## EQUINOXGOLD GREENSTONE GOLD MINES

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AN EQUINOX GOLD / ORION JOINT VENTURE

# Greenstone Mine Site Tour

## September 7 and 8, 2023

All \$ figures shown in USD unless stated otherwise All figures shown at 100% unless stated otherwise

All project expenditures shown to June 30, 2023 All project milestones shown to August 25, 2023

# **Presentation Deck**

## **Building One of Canada's Largest Gold Mines**



## Site Tour Personnel: Equinox Gold & Orion





**GREG SMITH** President & CEO



DOUG REDDY COO



PETER HARDIE CFO



GORDANA VICENTIJEVIC SVP Project Development



**RHYLIN BAILIE** VP Investor Relations

#### O C O C R E S O U R C E P A R T N E R S



ISTVAN ZOLLEI Portfolio Manager



AARON SCHNEIDER Investment Professional

# Site Tour Personnel: Greenstone Gold Mines (GGM)

#### **Operations Team**



ERIC LAMONTAGNE General Manager



DAVID NEWHOOK Director, Operations



KERRI CHABOYER-JEAN Director, Finance



CORY LIGHTFOOT Mill Manager



JASON RICKARD Exploration & Geology Manager

#### **Construction Team**



BERTHO CARON Project Director



**CHRISTINE PETCH** Deputy Project Manager



DANY FORTIN Plant Site Construction Manager



ALANA GIUSTIZIA Project Advisor



RICHARD GROLEAU TMF Construction Superintendent

# **Indigenous Partnerships**

- Greenstone is located on the traditional territories of Animbiigoo Zaagi'igan Anishinaabek, Aroland First Nation, Ginoogaming First Nation, Long Lake #58 First Nation and the Métis Nation of Ontario
- Long-Term Relationship Agreements are in place with a combined group of three First Nations (Animbiigoo Zaagi'igan Anishinaabek, Aroland First Nation and Ginoogaming First Nation), with Long Lake #58 First Nation and with the Métis Nation of Ontario





LONG LAKE #58 FIRST NATION



# Construction: On Schedule for H1 2024 Gold Pour

## Project 90% complete, pre-commissioning underway

#### **Power Plant**

- 99.7% complete, ahead of plan
- Successful first start August 11<sup>th</sup>
- Commissioning nearly complete
- Natural gas pipeline to
   Crushing, reclaim and site commissioned and operational
- Switching from grid to power plant in September

### **Process Plant**

- 84% complete
- Both ball mills mechanically complete
- Conveyors installed, belt installation underway
- HPGR substantially complete
- Hydrotesting leach tanks
- Pre-commissioning activities underway

#### **Tailings Facility**

- 88% complete
- South portion of TMF complete to final elevation
- Upstream and downstream buttresses 44% complete
- On schedule to be complete and ready for use in Q4 2023

#### **Additional Infrastructure**

- Truck shop, warehouse, water treatment plants, sewage treatment plant, SME plant, fuel stations and reagent storage complete
- Realigned 4.7 km of Highway 11 ahead of plan, opened for traffic in August 2023
- Relocated Ministry of **Transportation Patrol** Yard, complete Q1 2023









## Budget: On Track for \$1.225 B Total Spend

## \$937 M spent to June 2023 (76% total budget)



2024 operating costs and production guidance will be provided in Q1 2024

# **Completion Milestones: Construction & Commissioning**

## Key milestones to H1 2024 gold pour

## Q3 2023

- ✓ Highway 11 open to traffic
- Power plant commissioning complete
- Process plant construction substantially complete
- Crushing system ready to start pre-commissioning
- TMF ready to receive water
- Operational readiness and commissioning teams in place, procedures well advanced

## Q4 2023

- Mechanical, piping and electrical installation complete
- Commence process plant wet commissioning
- TMF available for use
- Additional 6 trucks, 1 loader and 1 drill commissioned
- Ramp-up of mine pre-production activities for ore stockpile

## H1 2024

- Commence hot commissioning
- First gold pour
- Additional 8 trucks, 2 shovels, 2 drills and dozer commissioned
- Mine production ramped up to 145 kt/day
- Ore stockpile at 2 Mt



# Mining

## Mining

- 12.2 Mt mined to date, on track to meet pre-production target of 30 Mt
- Mining to date has focused on construction waste rock
  - All TMF and construction requirements achieved with waste rock mined on site
- Ore stockpiling will begin in Q4 2023
  - 800 kt for start-up and 2 Mt by end of H1 2024

### **Current equipment**

- 8 Cat 793 trucks, 3 Cat graders
- 2 Komatsu shovels, 4 Komatsu dozers
- 4 Epiroc drills

## LOM equipment

- 31 Cat 793 trucks, 3 Cat graders
- 4 Komatsu shovels, 1 Komatsu loader
- 6 Komatsu dozers
- 6 Epiroc drills



## **Production Schedule**

## Average annual production: ~400,000 oz first five years, ~360,000 oz LOM



Mine plan under review to smooth production profile

# **Project Upside**

## Multiple opportunities to extend mine life and add to production profile

#### Greenstone underground

- 9.79 Mt at 3.93 g/t gold (1.2 Moz Indicated) and 24.59 Mt at 3.87 g/t gold (3.1 Moz Inferred)
- Not included in current mine life desktop study planned for 2024

#### Greenstone open pit

• Potential expansion of the open-pit to the southeast and west

#### Expand throughput



## Near-mine, regional and belt-scale potential

#### **Brookbank project**

- Undeveloped high-grade gold deposit potentially within trucking distance to Greenstone plant
- Both open-pit (83 koz Indicated) and underground (517 koz Indicated) potential

#### Other projects

- Multiple near-mine exploration targets including three past-producers
- 396 km<sup>2</sup> underexplored land package with excellent potential for new discoveries



