources 4.2Moz Au Valentine Lake project. Extensions of the granite into nearby stratigraphy are also thought to have a strong control in mineralisation at the eastern and western margins of the Central Zone.

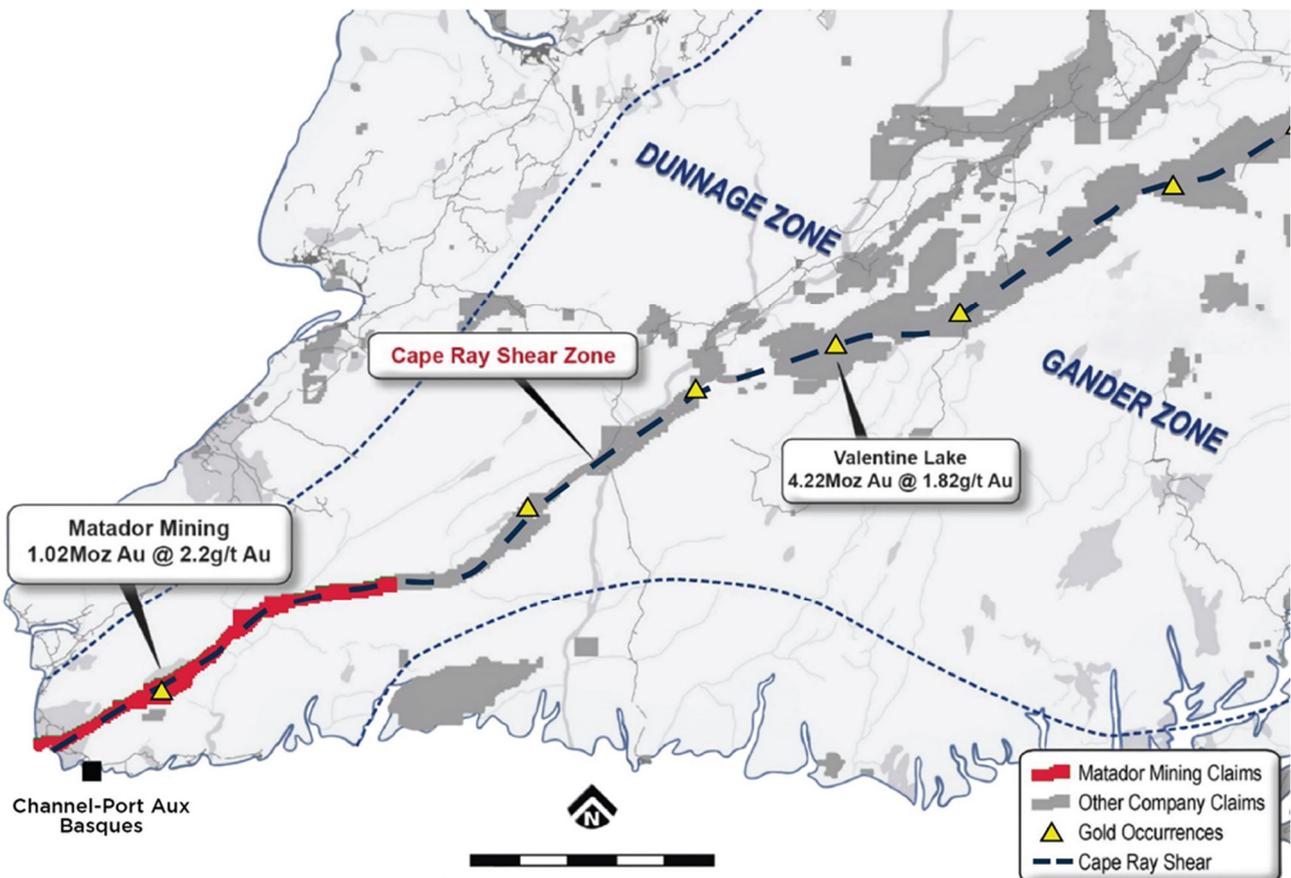
Extension of the Window Glass Hill granite is to the north and parallel to the main lode-style mineralisation at Central Zone. Only a small portion of this area along strike has been drilled, with approximately 2.5km of prospective strike remaining untested. The Company believes there is potential for Window Glass Hill to host a large tonnage, lower grade resource.

There is also strong potential for resource extension at Central Zone past the current 2.5km of strike. The Company is drill testing a number of structural and geochemical targets to the north as part of the current drill program.

### Greenfields potential – 80km of continuous strike

Matador recently increased its landholding along the Cape Ray Shear to now hold approximately 80km of continuous strike. This is the first time this ground has been consolidated under the ownership of a single company and makes Matador the largest holder of continuous ground along the Cape Ray Shear, one of the more prospective, yet under explored regions in Canada.

