

Mon Gold Property near Yellowknife, NWT, Canada

High-Grade Gold Mining Opportunity: Restarting a Past Producing High-Grade Mine

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#### **Cautionary Statement**



Sixty North Gold Mining Ltd. Is a British Columbia company ("the Company"). All statements in this presentation are made as at September 9, 2021. This presentation contains "forward-looking statements" within the meaning of applicable securities laws, including statements relating to proposed or anticipated work programs, plans for development of the Mon Property, and/or anticipated financings. Actual results and developments may differ materially from those contemplated by these statements. Factors which may lead the Company to not proceed with anticipated work programs, construction or development projects and studies include factors such as analysis of the exploration results may lead to a determination that further exploration or development is not warranted, delays by weather and other constraints, insufficient funding, delays as a result of early or late onset of winter conditions, availability of personnel and equipment to conduct work programs, a decline in precious metals prices, permit reviews, information requests and other factors not within the Company's control, changes in market conditions, and insufficient financing to complete work programs. Factors that could cause the Company to not proceed with, or reduce or increase, anticipated financings include change in market conditions and changes in the Company's exploration and development plans.

If the Company is unable to complete future financings, the Company may have to delay or alter its operations plans. In addition, the proceeds of the future financings may not be sufficient for the Company to complete its earn in and acquire the Mon Gold Property. The Company will require additional financing to complete the acquisition, which may result in further dilution to investors. If the Company is unable to complete the earn in, it will lose its interest in the Mon Gold Property. The factors identified above are not intended to represent a complete list of the factors that could affect the Company. Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated or intended.

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No Mineral Reserves or Mineral Resources as defined within the meaning of NI 43-101 have been established on the Mon Gold Property. No Preliminary Assessment (PA), Preliminary Feasibility (PFS), or Feasibility Study (FS) has been completed on the property, and the Company does not anticipate that its work programs will result in the establishment of mineral resources, mineral reserves, or an economic study, on the Mon Gold Property. Readers are cautioned that, as not all risks may have been identified at the time of a production decision is made, mineral properties developed in the absence of a PFS and FS have a higher risk of failure. Investors should consider the investment in securities of the Company as a speculative investment.

Technical information in this presentation has been prepared and reviewed by Dr. Dave R Webb, Ph.D., P.Geol., P.Eng., who is a qualified person for the purposes of NI 43-101, and is the controlling shareholder of Giauque Holdings Ltd. (the royalty holder of the Mon Gold Property) and a principal of New Discovery Mines Ltd. (the vendor of the Mon Gold Property). The technical information in December 11, 2017 prepared on Form NI 43-101F1 by David Dupre, P. Geo, and Kevin Fitzpatrick, P. Eng., qualified persons for the purposes of NI 43-101 who are independent of the Company and the property vendor.

# Why Invest in an Advanced Gold Exploration Company?



- Lack of gold discoveries in the last 10 years, including major gold projects.
- Low junior and senior exploration activity due to depressed gold price, lack of funding, until recently.
- Major producers need new mineable reserves and projects.
- Falling ore grades in the last 100 years from 20 g/t to 2 g/t expected in 2030.
- Gold price recently hit record level; global government liquidity stimulation due to COVID-19 debasing currencies relative to gold, so gold price seen much higher in coming years.

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- Valuation of resources in the ground to hit new records.
- Companies with operating permits and early production model expected to be valued at a premium.
- Takeovers from advanced explorers and producers will increase significantly in the next few years.

## Mon Gold Property



- Mon Gold Property is a high-grade past producing (1989–1997) gold mine, from which 15,000 oz. of gold was produced from 15,000 tons of ore.
- Through August 13, 2021, about \$4.4 million has been funded into the project, for purchase of mining equipment, camp, and supplies needed for mine development, drilling below old stopes, geophysics and surface exploration in VMS and shear zones.
- Metallurgical testing of a quarter tonne sample yielded recoveries averaging 98.8 % at a grade of 158 gpt gold.
- High grade samples up to 688 g/t gold over 0.5m have been recovered from the crown pillar.
- The mineralization identified in the Mon A-Zone appears to be a viable exploration target for a "Discovery Mine" type of deposit.