# **Health & Safety**

- Strong health and safety record
  - One lost-time injury since start of Project, with more than 4.7 million hours worked (August 2023)
- Safety Recognition Program rewards safe behaviour and reinforces safety culture
- Key leading indicators are tracked and monitored with management inspections, focus audits, field level risk assessments, hazard elimination learning program cards
- Operations health and safety team ramping up



# **Human Resources**

#### **Operations team**

- All senior operations positions are filled
- More than 245 positions recruited to date, on track to fill remainder by end of 2023
  - 43% from local communities (within boundaries of Greenstone Municipality)
  - 35% from region (within 500 km, excluding local communities)
  - 11% from Ontario (outside the regional area)
  - 11% from other Canadian provinces
  - 31% self-identified as having Indigenous ancestry
  - Third-party service providers retained to assist with power plant operators, process plant operators, and mechanics during training and ramp-up period
- ~550 jobs during operations
- Supporting training initiatives in collaboration with Indigenous communities, the Municipality of Greenstone and Confederation College to prepare Indigenous community members and local workforce for positions at the mine
  - 29 Indigenous community members have graduated from community training programs to date and joined the team as haul truck drivers



















## **Indigenous Partnerships**

- Currently 24 contracts have joint venture agreements with Indigenous groups, representing over \$180 M in commitments (20% of the Project's contracted value), with certain services and logistics joint ventures expected to continue into the operations phase
- Regular meetings with the Indigenous communities to discuss employment, training and procurement opportunities through the Implementation Committees
- The Indigenous communities each have a representative on the Greenstone environmental team, regularly tour the site and receive reports from the Independent Tailings Review Board
- Greenstone is considering opportunities with Kenogamisis Investment Corporation (KIC), a
  partnership between the four First Nations, including the potential for KIC to build a solar energy
  plant from which Greenstone would purchase up to 10 MW of power, reducing power plant
  emissions by ~6%



Matawa First Nations Annual General Meeting that was hosted by Long Lake #58 First Nation in July 2023



Environmental Technicians from the four First Nations and the Métis collecting the first Temporary Effluent Water Treatment Plant water sample

# Site Layout



## **Plant Site Tour**



# **Site Tour Safety Guidelines**

## Personal protection equipment (PPE)

- Steel toe boots
- Safety vest
- Long pants and long-sleeve shirt
- Hard hat
- Safety glasses
- Ear plugs as required



#### Safety requirements

- Remain with the group at all times
- Observe safety signage
- Keep a safe distance from machinery
- Watch for uneven ground
- Report any unsafe conditions
- Use PPE at all times
- Use 3 points of contact when using a ladder or entering/exiting a vehicle

### Your safety is our top priority!

- If you have any questions or concerns, speak to your tour leader or an Equinox Gold representative
- In an emergency, stay calm and follow instructions from your tour leader
- Emergency numbers
  - Radio Channel 1
  - 807-358-7742

# **Supplemental Information**



## **Cautionary Statements**

Forward-looking Statements. This presentation contains certain forward-looking information and forward-looking statements within the meaning of applicable securities legislation and may include future-oriented financial information. Forward-looking statements and forward-looking information in this presentation relate to, among other things: the Company's expectations for the Greenstone Project, including the schedule and cost of construction, expectations for timing of first gold pour, the Project's production capabilities and future financial or operating performance, relationship expectations with Indigenous partners, expectations for reducing Greenstone's GHG emissions, and the conversion of Mineral Resources to Mineral Reserves. Forward-looking statements or information generally identified by the use of the words "will", "advance", "on track", "on schedule", "on budget", "potential", "plan", "expect", "opportunity", "upside", "anticipated" and similar expressions and phrases or statements that certain actions, events or results "may", "could", or "should" occur, or the negative connotation of such terms, are intended to identify forward-looking statements and information. Although Equinox Gold believes that the expectations reflected in such forward-looking statements and information are reasonable, undue reliance should not be placed on forward-looking statements since Equinox Gold can give no assurance that such expectations will prove to be correct. The Company has based these forward-looking statements and information on Equinox Gold's current expectations and projections about future events and these assumptions include: construction of Greenstone being completed and performed in accordance with current expectations, including estimated capital costs; prices for energy inputs, labour, materials, supplies and services, and the impact of inflation on the same, remaining as expected; the timely delivery and commissioning of equipment; availability of funds for Equinox Gold's projects and future cash requirements; the Greenstone Mineral Reserve and Mineral Resource estimates and the assumptions on which they are based; capital, decommissioning and reclamation estimates remaining as estimated; the mine plan outlined in the Greenstone technical report is unchanged; tonnage of ore to be mined and processed and ore grade sand recoveries are consistent with the mine plan; prices for gold remaining as estimated; no labour-related disruptions and no unplanned delays or interruptions in scheduled construction, development and production, including by blockade or industrial action; the ability of Equinox Gold to work productively with its joint venture partner and Indigenous partners at Greenstone; all necessary permits, licenses and regulatory approvals are received in a timely manner; and Equinox Gold's ability to comply with environmental, health and safety laws and other regulatory requirements. While Equinox Gold considers these assumptions to be reasonable based on information currently available. they may prove to be incorrect. Accordingly, readers are cautioned not to put undue reliance on the forward-looking statements or information contained in this presentation. The Company cautions that forward-looking statements and information involve known and unknown risks, uncertainties and other factors that may cause actual results and developments to differ materially from those expressed or implied by such forward-looking statements and information contained in this presentation and Equinox Gold has made assumptions and estimates based on or related to many of these factors. Such factors include, without limitation: fluctuations in gold prices; fluctuations in prices for energy inputs, labour, materials, supplies and services; operational risks and hazards inherent with the business of mining (including environmental accidents and hazards, industrial accidents, equipment breakdown, unusual or unexpected geological or structural formations, cave-ins, flooding and severe weather); inadequate insurance, or inability to obtain insurance to cover these risks and hazards; employee relations; relationships with, and claims by, local communities and Indigenous populations; the Company's ability to obtain all necessary permits, licenses and regulatory approvals in a timely manner or at all; fluctuations in currency markets; changes in laws, regulations and government practices, including environmental, export and import laws and regulations; legal restrictions relating to mining; risks relating to expropriation; increased competition in the mining industry; a successful relationship between the Company and its joint venture partner; and those factors identified in the section titled "Risks and Uncertainties" in Equinox Gold's MD&A dated February 21, 2023 for the year ended December 31, 2022, and in the section titled "Risks Related to the Business" in Equinox Gold's most recently filed Annual Information Form, both of which are available on SEDAR at www.sedar.com and on EDGAR at www.sec.gov/edgar. Forward-looking statements and information are designed to help readers understand management's views as of that time with respect to future events and speak only as of the date they are made. Except as required by applicable law, Equinox Gold assumes no obligation to update or to publicly announce the results of any change to any forward-looking statement or information contained or incorporated by reference to reflect actual results, future events or developments, changes in assumptions or changes in other factors affecting the forward-looking statements and information. If Equinox Gold updates any one or more forward-looking statements, no inference should be drawn that Equinox Gold will make additional updates with respect to those or other forward-looking statements. All forward-looking statements and information contained in this presentation are expressly qualified in their entirety by this cautionary statement.