IMAGE 3: CAPE RAY SHEAR TENEMENTS

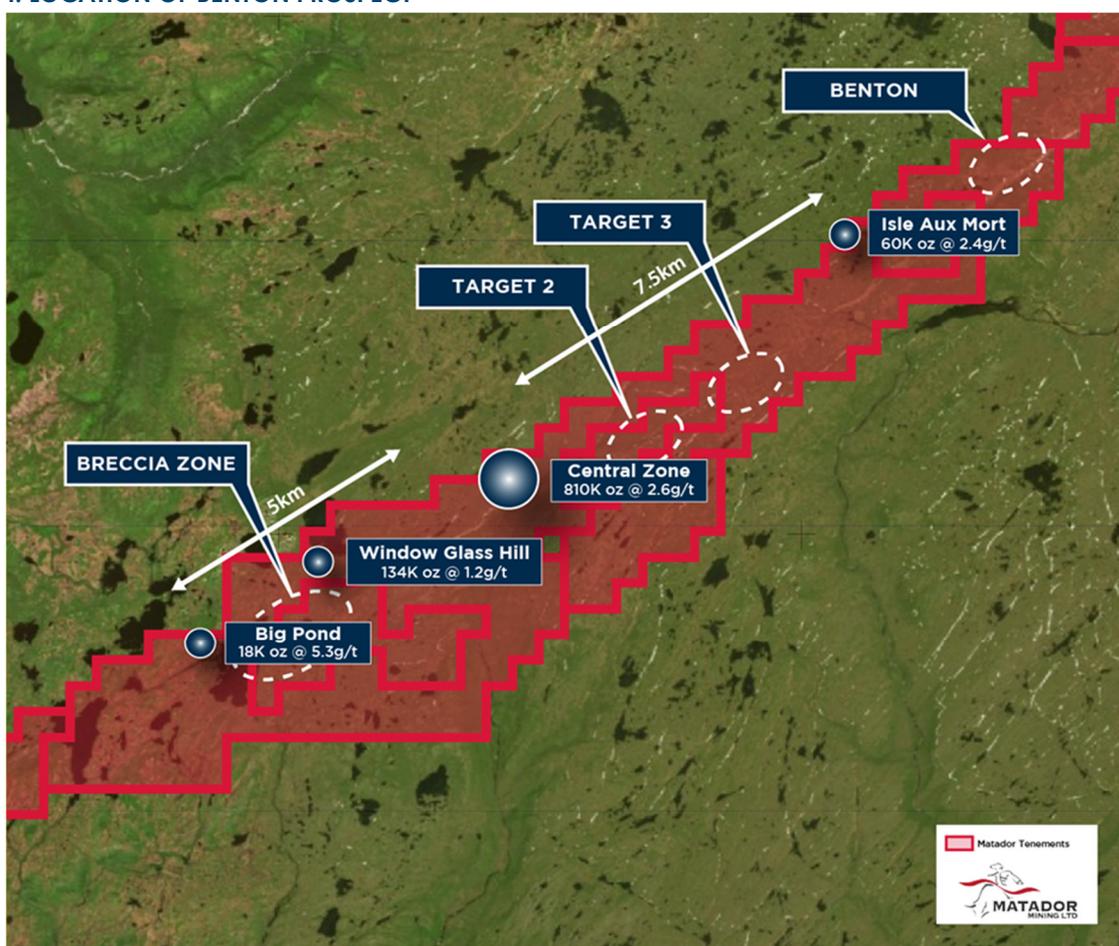


The majority of historical drilling completed at Cape Ray has focused around the known resource areas. This accounts for around 5km of the total 80km of strike. Very little has been completed outside of these areas.

During the current exploration season, drilling will be completed at four regional /greenfield exploration targets. These targets include the following:

- Breccia zone – located to the south of Central Zone and characterised by soil and till anomalies. Mineralisation at this target is outcropping with brecciated meta-sediments and quartz veining near surface.
- Benton – located approximately 4km north-east of Isle Aux Mort (Image 4). Mineralisation is outcropping with high grade rock chips of up to 191g/t Au (ASX announcement 9<sup>th</sup> November 2018).
- Isle aux Mort – hosts an existing resource of 60koz Au (ASX announcement 30<sup>th</sup> January 2019). Drilling is being considered to target an IP geophysical anomaly (Image 4) approximately 300m west from the resource area (ASX Announcement 2<sup>nd</sup> May 2019). This target has similar characteristics to the main Isle aux Mort deposit, however has never been drill tested.
- Extension to Central Zone – there are two priority targets located approximately 500m and 2km to the north of the current resource at Central Zone. These targets have strong soil samples and are contained within the same structure as the Central Project.