- Mining equipment and camp delivered on winter road to site March 2021
- Land Use Permit and Water License for mining and milling production at 100 tpd are in place – the Mon is the only gold project in the NWT permitted for production.
- Shear Zone hosted gold deposits (similar to Con and Giant Mines) have been identified on the property (7.22 gpt gold over 6.0 m). These have never been drill-tested.
- Precious metals-rich Volcanogenic Massive Sulphide (VMS) have been discovered on the property (203 gpt Ag, 1.0 gpt Au, over 0.45 m). These have advanced geophysical modeling completed. These have never been drill-tested.

# Yellowknife Gold Belt, Mines and Regional Exploration



- The Yellowknife Gold Belt extends in a north-south direction for over 100 km.
- The Con Mine (pp 6 million ounces at 16 gpt) and the Giant Mine (pp 8 million ounces at 16 gpt) are hosted in large shear zones
- The Discovery Mine (pp 1 million ounces at 32 gpt) and the Mon Mine (pp 15 k ounces at 32 gpt) are hosted in metasediments at metavolcanic boundaries.
- The region has come into focus again as multiple exploration companies are exploring again, like Rover Metals, GoldMining or Gold Terra Resource.



# Estimated Dates for A-Zone Key Operational and Corporate Milestones



Q1 2021

Q2 – Q4 2021

- Completed construction of winter road and hauled major mining equipment, camp, and stores to site
- Complete the balance of the required \$6 million expenditures on Mon Property (\$1.2 m open at September 9, 2021) for 80% Property interest, then acquisition of the remaining 20% interest through issuance of 25% of shares of the Company
- Extend decline 200 m to access 30 to 60 thousand tonnes of vein material
- Take 4,000 6,000 tonnes sample and move to surface
- Commence drilling to define 2022 and 2023 mining below current stopes
- Assays reported from bulk sample and drilling
- Initiate mill equipment order
- Mobilize mill and ancillary equipment to Yellowknife
- Complete construction of winter road and haulage of mill and stores to site
- Mill and mine fully operational
  - **First cash receipts expected from gravity gold sales**

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Q1 2022

Q3 2022

# Estimated Cost – Mine Development and Bulk Sample 2021



Category	Funds
Corporate G&A (5 months at \$40k)	\$200,000
Mine Operations (130 days at \$10k/day)	\$1,300,000
Miscellaneous equipment (jacklegs, stopers etc)	\$50,000
Regulatory controls	\$30,000
Subtotal	\$1,580,000

Note funding for this phase is covered by the \$2.18 million financing closed August 12, 2021.

## Estimated Cost – Mill capital, Operations 2022



Category	Funds
Corporate G&A (12 months at \$40k)	\$480,000
Mine Operations (220 days at \$10k/day)*	\$2,200,000
Mill Operations (180 days @ \$3k/day)*	\$540,000
Fuel	\$150,000
Explosives	\$250,000
Tanks, supplies	\$200,000
Mill	\$500,000
Winter road	\$400,000
Regulatory controls and Bond	\$400,000
Subtotal	\$5,120,000

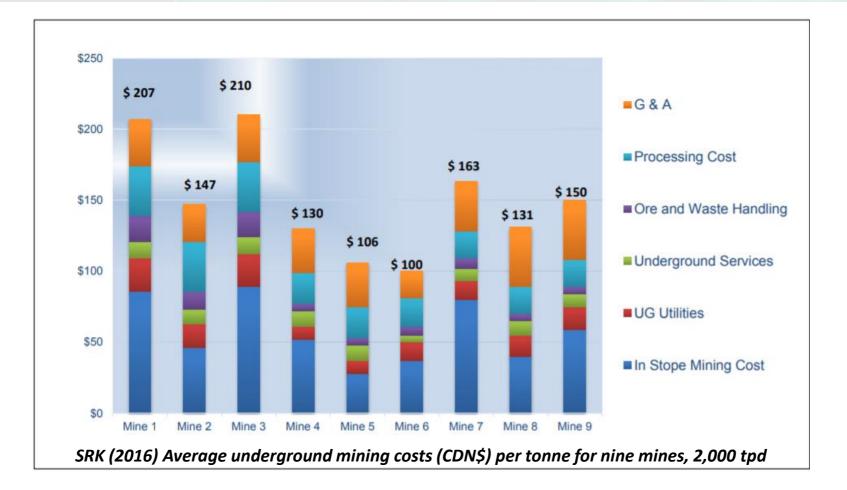
\* Note fuel, explosives, all materials excluded. Mill will need to be ordered by the end of August 2021 and payments schedule to be agreed upon.

