

## **Cassiar's BC Based projects**



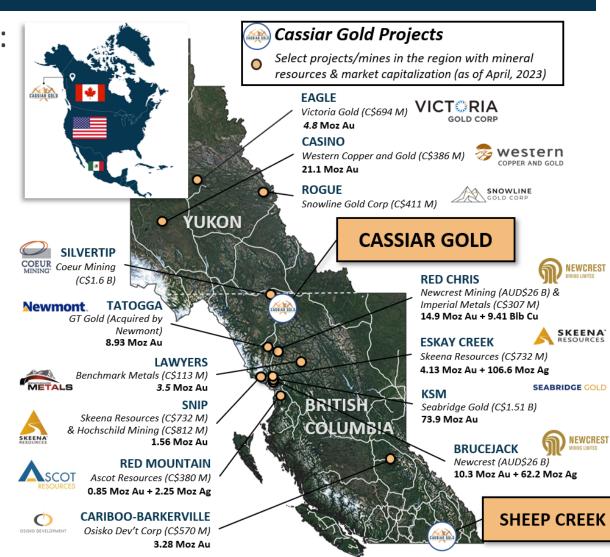
### Two important orogenic gold districts in BC:

### 1 Cassiar Gold FLAGSHIP PROPERTY

- 100% owned, 59,000 ha property with +15 km strike of gold targets
- Site of historical Cassiar Gold Rush with total historic gold production of 425,000 oz<sup>1</sup>
- CASSIAR NORTH: NI43-101 Inferred Resource estimate of 1.4 Moz Au
   @ 1.14 g/t Au<sup>1</sup> with significant resource expansion potential
- CASSIAR SOUTH: Multiple high-grade (10-20 g/t Au)<sup>1</sup> vein targets with access from 25 km of underground workings

### 2 Sheep Creek

- 3rd largest past-producing orogenic gold district in BC with historical gold production (1899 - 1951) of 742,000 oz Au @ 14.7 g/t Au<sup>2</sup>
- 60-70 known veins at the camp with little exploration carried out since the 1950s



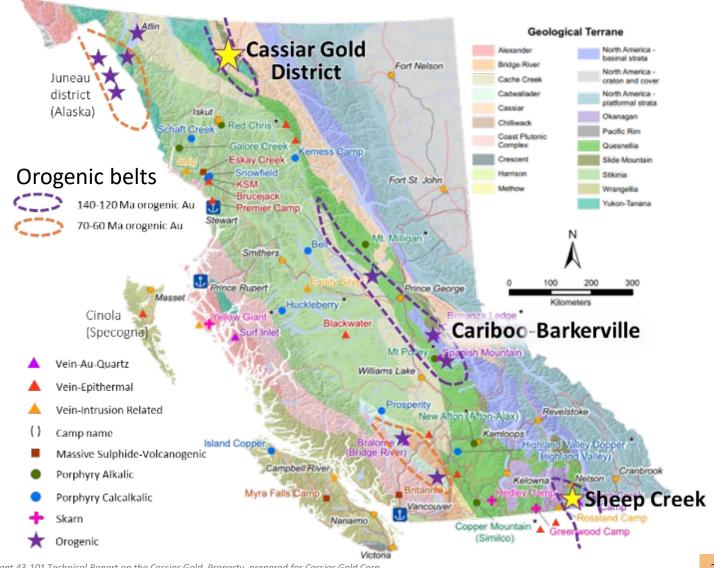
<sup>&</sup>lt;sup>1</sup>Zelligan, Moors, Jolette, April 28, 2022. National Instrument 43-101 Technical Report on the Cassiar Gold Property, prepared for Cassiar Gold Corp.

<sup>&</sup>lt;sup>2</sup> August 17, 2017, NI43-101 Technical Report on the Sheep Creek Project authored by Robert A. Lane, MSc. PGeo.

## **Cassiar Gold Property Overview**

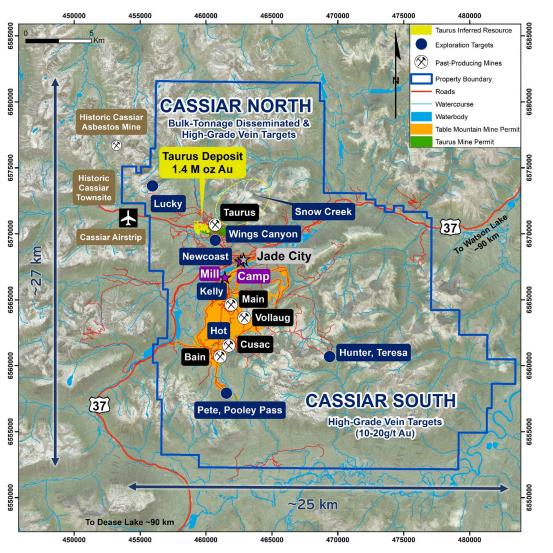


- The Cassiar Gold property is located in the central BC orogenic gold belt (140-120 Ma) – the older of two orogenic gold belts in BC/Alaska (the western being 70-60 Ma in the Juneau Belt and Bralorne district) associated with pulses of accretionary orogenesis
- This inland belt includes Cariboo-Barkerville (>5 Moz), Sheep Creek (0.7 Moz) and Cassiar Gold District (>0.4 Moz).
- Younger equivalent deposit type, with similar greenstone belt geology at Cassiar as older districts in the Abitibi Greenstone Belt, West Africa, or Western Australia



# **Cassiar Gold Property Overview**





- 59,000-hectare orogenic gold district controlled entirely by the company, consolidated only in the late 2000's.
- Has initial history dating to late 1800's when 72 oz nugget extracted from placer working around McDame Creek; approx. 75,000 oz of placer production reported, continuing at small scale to the present
- TWO KEY PROJECT AREAS, with active mine permits over central portions:
  - 1. CASSIAR NORTH (North of Hwy 37): near-surface bulk-tonnage Taurus Deposit hosting 37.9 MT @ 1.14 g/t Au containing 1.4 Moz Au <sup>1</sup> in an inferred mineral resource (0.5 g/t cutoff; 2022). Taurus deposit first systematically explored in early 1990's, small scale underground mining on its east side in 1980's.
  - 2. CASSIAR SOUTH (South of Hwy 37): Past-producing high-grade quartz veins mined underground at the Erickson and Cusac operations mined mainly from the 1980's to 1990's, to produce ~315,000 Au at recovered grades of 10-20 g/t Au.

### **Outstanding Infrastructure & Access in Northern BC**



- Paved Provincial Hwy 37 bisects the property with the paved Cassiar road passing through the Taurus Deposit area.
- Permanent camp with power/water nearby along with 160 km of property access road, owned/permitted 300 tpd mill and 25 km of underground workings.
- 1.2 km Cassiar airstrip in excellent condition just outside of property boundary.