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**Cautionary Note to U.S. Investors Concerning Estimates of Reserves and Resources.** Disclosure regarding the Company's mineral properties, including with respect to Mineral Reserve and Mineral Resource estimates included in this presentation, was prepared in accordance with National Instrument 43-101. NI 43-101 is a rule developed by the Canadian Securities Administrators that establishes standards for all public disclosure an issuer makes of scientific and technical information concerning mineral projects. NI 43-101 differs significantly from the disclosure requirements of the Securities and Exchange Commission (the "SEC") generally applicable to U.S. companies. Accordingly, information contained in this presentation is not comparable to similar information made public by U.S. companies reporting pursuant to SEC disclosure requirements.

#### Numbers may not add due to rounding. All dollar amounts in USD unless otherwise noted.

Technical Information. All technical information in this document related to the Greenstone Project is based on the "NI43-101 Technical Report, Hardrock Project" prepared by G Mining Services Inc. for Premier Gold Mines Limited with an effective date of December 16, 2020, which is available for download on Equinox Gold's website at <u>www.equinoxgold.com</u>. Doug Reddy, MSc, P.Geo., Equinox Gold's COO, has reviewed the technical report for the Greenstone Project. To the best of Equinox Gold's knowledge, information and belief, there is no new material scientific or technical information that would make the disclosure of the mineral resource and mineral reserves or other technical information for the Greenstone Project inaccurate or misleading. Doug Reddy is a Qualified Person under NI 43 101 for Equinox Gold and has reviewed and approved the technical information.

# **Greenstone Project Overview**

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An Equinox Gold / Orion Joint Venture



# **Project History**

1930 - 1970	Hardrock deposit mined by underground mines by the former Hard Rock, MacLeod- Cockshutt and Mosher companies		
2008 - 2012	Premier Gold acquires Hardrock deposit and completes drill program, resulting in mineral resource		
2014	Preliminary Economic Assessment		
2015	Centerra acquires 50%		
2016	Feasibility Study and NI 43-101 technical report		
2018 - 2019	Provincial and Federal Environmental Assessment approval Long-Term Relationship Agreements signed with Indigenous groups		
2018 - 2019	Additional drilling campaigns targeting first 5 years and confirming continuity		
2019	Feasibility Study update		
Dec 2020	Orion acquires Centerra's 50% interest		
Apr 2021	Equinox Gold acquires Premier's interest and an additional 10% from Orion Project rebranded as Greenstone Project		
Apr - Sep 2021	Pre-production early works program (tree clearing, temporary water treatment plant, lodging construction) completed		
Oct 2021	Groundbreaking announcement		

# **Project Overview**

#### Ownership

- Joint venture between Equinox Gold (60%) and Orion Mine Finance Group (40%)
- Greenstone Board approves all major decisions and Project expenditures

#### Location

- Located in Beardmore-Geraldton greenstone belt
- 4 km south of Geraldton in the Municipality of Greenstone
- 275 km northeast of Thunder Bay

#### Infrastructure

- Adjacent to Trans-Canada Highway 11
- 5 km from Geraldton Municipal Airport
- 14 km connection to Enbridge natural gas pipeline

### **Construction schedule**

- Overall project at 90% complete
- Construction at 89% complete
- On track for first gold pour in H1 2024

#### **Operational readiness and commissioning**

- Operational readiness and commissioning teams mobilized
- Recruiting, training, procedures, first fills and spares to support ramp-up on plan



## Key Project Parameters (based on Dec 2020 Feasibility)

Tonnage mined	Mt	824.9
Ore milled	Mt	135.3
Total P&P Reserves <sup>1</sup>	Moz	5.5
Total M&I Resources <sup>1</sup> (exclusive)	Moz	1.5
Total Inf Resources <sup>1</sup> (including underground)	Moz	3.1
Head grade / reserve cut-off grade	g/t	1.27 / 0.35
Strip ratio		5.1:1
Throughput	tpd / Mtpa	27,000 / 9.9
Recovery	%	91.2
First five years avg annual production	koz	~400
LOM avg annual production	koz	~360
LOM total production	Moz	5.1

## **Greenstone Project: Benchmarking**

### One of the highest-grade open-pit gold mines of scale in Canada

Reserve Grade and Estimated Annual Production of Open-pit Gold Projects in Canada<sup>1</sup>



Life of Mine Average Annual Production (koz Gold)

