

# HALLGARTEN + COMPANY

**Initiation of Coverage** 

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## Gold Line Resources

(TSX-v: GLDL, OTC: TLLZF, FSE: 4UZ)

Strategy: LONG

Key Metrics		
Price (CAD)	\$0.085	
12-Month Target Price (CAD)	\$0.38	
Upside to Target	347%	
12mth high -low	\$0.07 to \$0.35	
Market Cap (AUD mn)	\$2.29	
Shares Outstanding (mns)	26.9	
Fully diluted	65.1	

## **Gold Line Resources**

### Leading the Nordic Resurgence

- + While many European nations have seen their mining sectors wither away in recent decades (particularly upon accession to the EU), both Sweden and Finland have continued being strong mining jurisdictions
- + Gold Line has accumulated a strong portfolio of exploration targets on the eponymous Gold Line Belt in north central Sweden
- + The company's main target, Paubäcken, is strategically positioned between the projects of Agnico Eagle/Barsele and Dragon Mining
- + Potential for collaboration or consolidation of interests in the Gold Line Belt is promising
- + The company has also secured a key position on the Oijärvi greenstone belt in Finland with an expandable resource at its Kylmäkangas project
- + The target projects are located in the mining friendly northern regions of both countries
- Nimbyism has a strong presence in urban populations in both Scandinavian nations
- Gold remains somewhat range-bound between \$1,800 and \$2,000
- The environment for exploration funding is tough with investors being willing to fund only projects with a good story and realistic perspectives of production

#### Scandinavian Renaissance

Most parts of Europe have seen mining activity in the past, but much of that activity has petered out due to megamines developing in farther flung parts of the globe. These days the only very large-scale mines in Europe are in Poland, Spain, Finland and Sweden. The latter has been a major iron ore producer since the 19<sup>th</sup> century while Finland has had a variety of base metals mined over the last century. It's worth noting that much of this mining activity has been in the northern, sub-arctic parts of both countries and there is a strong mining culture in these parts.

Strangely though, it has only been in very recent decades that precious metals have become important and seen a rising trend in exploration, development and production. However, the tide has turned with projects such as that of Rupert Resources achieving market capitalisations of over CAD\$1bn for their progress made in the region.

It is into this fertile territory that Gold Line has ventured with projects in both Sweden and Finland.

In this initiation of coverage, we shall review the company's asset portfolio across the region, its exploration strategy and the environment for mine development in an area where opinions differ widely on the ease of operations.

#### The Assets

Gold Line Resources is a junior explorer focused exclusively on Scandinavia.

Its main asset package is in Sweden, where it controls the largest land position by an exploration company in the heart of the country's Gold Line Belt, with over 60,000 hectares in four project areas: Paubäcken, Storjuktan, Klippen and Långtjärn.

It is also diversified across the region, with exploration assets in Finland, with an extant resource, which it added in 2021.

#### The EMX Deal

EMX Royalty Corporation (EMX), the project generator, acquired the Långtjärn project in 2019 properties from Eurasian Minerals Sweden AB (EMSAB) and Viad Royalties AB (VRAB) in April 2019; both EMSAB and VRAB are wholly-owned Swedish subsidiaries of EMX. This was the Qualifying Transaction for Gold Line's RTO into an entity called Tilting Capital Corporation.

Under the agreement, EMSAB acquired a 9.9% interest in Gold Line through the issue of equity in Gold Line, advance royalty payments and a 3% net smelter return (NSR) royalty interest in the properties. Gold Line thus acquired a 100% interest in the Långtjärn property, which is located at the northern end of the Gold Line trend.

Since the acquisition in April 2019, the exploration has been managed in-country by EMSAB and Gold Line Resources AB (GLRAB), the Swedish subsidiary of the Canadian listed company.

#### The Agnico Eagle Deal

In March of 2021, Agnico Eagle sold 100% of its Oijärvi gold project in central Finland and the Solvik gold project in southern Sweden to Gold Line for an aggregate purchase price of \$10mn comprised of cash and shares of each of Gold Line and EMX Royalty Corp.

Agnico retained a 2% net smelter return royalty on the projects, 1% of which may be purchased at any time by EMX for \$1 million.

#### Closeology

There are several significant gold deposits in the Gold Line belt, including the Barsele project (a joint venture between Agnico Eagle Mines Ltd. and Barsele Minerals Corp) and the Fäboliden development project (operated by Dragon Mining Ltd). The Fäboliden and Barsele gold deposits are currently at a preproduction stage.

Past-producing mines include Svartliden (closed in 2015) and the Blaiken mine (closed in 2007). Major polymetallic VMS deposits are also nearby, including Kristineberg (Boliden Mining).

Excellent infrastructure with regional highways, rail lines and hydroelectric dam all within 50km of Gold Line's license packages.

#### **Sweden & Mining**

Mining is a traditional industry in Sweden, reaching back well over a thousand years. The historic Falun copper mine was for hundreds of years the most important industrial site in the country producing, at times, up to two-thirds of Europe's copper requirements.

Over the centuries, deposits of base metals, gold, silver and iron ore have been exploited. The giant iron ore mines of Kiirunavaara and Luossavaara were discovered during the 1730's and still operate. In 1924 prospecting in the Skellefte district led to the discovery of the Boliden deposit and the foundation of Boliden (STO:BOL). The country was an important source of iron ore for both sides during World War 2.

Historically, there have been restrictions on foreign participation in Sweden's mining industry resulting in mining being dominated by a small number of large domestic mining companies.

Until recently the State took a major role in the mining industry through State run exploration and the right to acquire a major stake in any new mining venture. In 1991, following a change in government and an application to join the European Union, new policies transformed participation in the mining industry with the lifting of foreign investment restrictions and the abolition of State participation in mining projects. A new mining law was introduced to give effect to these new policies.

On the economic front, Sweden adopted new policies to encourage foreign investment including cuts in the formerly infamous level of taxation, easier business conditions and the privatization of state industrial interests.

These changes resulted in a rise in the number of foreign mining companies that have developed a significant exploration presence in recent years.

Probably the best-known example of a TSX-listed miner operating in Sweden is Mandalay Resources with its Björkdal operation, which is located within the Boliden mining district, approximately 28 km northwest of the municipality of Skellefteå and approximately 750 km north of Stockholm.