#### Assumptions:

- 2022 operations 220 days; subsequent years expected to progress to 300 to 330 days per year
- Doré revenue (65% of production) to be realized four weeks after production.
- Flotation concentrate (35% of production) gold is realized annually after trucking to a smelter via the winter road.
- NWT royalties, prospector NSR, and federal and territorial taxes are to be deducted.
- Diamond drilling beneath operating stopes is expected to provide additional development opportunities and mine life.
- Production rate can be expanded as permitting progresses and resources/ reserves allow.
- Winter road construction, transportation and bulk supplies would be an annual cost.
- Further costs may be incurred for exploration on the Mon, and as agreed to on the Hangstone.

### Average underground mining costs by SRK (2016)





There are currently no NI 43-101 Mineral Resources or Mining Reserves on the Mon Property. Costs are shown for reference to published averages.

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#### Capital Structure



- SXTY is trading at the CSE Canadian Securities Exchange under the Symbol: SXTY
- also trading at OTC-Pink USA under the Symbol: SXNTF
- in Germany at Frankfurt and Tradegate Exchange under the Symbol: A2JKW2
- Market Cap : \$9.4 million CAD (2021-09-09)

2021-08-31	Shares, warrants and options issued			
Shares	144,384,102			
Warrants	85,618,922			
Options	7,650,000			
Fully Diluted	237,653,024			
Note: Management and Directors hold 17.2% of outstanding shares				



#### Access to the Mon Gold Property



- Easy 45 km to Mon Gold Property from Yellowknife: 15 minutes by helicopter, float or ski plane; options for crew daily commute or permanent camp. Gravity-recovered gold to be flown out.
- In winter, heavy equipment access by winter road heading to diamond mines 300 km north of Yellowknife, passes close to the Mon Gold project (we share winter road costs on 16.5 km to Bluefish Hydro, and pay 100 % on further 29km to Mon).
- Gold concentrate from Mon Mine will go out by winter road.



Winter road to the Mon Property; hauling heavy equipment to site March 2021



Float plane at Discovery Lake on the Mon Property



Helicopter at southern end of The Mon Property

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## The Yellowknife NWT Region



- Yellowknife was built on mining since the 1930's: Con, Giant and Discovery mines produced 15m oz. gold.
- Yellowknife is the capital of NWT, population est. 20,000+.
- It is a cosmopolitan city with high quality hotels, restaurants, entertainment and tourist support.
- Highway access 1,470 km from Edmonton, Alberta
- Yellowknife has experienced miners, geologists, mining and exploration suppliers, technical support companies, aviation companies helicopters, float/ski planes.



Yellowknife city; source: spectacularnwt.com



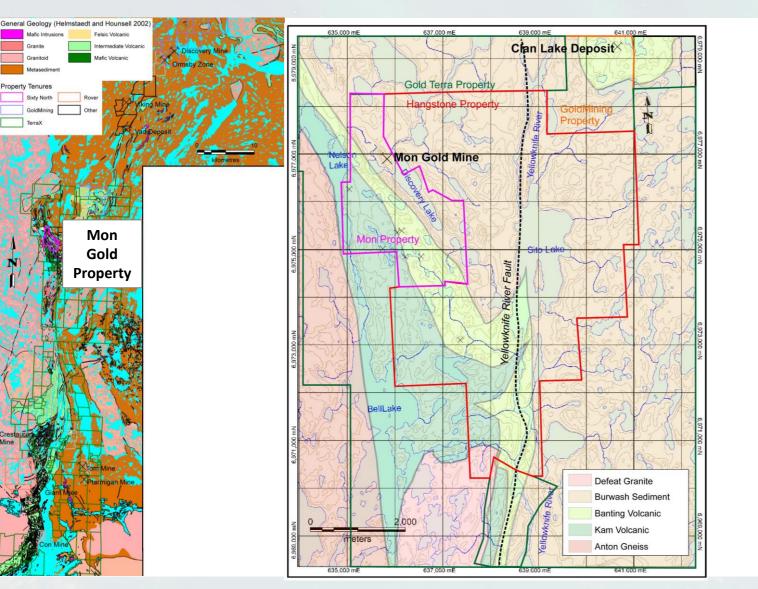
Historical photo – Giant Mine headframe; source: ykonline.ca, credit Kyle Thomas

