

Back River Site Tour

- 100

EXPLORATION PRESENTATION

September 26, 2023: Goose Mine, Nunavut

BACK RIVER GOLD DISTRICT

Presentation Outline:

- Introduction to Back River
- > History/Growth Profile
- Discovery of Back River
- Regional Geology
- Mineralization Controls
- > Goose Property
- George Property
- > Boot and Boulder Properties
- > 2023 Drill Budget and Objectives



BACK RIVER GOLD DISTRICT



Five mineral projects along an 80 km belt, located within the Slave Craton

- Most advanced mineral property is Goose, the first deposit to be mined, with 8 km of iron formation and multiple deposits defined
 - > All deposits at Goose are open along 8 km of iron formation, providing considerable potential for mine life extension

Second most advanced is George which is 50 km NW from Goose Mine and consists of over 20 km of iron formation

- > Over 40 targets have been identified at the George project for additional evaluation
- > Exploration continues to generate brownfield and greenfield targets





4

BACK RIVER GOLD DISTRICT - HISTORY

- 1982-1996: Back River Joint Venture (Trigg, Woollett Olson, Homestake Minerals and Kerr-McGee). Initial exploration primarily at George with minor exploration at Goose, Boulder and Boot 125,000m drilled
- 1997: Kit Resources 20,000m drilled (primarily George)
- 1998-2004: Kinross Gold Corp. and Miramar Mining Corp. 40,000m drilled (George and Goose)
- 2005-2008: Dundee Precious Metals 55,000m drilled (George and Goose)
- 2009-2023: Sabina Gold and Silver Corp.
 340,000m drilled (George and Goose)
- 2023 (April): Acquisition by B2Gold Corp.
 +20,000m drilling/drilled (George and Goose)

>600,000m total drilled at Back River





GOOSE PROPERTY: DISCOVERY



- 1982: George discovered during the Iron Formation 'rush' in the North after Lupin discovery
- 1986: George initial drilling
- 1991: Goose Main was discovered from a magnetic map
- 2009: Discovery of Echo based on IP and magnetic destruction
- 2010 (April): Llama discovered along a structural break in the geophysical signature
- 2010 (May): Umwelt was discovered within similarly folder stratigraphy in the same fold corridor as Llama



BACK RIVER GOLD DISTRICT – GROWTH PROFILE





7 /

BACK RIVER: STRATIGRAPHY (SIMILAR AT GOOSE AND GEORGE)





Greywacke and laminated greywacke and siltstone: forms the lower and upper sedimentary packages typically consisting of thickly bedded massive greywacke interbedded with laminated greywacke and siltstone packages.

Mudstone: Dark grey to black, fine grained, moderately to strongly foliated mudstone. Defines a stratigraphic marker unit between the main lower iron formation host rock and the interbedded upper iron formation unit.

Iron Formation: Main host lithology, the oxide iron formation consists of alternating beds of magnetite, chert and Fe-silicates. Fe-silicates beds are typically hornblende and actinolite altering to grunerite. An Fe-silicate dominated iron formation unit is also common and is typically interbedded with clastic sediments or oxide iron formation beds.

Felsic Dyke: Quartz feldspar porphyry (QFP) dykes are white to light grey, fine to medium grained and locally contain euhedral feldspar and quartz phenocrysts. QFP's are commonly veined and can contain disseminated euhedral arsenopyrite and gold mineralization.

Gabbro: Medium to coarse grained, medium to dark green, commonly displaying

Mineralization: Commonly associated with bedding parallel and cross-cutting quartz veins associated with chlorite alteration, and silicification and shearing within zones of sulphidized oxide iron formation. Arsenopyrite and pyrrhotite are the dominant sulphide minerals associated with gold.

BACK RIVER: MINERALIZATION CONTROLS



- First mineralization event associated with white quartz veins with patches of recrystallized quartz + arsenopyrite
- Second mineralization event with pyrrhotite + minor quartz veins and zones of disseminated replacement of layers in BIF (banded iron formation)
- Early arsenopyrite veins + pyrrhotite veins = anomalous gold grades (>>0.1 g/t Au)
- High gold grades also with pyrrhotite (without arsenopyrite)
- Visible free gold as fine blebs up to 1mm and commonly associated with pyrrhotite and arsenopyrite
 - > Fine pyrrhotite veins and patches cutting dark shears
 - > Pyrrhotite that infills fractures in arsenopyrite



