



## Occurrence Details

**Occurrence Number:** 1150 165  
**Occurrence Name:** Golden Saddle  
**Occurrence Type:** Hard-rock  
**Status:** Deposit  
**Date printed:** 6/14/2025 6:09:28 PM

## General Information

**Primary Commodities:** gold  
**Secondary Commodities:** silver  
**Aliases:** White Gold  
**Deposit Type(s):** Orogenic Au  
**Location(s):** 63°9'59" N - -139°28'58" W  
**NTS Mapsheet(s):** 115003  
**Location Comments:** .5 Kilometres  
**Hand Samples Available:** No  
**Last Reviewed:**

### Capsule

#### Work History

In Jan/2003 S. Ryan staked White cl 1-12 (YC23532) 5.5 km to the northwest. Ryan added White cl 13-46 (YC27120) in Jun/2003. This occurrence was staked within White cl 47-106 (YC25657) in Dec/2003.

In Jan/2004 S. Ryan optioned the White claims to Madalena Ventures Inc, which performed geological mapping, limited rock sampling and soil sampled the central portion of the claim block. In 2005 Madalena carried out ground magnetic surveys and extended soil sampling to the east and west sides of the claim block. In Jun/2006 Madalena transferred its interest in the White claims to 638523 B.C. Ltd (Newco) a wholly-owned subsidiary of the company in order to concentrate on their oil and gas properties. The White claims option was dropped at the end of 2006 and the claims were returned to Ryan.

In Mar/2007 S. Ryan staked White cl 107-118 (YC60626) 1 km to the east. In May/2007 Ryan staked White cl 119-199 (YC60719) around the outer boundary of the existing White claims. On May 16, 2007 Underworld Resources Ltd optioned the entire White claim block from S. Ryan. Underworld carried out soil sampling, geological mapping, trenching, rock sampling and IP ground surveys on the claim block.

In Jul/2008 White cl 200-303 (YC75721) were added on the northern boundary of the claim block and in Oct/2008 White cl 304-376 (YC84213) were added to Underworld's holdings. In 2008 the company carried out soil sampling, trenching, geological mapping and prospecting around the Golden saddle zone. In addition the company drilled 27 diamond drill holes (3431 m) on the larger White Gold property. Thirteen holes were collared on the Golden Saddle zone with the remaining holes targeting the Arc zone, Ryan's Showing, and the Donahue soil anomaly. The company also carried out preliminary metallurgical studies on drill core recovered from the Golden Arc zone.

In 2009 Underworld carried out a three phase diamond drill program consisting of 25,670 m in 94 holes. Sixty of the holes (19,023 m) targeted the Golden Saddle zone, with the remaining twenty-four holes targeting the Arc, Minneapolis, Donahue, South Donahue and McKinnon zones. The company also carried out additional soil sampling, trenching and ground magnetic surveys over the property and continued metallurgical test work on core samples from the Golden Saddle and Arc zones.

In Jan/2010 Underworld Resources released an Initial Resource Estimate for the newly designated Golden Saddle and neighbouring Arc (Minfile Occurrence 1150 166) deposits. In Mar/2010 Kinross Gold Corp announced a proposed acquisition of all shares of Underworld Resources with the aim of acquiring control of the White Gold deposit and Underworld's various exploration properties located in the Dawson region of the Yukon. In Apr/2010 Kinross announced its successful acquisition of 87% of the issued and outstanding common shares of Underworld Resources. Kinross immediately took steps to acquire the remaining shares of the company and on June 30, 2010 took Underworld Resources private resulting in Underworld Resources becoming a wholly-owned subsidiary of Kinross.

As a privately held company Underworld is not required to release exploration results. According to Yukon Exploration and Geology 2010, Kinross spent \$14,000,000 exploring on both the White Gold and JP Ross properties (Minfile Occurrence 1150 160) located approximately 28 km to the northeast. Property-wide geological mapping, airborne geophysical surveys, soil sampling survey and over 25,000 m of diamond drilling was completed on the two properties.