## History of the Yellowknife Producers



- 1936, Con, Negus, Rycon Mines Discovered
- 1937 Mon Gold Mine Discovered
- 1938 Con Mine starts at 100 tpd
- 1939 Negus Mines Starts at 100 tpd
- 1944 Giant Mine Discovered
- 1947 Discovery Mine Discovered
- 1948 Giant Mine starts at 235 tpd
- 1948 Discovery Mine starts at 100 tpd

#### Regional Geology, Claims and Leases





- The Mon Gold Property is located in the Archean-aged, Yellowknife Greenstone Belt, NWT, Canada.
- Past mining in this Belt exceeds 15 million ounces of gold at grades >0.5 oz./tonne, including the Con (6 m oz.), Giant (8 m oz.) and Discovery Mines (1 m oz. at 1 oz./tonne, 1949-1969).
- The Mon Property is 622 ha in size and the recently optioned, contiguous Hangstone Property is 2,394 ha in size

## Vein Outcrop and Gold Occurence



**Typical** 

Mon gold

occurence

in quartz –

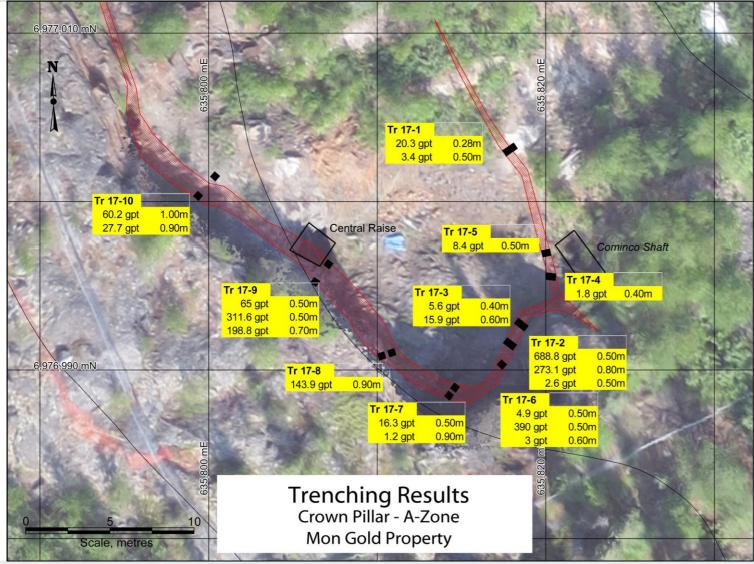
nugget effect

Vein outcrop and topography This shows the folded nature of the vein at surface.



# 2017 Prospecting Results Supports The High-grade Nature Of The Past Producing A-zone





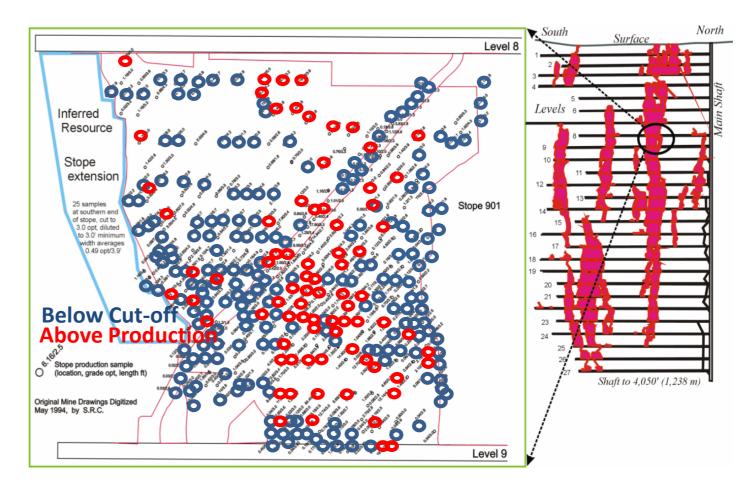
- Samples from 1.20 gpt Au/0.90 m to 688 gpt Au/0.50 m
- A sixty-meter exposure of the crown pillar of the A-Zone was sampled by mechanical chipping in ten continuous chips across the width of the vein.
- Full details in news release August 7, 2018