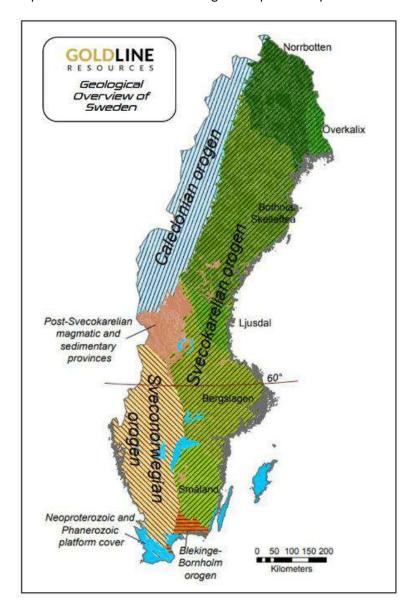
The Björkdal operation has been operational since 1983 and Mandalay acquired the mine in 2014 and has produced gold from both an open pit and underground mine. In 2019, Mandalay suspended the open pit operation and now solely operates the underground mine. The target was to eliminate the associated open pit costs and take advantage of processing higher-margin underground and stockpiled ore. Mandalay Resources expects to produce 49-54,000 ozs of gold in 2023 at a cash cost of US\$975 – \$1,125 per oz (compared to 41,247 ozs in 2022 at a cash cost of US\$1,321 per oz).

Currently, the Björkdal mine produces ore from the Aurora zone underground mine, as well as from a stockpile of low-grade material accumulated over the course of its life of mine. Approximately 75% of the mill feed is attributed to the underground operation and the remining 25% from the stockpiled

material. Essentially, Mandalay has had no problems in operating in Sweden over the last nine years.

#### **Regional Geology**

The Gold Line belt is located in the Västerbottens Län mining region of Northern Sweden, 600 km north of Stockholm. The Gold Line belt is a north-south trending Paleoproterozoic greenstone belt that is host to at least 14 gold prospects ranging from early-stage exploration to closed mines. It was formed during the Svecofennian orogeny (the green hatched region on the map on the following page). The Gold Line Belt is located on the western end of the Proterozoic Skellefte Trend, a prolific volcanogenic massive sulphide deposits belt, that intersects with the Gold Line in Northern Sweden. Both polymetallic VMS deposits and intrusive-hosted orogenic deposits are present in this region.



The Swedish tenements of Gold Line are located within the Fennoscandian Shield, which shares a similar geology and metallogeny with the Precambrian shields in Canada, Australia, Brazil and South Africa. The shield is situated in the north-westernmost part of the East European Craton and is the largest exposed area of Precambrian rocks in Europe.

The Svecokarelian orogen in Sweden is inferred to have formed along an active continental margin in a convergent plate boundary setting. The main lithotectonic units of the Svecokarelian orogen in Sweden are Norrbotten, Bothnia-Skellefteå and Bergslagen. These units also host the three most important mining districts in Sweden.

The oldest rocks in the Bothnia-Skellefteå lithotectonic unit are turbiditic to coarse-grained sedimentary sequences with some mafic rocks. Magmatic activity during the orogeny formed the rocks of the Skellefte district, a province with both submarine and subaerial volcanic rocks deposited in volcanic arc environments.



The Skellefte District and adjacent areas in northern Sweden is one of the most prominent gold and base-metal districts in the Fennoscandian Shield with around 150 known precious and base-metal deposits.

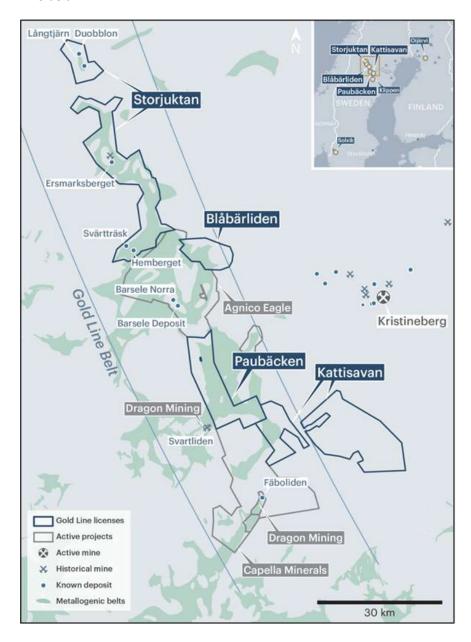
The first property that Gold Line acquired was the Långtjärn property, located in the north-western part of the Skellefteå district lying at the northern extent of the Gold Line belt.

The bedrock geology of the Gold Line area consists of metasedimentary rocks and metabasalts of the Bothnian Supergroup, which was intruded by several phases of granitoids. The metabasalts were

emplaced as sills or submarine lava flows. Pillow lavas, spilites and volcanoclastic breccias are common. Granodiorites intruded at an early stage of the orogeny and were deformed together with the supracrustal rocks. Late- to post-orogenic granites occur as large massifs in the region.

#### The Paubäcken Project

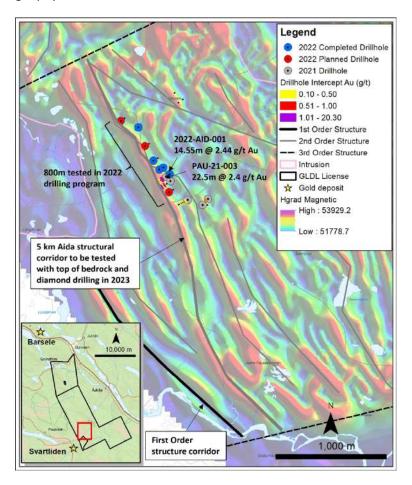
The Paubäcken project is strategically positioned between the Barsele and Fäboliden developments and consists of three contiguous licenses covering 17,000 hectares located in the central portion of the Gold Line belt.



The project contains 22 kilometres of the regionally significant Gold Line structure, which can be traced

for over 200 kilometres in regional geophysics data. All mineralization discovered to date shows a spatial relationship to this structural corridor, occurring mainly on second and third order splay structures.