#### Capsule Geology

The geology of the Stewart River Area was remapped by J. Ryan and S. Gordey (2004) of the Geological Survey of Canada beginning in 2000 as a component of the Ancient Pacific Margin NATMAP Project. The NATMAP Project is an interagency project initiated by the Geological Survey of Canada, Yukon Geology Program (now Yukon Geological Survey) and British Columbia Geological Survey Branch to understand the composition, relationships and metallogenic of poorly understood pericratonic terranes lying between the ancestral North American margin and those known with more certainty to be tectonically accreted. The Stewart River component focuses on the Yukon-Tanana terrane, comprising complexly deformed mostly (?) Paleozoic meta-igneous and metasedimentary rocks. In 2005, S. Gordey and J. Ryan released a geological compilation map for the Stewart River area. The map units generally remained the same as the 2004 geology map but age dates were changed to reflect new dates obtained through geochronology data. J. Ryan reported that the Stewart River area is underlain by twice-transposed, amphibolite-facies gneiss and schist of mostly (?) Paleozoic age. These are intruded by younger plutonic rocks (Jurassic, Cretaceous and Eocene) and overlain by upper Cretaceous volcanic rocks. Metasiliclastic rocks are widespread and dominated by psammite and quartzite, with lesser pelite and rare conglomerate. Preliminary detrital zircon geochronology and geochronology for plutonic rocks constrain the siliclastic rocks to the Middle Paleozoic. Amphibolite interdigitates with and stratigraphically overlies the siliclastic rocks. Marble horizons ((?) reefs) occurs within the amphibolite and siliclastic rocks. Orthogneissic rocks with diorite, tonalite and granodiorite protoliths intrude both the siliclastic and amphibole assemblages; it is interpreted as a subvolcanic intrusive complex.

Geological mapping by J. Ryan and S. Gordey shows the area surrounding the occurrence is dominated by an intensely folded package of felsic psammites with lesser quartzite, conglomerate and rare marble horizons, interdigitated with amphiboles of probable volcanoclastic protolith. A felsic orthogneiss has been thrust to the east. This package has been thrust over a weakly deformed garnet-biotite gneissic unit. This contact defines the tectonostratigraphic boundary between the underlying, weakly deformed garnet-biotite gneissic unit and the overlying, intensely deformed assemblage. The deformed assemblage (and most likely the undeformed unit) is cross-cut by quartz monzonite dikes, up to two metres thick with a minimum of three generations of emplacement (observed from cross-cutting relationships) Large quartz diorite dikes, displaying no deformation, have also been mapped to the north and the south. A cap of mafic-ultramafic rock has been thrust on top of the stratigraphic pile.

The occurrence area is underlain by a large mid to Late Paleozoic amphibolite body which intrudes Devonian to Mississippian psammite. A body of Devonian and/or Permian felsic gneiss

cuts through east side of the occurrence area.

S. Ryan, Madalena Ventures and Underworld Resources systematically soil sampled the White claims, expanding the sampling as the claim block grew. To date the sampling outlined a large gold, arsenic and antimony soil anomaly measuring 8.0 by 3 km across the length of the claim block. The anomaly consists of numerous discrete gold anomalies with a threshold of 50 ppb gold. One of the anomalies, the Golden Saddle zone is associated with this occurrence. The Golden Saddle measures 800 by 500 m and is defined by gold values averaging 50 ppb with a maximum value of 364 ppb from 87 samples. Trenching was carried out in 2007 on the Golden Saddle zone. A chip channel sample returned 1.12 g/t gold over 39 m including 4.7 g/t gold over 5 m.

Diamond drilling in 2008 outlined a northwest dipping mineralized zone (Golden Saddle) with a strike extent of 450 m and a down dip length of 170 m. Hole 4, the discovery hole collared to test mineralization found in 2007, returned an intersection of 4.35 g/t gold over 18.1 m from a depth of 14.5 m. Eight of twelve additional holes collared at the Golden Saddle zone returned encouraging results including hole 21 which returned 3.1 g/t gold over 50.7 m from a depth of 96m.

The 2009 drill program was aimed at extending the gold discoveries made on the Golden Saddle and Arc (Minfile Occurrence 1150 166) zones in 2008. Highlights of the 2009 program at the Golden Saddle were hole WD09-47 which returned 31.1 m grading 9.20 g/t gold. Other results include WD09-31 which returned 3.39 g/t gold over 104 m, hole WD09-74 which returned 112m grading 1.94 g/t gold and hole WD09-80 which returned 10.0 m grading 8.93 g/t gold. As a result of this drilling the Golden Saddle zone now extends for 574 m along strike and 450 m down dip. The zone remains open along strike and down dip to depth. Recent drilling has also demonstrated deeper seated mineralization at Golden Saddle with potentially economic silver credits.