## Project Construction Progress (as of August 25, 2023)

<b>90%</b> Project completion		<b>89%</b> Construction progress	~ <b>\$937 M</b> Spent <sup>1</sup>	<b>~\$1.225 B</b> Cost at completion			
Safety	<ul> <li>One LTI since the start of Project, with more than 4.7 million hours worked (August 2023)</li> <li>Total Recordable Injury Frequency Rate of 3.38 per 1,000,000 hours worked</li> <li>Project has developed and maintained a strong safety culture – Finish Strong campaign to launch shortly</li> </ul>						
Budget <sup>1</sup>	<ul> <li>Project remains on budget <ul> <li>76% of total cost spent<sup>1</sup></li> <li>Inflationary pressures have been mitigated through favourable exchange rates and offsetting savings opportunities, or absorbed through the \$177 M contingency in the construction budget</li> <li>Independent quantitative risk assessment ("QRA") was completed during Q2 2023, concluding that the schedule and budget remain achievable</li> </ul> </li> </ul>						
Total overall progress	<ul><li>Detaile</li><li>Procur</li></ul>						
Construction Progress	<ul> <li>Plant site earthworks 98% complete, concrete 96% complete, structural steel 98% complete, mechanical installations 85% complete, piping installations 80% complete, electrical installations 75% complete, tailings management facility 88% complete</li> </ul>						

# **Environment, Social & Governance**

CA



# **Health & Safety**

#### Health & Safety

- Strong health and safety record since the start of construction: One lost-time injury (LTI) since the start of the Project, with more than 4.7 million hours worked (August 2023)
- Safety Recognition Program rewards safe behaviour and reinforces safety culture
- Key leading indicators are tracked and monitored with management inspections, focus audits, Field Level Risk Assessments (FLRA) and Hazard Elimination Learning Program (HELP) cards
- Health and Safety team for operations is in place, using similar approach and tools as the construction team; planning for final transition of health and safety responsibilities and activities is well advanced



#### **Ongoing activities**

- Independent Tailings Review Board in place since 2017 to provide oversight for design, construction and management of the tailings management facility
- Permit amendments have been submitted as needed; all construction permits received
- Each Indigenous community has an environmental monitor as part of the Greenstone Project environmental team, undertaking site monitoring and sampling activities and reporting back to the communities
- Met all 2022 annual federal and provincial reporting requirements
- The Closure Plan was filed in January 2020; a Closure Plan Amendment will be submitted by the end of 2023

#### Mitigating historical mining impacts

- Relocating 2 million m<sup>3</sup> of historical tailings to the TMF facility, which is expected to improve water quality in Kenogamisis Lake
- Installed seepage collection systems for historical tailings, with a portion of seepage now being collected and treated
- Historical Hardrock #1 Shaft is no longer discharging into Kenogamisis Lake
- Contaminated soil from historical mining is being characterized and managed by soil type to mitigate potential leaching

- The mine is located on the traditional territories of four First Nations Animbiigoo Zaagi'igan Anishinaabek, Aroland First Nation, Ginoogaming First Nation and Long Lake #58 First Nation – and home to the citizens of the Métis Nation of Ontario
- Long-Term Relationship Agreements are in place
- Regular meetings with the Indigenous communities to discuss employment, training and procurement opportunities through the Implementation Committees
- Site tours are held on a regular basis focusing on points of interest identified by the communities
- First Nations partners interact with the Independent Tailings Review Board and receive reports
- Support training programs so Indigenous community members can obtain jobs at the mine
  - 29 Indigenous community members have graduated from community training programs to date and joined the team as haul truck drivers
  - 31% of the operations personnel hired to date self-identify as Indigenous







GINOOGAMING FIRST NATION





## **Indigenous Partnerships**

- Currently 24 contracts active at site have joint venture agreements with Indigenous groups, representing over \$180 M in commitments, or 20% of the Project's contracted value, with certain services and logistics joint ventures expected to continue into operations phase
- Kenogamisis Investment Corporation (KIC), a partnership between the four First Nations, is pursuing several opportunities, including:
  - The study of a 10 MW solar energy plant, where GGM would be the sole offtake, reducing power plant emissions by ~6%. Potential to expand the plant and add an additional 10 MW in 2028
  - A partnership involvement with the new Ontario Provincial Police (OPP) station, which includes the potential for government funding



Matawa First Nations Annual General Meeting which was hosted by Long Lake #58 First Nation July 2023



Environmental Technicians from Indigenous groups collecting the first Temporary Effluent Water Treatment Plant sample

# **Other Community Relationships**

- Strong relationships with the community of Geraldton, the Municipality of Greenstone and key stakeholders, including OPP and emergency services such as fire and paramedics, and training agencies
- Community Sustainability Committee established in August 2022 allows committee members to actively
  participate in discussions about community interests, concerns and opportunities arising from Project
  activities. Members include representatives from local residents, the Municipality of Greenstone and GGM
- Feedback mechanism in place since 2018
- Community benefits include:
  - Purchased infrastructure (golf course, interpretative centre and headframe), which provided the municipality with funds for long-term planning
  - Contributed to upgrade of the Municipal Sewage Treatment Plant (target to be operational in Q3 2023)
  - Money flowing directly into the local economy from workforce for purchases such as groceries, hardware, transportation and restaurants





Annual community barbecue

Local high school tour

## Human Resources





#### **Operations**

- All senior operations positions are filled, more than 245 positions recruited to date
  - 43% local employees (within the boundary of the Greenstone Municipality)
  - 35% regional area employees (within 500 km from our regional point of pick up)
  - 11% from Ontario (outside the regional area)
  - 11% from other Canadian provinces
  - 31% self-identified as having Indigenous ancestry
- Strong team culture and employee engagement
- Supporting training initiatives to prepare the local and regional workforce for jobs at the mine in collaboration with Indigenous communities, local agencies in the Municipality of Greenstone, and **Confederation College**
- Anticipate ~550 jobs during operations ۲