The Paubäcken Project hosts the Aida target, which is located three kilometres northeast of the operating Svartliden plant. The Aida target consists of a >5 km shear corridor identified from magnetic geophysics data.



The project borders the past-producing Svartliden mine with an operating mill located some three kms to the southwest.

#### Geology

The geological context of the Paubäcken project consists of an inverted volcano-sedimentary sequence intruded by small pre- to syn-kinematic granitic intrusions within a broad, anastomosing high strain structural corridor. Lithologies are regionally metamorphosed to upper greenschist and amphibolite grade facies, and gold mineralization is associated with intense sericite, carbonate, biotite, and calc-silicate alteration assemblages and sulphide minerals arsenopyrite, pyrite, and pyrrhotite. These lithological sequences are viewed by the company's team as highly prospective for orogenic gold

deposits.

#### **Exploration**

The asset was most recently owned by Dragon Mining. Previous operators include Lappland Gold Miners, Dragon Mining, Hansa Resources, and Klippen Guld Aktiebolag.

These groups at various times undertook surface mapping and geochem sampling. They also investigated the boulders (float), outcrops and carried out A- and C-horizon till sampling.

Grab samples registered gold mineralization in multiple boulders and outcrops of up to 60 g/t Au in grab samples.

A SkyTEM helimag survey was flown. A total of 71 DD holes were drilled by previous operators yielding individual DD assays up to 34.5 g/t Au over 1.0 m at the Paubäcken Project (hole DDH97004).

Regional top of bedrock drilling in 2021 identified gold and path finder anomalism coincident with the structural corridor.

EMX/GLDL Exploration 2021

- 2,399 surface till/soil samples have been collected and analyzed
- 270 line kms of ground magnetic geophysical surveys
- 185 rock chip and 17 channel samples were collected and analyzed
- 201 BoT/ToB drill holes completed with results including 3m of bedrock at 3.9 g/t Au
- 5,200m historic drill core has been re-logged with 252 samples analyzed and re-sampled

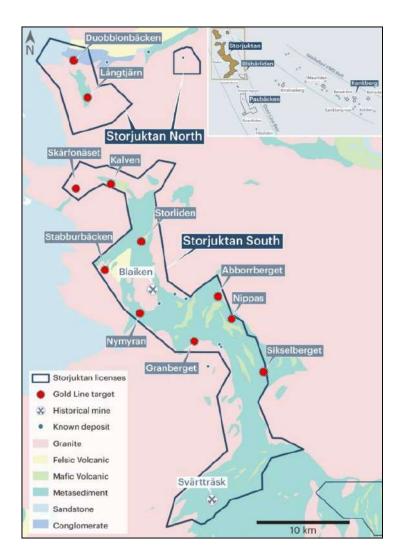
A maiden drill program of 670m at the Aida target was completed in November 2021. Notably, one hole (PAU-21-003) intercepted 22.5 m of 2.4 g/t Au. This was hosted within a sheared and altered basalt unit within the structural corridor.

#### **The Storjuktan Project**

This project is a large, early-stage project strategically positioned north of the Barsele deposit. It consists of seven contiguous licenses covering 30,000 hectares located in the northern portion Gold Line belt.

The first part of this elongated holding that Gold Line acquired was the Langtjarn piece, on which a NI43-101 from July 2020 is extant.

The Storjuktan project contains over 60 kilometres of the Gold Line structure. All mineralization discovered to date shows a spatial relationship to this structural corridor, occurring mainly on second and third order splay structures.



#### Geology

The specific geology where the Storjuktan project sits consists of an inverted volcano-sedimentary sequence intruded by small pre- to syn-kinematic granitic intrusions within a broad, anastomosing high strain structural corridor. Lithologies are regionally metamorphosed to upper greenschist and amphibolite grade facies, and gold mineralization is associated with intense sericite, carbonate, biotite, and calc-silicate alteration assemblages and sulphide minerals pyrite, arsenopyrite, and pyrrhotite.

These lithological sequences are deemed to be highly prospective for orogenic gold deposits.

#### **Past Exploration**

The most expansive work has been undertaken in the Långtjärn area where sulphide mineralisation has been known since 1965 when pyrrhotite and pyrite was observed in greywacke outcrop during the mapping of the Dobblon area by the Swedish Geological Survey (SGU). However, the first dedicated exploration work in the area didn't occur until the mid-1970's when a copper-bearing boulder was

discovered in connection with uranium exploration in the area. During the period 1979-1987, Swedish Geological AB, on behalf of the State Mining Property Commission (NSG), completed exploration across the Långtjärn and Dobblonbäcken prospects.

In 1988, diamond drilling was completed at the Långtjärn South anomaly and comprised 20 drillholes for a total of 2,123m. The drilling was designed to test the gold-arsenopyrite mineralised diorite identified during the trenching in 1987. The gold mineralisation is associated primarily within strongly altered zones of the diorite and secondly within arsenopyrite-bearing quartz veins. The highest value returned from the 1988 drilling was 41.6g/t Au over 0.13m (Bh. 88001), but the typical grades averaged between 0.3-2g/t Au over several meters core length.

In 1988, a resource (not compliant with NI43-101) was calculated by Swedish Geological AB at Långtjärn South from seven holes along two section lines roughly 50m apart. The resource is considered historical and was calculated using the polygonal method and comprised 556,150 tonnes at a grade of 0.9g/t Au.

There is a past production site at the Blaiken target where, up until 2007, a Stockholm-listed company, ScanMining AB operated an open-pit Zinc mine, which closed due to the bankruptcy of the master company.

Work in the past on the other parts of the Storjuktan project has consisted of limited amounts of mapping, boulder sampling, stream sediment and till sampling, top of bedrock drilling and diamond drilling. Historic operators (SGU (Swedish Geological Survey) and EMX) have intersected gold mineralization at Dobblonbäcken, Storliden, and Nippas targets. One of the challenges is a layer of glacial till obscuring outcroppings and thus makes prospecting and surface sampling extremely challenging. The known gold mineralisation at Långtjärn was found from boulder train prospecting and to date has only been delineated in drill core and from trenching of outcrop under the till. At Dobblonbäcken however, gold mineralisation was discovered in outcrop on the banks of the Dobblon Creek.