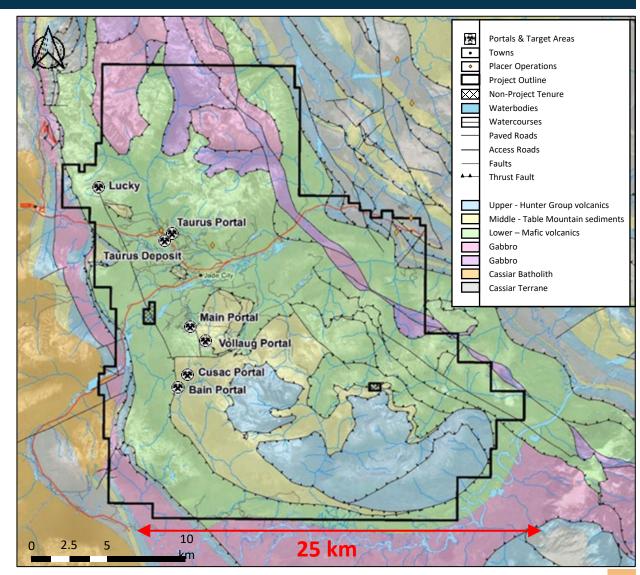




## **Cassiar Property Geology**



- Camp is hosted by the Sylvester Allochthon, a portion of the Slide Mountain ophiolitic terrane composed of stacked, shallow dipping thrust panels of Paleozoic to early Mesozoic mafic volcanic rocks, ultramafic sills and fine-grained siliciclastic sediments
- The allochthon is bounded to the east by the siliciclastic, autochthonous Cassiar terrane and to the west by carbonatedominant sequences of the Cache Creek terrane
- Regional Jurassic to Cretaceous deformation affects the area, associated with gold veins



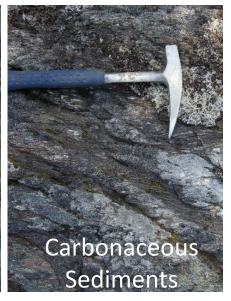
# **Cassiar Property Geology**

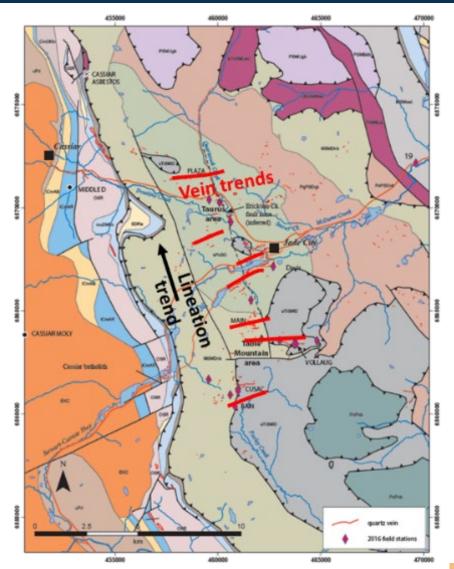


- Host rocks are a stacked sequence of gently dipping competent mafic volcanic rocks layered with weaker altered ultramafic (listwanite) and fine-grained sedimentary units (ophiolite sequence).
- Shallow dipping high strain zones with carbonate-sericite alteration are localized along the weaker listwanite and sedimentary units, acting as structural control and fluid conduits to vein systems.
- Gold-bearing veins formed in stacked mafic volcanic panels in NW-side down, apparent normal shear zones that accommodate displacement between weaker units.



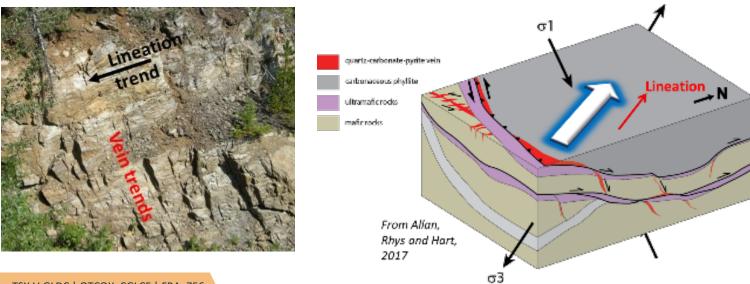


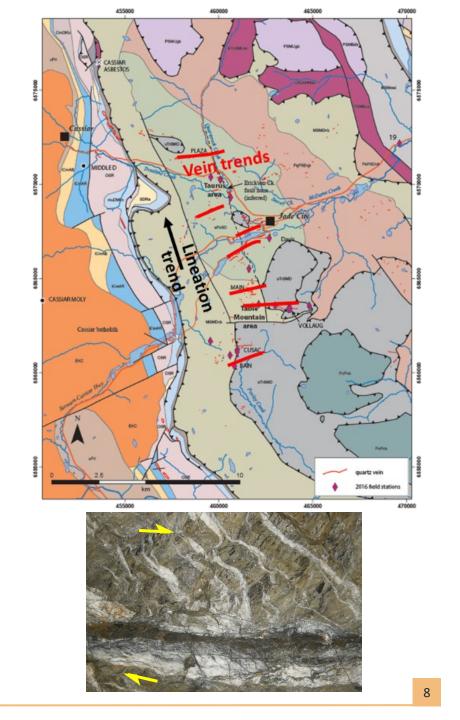




### **Structural Distribution of Shear Veins**

- Veins formed top to the NW low angle thrusting on listwanite and sedimentary accompanied by NNW-SSE stretching
- Veins form in stacked mafic volcanic panels in NW-side down, apparent normal shear zones that accommodate displacement between competent mafic rocks and weaker sedimentary and listwanite units which localize strain and shear zones
- Comparable to other greenstone-belt hosted deposits globally, although flat-lying orientation of lithological sequence differs with some exceptions (e.g. Beta-Hunt, Western Australia)
- Veins may be blind to surface where covered by sediments