# Mining
## **Mining: Overview**

- Engineering and geology departments are fully staffed. Recruitment efforts are on track and workforce has been available to execute the plan
- Minimal overburden and pioneer blasting activities were required prior to start of full production, and all set-up activities have been self-performed
- Mine tonnage is on track to meet 30 Mt pre-production target with 12.2 Mt mined to date
- Mining to date has focused on construction waste rock. Significant ore stockpiling will begin in Q4 2023, with 800 kt of stockpile planned for start-up and 2 Mt by end of H1 2024
- Planned productivities for the shovel and trucks have been achieved
- Excellent haul truck tire life for a start-up as a result of tire selection, road maintenance, and less abrasive material
- Localized dewatering in the pit has not been necessary, shaft dewatering has provided excellent pit drainage



#### **Greenstone: Pre-Production Mining**



#### **Mine Development**



#### **Mining Schedule**

Total life-of-mine tonnage of 825 Mt mined at a strip ratio of 5.1:1



#### **Production & Grade Profile**

Average annual gold production: ~400,000 oz first five years, ~360,000 oz life of mine Mine plan under review to assess the possibility of smoothing production profile and limiting grade drop



## **Void Management & Mining**





#### Safety

- Procedure in place for working above or adjacent to historical mine workings
- All work around voids requires a work-specific Job Safety Analysis
- Ongoing and updated risk assessments for working around voids with full participation of H&S, Mine Operations, Geology and Engineering
- Probe drilling completed using a production drill (Epiroc D65) to establish detailed dimensions of voids and update the void model
- Void model to be updated every two benches (20m)

#### **Grade control**

- Vertical and inclined probe holes sampled for gold
- Assay data will be used with blast hole, RC and DDH data to generate block outs

#### Mining

- Mining method will vary depending on size/shape of voids and whether they are back-filled
- Most small voids will be collapsed, large voids may be back-filled
- Similar mines like Canadian Malartic used as case studies

### **Mine Equipment**

Equipment	Supplier	Ready to Work End of 2023	Start of Q3 2024	LOM Requirement (excludes replacement units)
Truck 793F / 793	Cat	14	25	31
Shovel PC5500	Komatsu/SMS	2	4	4
Loader LT-1850	Komatsu/Joy Global	1	1	1
Drill PV235	Epiroc	3 (+2 D65 drills)	5 (+2 D65 drills)	6 (+2 D65 drills)
Dozers 375	Komatsu	4	6	6
Graders 16M	CAT	3	3	3

• Mobile equipment maintenance is self-performed (30 GGM maintenance employees mobilized to date), with support from the main production original equipment manufacturers during the ramp-up period

# Processing

HPGR

owei

**B1** Pond

ROM Pad & Secondary Primary Crusher Crusher

Coarse Ore Stockpile & Reclaim

HPGR = High-pressure grinding roll

M1 Pond

Effluent

Reagent Storage

**Treatment Plant** 

Standon .

dmin

Building

Detox

See.

ASPER

**Truck Shop** 

Pre-leach Thickener

eac

Grinding

a To The state

#### **Process Plant Design**

#### **Process plant**

- 9.9 Mt/y or 27,000 tpd processing capacity
- Availability 92%
- HPGR F80 = 31 mm
- HPGR P80 = 16 mm
- Two parallel ball mills, P80 = 90 μm
- Gravity concentration with intensive leach reactor
- Leach residence time = 28 hours
- Leach/CIP with Zadra elution circuit
- Gold recovery = 91.2%



#### **Operational Readiness: Status**

Progress & Schedule	<ul> <li>BBA is providing operational readiness management support; Soutex is supporting procedure development and training delivery</li> <li>Overall operational readiness activities at 33%, slightly ahead of plan</li> <li>Detailed schedule in place, resource loaded</li> </ul>
Hiring & Training	<ul> <li>All senior plant positions filled: Mill Manager, Mill General Foreman, Metallurgical Superintendent, Maintenance Superintendent, Health &amp; Safety Superintendent</li> <li>Additional support engaged for operational readiness period through contracted services for SAP implementation, training, development of documentation</li> <li>Agreements in place with experienced third-party service providers for power plant operators, process plant operators and mechanics during training and ramp-up period</li> <li>Early involvement with mill design, resource plan coordinated with commissioning team</li> <li>Training matrix, schedule and resources in place</li> </ul>
Procedures & Plans	<ul> <li>Development of Standard Operating Procedures 63% complete, Standard Work Procedures (maintenance) 97% complete. Joint Health &amp; Safety Committee involved in review of procedures</li> </ul>
Spare Parts	<ul> <li>Capital spare parts (100% ordered) / operating spare parts (86% ordered), confirmed that delivery dates meet requirements</li> <li>All purchase orders issued for first fills for reagents and consumables</li> </ul>
Systems	<ul> <li>Systems implementation is progressing for asset management, warehouse and maintenance (SAP), ESG (Isometrix) and controls (Aveva)</li> </ul>

# Tailings Management Facility (TMF)



### **Tailings Management Facility: Overview**

#### Independent oversight

- Independent Tailings Review Board established in late 2017, in place for full detailed design phase
- Designer of record: WSP (previously Golder)
- Engineer of record: WSP (previously Golder)
- Construction contractor: Fournier Fils

#### Key design criteria

- Downstream, till core, filter zones
- Designed for most severe flood criteria using Probable Maximum Flood
- 145 Mt capacity at 1.34 t/m<sup>3</sup>
- Seepage collection system at ultimate toe of the dam