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# Cross section through the Discovery Mine, 901 Stope, Production Samples



- High-grade gold is not homogenously distributed, rather it occurs in clusters of very concentrated grades, i.e. this "nugget effect" indicates bulk sampling is preferable to drilling to establish a resource.
- The Discovery Mine started at 100 TPD, increased to 300 TPD, and produced 1 m oz.
- The Mon Gold Property A-Zone's overall size, grade, and form of the mineralization, as well as its host rock assemblage, is geologically similar to the Discovery Mine, 50 km to the north.



#### View to the South of A-Zone Vein





A-Zone vein at the mouth of the central adit sampled by DG Dupre, QP, June 2016: three 1m long continuous chip samples averaged 147 gpt gold; ref. NI 43-101 Technical Report, Dupre and Fitzpatrick, 2017

ZONE VEIN

## Metallurgical Testing 2018: Recoveries Avg. 98.8 %

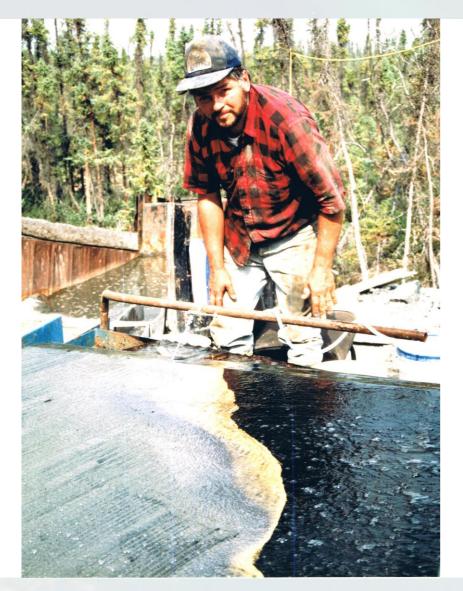


Composite ID	Sample Weight Tested	Head Gra	de, g/t Au	Gold Recovery, % Au		
	kg	Measured	Calculated	Gravity	Flotation	Overall
Composite 1	75.6	17.4	<mark>1</mark> 6.6	79.9	18.0	97.9
Composite 2	83.8	266.8	314.8	73.2	26.0	99.3
Composite 3	83.6	170.7	128.9	75.7	23.5	99.2
Composite 1+2+3	243.0	156.2	158.0	76.1	22.7	98.8

- Three composite samples totaling a quarter tonne on the crown pillar of the A-Zone
- Simple gravity and flotation circuit averaging 98.8 % recovery on 158.0 g/t Au calculated head grade
- Environmental benefit high recoveries without the use of cyanide leaching
- Details in news release August 15, 2018