#### **Planned Exploration**

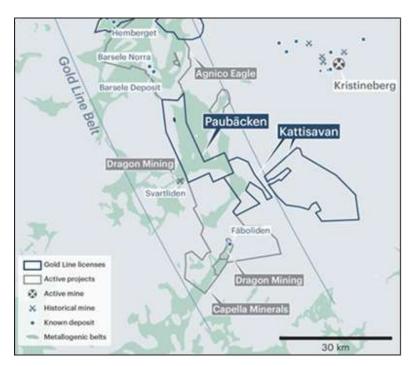
In management's opinion there is a high potential for expansion of known mineralization and new discoveries. Skärfonaset, Kalven, Stabburbäcken, Nymyran, Sikselberget are early-stage exploration targets that have clearly defined gold-in-till anomalies.

The geological team plans to follow up on this work with a high-resolution UAV magnetic survey and interpretation of magnetic data and systematic till and top of bedrock drilling along identified structural corridors to continue to identify high-priority target areas.

#### **Thinking Strategically**

There are more interesting dynamics to the area around the Paubakan project than appears at first glance that could play top Gold Line's advantage.

The Hong Kong-listed Dragon Mining (HKG:1712) has Australian management, but a significant Chinese investor component. It's Fäboliden development project is somewhat stuck in the starting gates.



In late 2017, Dragon was granted a permit for test mining operations at Fäboliden from 11 May 2018. The company commenced pre-stripping activities in August 2018 and extracted and transported the first ore to its mill at the past-producing Svartliden mine in June 2019. In accordance with the conditions of the Test Mining Permit, test-mining activities concluded at the end of September 2020. Dragon's website states: "The Company continues to work towards obtaining environmental approval for full-scale mining at Fäboliden".

However, the Svartliden mill is some 30 kilometres by road to the northwest from its proposed new mine and ore must transit to the mill via a road that passes through a village, with local residents unreceptive to the potentially substantial traffic burden that will be created.

Ergo, permitting for the restart is currently going nowhere. This will probably require Dragon to agree to construct a bypass, or alternative route of some sort to get around the objections to heavy local traffic.

The Svartliden plant is a conventional comminution and carbon in leach (CIL) circuit with a design capacity of 300,000 tonnes per annum. It was brought into production in March 2005 and represented the first integrated mine and treatment plant to be developed under the new Swedish Environment and Mining Acts. At the completion of processing ore from the Svartliden mine in 2015, 377,347 ounces of gold had been produced. Subsequent to this, the Svartliden Plant has been utilised to process gold concentrates from the Dragon's Finnish operation and the processing of ore from test mining at the Fäboliden Gold Mine.

Meanwhile, it throws into contention the possibility of Gold Line advancing Paubäcken to a stage at which it was producing ore that could be sent to the mill owned by Dragon. Paubäcken is up close with the Svartliden mill and a logical choice for processing. Dragon can apparently increase the capaty of its mill to double its current nameplate capacity (i.e. increase to 600k tpa) without significant capex being required.

It then somewhat becomes a question of whether Dragon (with only a market cap of \$29mn) yields and builds the road (adding substantially to its costs) or Gold Line proves up Paubäcken to the point where it can open a pit to provide Svartliden with ore.

The next logical conclusion would be a combination of Gold Line and Dragon Mining. Time will tell.

Then the next opportunity is presented at the northern end of the Paubäcken concession, which is in close proximity to the Barsele project (operated as a joint venture between Agnico Eagle Mines and Barsele Minerals Corp (TSX.V: BME).

The resource is not to be sneezed at and is indicative of the potential for Gold Line's Paubäcken target.

Barsele Project - Resource(s)									
Cut-off g/t	Tonnage	Gold g/t	Contained ozs	Tonnage	Gold g/t	Contained ozs			
0.5	3,452,000	1.32	147,000	1,819,000	1.59	93,000			
1.5	1,442,000	2.53	117,000	8,759,000	2.58	728,000			
1.8	684,000	2.75	60,000	14,917,000	2.64	1,265,000			
-	5,578	1.81	324,000	25,495	2.54	2,086,000			
	Cut-off g/t 0.5 1.5	Cut-off g/t  0.5 3,452,000  1.5 1,442,000  1.8 684,000	Cut-off g/t         Tonnage g/t         Gold g/t           0.5         3,452,000         1.32           1.5         1,442,000         2.53           1.8         684,000         2.75	Cut-off g/t         Tonnage g/t         Gold g/t         Contained ozs           0.5         3,452,000         1.32         147,000           1.5         1,442,000         2.53         117,000           1.8         684,000         2.75         60,000	Cut-off g/t         Tonnage g/t         Gold g/t         Contained ozs         Tonnage ozs           0.5         3,452,000         1.32         147,000         1,819,000           1.5         1,442,000         2.53         117,000         8,759,000           1.8         684,000         2.75         60,000         14,917,000	Cut-off g/t         Tonnage g/t         Gold g/t         Contained ozs         Tonnage g/t         Gold g/t           0.5         3,452,000         1.32         147,000         1,819,000         1.59           1.5         1,442,000         2.53         117,000         8,759,000         2.58           1.8         684,000         2.75         60,000         14,917,000         2.64			

Since Agnico Eagle became operator of the project in late 2015, a total of 162,691 metres of overburden penetration and core collection has been tabulated from a total of 433 drill holes. The main gold-bearing system remains open in all directions. The structurally linked gold mineralized lodes occur mainly within a granodiorite host and to a lesser extent, volcanic and sedimentary rocks. Multiples of parallel to subparallel lodes that vary in width from 10 metres to 100 metres, combine for a maximum known thickness of 425 metres. The Avan–Central–Skiråsen zones have a strike length approaching 3.6kms and that same northwest trending structural corridor does contain localized bodies with gold mineralization over an additional 4.4kms. The drill tested depth of the mineralized system approaches one kilometre and as mentioned, remains open.

Gold is generally associated with arsenopyrite and low base metal content, but also occurs as native metal.

With Agnico's headlong growth spurt through acquisitions in recent times, the question arises as to whether Barsele is their priority. It would seem not. This raises the potential of some sort of broader

reorganization of ownership in the district with Gold Line strategically located in the centre of the action.