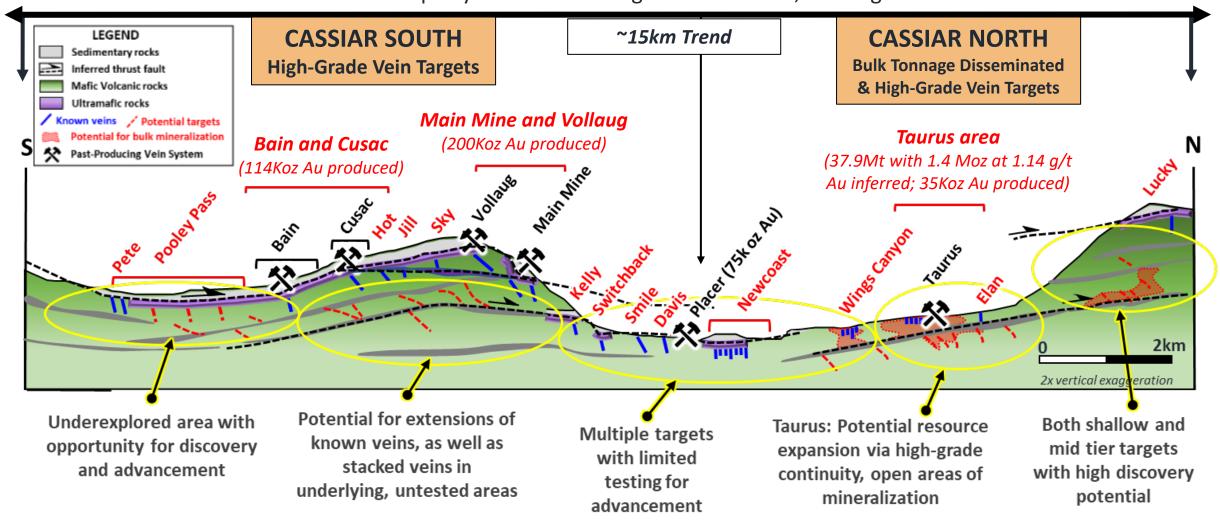




## **District Scale Discovery Potential**

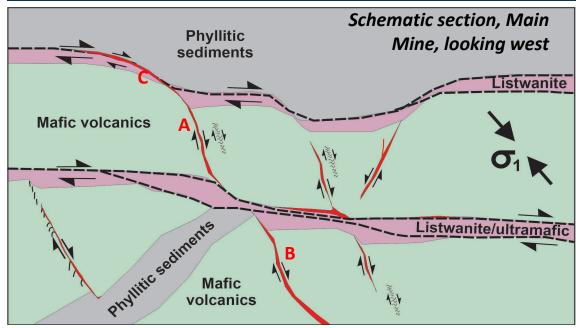


Cassiar Gold Property - Schematic Longitudinal Section, Looking West



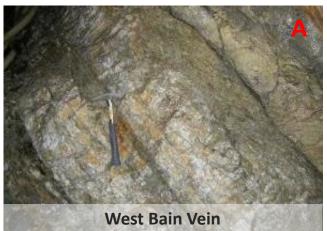
# **Cassiar South: Classic Orogenic Gold Veins**





- Classic orogenic-style, quartz-carbonate pyrite-tetrahedrite + visiblegold-bearing shear veins with free gold.
- Veins occur in mafic volcanic rocks stacked between low-angle listwanite-bearing thrust surfaces and lenses of fine-grained clastic sediments.
- Deflections in contacts, increased carbonate-fuchsite alteration in listwanite mark vein positions
- Mined veins average 2-3 m thick with local strike lengths of >600 m (eg.
   Vollaug, Bain) and extend 30-150 m down dip.
- Veins are spaced 10s to 100s of meters apart and stacked in multiple mafic units -- potential for untested parallel and vertical repetition.





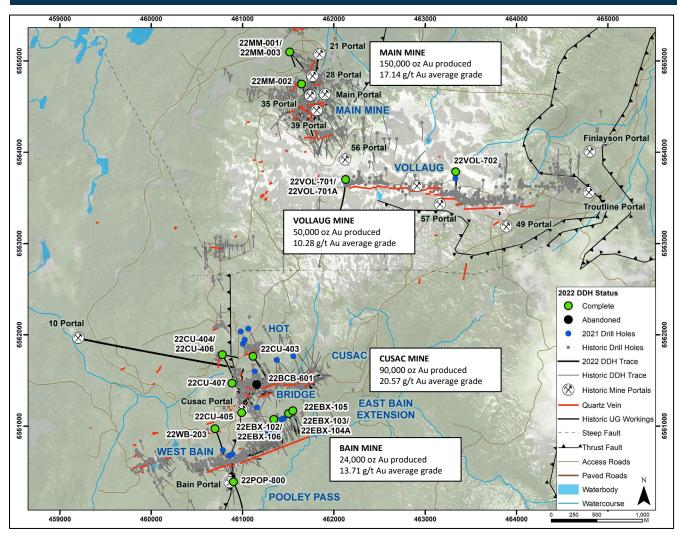




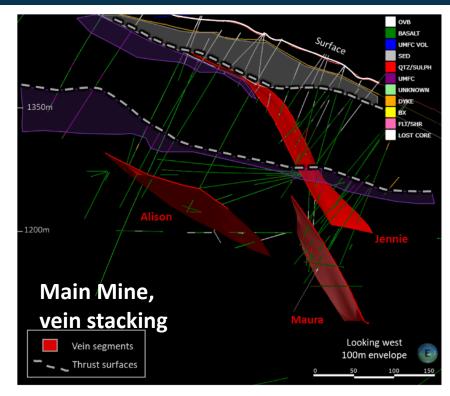
in Mine Shear Vein Listwanite shear zone with quartz vein, Bain area

# **Cassiar South:** Historically Mined Areas and 2022 Drilling





Cassiar South 2022 Drill Campaign Drillhole Location Map. Historical production figures from April 2022 NI43-101 Technical Report by Zelligan, Moors, Jolette, and references therein.



Vein targets include **East Bain Extension**, **West Bain**, **Vollaug**, **Cusac and Main Mine** and drilling focused on testing for:

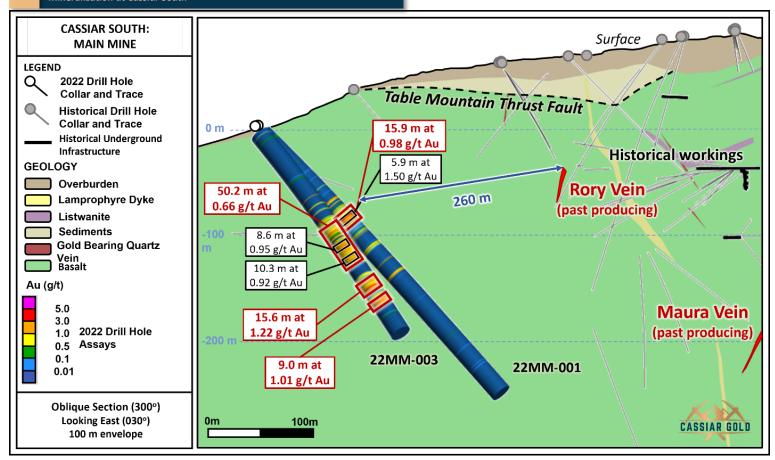
- Lateral/down-dip extensions of known vein systems.
- Periodicity of parallel sets of vein systems.
- 3) Thrust stacking of mafic volcanic panels that may host additional, blind underlying quartz veins.

### Cassiar South 2022 – Main Mine new area of veins and alteration



#### 20 APR 2023

Cassiar Gold Intersects 50.2 m of 0.66 g/t Au, including 15.6 m of 1.22 g/t Gold Mineralization at Cassiar South





Visible gold encountered in 22MM-003 hosted in a sulphidemineralized quartz vein at 142.9 m depth



22MM-003 drill core photo depicting high density veining encountered within a 50.2 m intercept of 0.66 g/t Au (drill core length)

Oblique vertical section showing 22MM-001 and 22MM-003 at the Main Mine target area, looking to the east. Assay results in red and higher grade nested intervals in black are reported in today's news release. Section width +/- 50m.

## Cassiar South: Bain Vein Drill Highlights



- Bain vein system produced 24,000 ounces of gold at an average grade of 13.71 g/t Au from 1993 to 1995.<sup>1</sup>
- Historical drilling by previous operators in 1990/91, 2002, 2008 and 2009 in unmined areas returned significant mineralized intercepts, demonstrating the continuation of the vein system to the east to form a 1.5 km long corridor of known high-grade mineralization (see table on right).
- The area was subject to additional mine development in 2009 to within 50 m of the unmined East Bain vein, allowing for ease of potential future underground and mining access.