## Gold Recovery by Gravity Totaled 85 % Historically

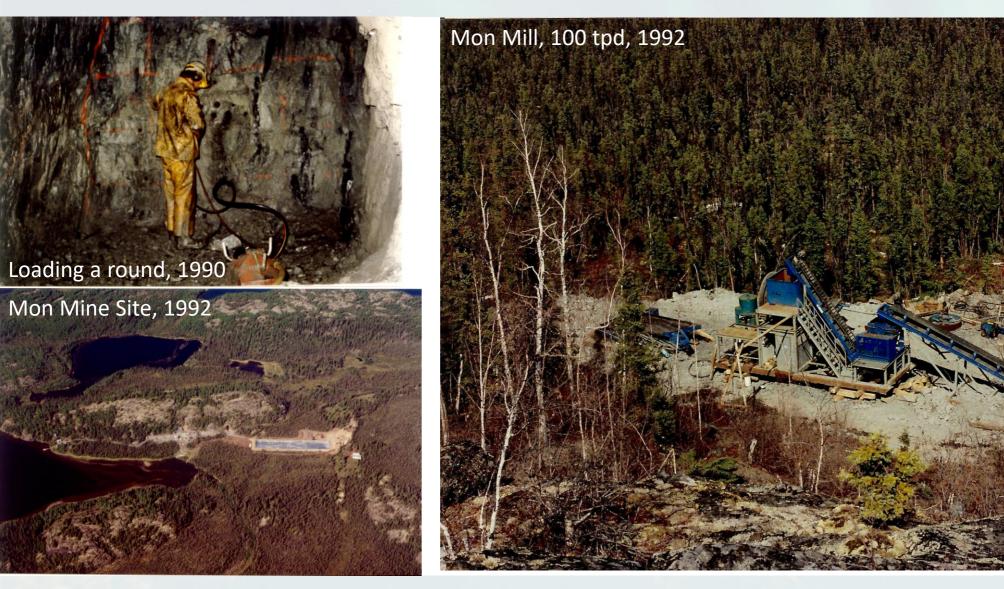




- Past production at the Mon totals 15,000 ounces of gold from 15,000 tonnes of ore from 15m of elevation in part of the folded quartz vein system.
- Historic drilling results show continuity of mineralization to the maximum depth drilled, for an additional 63 m below the area mined.

### Former Operations of the Mon Gold Mine





## Aerial View of the A-Zone Area in 1990's

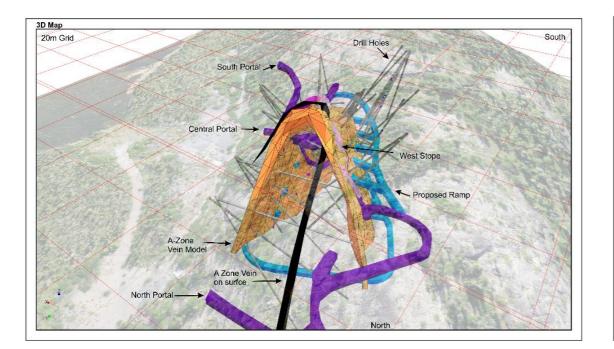


- A-Zone area looking west showing previous operations
- Easy access to the property from float plane or ski plane in winter, as well as helicopter

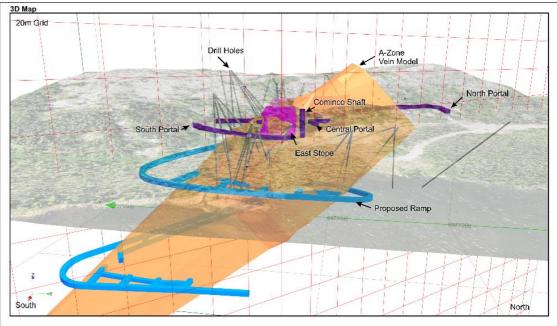


#### **Proposed Restart of Operations**





Three dimensional representations of the A-Zone (gold) with drill hole traces (dark grey), and existing workings (purple) with planned development (blue) in views to the south ...



... and to the west

## **Operational Equipment and Camp**

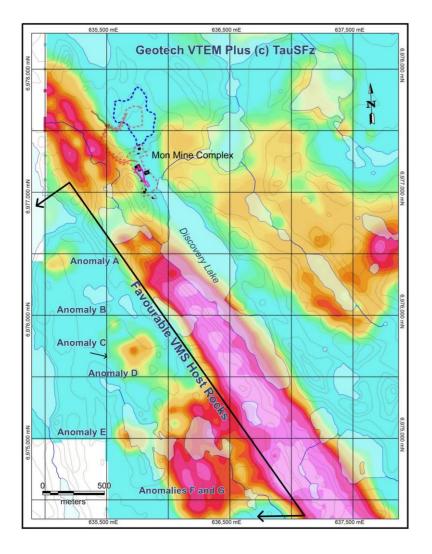


- Mining equipment and camp buildings have been purchased by Sixty North Gold and were trucked onto site from Yellowknife via the winter road in March 2021.
- This equipment will be used for the bulk sample planned for 2021, and ongoing mining operations at 100 tonnes/day thereafter.