#### **Construction activities**

- Contractor mobilized in late Q3 2021, four months earlier than planned, allowing initial work to be completed ahead of plan and before the spring freshet
- Changed from two cell to one cell construction approach (capex and operating cost savings), permit amendment approved
- Seepage prevention method required differing treatments for the foundation key-in depending on the depth of the silt layer. Deep soil mixing (DSM) cut off wall was designed for areas where it was not possible to reach the low permeability layer by excavation

# **Tailing Management Facility: Status**

Status	<ul> <li>Tailings management facility (TMF) earthworks and construction on schedule at 88% complete</li> <li>Construction of the sand blanket in the southeast creek dam area has been finalized with the elevation raised to 339.0, achieving complete enclosure of the south portion of the TMF</li> <li>Upstream and downstream buttresses are 44% complete (3.5 Mt of planned 8 Mt)</li> </ul>	<image/> <caption></caption>
Upcoming	<ul> <li>TMF completion at elevation 340.0 by end of Q4 2023</li> <li>Tailings pipeline construction completion and commissioning (earthworks and liner for corridor recently completed)</li> </ul>	

Deep soil mixing drill building a cutoff wall on the East Dam

#### **Tailings Management Facility: Design**



#### **Tailings Management Facility**



# Water Management

#### Water Management Overview

Effluent Water Treatment Plant	<ul> <li>All collected water being treated through the permanent effluent water treatment plant</li> <li>Can process up to 19,000 m<sup>3</sup> of water per day</li> <li>Discharges to Kenogamisis Lake via diffuser</li> </ul>	
Water Collection	<ul> <li>Installation of the historical MacLeod high tailings seepage collection system completed in 2022</li> <li>Series of collecting ponds will pump back to the main pond (Pond M1)</li> <li>Pond M1 and Pond B1 complete, Pond A2 and B2 will be complete before year end 2023</li> </ul>	
Historical Shaft Dewatering	<ul> <li>Historical MacLeod shaft dewatering at 170 m<sup>3</sup>/day</li> <li>Good connectivity between the shafts and the underground workings. No in-pit dewatering required</li> </ul>	
Potable Water Treatment Plant	<ul> <li>Fed from Kenogamisis Lake intake</li> <li>Can supply up to 75 m<sup>3</sup>/day</li> </ul>	
Sewage Treatment Plant	<ul> <li>Commissioned, currently in closed loop waiting for permit approval (with Ministry of Environment, Conservation and Parks)</li> <li>Capacity for 3,600 m<sup>3</sup>/day</li> </ul>	





# **Construction & Commissioning**

### Project Schedule (as of August 25, 2023)

Milestone	Plan	Actual/ Forecast	Variance (Months)
Initial investment in early works construction commitments	Jan-21	Jan-21 (A)	-
Initial investment in remaining vendor data	Feb-21	Feb-21 (A)	-
Commence tree clearing	Mar-21	Mar-21 (A)	-
Initial investment in long lead equipment for fabrication	Jul-21	Jul-21 (A)	-
Updated capex for construction approval	Jul-21	Sep-21 (A)	(2)
Construction decision	Aug-21	Oct-21 (A)	(2)
Temporary lodge operational	Sep-21	Sep-21 (A)	-
Commence construction	Oct-21	Oct-21 (A)	-
First steel delivery process plant east end	Jun-22	Oct-22 (A)	(3)
Commence mine pre-production	Oct-22	Aug-22 (A)	2
Process plant west end enclosed	Sep-22	Nov-22 (A)	(2)
Process plant east end enclosed	Dec-22	Feb-23 (A)	(2)
Gravity tower building enclosed	Jul-23	Jul-23 (A)	-
Highway 11 handover (open to traffic)	Nov-23	Aug-23 (A)	3
Power plant commissioning complete	Oct-23	Sep-23	1
TMF available for use	Q4-23	Q4-23	-
Commence hot commissioning	Q1-24	Q1-24	
First gold pour	H1-24	H1-24	-

Category	Weight	Progress to Date
Engineering	10%	100%
Procurement	25%	89%
Construction	65%	89%
Total progress		90%

- Critical path continues to flow through mechanical / electrical / piping installation activities for the ball mill to allow for commissioning of these areas
- All auxiliary facilities, power plant and Highway 11 are complete. TMF and process plant progressing on plan
- Independent QRA on the schedule completed in Q2 2023 confirmed that the schedule remains achievable
- On track for first gold pour in H1 2024

#### **Project Timeline**



#### **Overall Project Progress**

#### 90% complete at August 25, 2023



- Overall progress to August 25<sup>th</sup> is 90%
- On track to achieve remaining milestones and pour gold in H1 2024

#### **Plant Site Progress**



West end mill building

Pre-leach, leach and detox tanks

HPGR





Ore storage dome

Conveyors, crushers and MSE (mechanically stabilized earth) wall 58

#### **Process Plant**

Specs	<ul> <li>Designed to operate at a throughput of 27,000 tpd / 9.9 Mt pa</li> <li>Consists of a crushing circuit, grinding circuit, pre-leach thickening and leaching, carbon-inpulp circuit, carbon elution and regeneration, electrowinning and gold refining</li> </ul>	
Status	<ul> <li>Process plant is 84% complete</li> <li>Both ball mills mechanically complete</li> <li>Conveyors installed, belt installation commenced</li> <li>Crushing, reclaim and HPGR substantially complete</li> <li>Hydrotesting of leach tanks underway</li> <li>Pre-commissioning activities have started on initial systems</li> </ul>	<image/> <text></text>



Nest end mill building



#### **Power Plant**

Specs	<ul> <li>Base load of approximately 35 MWe with peak load at 40 MWe</li> <li>6 natural gas-powered piston engines</li> <li>Recover thermal energy from the engines, a glycol distribution loop will provide heat to all process buildings and the truck shop</li> </ul>	
Status	<ul> <li>Power plant 99.7% complete and ahead of plan, with commissioning nearly complete</li> <li>Successful first start on August 11<sup>th</sup></li> <li>Run tests now completed on all six engines</li> <li>Commissioning work is being led by Wärtsilä and supported by Systemex and GGM</li> <li>Switching from grid to power plant in September</li> </ul>	<section-header></section-header>