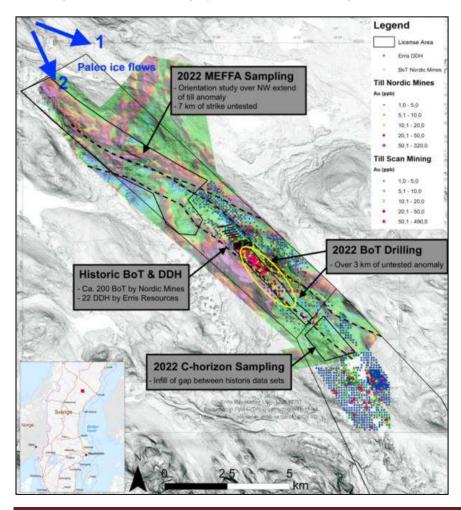
#### The Klippen Project

This project consists of two contiguous licenses covering 10,400 hectares located in the southern portion of the Gold Line belt. The company regards this as a potentially interesting target and shall be upping the work effort on the tenement during the 2023 season.

#### Geology

The Klippen Project is regarded as part of the greenstone assemblage. It contains >15 km of an interpreted second-order splay structure off the main Gold Line structural corridor.

The underlying geology of the Klippen project consists of an inverted volcano-sedimentary sequence intruded by several pre- to syn-kinematic granitic intrusions within a broad, anastomosing high strain structural corridor. Mineralization on the project has been identified along high strain corridors along the margins of and within a highly deformed and altered granodiorite intrusion.



#### **Exploration**

Historic work by Nordic Mines identified a 5 km-long Au, As, Cu, Zn anomaly in shallow glacial till coincident with the structural corridor identified from airborne magnetic data. Follow-up top of bedrock and diamond drilling have confirmed *in situ* mineralization under a small portion of the anomaly with several kilometres of structural corridor so far untested.

In light of the anomaly being insufficiently tested thus far the strategy during the 2023 summer season (with permits running until the end of October) is to undertake further geophysics and a campaign of top-of-bedrock drilling. This will penetrate through the till layer and around 4 metres into the underlying bedrock to gain knowledge on the bedrock's composition and its relation to (or not) the overlying till.

#### The Solvik Project

This project is less of a priority for Gold Line as it does not lie in the Gold Line belt, but rather in the southwest of the country.

It consists of ten licenses covering 9,240 hectares located in the Mjøsa-Vänern Belt of southwest Sweden. The belt stretches north-south along the border with and into Norway.

#### **Regional Geology**

The maps on the following page show the concessions and the regional geology, particularly the relationship to the Harnäs Mine.

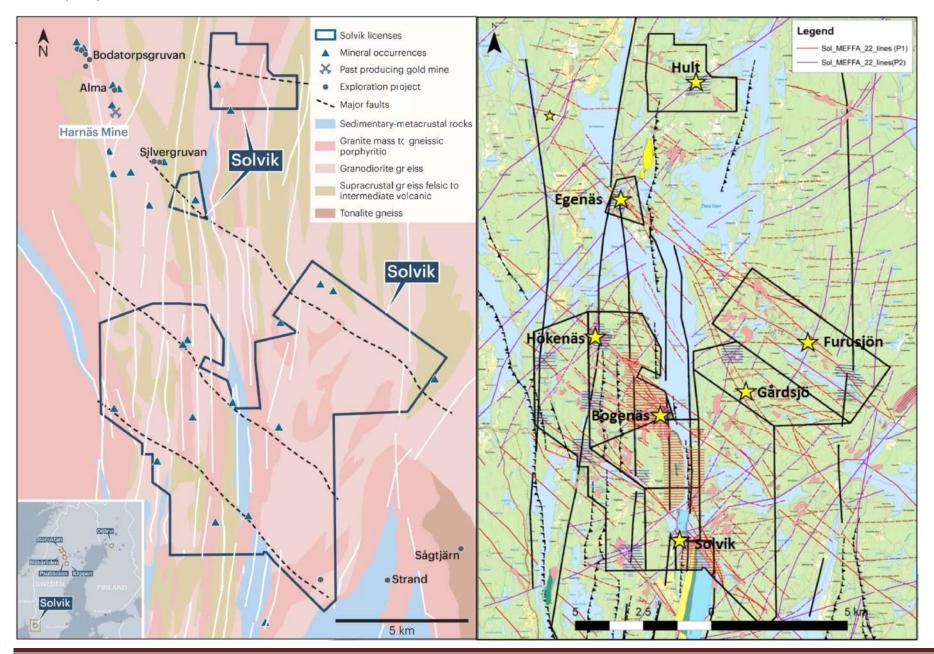
The Mjøsa-Vanern belt is an ore-bearing district, which has been defined only recently (the 1980s). The Harnäs Au deposit in southwest Sweden is located in the Mjøsa-Vänern mineral belt that transects, from northwest to southeast, the prominent geologic fabric of the Sveconorwegian province including the Mylonite Zone.

#### Geology

The geology of the Solvik project is dominated by metasedimentary and volcanic assemblages surrounded by granitoids and gneisses. The belt is highly tectonized with a framework of thrusts and faults controlling mineralization. Observed mineralization occurs at the intersection of second order structural corridors in quartz-carbonate veins associated with sericite and pyrite alteration.

#### **Exploration**

At Solvik, historic work by Agnico Eagle included structural interpretation from magnetic geophysics and LiDAR data, extensive bedrock mapping, heavy mineral panning, till, outcrop, and boulder sampling. A total of 43 holes were drillled by Agnico Eagle across the project for a total of 8,364 m. Several holes intersected gold mineralization with the best intercepts being 2.50 g/t Au over 19.4 m and 2.71 g/t Au over 8.5 m (estimated true widths). Over 100 channel samples from outcrops and boulders returned a number of surface high grade Au-grades between 1.0 – 90.1 g/t Au.



#### **Strategy**

Most likely this will be sold, joint-ventured or farmed out so that Gold Line can focus on its asset base in the north of the country (and in Finland).