Property basement geology consists of five stacked thrust sheets of lower to middle amphibolite facies Yukon-Tanana schist and gneiss. Permian metamorphic fabric have been overprinted during Jurassic thrusting, with subsequent deformation associated with late Cretaceous normal faulting. Mineralization occurred prior to or during this period of regional extension and may be related to post-metamorphic orogenesis, or deeper buried (Tombstone Suite ?) plutonism.

The White Gold property hosts multiple styles of gold mineralization including: quartz veins, hydrothermal breccias and disseminated sulphide targets indicated by widespread soil geochemical anomalies. Gold mineralization at the Golden Saddle zone is preferentially hosted within metamorphosed felsic intrusive unit as well as felsic and mafic metavolcanic rocks. The dominant mineralization at the zone is quartz, albite, carbonate breccias with low volumes of disseminated pyrite. The alteration assemblage includes pervasive K-spar, carbonate, sericite and silicification. The main mineralized zone strikes to the northeast, with a gentle to moderate dip to the northwest.

Bottle roll cyanide leach teats conducted on a total of 23 samples from six 2008 drill holes averaging 6.60 g/t gold achieved an average gold recovery of 85.5%, (ranging from 65.7 to 93.7%). Samples included near surface oxidized material, partially oxidized and unoxidized material. Unoxidized and partially oxidized mineralization returned higher recoveries, averaging 87.7%, with oxidized mineralization averaging 73.6%. Additionally, higher grade individual samples, over 10 g/t gold typically displayed slightly lower recoveries averaging 83.7%. This is potentially due to reduced leaching of coarse gold, which could possibly be amenable to gravity separation to boost recoveries.

Additional bottle roll tests completed in 2009 on core samples collected from the Golden Saddle zone achieved increased gold recoveries ranging from 78% to 97%. Comprehensive metallurgical testing indicates that 92% or better gold recovery can be expected from the Golden Saddle zone with a conventional processing plant.

On January 19, 2010 Underworld Resources released an Initial Resource Estimate for the White Gold property. The mineral resource was prepared by SRK Consulting (Canada) Inc which divided the deposit into open pit and underground resources.

The open pit portion of the Golden Saddle deposit hosts an indicated mineral resource of 9,665,000 tonnes grading 3.19 g/t gold and an inferred mineral resource of 4,104,000 tonnes grading 2.33 g/t gold. These figures employ a 0.5 g/t gold cut-off grade. The underground portion of the Golden Saddle deposit hosts an indicated mineral resource of 132,000 tonnes grading 3.23 g/t gold and an inferred mineral resource of 918,000 tonnes grading 3.38 g/t gold. The underground mineral resource employs a 2.0 g/t gold cut-off grade. In addition the newly designated Arc open pit deposit (see Minfile 1150 166) hosts an inferred mineral resource of 4,369,000 tonnes grading 1.21 g/t gold (employing a 0.5 g/t gold cut-off).

Since its take-over of Underworld Resources, Kinross Gold has not publicly released any detailed results from the White Gold project. The Kinross website as of January 2014 lists the 2010 resource as current, but includes the Arc deposit, described separately in Minfile 1150 166. The combined open pit and underground Indicated resource for the White Saddle deposit is listed at 9,797,000 tonnes grading 3.19g/t with total contained 1,005,000 ounces Au (31,258 kg); the combined open pit and underground Inferred resource for White Saddle and Arc deposit is listed t 9,391,000 tonnes grading 1.91g/t Au containing an estimated 578,000 ounces Au (17,980 kg).

Work History

Date	Work Type	Comment
12/31/2009	Drilling	Sixty holes, 19,23 m collared on Golden Saddle zone.
12/31/2009	Geochemistry	Grid and ridge contour sampling throughout property.
12/31/2009	Ground Geophysics	
12/31/2009	Trenching	
12/31/2008	Drilling	Twenty-seven holes, 3431 m.
12/31/2007	Geochemistry	Also soil sampling. Carried out across property.
12/31/2007	Geology	Carried out across property
12/31/2007	Trenching	Trenched in Golden Saddle area.
12/31/2005	Geochemistry	Grid based.
12/31/2005	Geology	Detailed mapping.
12/31/2005	Geochemistry	Grid based.
12/31/2005	Ground Geophysics	
12/31/2004	Geochemistry	Limited sampling.
12/31/2004	Geochemistry	Limited sampling.
1/19/2010	Studies	SRK Consulting, March 2010, for Underworld Resources.