## **Exploration Potential – VMS**





#### **Volcanogenic Massive Sulfide (VMS)**

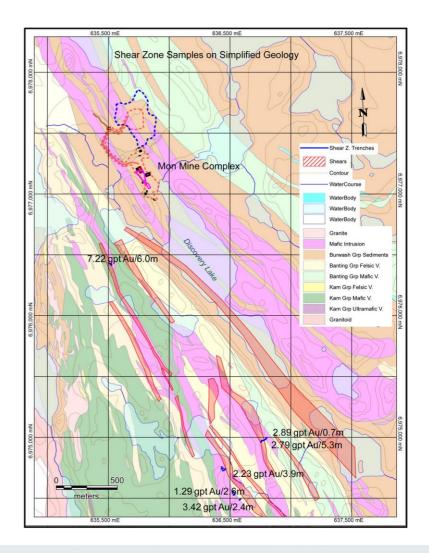
- VMS deposits account for 40% of Canadian silver production, 49% of its zinc, 27% of copper, 20% of its lead, and 3% of gold.
- 2018 exploration by SXTY led to discovery of a new 2,500 m long horizon hosting VMS mineralization enriched in silver, lead, zinc and gold.
- Grab samples in this zone (Anomaly C) graded up to 2.30 gpt Au, 360 gpt Ag, 3.83% Pb, and 1.94% Zn.
- Trench assays including 0.45m of 203 gpt silver, 1.0 gpt gold, 0.59% lead and 0.96% zinc.
- 2019/2020 airborne geophysics has identified at least seven isolated anomalies within favourable rocks. The strongest anomalies are not exposed. This has generated at least 4 drill targets.

#### **Exploration Potential – Shear Zones**



#### **Shear Zones**

- Yellowknife Greenstone Belt contains numerous Shear Zone-hosted gold deposits:
  - Giant Yellowknife Gold Mine past production 8 million oz Au
  - Con Gold Mine past production 6 million oz Au
  - Negus Rycon Gold Mines past production 0.9 million oz Au
  - Crestaurum Mine part of Gold Terra resource
- Mon Property contains gold-bearing Shear Zones (multiple structures, some mineralized over 2 km), some of which have minor exposures.
  - Over 95% of the shear zones are not exposed, underlying lakes and swamps.
  - Trench results show potentially economic grades over potentially minable widths.
  - The Shear Zones extend onto the optioned Hangstone Property



# East-facing Longitudinal Section through the Con Mine C-4 Shear Zone

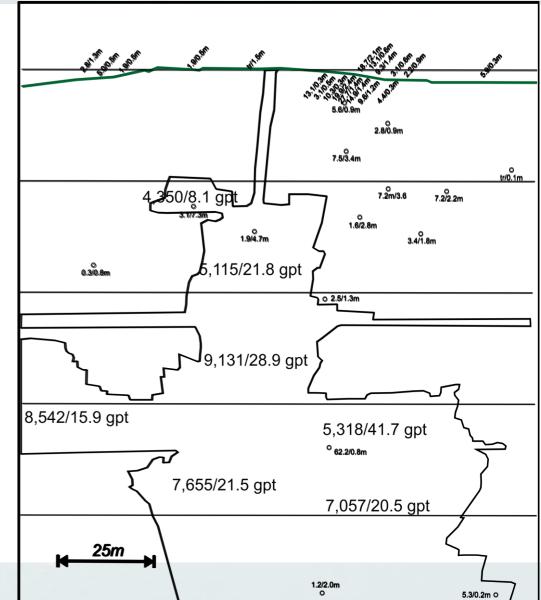
C-4 Shear one is exposed with a 25 m long high-grade section exposed averaging 17 gpt across 1.2 metres within 11.4 gpt over 100 metres.

Fourteen diamond drill holes intersect the structure returning an average of 5.3 gpt gold across 2.2 metres.

Development led to 47,100 tonnes being mined from seven separate stopes.

The 47,100 tonnes graded 22.84 gpt gold recovering 34,500 ounces of gold. This works out to twice what the average surface grades were, 25% higher grade than the high-grade surface section, and almost five times the diamond drill grades.