Quartz vein with band of coarse gold and pyrite, Bain (above); Bain vein in historical stope (left)

Significant ur	Significant unmined historical and 2021 drill results in the unmined Eastern Bain corridor with grades of >10 g/t Au (*denotes 2021 drillholes)						
Target area	Drillhole <sup>3</sup>	From (m)	To (m)	Length <sup>2</sup> (m)	Grade (g/t Au)		
East Bain	C90-340	146.55	148.00	1.45	52.19		
	C90-357	156.40	158.70	2.30	17.28		
	C90-359	140.30	143.00	2.70	34.99		
	C91-371	150.40	153.00	2.60	10.94		
	C91-373	154.95	158.30	3.35	21.71		
			incl.	0.90	71.57		
	02BG-02	170.20	172.80	2.60	41.30		
	02BG-03	126.20	132.80	6.60	6.65		
			incl.	2.60	13.02		
	02BG-04	186.6	188.8	2.20	8.34		
	BNS-0003	150.32	157.2	6.88	12.45		
	BNS-0005	111.83	115.72	3.89	10.50		
	BNS-0006	134.82	139.01	4.19	4.35		
	BNS-0007	125.10	128.40	3.30	28.61		
	21EB-300*	182.79	187.56	4.77	35.10		

203.16

incl.

and

207.71

0.53

0.40

4.55

105.00

270.00

3.27

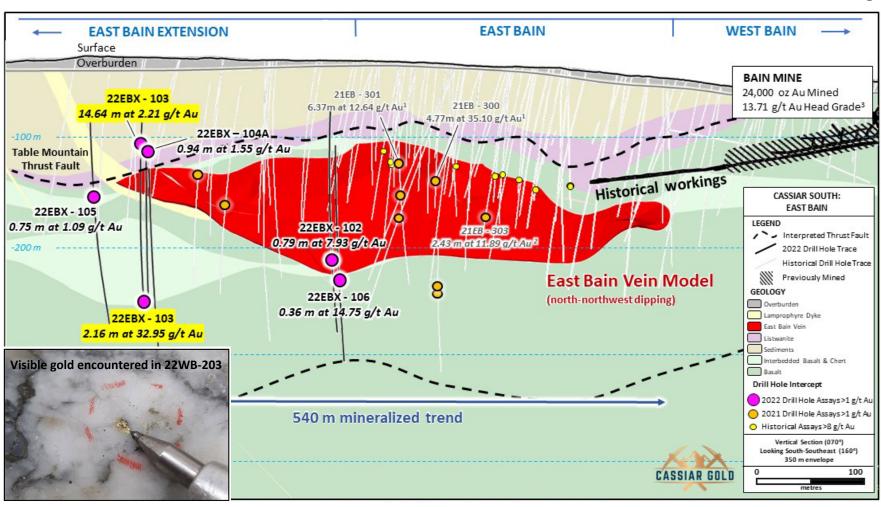
Extension

21EBX-101\*

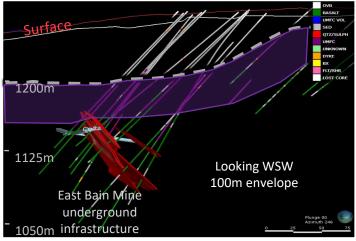
## **Cassiar South 2022 – Bain Vein Highlights**

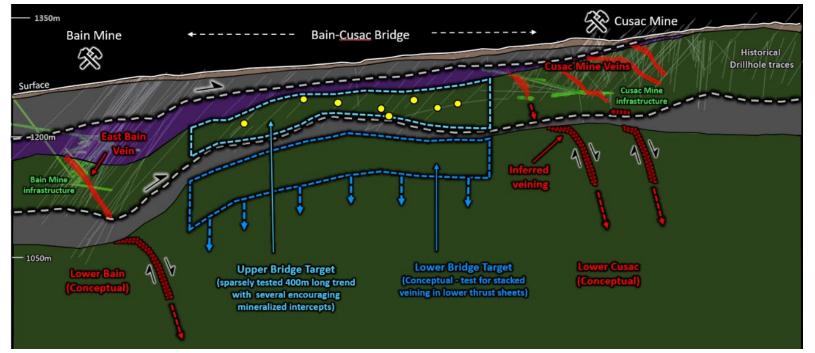


### 2022 drill results at Bain Vein confirmed mineralized trend of over 540 m in strike length beyond historical workings<sup>1</sup>

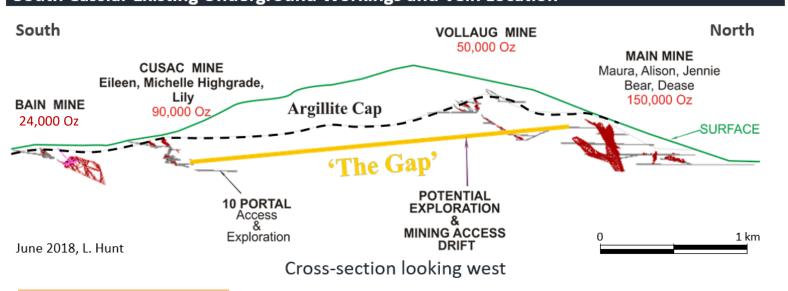




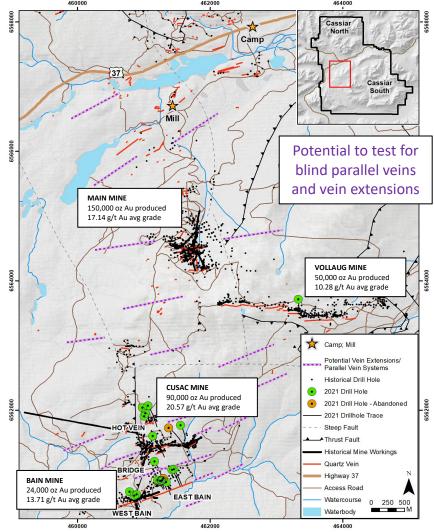




### South Cassiar Existing Underground Workings and Vein Location



# South Cassiar targeting concepts: vein stacking, periodicity, and blind veins beneath sediments and listwanite



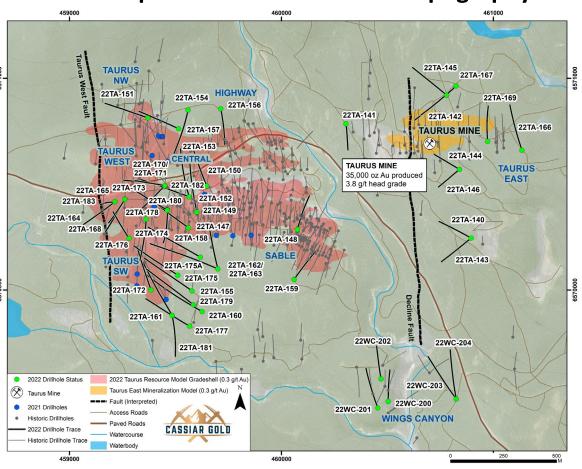
### Taurus deposit area — potential for expansion and additional Tauri?