Power plant

#### **Site Infrastructure**

Truck Shop & Warehouse	<ul> <li>Complete, handed over to operations <ul> <li>4x haul truck bays, 2x mobile equipment bays, 1 drill bay and 1 wash bay with drive-in sump</li> </ul> </li> <li>Warehouse, office, lunchroom, lubrication system</li> </ul>	
Site Mixed Emulsion Plant	<ul> <li>Complete, handed over to operations</li> <li>Contractor Dyno Nobel took possession in Q4 2022</li> </ul>	
Fuel	<ul> <li>Plant site fuel station – complete <ul> <li>For light vehicles</li> <li>Split double-walled tank – 50,000 L diesel and 20,000 L gasoline</li> </ul> </li> <li>Pit fuel station – complete <ul> <li>For heavy equipment</li> <li>150,000 L diesel and 50,000 L urea</li> </ul> </li> <li>Off-site fuel storage (150,000 L diesel expandable to 250,000 L) under construction</li> </ul>	

#### **Site Infrastructure**

Natural Gas Pipeline	<ul> <li>Enbridge Gas constructed 14-km-long high-pressure natural gas pipeline from TC Energy Mainline north of Geraldton to a metering station at mine site entrance</li> <li>2.1 km private pipeline segment</li> <li>In service on schedule in June 2023</li> <li>Delivery pressure: 125 psi</li> <li>Maximum hourly flow: 11,500 m<sup>3</sup>/hr</li> <li>Contract demand: 240,000 m<sup>3</sup>/day</li> </ul>	
Offices & Warehouses	<ul> <li>Construction office – opened 2021</li> <li>Administration office – opened July 2022</li> <li>Reagent cold storage – opened Dec 2021, used by construction team as a temporary warehouse</li> <li>Temporary Effluent Treatment Plant building repurposed to warehouse space</li> </ul>	
Workforce Lodging	<ul> <li>Temporary lodging facility has capacity for 704 people</li> <li>Greenstone owns 29 houses with capacity for 90 visitors and management</li> <li>RFP in progress for four new wings (152 rooms) for operations</li> </ul>	

#### Infrastructure Repositioning

Highway 11	<ul> <li>Realigned 4.7 km of Highway 11 (TransCanada) north of mine site</li> <li>Work completed ahead of schedule, opened for traffic in early August 2023</li> <li>Move provides operational flexibility for pit work and ability to start dewatering Mosher Shaft</li> </ul>	
Patrol Yard	<ul> <li>Relocation of Ministry of Transportation (MTO) Patrol Yard is complete</li> <li>MTO accepted new yard in January 2023</li> <li>Demolition and site remediation of the old yard completed in Q2 2023</li> </ul>	
Hydro One Facilities	<ul> <li>Earthworks on the new Geraldton Operations Centre has commenced</li> <li>Relocation of the Hydro One Substation is planned for late 2024. All major equipment has been ordered</li> </ul>	

### **Commissioning: Plan & Status**

Progress & Schedule	<ul> <li>Detailed pre-commissioning, wet commissioning and hot commissioning schedules in place, resource loaded</li> <li>All facilities except Process Plant and TMF (minor piping commissioning activities) have been successfully commissioned</li> </ul>
Resources & Systems	<ul> <li>Overall commissioning model integrates construction personnel, operations personnel and vendor representatives</li> <li>Systemex (commissioning specialist) engaged in Q1 2023 to provide experienced personnel and proven systems to support power plant and process plant commissioning activities</li> </ul>
Commissioning Spares	<ul> <li>All commissioning spares received, final validation underway</li> </ul>
Transition from Project to Operations	<ul> <li>Roles and responsibilities shift through the three phases of pre, wet and hot commissioning, but maintain involvement of all departments to completion of the Project</li> <li>Following completion of wet commissioning of all systems, care and control will be turned over to operations team for initiation of hot commissioning and the subsequent mine production ramp up. Construction team and commissioning leads will continue to support the operations team through these periods</li> </ul>

### **Commissioning Phases**

EQUINOXGOLD

GREENSTONE MINE

Pre-Commissioning	Wet Commissioning	Hot Commissioning
Construction Team	Commissioning Team	Operations Team
<ul> <li>Begins during late stage of mechanical completion</li> <li>Installation complete</li> <li>E-rooms energized</li> <li>Point to point and input/outputs tested</li> <li>Motor rotations checked</li> <li>First walkdowns</li> <li>Pre-commissioning checklists</li> </ul>	<ul> <li>Motor run-ups</li> <li>Vibration/temperature monitoring for baseline data</li> <li>Dry-run equipment where applicable</li> <li>Loop tests</li> <li>Test safety devices, interlocks, speed control</li> </ul>	<ul> <li>Introduction of chemicals, reagents and ore</li> <li>Simplified flow sheet startup</li> </ul>
SAFETY IN TRANSITION THIS SECTOR IS UNDER THE CONTROL OF THE PRE-COMMISSIONING TEAM	SAFETY IN TRANSITION THIS SECTOR IS UNDER THE CONTROL OF THE WET COMMISSIONING TEAM	SAFETY IN TRANSITION