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<a href="#">097276</a>	2018	2018 Geochemical, Geophysical, Geological and Drilling Assessment Report	Orthophoto - Airphotography, Diamond - Drilling, Reverse Circulation - Drilling, Rock - Geochemistry, IP - Ground Geophysics, Resistivity - Ground Geophysics	60	18647.05
<a href="#">097246</a>	2017	Geochemical, Geophysical, Geological, and Drilling Assessment Report: White Gold Project	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Orthophoto - Airphotography, Diamond - Drilling, Reverse Circulation - Drilling, Rock - Geochemistry, Soil - Geochemistry	35	5272.19
<a href="#">096402</a>	2012	2012 Exploration Report, White Gold Claim Blocks	Rock - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Gamma-ray Spectrometry - Ground Geophysics, Gamma-ray Spectrometry - Ground Geophysics, Prospecting - Other, Prospecting - Other, Backhoe - Trenching, Backhoe - Trenching		
<a href="#">096215</a>	2011	White Gold, 2011 Surface Exploration Report	Rock - Geochemistry, Rock - Geochemistry, Silt - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Soil - Geochemistry, Regional Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Prospecting - Other, Prospecting - Other, Backhoe - Trenching, Backhoe - Trenching		
<a href="#">096207</a>	2010	High resolution Airborne Geophysical Report on the White and the Black Fox Group	Electromagnetic - Airborne Geophysics, Gamma-Ray Spectrometry - Airborne Geophysics		
<a href="#">096206</a>	2010	Geological and Geochemical Report on the White Groups and Black Fox	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other, Backhoe - Trenching		
<a href="#">095338</a>	2009	Report on the 2009 Diamond Drill, Geological and Geochemical Work Program on the White Gold, Black Fox, Yellow, JP Ross and Maisy Properties	All Weather Road - Development, Surface, Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Detailed Bedrock Mapping - Geology, Metallurgical Tests - Lab Work/Physical Studies, Prospecting - Other, Environmental Assessment/Impact - Studies, Resource Estimate - Studies, Backhoe - Trenching	94	25891.67
<a href="#">095090</a>	2008	Drilling - Geochemical - Geological Report on the BLACK FOX CATH CATHY CCC WHITE and WS Claims	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Backhoe - Trenching, Hand - Trenching	27	3433
<a href="#">095034</a>	2007	Geochemical Geological Report White Claims	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, Prospecting - Other, Backhoe - Trenching		
<a href="#">094607</a>	2005	Report on the Soil Geochemistry on the White Property	Soil - Geochemistry, Magnetics - Ground Geophysics		
<a href="#">094575</a>	2004	Report on the White Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Line Cutting - Other, Prospecting - Other, Backhoe - Trenching		
<a href="#">094508</a>	2003	Geochemical Report White Claims	Rock - Geochemistry, Soil - Geochemistry, Prospecting - Other		

Related References				
Number	Title	Page(s)	Reference Type	Document Type
<a href="#">ARMC016531</a>	Geochemical map - 1150/3 - Thistle Creek		Property File Collection	Geochemical Map
<a href="#">ARMC016530</a>	Coloured geology map - 1150/3 - Thistle Creek		Property File Collection	Geoscience Map (Geological - Bedrock)

Resource/Reserve									
Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
2010	GOLDEN SADDLE - UNDERGROUND (UNDERGROUND)	Inferred	gold	3.38 g/t	918,000	3098000	Yes	Yes	2.0g/t Au
SRK Consulting, 2010.									
2010	GOLDEN SADDLE - UNDERGROUND (UNDERGROUND)	Indicated	gold	3.23 g/t	132,000	427000	Yes	Yes	2.0g/t Au
SRK Consulting, 2010.									
2010	GOLDEN SADDLE - OPEN PIT (OPEN PIT)	Inferred	gold	2.33 g/t	4,104,000	9574000	Yes	Yes	0.5g/t Au
SRK Consulting, 2011. See Minfile 1150 166 for Inferred Resource of Arc deposit.									
2010	GOLDEN SADDLE - OPEN PIT (OPEN PIT)	Indicated	gold	3.19 g/t	9,665,000	30818000	Yes	Yes	0.5g/t Au
SRK Consulting, 2010.									