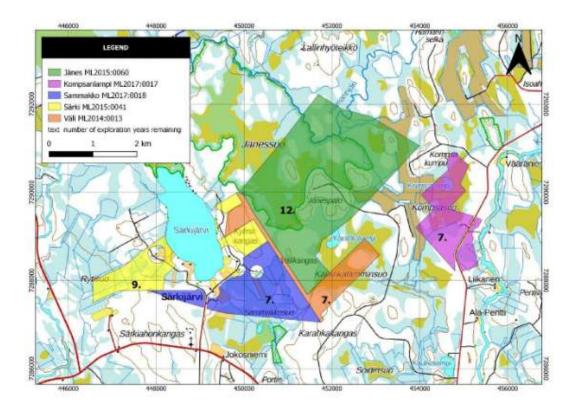
#### **Finland**

The main asset held by Gold Line in Finland is the Kylmäkangas property which encompasses 1,641 ha and is located 85 km east of the town of Kemi within the North Ostrobothnia District in the Kuivaniemi Parish in northern Finland. Management feels the property is prospective for gold and silver mineralization within the Oijärvi Greenstone Belt, approximately 10 km north of the Oijärvi village.

#### **Background**

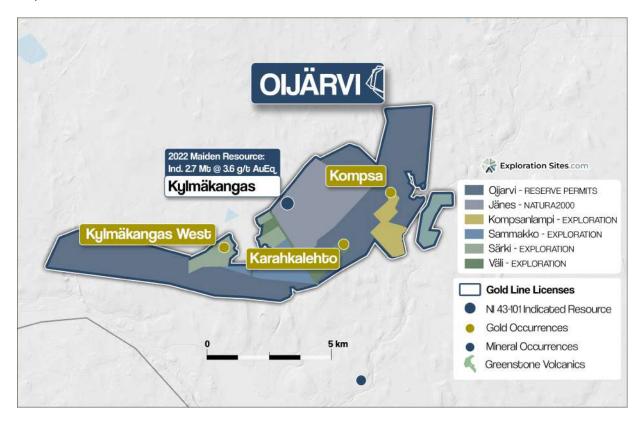
The Kylmäkangas Au-Ag occurrence was first discovered in 1999 by the Geological Survey of Finland (GTK) in the central portion of the Oijärvi greenstone belt using regional magnetic geophysics. Initial exploration by the GTK involved mapping, till geochemistry surveys and diamond drilling which led to the discovery of the Kylmäkangas deposit.

The Oijärvi Project was originally acquired by Agnico Eagle in 2006, which then vended the five exploration permits (shown in the following map) over the Kylmäkangas deposit to Gold Line in June 2021.



Note the Särkijärvi lake that divides the central part of the concession.

Following this, the company applied for and received an Exploration Reserve permit over the rest of the 17,600 ha Oijärvi greenstone belt (the dark grey areas in the following map), bringing the entire belt into its portfolio.



Above: the expanded Kylmakangas exploration concession

#### **Regional Geology**

The Oijärvi greenstone belt is located in northwest Finland, in the Meso- to Neoarchean Pudasjärvi complex. Discovered in the early 1990s by the Finland Geological Survey (GTK) using regional magnetic geophysics it is one of the least studied greenstone belts in the region. Initial exploration by the GTK involving mapping, till geochemistry surveys and diamond drilling led to the discovery of the Kylmäkangas Au-Ag deposit.

#### Geology

The gold mineralization at Kylmäkangas is closely associated with a 1.8 km NE-SW striking sheared fault zone. Massive quartz-veins containing gold, silver, and base metals occur along this shear/fault zone. This zone is termed the Main Mineralized Zone and consists of a dense, white to grey quartz-sericite-breccia and milky to grey-coloured quartz veins, both of which are enveloped by strongly sheared and

#### altered mafic schist.

Higher-grade ore shoots appear to be controlled by primary shear with interpreted trans-pressive deformation along the structural corridor which displays rheological contrast between lithologies. Intense hydrothermal alteration is closely associated with structural corridors and gold-silver mineralization, extending up to several metres into the hanging wall and foot wall lithologies.

Most of the native gold is fine grained and occurs intergrown or as inclusions in tellurides, sulphides and sulphosalts. Free native gold occurs between quartz grains (7%). Electrum occurs as inclusions in tellurides, galena (3%) and tetrahedrite (3%). The major silver carriers are hessite and petzite.

#### **Exploration**

While no mining has been undertaken at Kylmäkangas, exploration efforts by several parties have included several generations of diamond drilling.

During the early 1980s and 1990s, the Geological Survey of Finland (GTK) completed regional geologic mapping, regional till mapping, and airborne geophysical surveys in the Kylmäkangas area. Other non-drilling exploration work between 1996 and 2007 consisted of additional geophysical ground measurements, mapping, and trenching. Between 1998 and 2000, the GTK undertook a reconnaissance drilling program consisting of 24 diamond drillholes totalling 4,726 m, resulting in the discovery of gold-silver mineralization in 1999.

In 2001, Troy Resources NL, in a JV with Riddarhyttan, completed a detailed field geology program which included ground geophysics and bedrock mapping. From 2001 to 2002, Troy Resources completed a reconnaissance drill program of nine diamond drillholes.

Then, between 2006 and 2009, Agnico-Eagle Finland completed an additional 66 diamond drill holes on the deposit totalling 18,069 m and 34 regional diamond drill holes totalling 7,207 m.

In its initial work, Gold Line flew phase 1 of 2 Unmanned Aerial Vehicle (UAV) magnetic surveys over the two areas of the Oijärvi Greenstone Belt. Work completed by Gold Line on the Kylmäkangas deposit has included re-logging and sampling core that was previously unsampled. The newly sampled material is located adjacent to mineralized intercepts drilled and sampled by Agnico-Eagle.