### **Aerial view looking WSW**



### Taurus deposit area: location and topography



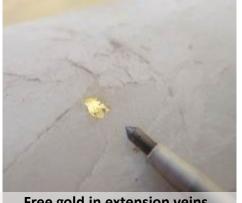
## **Taurus Gold Deposit: Mineralization Styles**



- Mineralization Type: Basalthosted, low-sulfide gold-bearing veins and well-defined alteration envelopes of quartz, sericite-iron carbonate and pyrite.
- Vein density, alteration intensity and shear zone distribution aid in defining and modeling higher grade corridors of mineralization.



Free gold in extension vein (T4), drill hole TA09-25



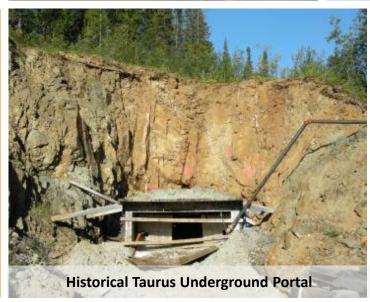
Free gold in extension veins, drill hole TA09-41

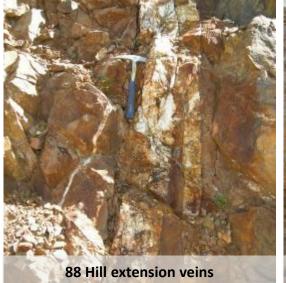


Sheeted veins in discrete T3 carbonate-pyrite alteration

### **Two Mineralization styles:**

- ENE trending, steeply dipping sets of sheeted quartz extension veins associated with steep, WNW trending shear zones.
- Broad zones of disseminated pyrite-mineralization in carbonate altered mafic volcanic rocks surrounding structures, especially near Taurus West Fault.







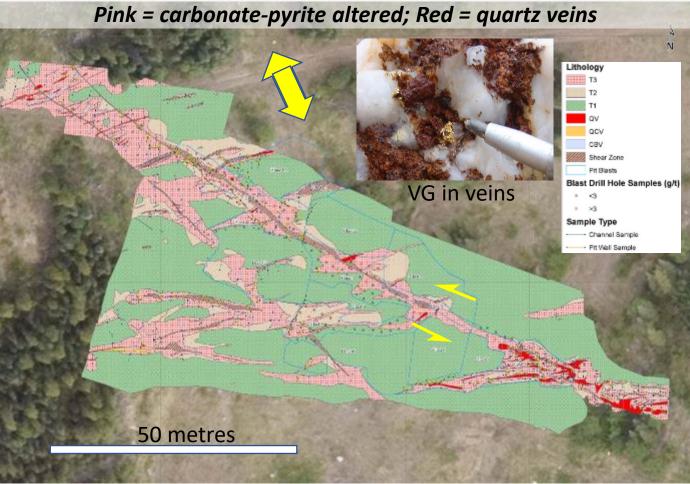
# **Taurus Test Pit Area (2010):** 5500 T at 3.2 g/t Au extracted, based on blasthole and chip assays, stockpiled beside Cassiar Mill



### Sable Shear Zone showing NW Shear Zone Control on Mineralization; EW to ENE shear veins in other areas



Vein arrays in pyritic alteration







TSX.V:GLDC | OTCQX: CGLCF | FRA: 756

(T3 + T4 mineralization)

# Taurus Gold Deposit: 2021 Drill Campaign

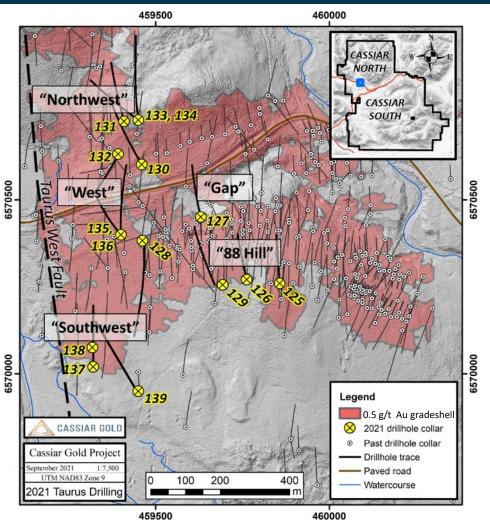


- 39 drill holes completed here by Cassiar in 2020-2021 that were included in the 2022 resource, with 15 holes totalling 4,098 m in 2021 for which highlights are shown below
- Aimed at confirming historical results, continuity of higher-grade mineralized areas where historical drilling was widely spaced (~100 m apart) and to test the potential for expansion of the deposit footprint laterally and at depth.

#### **HIGHLIGHT 2021 RESULTS SHOWN BELOW 1,2,3,4**:

Hole ID	From	Length	Au	Target
21TA-129	16.9 m	23.2 m	3.56 g/t Au	
21TA-125	123.4 m	13.1 m	3.53 g/t Au	88 Hill &
21TA-125	70.2 m	37.8 m	1.80 g/t Au	Gap area
21TA-125	9.9 m	52.3 m	1.16 g/t Au	
21TA-134	172.9 m	45.5 m	2.40 g/t Au	
21TA-132	180.1 m	45.6 m	1.83 g/t Au	Northwest area
21TA-134	98.2 m	35.5 m	1.59 g/t Au	Northwest area
21TA-118	24.7 m	41.3 m	1.05 g/t Au	
21TA-135	194.2 m	34.9 m	2.56 g/t Au	
21TA-128	11.0 m	118.6 m	1.01 g/t Au	West area
21TA-128	349.7 m	45.3 m	1.29 g/t Au	
21TA-138	12.7 m	46.5 m	1.12 g/t Au	
21TA-137	21.3 m	119.0 m	0.72 g/t Au	Southwest area
21TA-139	11.0 m	150.7 m	0.65 g/t Au	

<sup>\*</sup>Significant results based on a >0.5 g/t cutoff

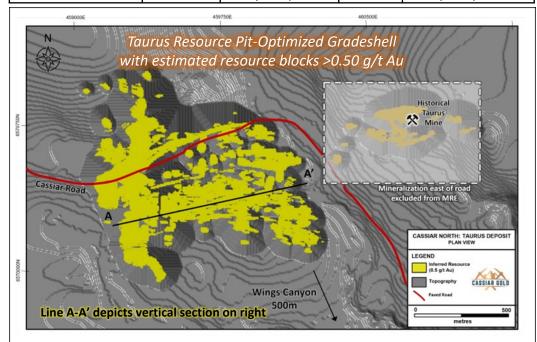


Distribution of 2021 drill holes at Taurus deposit. Surface projection of 2019 0.5 g/t Au grade shell is shown for reference. Blue box in inset map shows location within the overall Cassiar Gold property.

## **Cassiar North: Taurus Gold Deposit**

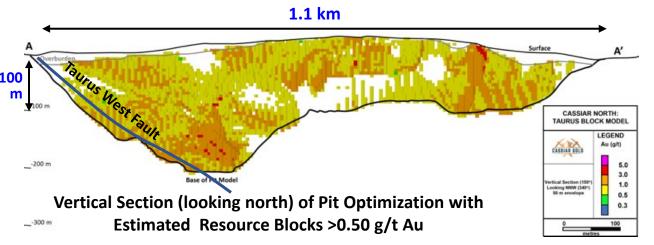


2022 NI 43-101 Taurus Inferred Mineral Resources <sup>2</sup>					
Resource Category	Cut-off Au g/t	Tonnes	Au g/t	Au oz	
Inferred	0.40	44,600,000	1.03	1,480,000	
Inferred	0.50	37,900,000	1.14	1,390,000	
Inferred	0.60	32,000,000	1.24	1,280,000	
Inferred	0.70	27,000,000	1.36	1,180,000	



Assumptions: Metal price used was US\$ 1,800/oz Au (Exchange Rate 0.78\$US:1\$C) with process recoveries of 92%. A C\$15/t OPEX mining cost, C\$11/t process cost, and C\$4.50/t G&A cost were used. The constraining pit optimization uses pit slopes of 45°, dilution of 5% and mining recovery of 98%. Strip Ratio is calculated at 4.36:1.