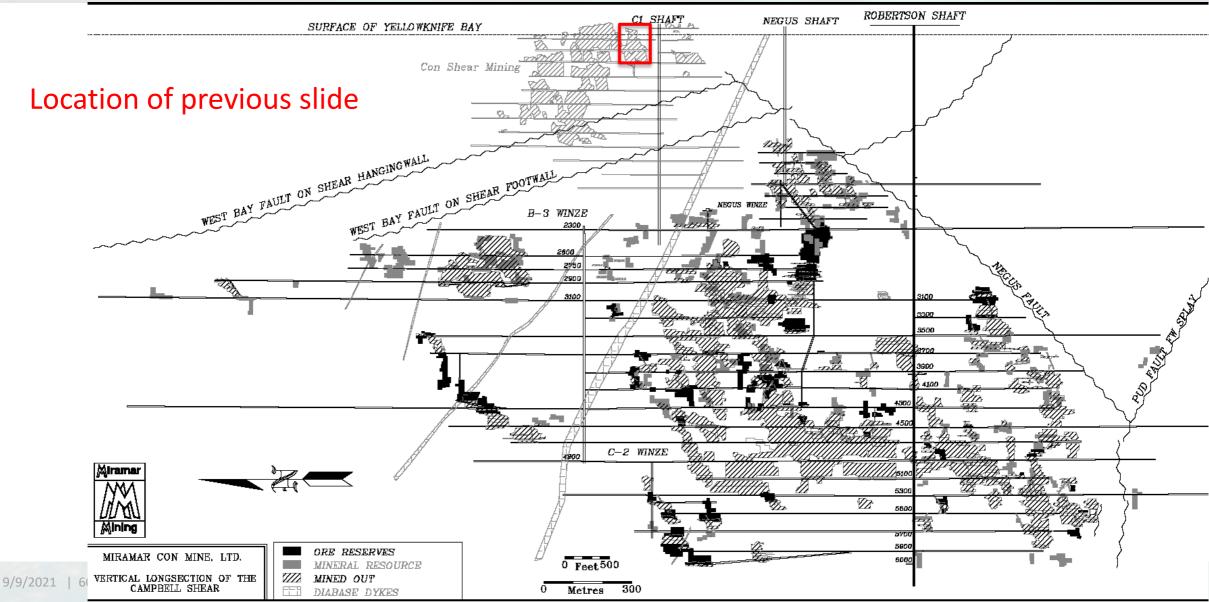
Clearly diamond drilling does not work in this situation! This 6 million ounce deposit would not have been identified without bulk sampling.





# East-facing Longitudinal Section through the Con Mine C-4 Shear Zone and Campbell Shear Zone





#### **Directors and Management**



#### Sixty North Gold Mining Ltd.

- John Campbell, MBA, CFA, CPA; Chairman of the Board & CFO
- Dr. Dave R. Webb, B.A.Sc., M.Sc., Ph.D., P.Geol., P.Eng., President & CEO
- Ronald L. Handford, B.A.Sc., MBA; VP Corp. Dev. & Corp. Secty.
- Grant Block, CPA, CA, CMA, CPA (Nevada) Director
- Andriyko Herchak, B.Comm., CPA, CA Director

- Gavin Kirk, Director and Investor Relations Consultant
- Brian Malahoff, P.Geo., Director

#### **New Discovery Mines Ltd. (Project Manager)**

- Dr. Dave R. Webb, B.A.Sc., M.Sc., Ph.D., P.Geol., P.Eng., Director
- Gerry V. Hess, President

#### **Key Operations Personnel**



#### Dr. Dave R. Webb, Ph.D., P.Geol., P.Eng.

has over 40 years of experience, completed his M.Sc. and Ph.D. in Yellowknife. He discovered four gold deposits in Yellowknife, developed the largest gold resource reported in Yellowknife in the past 50 years subsequently taken to feasibility, and the largest granitoidhosted gold deposit in the NWT. He acquired the Mon Property in the late 1980's from Cominco Ltd. and developed it into production in the 1990's. He recently obtained operating permits for mining, processing, and storage of tailings at the Mon Property.

#### **Rod McKay**

Mine Manager - Mon Gold mine project, has worked as a project superintendent on numerous underground mining projects, including responsibility for milling operations and exploration activities. He has more than 40 years of diversified work experience in all aspects of underground mine construction, operation and maintenance, including in the NWT.

#### **Gerry V. Hess**

Operations Advisor, is a former Mine Manager of the Mon Mine, and underground superintendent at four other mines in the Yellowknife area. He has been an independent mine contractor installing several kilometres of underground workings at various remote sites and has been a former contractor at one of the NWT's diamond mines.



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in Sixty North Gold Mining Ltd.