**IMAGE 4: LOCATION OF BENTON PROSPECT**



## Metallurgical Testwork

The Company completed a preliminary metallurgical testwork program at the Project in January 2019. The work completed consisted of cyanide leach tests, gravity recovery testwork as well as flotation testwork. The results showed excellent gold recoveries from both the cyanide (average 96% recovery) and the flotation testwork (average 90% recovery) and were in line with results achieved historically. A summary of the results is shown in Table 2 below.<sup>3</sup>

**TABLE 2: METALLURGICAL TESTWORK**

	Gold Recovery			Silver Recovery		
	Gravity	Whole Ore Cyanide	Whole Ore Flotation	Gravity	Whole Ore Cyanide	Whole Ore Flotation
Central Zone (04)	25%	97%	95%	10%	53%	84%
Central Zone (41)	33%	96%	91%	9%	71%	87%
Isle Aux Mort	9%	95%	80%	8%	56%	66%
Window Glass Hill (WGH)	59%	99%	97%	18%	38%	93%
Big Pond	44%	99%	94%	5%	35%	92%
<b>Average</b>	<b>28%</b>	<b>96%</b>	<b>90%</b>	<b>9%</b>	<b>56%</b>	<b>82%</b>

## Permitting and Environmental

Activities carried out by the previous owners at the Project have allowed Matador to effectively “pick-up” the work well into the process and draw heavily on previous submissions. This means the Company has gained almost two years of initial work, such that submissions to regulators can be targeted for Q3 2020, with Project permitting to follow. Estimated timelines towards construction have therefore been reduced significantly from previous estimations with the Company now looking to execute the project in early 2022 and start production the year after. Table 3 below highlights the key milestones and timeline to production.

<sup>3</sup> ASX Announcement 31<sup>st</sup> January 2019

**TABLE 3: INDICATIVE DEVELOPMENT TIMELINE**

Category of Task / Activity	Task / Activity	2019		2020				2021				2022				2023	
		Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
Environmental Assessment Process	Meeting with CEAA and Provincial EA representatives																
	First Nation Consultation																
	Other stakeholders																
Technical Studies	Gap analysis																
	Spring Baseline studies																
	Winter baseline studies																
	Predictive Modelling																
	Scoping Study																
	Pre-Feasibility Study																
	Bankable Feasibility Study																
Environmental Assessment & Permitting Process	Complete Federal EA Process and submit EIS																
	Complete Provincial EA Process and submit EIS																
	Respond to supplemental information requests																
	EIS accepted and project approved by CEAA and NL EA																
	Obtain Federal authorizations and Provincial Permits to construct																
Construction																	
Production																	

### Work program – Development Study

The Company is targeting completing the Development Study by Q1 2020. Work is already underway on a number of the key aspects that will form part of this report. Additional and on-going scopes of work required include the following.

- Resource upgrade (post current drill program)
- Whittle pit optimisations
- Preliminary mine schedules and mine design
- Flowsheet development and plant design
- Tailings Management Facility (TMF) design
- Non-process infrastructure to support operation
- Power supply studies with Newfoundland power supply companies
- Ground water modelling, including potential water supply
- Surface water infrastructure
- Operating cost estimates (Class 4)
- Capital cost estimates (Class 4)
- Discounted Cashflow Model to demonstrate economics of project

## About the Company

Matador Mining Limited (ASX: MZZ) is a gold exploration company with tenure covering 80km of continuous strike along the highly prospective, yet largely under-explored Cape Ray Shear in Newfoundland, Canada. Within the package is a 14km zone of drilled strike which hosts a JORC resource of 1.02Moz Au (14.25Mt at 2.2g/t Au) (see Table 4 below).<sup>1</sup> The exploration opportunity at Cape Ray is extensive, with only a small portion of the 80km strike drilled, and high-grade gold occurrences observed along trend. The current drilling program is part of a larger-scale exploration and project development plan that is focused on unlocking the value in this considerable package.

**TABLE 4: CAPE RAY GOLD PROJECT, JORC 2012 CLASSIFIED RESOURCE SUMMARY – GOLD RESOURCE ONLY**

	Indicated			Inferred			Total		
	Mt	Au (g/t)	Koz (Au)	Mt	Au (g/t)	Koz (Au)	Mt	Au (g/t)	Koz (Au)
Central	7.69	2.7	660	9.72	2.3	150	9.72	2.6	810
Isle Aux Mort	-	-	-	0.78	2.4	60	0.78	2.4	60
Big Pond	-	-	-	0.11	5.3	18	0.11	5.3	18
WGH	-	-	-	3.63	1.2	134	3.63	1.2	134
<b>Total</b>	<b>7.69</b>	<b>2.7</b>	<b>660</b>	<b>6.56</b>	<b>1.7</b>	<b>360</b>	<b>14.25</b>	<b>2.2</b>	<b>1,020</b>

*Note: reported at 0.5 g/t Au cut-off grade*

To learn more about the Company, please visit [www.matadormining.com.au](http://www.matadormining.com.au), or contact:

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## Reference to previous ASX announcements

In relation to prior exploration results reported in this announcement, Matador confirms that it is not aware of any new information or data that materially affects the information included in those announcements.

In relation to the Mineral Resource estimate previously reported on 30 January 2019, Matador confirms that it is not aware of any new information or data that materially affects the information included in the announcement of 30 January 2019 and that all material assumptions and technical parameters underpinning the Mineral Resource estimate in the announcement of 30 January 2019 continue to apply and have not materially changed.