



## Occurrence Details

**Occurrence Number:** 1150 174

**Occurrence Name:** Donahue

**Occurrence Type:** Hard-rock

**Status:** Prospect

**Date printed:** 12/16/2025 3:19:48 PM

## General Information

**Secondary Commodities:** antimony, gold, silver

**Aliases:** South Donahue, White Gold

**Deposit Type(s):** Porphyry-related Au

**Location(s):** 63°8'39" N - 139°28'35" W

**NTS Mapsheet(s):** 115003

**Location Comments:** .5 Kilometres

**Hand Samples Available:** No

**Last Reviewed:**

### Capsule

#### Work History

\*This occurrence covers the Donahue gold zones and has been broken out from the McKinnon occurrence (Minfile Occurrence #1150 013) and given its own occurrence number

In Jan/2003 S. Ryan staked White cl 1-12 (YC23532) 8.5 km to the northwest. Ryan added White cl 13-46 (YC27120) in Jun/2003 and White cl 47-106 (YC25657) in Dec/2003. In Jan/2004 S. Ryan optioned the White claims to Madalena Ventures Inc, which carried out exploration programs in 2004 and 2005.

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) 4 km to the northeast.

Staked within White cl 119-199 (YC60719) in early May/2007 by S. Ryan who on May 16, 2007 optioned the entire White claim block to Underworld Resources Ltd. Later in the summer 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 onto the northern boundary of the claim block. In 2008 Underworld Resources drilled 27 diamond drill holes (3 431 m) on the White claims. One hole (167.68 m) was collared to test the Donahue gold soil anomaly (this occurrence). In Oct/2008 Underworld staked White cl 304-376 (YC84213 to the south and east).

In 2009 Underworld carried out a three phase diamond drill program consisting of 25,670 m in 94 holes. The company drilled 3 holes at the Donahue gold zone (768.1 m), 5 holes at South Donahue gold zone (979.3 m - located 1.5 km to the south) In addition the company dug 2 trenches on the Donahue gold zone and 7 trenches on the South Donahue gold zone. The company also carried out regional mapping and sampling programs.

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 60 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 a 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 psammities with lesser quartzite, conglomerate and rare marble horizons, interdigitated with amphiboles of probable volcanoclastic protolith. A felsic orthogneiss has been thrust to the northeast. 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 dykes, up to two metres thick with a minimum of three generations of emplacement (observed from cross-cutting relationships) Large quartz diorite dykes, 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 area surrounding this location is underlain by Devonian to Mississippian age psammite/quartz-mica schist. This portion of the White claims was not explored until 2007 at which time Underworld Resources carried out geological mapping and soil and rock sampling. The results were added to previous years results. Soil sampling to date across the White claim block outlined a large gold, arsenic and antimony soil anomaly measuring 8 by 3.5 km across the length of the claim block. The anomaly consists of numerous discrete gold anomalies with a threshold of 50 ppb gold.

Soil sampling in 2007 outlined the Donahue gold zone (soil anomaly – this occurrence). The Donahue gold zone measures 800 by 700 m with 35 of 374 samples exceeding 40 ppb gold. The average of the anomalous samples was 414 ppb gold with a maximum value of 9 019 ppb gold (Underworld press release 12 Feb/2008). Further soil sampling in 2008 outlined the South Donahue gold zone located 1.5 km to the south. The single 2008 diamond drill hole was collared towards the northwest end of the Donahue gold soil anomaly. Hole WD-015 returned 1.30 g/t gold over 1.0 m from a down hole depth of between 114.50 and 115.50 m.

Trenching, soil and rock sampling carried out in 2009 at the Donahue soil anomaly encountered, near surface gold mineralization similar in style to the Golden Saddle deposit (Minfile Occurrence # 1150 165). Diamond drill hole DN09-01 collared on the Donahue soil anomaly returned 1.00 g/t gold over 2 m while hole DN09-03 returned 21.5 g/t over 0.73 m. Hole DN09-02 did not return any significant intersections (Underworld Press Release – Sep 10/2009).

The South Donahue gold zone occurs in similar host rocks to the Golden Saddle deposit and possesses similar geochemical signature. Diamond drilling intersected 1 to 5 m thick quartz veins hosted within an altered granitoid, however no significant values were returned from any of the five drill holes (Underworld Press Release – Oct 19/2009).

Since its take-over of Underworld Resources, Kinross Gold has not publicly released any detailed results from the White Gold project.

References

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Work History

Date	Work Type	Comment
12/31/2009	Drilling	Number of holes drilled: 8 Amount of work done: 1747.4 METRES Three holes (768.1 m) collared on Donahue, five holes (979.3) collared on South Donahue.
12/31/2009	Geology	Regional scale.
12/31/2009	Trenching	Total of Nine trenches.
12/31/2008	Drilling	Number of holes drilled: 1 Amount of work done: 167.68 METRES Part of larger program.
12/31/2007	Geology	Reconnaissance scale.
12/31/2007	Geochemistry	
12/31/2007	Ground Geophysics	Ground survey .
12/31/2007	Trenching	

Assessment Reports that overlap occurrence

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		
			Rock - Geochemistry, Rock - Geochemistry, Silt - Geochemistry, Silt -		

<a href="#">096215</a>	2011	White Gold, 2011 Surface Exploration Report	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="#">094646</a>	2005	Report on the Line Cutting on the White Property	Line Cutting - Other		
<a href="#">094607</a>	2005	Report on the Soil Geochemistry on the White Property	Soil - Geochemistry, Magnetics - Ground Geophysics		
<a href="#">094508</a>	2003	Geochemical Report White Claims	Rock - Geochemistry, Soil - Geochemistry, Prospecting - Other		