- 2022 NI43-101 Compliant Inferred Mineral Resource Estimate of 1.4 Moz @ 1.14 g/t Au using 0.5 g/t cut-off grade.<sup>1</sup>
- Past production: 35,000 oz @ 3.8 g/t Au² recovered grade from 1981-8.
- Open-pittable, flat-lying mineralization from surface to 270 m depth.
- 45% of ounces occur within 50 m, 76% of ounces occur within 100 m and 90% of ounces occur within 150 m, respectively, from surface.
- Deposit footprint still reflects 1990's Cyprus/Intl Taurus land position:
   Mineralization is only constrained by drilling with high potential for resource expansion laterally, at depth and within the resource pit shell.

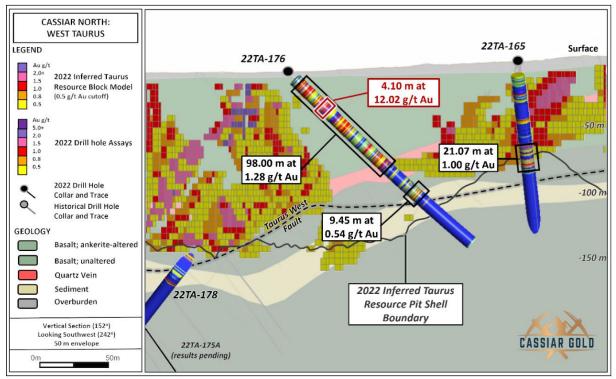


<sup>&</sup>lt;sup>1</sup> Zelligan, Moors, Jolette April 28, 2022. National Instrument 43-101 Technical Report on the Cassiar Gold Property, prepared for Cassiar Gold Corp.

### **2022 Drill Program Details at Cassiar North**

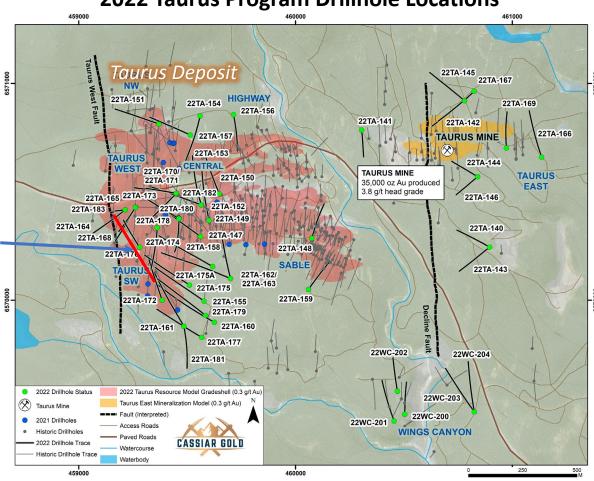


- 45-hole, 14,000 m Taurus drill campaign complete
- Step-out drilling and infill of wide gaps between previous drill holes



Vertical section showing 22TA-176, looking southwest with the 2022 Taurus Resource Block Model for reference. The drill hole infills a large gap in the block model and suggests mineralization continuity between the earlier widely spaced drill holes. Section width +- 25m.

### **2022 Taurus Program Drillhole Locations**



Cassiar North 2022 Drill Campaign Drillhole Location Map. Vertical projection of 2022 0.3 g/t Au resource gradeshell shown for reference (from Zelligan, Moors, Jolette 2022). Historical production figures from Taurus MINFILE Production Detail Report, file number 104P 012, BC Geological Survey.

# **Cassiar North 2022 Drill Program Highlight Intercepts**

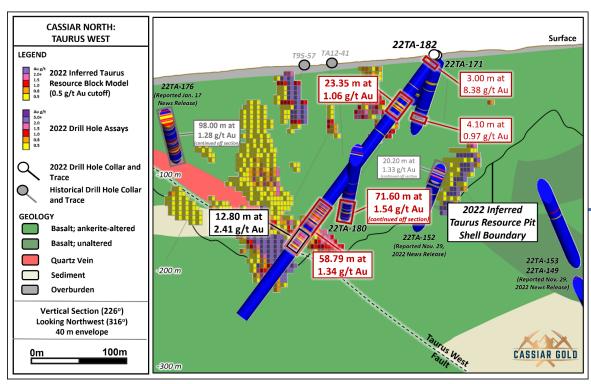


<b>Target Area</b>	Drillhole		From	То	Length*	Grade
Taurus East	22TA-142		129.8	152.0	22.20 m	1.50 g/t Au
		incl.	132.2	133.0	0.75 m	9.61 g/t Au
	22TA-146		12.9	23.4	10.50 m	4.47 g/t Au
		incl.	13.8	17.0	3.25 m	11.12 g/t Au
		with	15.4	15.9	0.50 m	45.30 g/t Au
		incl.	20.4	21.1	0.75 m	12.65 g/t Au
	22TA-167		226.0	239.7	13.70 m	2.24 g/t Au
	22TA-169		4.5	11.1	6.60 m	22.44 g/t Au
		incl.	10.3	11.1	0.80 m	174.50 g/t Au
Taurus Central	22TA-149		8.2	44.9	36.75 m	1.30 g/t Au
		incl.	29.1	34.4	5.29 m	4.09 g/t Au
	22TA-152		157.4	177.6	20.20 m	1.33 g/t Au
		incl.	157.4	157.9	0.45 m	25.90 g/t Au
			279.7	308.8	29.05 m	1.17 g/t Au
Sable	22TA-148		8.7	38.8	30.10 m	1.41 g/t Au
		incl.	8.7	12.4	3.65 m	2.76 g/t Au
		and	21.5	23.9	2.35 m	9.08 g/t Au
		with	23.0	23.4	0.35 m	41.40 g/t Au
			68.9	102.0	33.15 m	0.87 g/t Au
		incl.	68.9	88.3	19.45 m	1.14 g/t Au