#### Resource

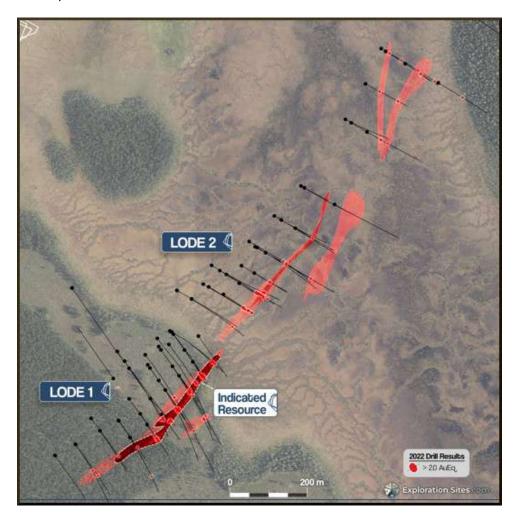
In July of 2020, a Mineral Resource estimate (compiled in accordance with NI 43-101) was published on the Kylmäkangas project. The report was prepared by the consultants Eemeli Rantala & Ove Klavér.

The resource (shown in the table that follows) was calculated as being, in the Indicated and Inferred categories, some 2.7 million tonnes grading at 3.6 g/t AuEq for a contained total of 311,000 AuEq equivalent ounces.

Kylmäkangas Resource Estimate									
@1.5 g/t Au	Contained Metal								
Category	Tonnes mns	Au g/t	Ag g/t	AuEq g/t	Au ozs	Ag ozs	AuEq ozs		
Indicated	1.07	4.1	35.4	4.6	143,000	1,220,000	159,000		
Inferred	1.63	2.7	15.2	2.9	142,000	795,000	152,000		

#### Filling in the Gaps

The first obvious gap to be filled is the 150-metre space between the so-called Lodes I & II as shown in the map below:

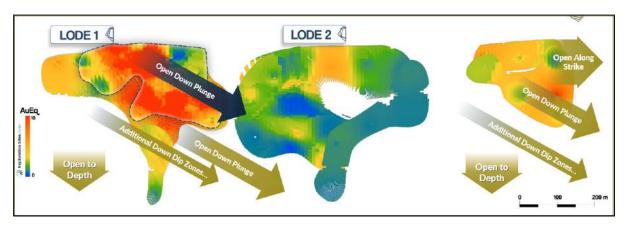


It is important to note that Lode II is within the Natura 2000 wetlands reserve, which somewhat

complicates things. It does not preclude exploration by any means but does require that drilling is down in winter only and that special membranes are put in place for transport and special care taken with drill pads etc.

The mineralized vein at Kylmäkangas is around five-metres wide. The eventual logic here would be that a mine would be underground and would consist of a portal to the southwest with the decline working its way to the north-east through Lode I, and then into Lode II, with no surface expression in the wetlands area.

The graphic below shows the down plunge of the mineralisation from Lode I to areas at depth under Lode II that potentially offer further extension to the resource.



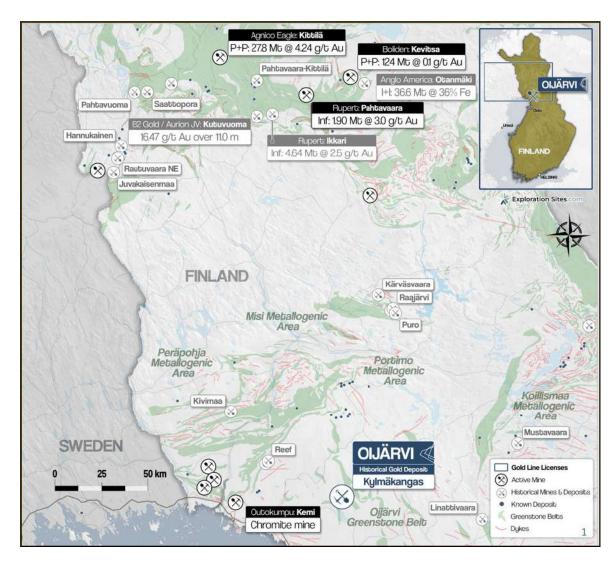
The second gap opportunity is to the southwest under the Särkijärvi lake as evidenced in the map on page 17. The lake at its deepest is only around three-metres deep and is around one kilometre wide (upon trend). The lake separates the existing resource at Kylmäkangas from the target at Kylmäkangas West (as shown in the map on page 20). Exploration work is envisioned for Kylmäkangas West and ice platform drilling on the lake to prove up an extension of the resource further to the southwest.

#### **Analogs in Finland**

It might be extreme or even wishful thinking to draw parallels between Gold Line Resources and Rupert Resources (TSX:RUP), which has a market cap of just over CAD\$800mn. Rupert's principal asset is the Pahtavaara gold mine in Sodankylä, Finland. The gold mine is located on a 297 km² land package with an open pit and underground mine with cumulative gold production of 350,000 oz, with peak annual production of 37,000 oz.

The Ikkarit project of Rupert Resources is located within the Central Lapland Greenstone Belt (CLGB), part of the Fennoscandian shield, which hosts 1700 known incidences of mineralisation in Finland, Sweden, Norway and Russia including around 80 mines.

The following map shows Kylmäkangas in relation to the CLGB, that runs east-west to the north of the Oijärvi greenstone belt:

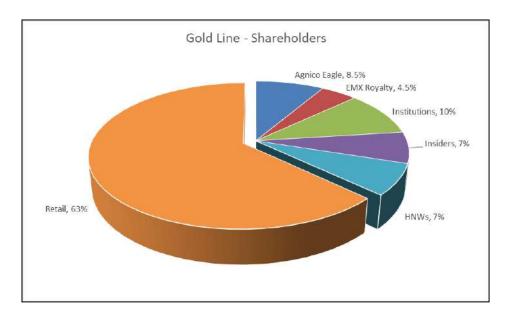


The CLGB has two gold mines of significance. Agnico Eagle's Kittilä mine (the largest gold mine in Europe), which produced over 216,947 oz of gold in 2022 and Pahtavaara which mined almost 450,000 oz of gold over 16 years in three periods of ownership. Boliden's copper-nickel Kevitsa mine and Anglo American's Sakatti project are located within 30km of Rupert's Pahtavaara mine.

#### **Shareholders**

Gold Line originally came to the markets in May 2020 when Tilting Capital Corporation, a company listed on the NEX board of the Toronto Venture Exchange, entered into a letter of intent with Gold Line for a reverse takeover transaction under which TLL would acquire all of the issued and outstanding common shares in the capital of Gold Line.

The pie chart which follows shows the breakdown of the current shareholder base.