GREENSTONE MINE

INTERLIGENERAL CONTRACTOR OF THE OFFICE

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# Financials



## **Construction Budget**

- Project remains on track to achieve budgeted spend of \$1.225 B
- At June 30, 2023, 76% of total cost had been spent (\$937 M)
- All purchase order and construction contracts for project completion in place
- Inflationary pressures have been mitigated through favourable exchange rates and offsetting savings opportunities, or absorbed through the \$177 M contingency in the construction budget
- Project is on schedule a major driver of cost containment
- Valency Inc., a global provider of construction project assurance solutions and quantitative risk assessments, completed the Project's second quantitative risk assessment during Q2 2023 and concluded that the schedule and budget remain achievable
- A second Project Management & Controls review was completed in Q2 2023 focused on commissioning, operational readiness, productivity, quality and project close-out. Overall report outcomes were positive. Management responses and actions were established to address findings and recommendations, with 100% of the actions implemented

#### **Construction Budget**

#### \$937 M spent to June 2023 (76% total budget)

**Capital Expenditures (\$M)** \$400 \$1,250 Half Year / Quarterly Expenditures (\$M) \$1,000 Cumulative Expenditures (\$M) \$300 \$750 \$200 \$500 \$100 \$250 \$0 \$0 H1 2021 H2 2021 Q4 2023 Q1 2024 H1 2022 H2 2022 H1 2023 Q3 2023 Q2 2024 Actual Forecast —Cumulative

2024 operating costs and production guidance will be provided in Q1 2024

# Geology & Exploration

# **Regional Geology**

- The Archean-aged Beardmore-Geraldton Greenstone Belt stretches >100 km east to west. The 2.73 Ga
  metavolcanic rocks are bounded to the south by a package of younger metasedimentary rocks that host
  most gold deposits. The intrusive porphyritic rocks have a crystallization age of 2.69 Ga
- Past gold production in the Beardmore-Geraldton Greenstone Belt totals over 4 Moz of gold



## **Geology: Greenstone Mine**



Hardrock deposit was accessed from five separate shafts and mined historically from underground

- Hardrock Mine (1938-1951): 269 koz
- MacLeod-Cockshutt Mine (1938-1968): 1,476 koz
- Consolidated Mosher Mine (1962-1966): 330 koz
- MacLeod Mosher Mine (1967-1970): 109 koz

# Archean orogenic gold deposit with iron formation associations

- Gold hosted within greywacke, iron formation and porphyry
- Lithostructural controls on distribution of mineralization, plunging shallowly to the west
- Gold mineralization occurs primarily with sulphide disseminations and as free gold within quartzcarbonate veins
- Gold is primarily found within high strain zones, along axial planar cleavage and within fold hinges



#### **Geology: Greenstone Mine**



Porphyr

## **Gold Mineralization**



- Majority of gold associated with pyrite
- Lesser association of gold with arsenopyrite
- Coarse gold typically as free gold within quartz-carbonate veins



#### **Mineral Reserves & Mineral Resources<sup>1</sup>**

Greenstone Mineral Reserves Estimate					
Category	Diluted Ore Tonnage (kt)	Gold Grade (g/t Au)	Contained Gold (koz Au)		
Proven	5,623	1.28	232		
Probable	129,700	1.27	5,307		
Total P&P	135,323	1.27	5,539		

Notes:

- 1. CIM definitions were followed for Mineral Reserves.
- 2. Effective date of the estimate is August 8, 2019.
- Mineral Reserves are estimated at a cut-off grade of 0.35 g/t Au.
   Mineral Reserves are estimated using a long-term gold price of USD 1,250/oz and an exchange rate of CAD:USD 1.30.
- 5. A minimum mining width of 5 m was used.
- Bulk density of ore is variable but averages 2.78 t/m<sup>3.</sup>
- 7. The average strip ratio is 5.10:1.
- 8. Dilution factor is 17.2%.
- 9. Numbers may not add due to rounding.



Category	Units	In-Pit >0.30 g/t Au	Underground >2.00 g/t Au	Total
	Tonnes (Mt)	5.97	9.79	15.76
Indicated	Grade (g/t Au)	1.21	3.93	2.90
	Gold (koz)	231	1,237	1,469
	Gold (koz) Tonnes (Mt)	<b>231</b> 0.36	<b>1,237</b> 24.59	<b>1,469</b> 24.95
Inferred		-	,	

#### Greenstone Mineral Resource Estimate (Exclusive of Mineral Reserves)

#### Notes:

- 1. These Mineral Resources are not Mineral Reserves as they do not have demonstrated economic viability.
- 2. The effective date of the estimate is September 4, 2019.
- In-pit results are presented undiluted within a merged surface of the pit optimization shell 24 and the 2019 pit design, using a USD 1,250 gold price and a revenue factor 0.78.
- 4. Whittle parameters (all amounts in Canadian dollars): Reference mining cost: \$1.98/t, Incremental bench cost (\$/10 m bench): \$0.033, Milling cost: \$7.54/t, Royalty: 4.4%, G&A: \$1.59/t, Sustaining capital: \$0.70/t, Gold price: \$1,625/oz, Milling recovery: 91.1%.
- 5. Ounce (troy) = Metric Tonnes x Grade / 31.10348. Calculations used metric units (metres, tonnes and g/t).
- 6. The number of metric tonnes was rounded to the nearest thousand and ounces was rounded to the nearest hundred. Any discrepancies in the totals are due to rounding effects.

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## **Exploration Upside**

#### Geraldton area

- Greenstone underground: Significant gold resource down-plunge from the open pit remains open; desktop study planned for 2024
- Near mine: Potential for open pit expansion to the southeast; multiple near-mine exploration targets, including three past-producers

#### **Regional potential**

- Brookbank Project: Undeveloped high-grade gold deposit that is potentially within trucking distance to the Greenstone process plant
- Belt-scale: 396 km<sup>2</sup> land package has seen little to no modern exploration, with excellent potential for new discoveries



#### **Greenstone Underground & Pit Expansion Potential**



### **Near-Mine & Belt-Scale Exploration Potential**

- District-scale exploration potential with numerous past-producing mines
- Consolidated land package with limited modern exploration