Target Area	Drillhole		From	То	Length*	Grade
Taurus West	22TA-158		337.0	409.2	72.25 m	1.09 g/t Au
	22TA-174		12.3	89.5	77.2 m	0.67 g/t Au
			364.2	388.5	24.3 m	1.13 g/t Au
	22TA-176		10.7	108.7	98.00 m	1.28 g/t Au
		incl.	41.7	45.8	4.10 m	12.02 g/t Au
		with	43.8	45.1	1.30 m	25.87 g/t Au
		incl.	65.0	65.6	0.55 m	17.80 g/t Au
	22TA-178		51.4	103.4	52.00 m	0.60 g/t Au
		incl.	93.0	93.7	0.69 m	14.85 g/t Au
			116.0	186.6	70.65 m	0.76 g/t Au
		incl.	153.5	161.1	7.60 m	2.02 g/t Au
	22TA-180		177.5	249.1	71.6 m	1.54 g/t Au
		incl.	222.0	245.5	23.5 m	3.68 g/t Au
		incl.	222.0	223.0	1.0 m	37.40 g/t Au
	22TA-182		194.7	253.5	58.8 m	1.34 g/t Au
		incl.	240.2	253.0	12.8 m	2.41 g/t Au
		incl.	250.6	251.2	0.5 m	13.75 g/t Au
Taurus	22TA-160		69.0	88.9	19.95 m	0.72 g/t Au
Southwest			214.0	234.3	20.35 m	0.51 g/t Au
	22TA-161		8.2	180.1	171.88 m	0.66 g/t Au
	22TA-172		28.0	167.4	139.35 m	0.61 g/t Au
		incl.	48.7	64.1	15.35 m	1.31 g/t Au
		with	61.3	61.9	0.65 m	6.28 g/t Au
		incl.	140.9	141.4	0.55 m	5.17 g/t Au
	22TA-175A		189.0	239.0	50.05 m	0.61 g/t Au
		incl.	224.7	233.2	8.45 m	1.54 g/t Au
Drill core lengths are reported here. True widths for these intervals have not been established						

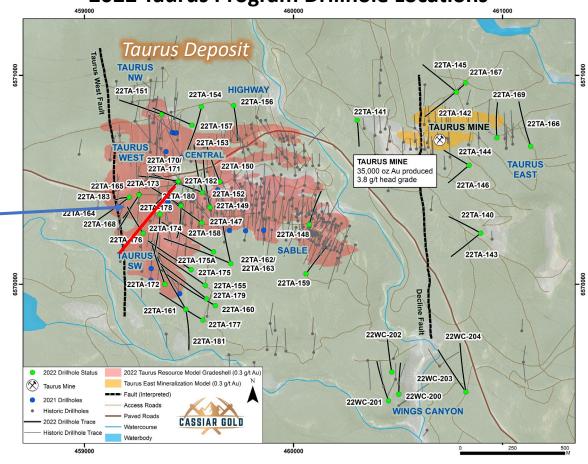
### **2022 Drill Campaign: Taurus West**





Vertical section showing 22TA-182 in the Taurus West target area, looking to the northwest. Assay results in red and higher-grade nested intervals in black are reported in this news release. Section width +/- 20m.

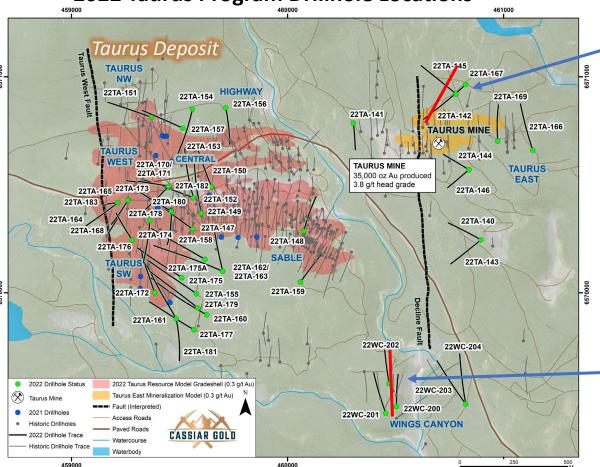
### **2022 Taurus Program Drillhole Locations**



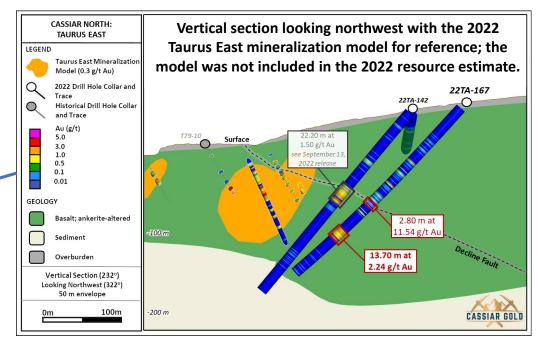
Cassiar North 2022 Drill Campaign Drillhole Location Map. Vertical projection of 2022 0.3 g/t Au resource gradeshell shown for reference (from Zelligan, Moors, Jolette 2022). Historical production figures from Taurus MINFILE Production Detail Report, file number 104P 012, BC Geological Survey.

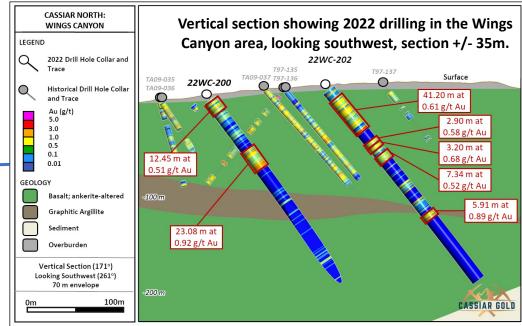
# **2022 Taurus Drill Program: Eastern areas**

**2022 Taurus Program Drillhole Locations** 



Cassiar North 2022 Drill Campaign Drillhole Location Map. Vertical projection of 2022 0.3 g/t Au resource gradeshell shown for reference (from Zelligan, Moors, Jolette 2022). Historical production figures from Taurus MINFILE Production Detail Report, file number 104P 012, BC Geological Survey.

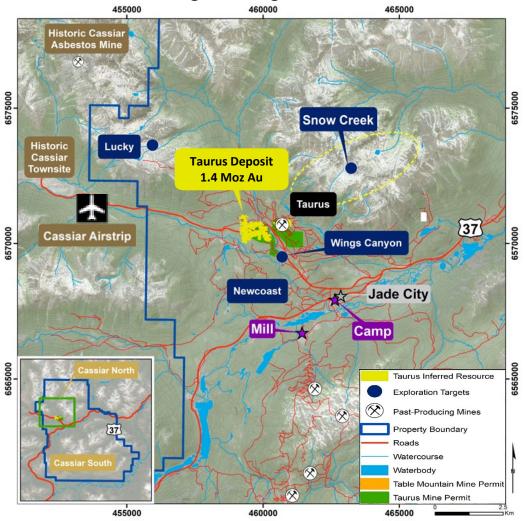




### **Priority Regional Targets**



### **Location of Regional Targets at Cassiar North**



- Wings Canyon Zone of intense iron-carbonate altered mafic volcanics with abundant quartz veining over ∼500 x 180 m area. Previous drill intercepts include 128.5 m of 0.56 g/t Au and 90.6 m of 0.55 g/t Au<sup>1</sup>.
- Lucky Large multi-element soil geochemical anomaly defined over 1 km area 4 km west of Taurus Deposit. Numerous quartz veins exposed within an area of Fe-carbonate altered mafic volcanics and listwanite with locally high grade grab and chip samples
- Snow Creek Sheeted quartz veins with pyrite-Fe-carbonate alteration similar to the Taurus Deposit, minimal previous exploration.