Gold bleb in early quartz vein



Fine pyrrhotite replacing amphibole altered bands of BIF

BACK RIVER: MINERALIZATION CONTROLS - GOOSE



Umwelt Drill Core









BACK RIVER: LOCAL GEOLOGY - GOOSE



- Iron formation within a northwesterly to westerly striking, steeply-dipping folded belt of coarse clastic sediments
 - > 10 km long and up to 1.5 km wide
 - Mineralization controlled by parasitic folding in thickened hinge zones
- Metamorphic grade middle greenschist to lower amphibolite
- Quartz Feldspar Porphyry (QFP) dikes are swarm-like and predominantly located in hinge zones proximal to mineralization
- Metasedimentary rocks are crosscut by northwest trending gabbroic dykes that are related to the Mackenzie dyke swarm

 Late NE dextral and NNE sinistral lateral faults offset the iron formation and coarse clastic sediments



GOOSE PROJECT

Six Gold Deposits

Folded Banded Iron Formation & Quartz Feldspar Porphyry Dykes



7270000

12

B2GOI



GOOSE PROJECT: DEPOSIT GEOMETRY AND GEOLOGY



Thickened Iron Formation in Fold Zones is Associated with Robust Mineral Zones and Significant Deposit Size



UMWELT: HIGH GRADE CORRIDOR – V2





GOOSE : UMWELT CROSS SECTION – LOOKING NW





16

GOOSE : UMWELT CROSS SECTION – LOOKING NW





17

GOOSE : LLAMA CROSS SECTION – LOOKING NW





18

NUVUYAK & HOOK: RESOURCE GROWTH OPPORTUNITY



Nuvuyak Maiden Resource: 583,000 oz at 7.5 g/t Au

EXPLORING THE GOOSE GOLD TREND







BACK RIVER: LOCAL GEOLOGY - GEORGE

- Iron formation within a northwesterly-striking, steeply-dipping belt of coarse clastic sediments
 - > 20 km long and up to 2.5 km wide
 - Mineralization controlled by shear zone hosted quartz +/- carbonate +/- chlorite +/- sulphide veins within iron formation
- Three major belts of oxide iron formation: Lookout Hill belt, Fold Nose belt, and George Lake belt
- Metamorphic grade predominantly lower greenschist
- Up to 140 m wide x 2.3 km long QFP intrusion is situated at the northwest end of George Lake proximal to the LCP zones
- Metasedimentary rocks are crosscut by northwest trending gabbroic dykes that are related to the Mackenzie dyke swarm
 - Late NE dextral and NNE sinistral lateral faults offset the iron formation and coarse clastic sediments



BACK RIVER: MINERALIZATION CONTROLS - GEORGE

























Red = Conversion **Blue** = Extension / Brownfields **Green** = Exploration / Greenfields



•



BOOT

100 km² license

- 129 DDH for 18,000 m
- Hosts multiple mineralized structures intersecting iron formation
- Coincident untested geophysical and geochemical anomalies
- 2023 reconnaissance visit reviewing key showings and structural controls for iron formation





BOULDER

113 km² license

- 89 DDH for 23,000 m
- South extension of George mineralized iron formation sediments
- Gold mineralization occurs with pyrite, arsenopyrite and chalcopyrite associated with quartz veins in iron formation and adjacent to felsic dykes







Exploration 2023

B2Gold Budget of US\$ 20.0 Million (CDN \$27.0 M)



Drilling

- > George: 6,009m drilled
 - Spring: 3,316m in 15 holes (Sabina)
 - Summer: 2,693m in 11 holes (B2Gold)
 - Exploration drilling
 - Resource confirmation and testing up plunge and down
 plunge extensions to known mineralization
- > <u>Goose</u>: ~26,560m planned
 - 9,500m drilled to date in 2023, 5 drills
 - Test Umwelt down plunge
 - Late July to December
 - Goose regional targets
 - Late July to September due to weather and daylight constraints
- LIDAR (>650 km²) flown across entire Back River Project
- Prospectivity analysis as a predictive tool for exploration targeting (ongoing)





27

BACK RIVER: EXPLORATION Q4 2023 - 2024

- Extend resources down plunge and convert inferred resources
- Addition of metallurgical and geotechnical data through drilling
- Continued advancement of understanding of mineralization controls in the region
- Identification of new zones of mineralization











A ANTON A ANTONIA A

THANK YOU

at the set of the