#### **Financing**

The most recent financing closed in early May when the company closed its non-brokered private placement for gross proceeds of CAD\$1mn. It issued an aggregate of 8,333,334 units at a price of \$0.12 per unit comprised of 8,333,334 common shares and 4,166,667 share purchase warrants exercisable at a price of \$0.25 per share for one common share in the capital of the Company for a period of twenty-four months from the date of issuance, expiring April 28, 2025.

Around 10% of the placing was taken up by two insiders of the company.

Previously, in mid-September 2022, the company closed on a non-brokered private placement for gross proceeds of \$1.5mn. This resulted in the issuance of an aggregate of 12,500,000 Units at a price of \$0.12 per unit consisting of 12,500,000 common shares and 6,250,000 share purchase warrants.

The warrants (and compensation warrants) are exercisable at a price of \$0.25 per share for one common share for a period of two years, expiring on the 14<sup>th</sup> of September 2024.

Again, two insiders participated in the placement and acquired an aggregate of 750,000 Units.

#### **Board & Management**

**Toby Pierce,** Chairman & Director, is currently CEO and Director of TAG Oil Ltd, a TSX-listed oil and gas producer in Australasia. Mr. Pierce has 25 years of geological and financial understanding within the resource sector. He has been a founder, CEO or director of numerous private and public mining and natural resource companies including: Benchmark Metals, New Placer Dome Gold, Gold Line Resources, Crest Petroleum, North Country Gold, Brilliant Resources, Red Tail Metals, Kingfisher Metals and numerous shell companies in the Canadian and London markets. He holds an MBA from the Rotman School of Business and a Bachelor of Science degree in Earth Sciences from the University of Victoria.

**Adam Cegielski**, CEO & Director, has over 20 years of experience in the venture capital industry ranging from mineral exploration, technology, health care and education. He started his career developing an industrial mineral project in Uganda that he later sold to Rio Tinto. He was the founding director of Cayden Resources, which was sold to Agnico Eagle Mines for CAD\$205mn.

He is the founder, CEO & director of Binovi Technology Corp, a neurotechnology company driving higher levels of human performance through the use of Binovi technology.

**Benjamin Gelber**, Director and VP of Exploration, is a professional geologist with over 17 years industry experience specializing in orogenic gold systems, garnering a deep understanding of geological and structural controls on mineralization in orogenic systems at all scales, including developing and managing large and complex district to camp scale exploration programs. He was previously with Barrick Gold Corporation as Exploration Manager, Guyana. Prior to Barrick, he held the positions of Generative Exploration Manager, and Group Geology Manager with Asanko Gold, now named Galiano Gold.

**Robert Leckie**, a non-executive director, is currently a Vice President of Dundee Corporation and CEO of Agrimarine Holdings. He has over 15 years of experience in the capital markets and has previously been a Vice President at Dundee Resources where he was responsible for identifying, developing, and overseeing investment opportunities. He was also a Co-Managing Director of Dundee Acquisition, the first SPAC created in Canada, a founding board member of Nova Royalty Corp, and a board member of Reunion Gold, Magna Terra Minerals, and Cathedra Bitcoin. He is a co-founder and director of Somerset Energy Partners, Valkyrie Oil Trucking Corp., and South Viking Energy Corp.

#### Risks

The risks for Gold Line might be summarised as:

- Gold price risk
- The political risk of a swing away from a pro-mining policy stance in either Finland or Sweden (or both)
- Exploration risk is a perennial in mining
- > Financing Risk

To posit gold price weakness is almost to be branded a heretic in some mining circles. However, we were surprised to see gold shoot over \$2,000 per oz so rapidly, and then were not surprised when it surrendered that level almost as quickly and retreated \$300 from its highs. This has dashed the hopes of those for whom Gold is destined to rise unerringly to \$4,000. Gold's price over the last 12 months has largely fluttered around the \$2,000 level, occasionally breaking to the upside. We do not, however, see a context where there would be a major retreat in gold.

At current levels (above \$1,900 per oz) projects that are not viable at these levels should not even be

taken into consideration, as this is an excellent gold price.

Finland's and Sweden's governments are both pro-mining (with northern regions of both countries being especially & historically mining-oriented).

Proving up a viable project to development stage is the main imponderable for most explorers. The presence of substantial resources to the near north and near south of Paubäcken, which is on trend would seem to reduce discovery risk substantially.

Financing conditions rise and fall with sentiment towards gold... and with other dynamics. The last year has been a quantum better on the financing front for junior explorers. Despite the gold price retreat from recent highs, markets have still been very forthcoming in supporting placings and other financings despite competition from other resurgent metals (e.g. Copper or battery metals).

#### Conclusion

While not exactly new as a precious mining camp the Gold Line district in Sweden (and the Oijarvi greenstone belt in Finland) are relatively untrammelled territory with only a few players having explored (or exploited) this territory. The gold prospectivity of both countries is now coming into focus and Gold Line has pegged itself sizeable positions in the most promising territory in these jurisdictions. Additionally, being in the most mining friendly parts of these nations, the old shibboleths about Scandi NIMBYism have less traction or even relevance.

If Gold Line can follow in the footsteps of Rupert Resources, then shareholders will be happy campers indeed.

When we meet explorers complaining of the dire markets, we look find the critique is not valid when it comes to either gold or silver. Gold, in particular, has experienced several years of the highest annual average price in history. And yet looking at the charts of companies such as Gold Line we can see the reasons for managements' despair. However, as we well now, the swings and roundabouts of precious metals prices are fast and furious and always come back into favour at some point.

The task now for Gold Line is to generate a flow of exploration results and firm up its existing historic resource to put it firmly in contention with the other players in-country. Then, as we explained, there are also corporate action opportunities which present themselves to savvy movers and shakers, of which Gold Line appears to be one.

Therefore, we are initiating Gold Line Resources with a **LONG** rating with a 12-month target price of CAD 38cts.



#### Important disclosures

I, Christopher Ecclestone, hereby certify that the views expressed in this research report accurately reflect my personal views about the subject securities and issuers. I also certify that no part of my compensation was, is, or will be, directly or indirectly, related to the specific recommendations or view expressed in this research report.

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