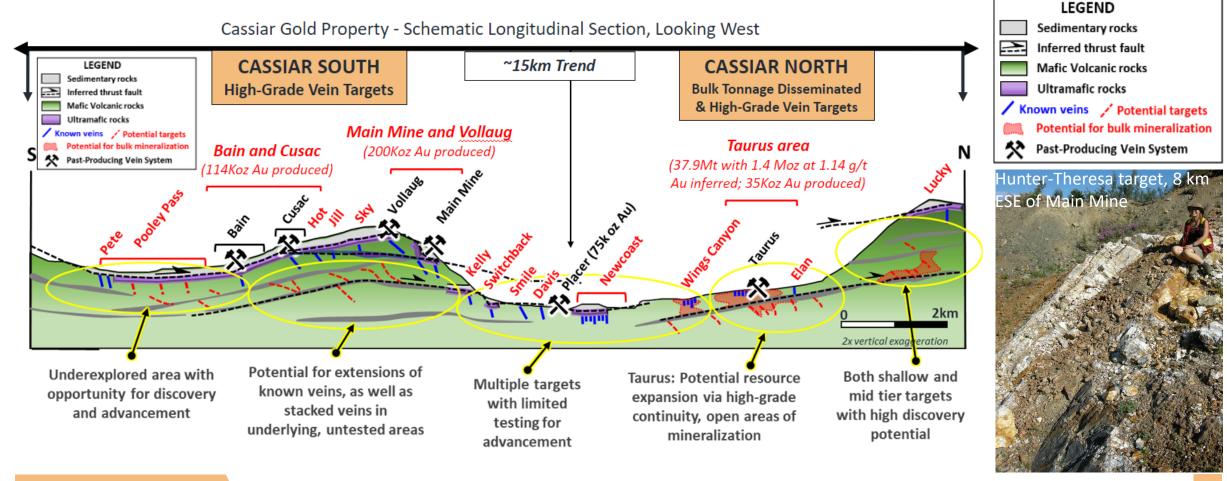




### Schematic N-S Cross Section and Exploration Model for the Cassiar Gold Project

### Cassiar Gold Project has potential for:

- ✓ In brownfields areas: expanding known resource areas and stacked hidden targets between shear zones along sedimentary and ultramafic rock horizons
- ✓ Property wide potential for additional trends and targets, many showings, thin cover, clear controls to mineralization



## **2023 Exploration Program Overview**



Project Area	Drill Metres	Description
Taurus Deposit (Cassiar North)		• ~80% focused on 50-100 m step-out holes around the deposit to test for extensions of key mineralized trends and potentially expand the resource laterally.
	10,000 m	<ul> <li>~20% focused on infill, confirmation, and deeper drilling. Infill drilling will fill in gaps between widely spaced historical holes. Deeper drilling will focus on expanding mineralization at depth and testing for potential stacked mineralized zones.</li> </ul>
Outlying Targets	5,000 m	<ul> <li>Drilling at high-priority outlying targets such as Newcoast, Lucky, Snow Creek, and step-out holes at Wings Canyon.</li> </ul>
Cassiar South	5,000 m	<ul> <li>Drilling focused on testing for blind parallel vein systems, known vein extensions, and vertical stacking of favourable stratigraphy.</li> </ul>

### **Exploration Fieldwork**

- Mapping and sampling work at various regional targets such as Lucky and Snow Creek.
- Soil sampling program at Snow Creek regional target.
- Induced polarization (IP) survey at Cassiar North.

### **Research and Development**

• Geological domaining at Taurus - petrologic and petrographic review, DMIS, LECO sulphur and cyanide soluble gold analysis.

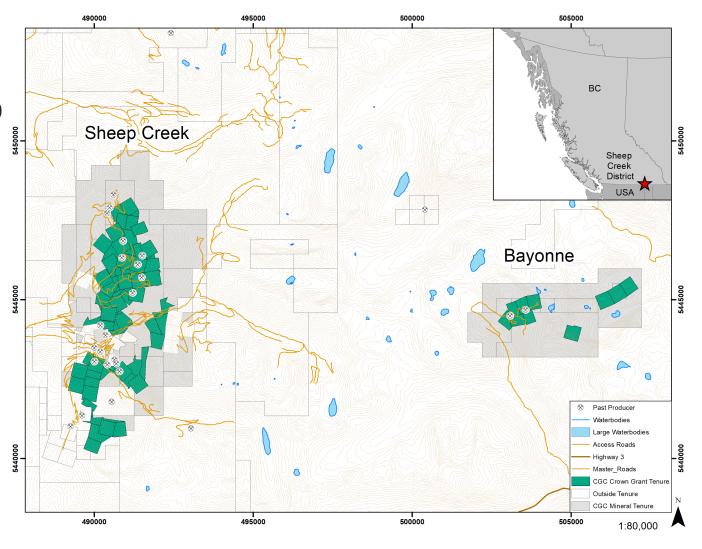
TSX.V:GLDC | OTC: CGLCF

# **Sheep Creek Camp Overview**



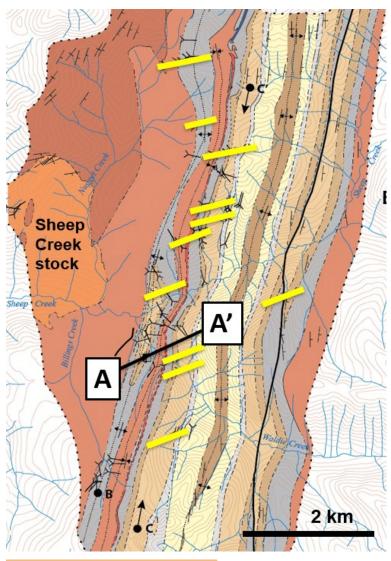
- 3,939-ha camp consisting of the Sheep Creek and Bayonne properties.
- Total production from 1900 to 1951 from 1.72 Mt of ore: **742,000 ounces of gold @ 14.7 g/t Au,** ~365,000 ounces of silver, 377,000 lbs. of lead and 312,000 lbs. of zinc.<sup>1</sup>
- **Geological analogue to Barkerville and the Cassiar Gold District** – camp hosts 60-70 gold-bearing quartz veins with the potential to carry high-grade gold; little modern exploration conducted since the 1950s.





## **Sheep Creek: Geology (from Allan et al., 2017)**



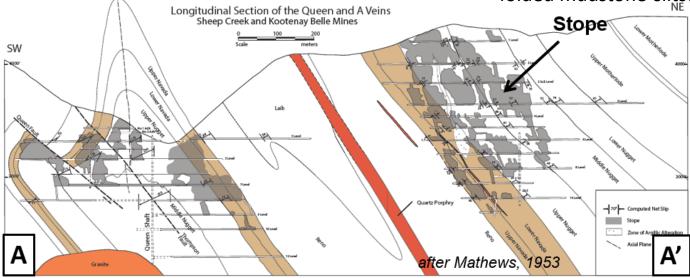






58.63 g/t Au

- NE trending quartz shear veins dominantly hosted by folded quartzite, capped argillaceous rocks of Upper Navada member.
- Like Cassiar, potential additional parallel and stacked veins, as well as additional veins in fold hinges and blind beneath folded mudstone-siltstone



Longitudinal section looking NNW showing stopes on veins which cut the folded sequence. Stopes often developed in fold hinges, and where veins cross competent quartzite units



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