Occurrence Details

Occurrence Number: 105H 106
Occurrence Name: Justin - Confluence
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 8/6/2025 2:17:34 AM

General Information

Secondary Commodities: gold, silver
Aliases: Sun, Rain
Deposit Type(s): Vein Au-Quartz
Location(s): 61°39'46.08" N - -128°4'48.47" W
NTS Mapsheet(s): 105H09
Location Comments: The location of this occurence was taken from figures on Aben's website. The location of this occurrence was taken from figures on Aben's website.
Hand Samples Available: No
Last Reviewed: May 7, 2019

Capsule

Work History

Note: The Confluence mineral occurrence was discovered as part of exploration efforts on the Justin property. Refer to MINFILE 105H 045 for the detailed work history on the Justin property prior to 1997 when Aben Resources Ltd. discovered the Confluence zone.

In Aug/97 Battle Mountain Canada optioned the Sprogge (MINFILE 105H 103) and Justin claims to Viceroy Exploration (Canada) Ltd. In Sep/97 Viceroy Exploration carried out a combined exploration program on both claim groups. Geological mapping, prospecting, soil geochemical sampling and hand trenching was carried out on the Justin claims. In Oct/97 Viceroy staked Snow cl 26-101 (YB90799) and Sprogge cl 75-158 (YB90875) on the north, west and south sides of the Justin claims forming a single contiguous block of claims covering 15 km of prospective stratigraphy, then collectively known as the Sprogge Project.

In 1998, Viceroy carried out systematic soil geochemical sampling across 75% of the claim group, detailed mapping and rock chip sampling of known anomalies, and reconnaissance style mapping and sampling over the remainder of the property. In Aug/98 the company staked Sprogge cl 159-202 (YB91350) on the north side of the northwest end of the claim group to secure an access corridor to the nearby Nahanni Range Road.

In Mar/99, NovaGold Resources Inc acquired 100% of Viceroy's interest in the project. Later in 1999, NovaGold carried out an evaluation of the claims that included prospecting, geological mapping and geochemical (rock) sampling.

In Sep/2000 NovaGold entered into an agreement with Kennecott Canada Inc. to fund exploration expenditures on the property and together they drilled 4 diamond drill holes (762m) on the adjacent Sprogge claims.

In Apr/2001 NovaGold dropped its option on the Justin property and returned the claims to B. Kreft.

In Mar/2002 Eagle Plains Resources Ltd optioned the Justin claims from Kreft in return for cash payments and certain work commitments. In Mar/2005, the company purchased 100% interest, in the property, subject to a 1% net smelter royalty (Eagle Plains –Consolidated Financial Statements – Dec. 31, 2005. pg. 14).

In Apr/2008 Eagle Plains staked SP cl 1-50 (YC73232) north, west and south of the Justin claims. In Aug/2008 the company carried out a small rock sampling program to confirm previous results.

In Jun/2010 Eagle Plains flew an airborne electromagnetic and magnetic survey over the Justin property. In Aug/2010 the company carried out geological mapping, rock, silt and soil sampling, dug soil orientation pits and prospected areas of the property which had not yet been explored. The company also staked SP cl 51-55 (YD65452) on the north and west sides of the claim block.

In Feb/2011 Eagle Plains optioned the Justin property to Aben Resources Ltd. and between August and Sep/2011 Aben Resources drilled 10 diamond drill holes (2,020m) to test known areas of mineralization. Concurrent with the drill program the company carried out limited geological mapping, rock and soil sampling around the newly defined POW zone (MINFILE 105H 104). The company also followed up some of the anomalies defined by the airborne geophysical survey.

In Oct/2011 Aben Resources staked SP cl 57-70 (YD87920) and SP cl 71-84 (YD87903) on the north end of the claim block. In Nov/2011 the company staked SP cl 89-207 (YF33001) on the south end of the claim block. A total of 2,020m of NQ core was drilled during the 2011 program with 2 holes totalling 460.84m in the Confluence zone.

In Mar/2012 Aben optioned the adjoining VF gold project (MINFILE 105H 034) from Bearing Resources Ltd. In 2012 Aben collared 9 diamond drill holes (1,994 m) on the POW zone (105H 104). The company also completed ground magnetic surveys, detailed geological mapping, prospecting and rock, soil and silt sampling programs on both the Justin and VF properties.
No work was reported by Aben for 2013. In 2014, Aben completed trenching, drillcore resampling and limited silt and soil sampling focusing on the POW and Big Swifty (MINFILE 105H 107) zones. No work was completed on the property over 2015 and 2016.
Work completed during the 2017 exploration program by Aben included the collection of 21 channel and 3 chip samples from 4 trenches in addition to 13 rock samples, 2 silt samples, 1 bulk soil sample for gold grain analysis and 380 soil samples with coverage totaling 16.8 line-km focusing on the Lost Ace (MINFILE 105H 108) and Confluence zones. In 2018, Aben continued trenching, silt and soil sampling again focusing on the Lost Ace zone.

Capsule Geology

The actual occurrence lies approximately 11 km east of the Nahanni Range Road which services North American Tungsten Corporation Ltd's Cantung tungsten mine which is located approximately 30 km to the north. The area lies within the Selwyn Mountains and is underlain by a sequence of Selwyn Basin stratigraphy composed primarily of shallow marine shelf and off-shelf sedimentary rock derived from the ancient North American Platform.

The occurrence area is underlain by a broad package of west-northwest trending, north-northeast dipping coarse grained clastic sediments, siltstones, pyllitic shale, limestone and calcareous siltstone and shale of the Upper Proterozoic to Lower Cambrian Hyland Group. Eagle Plains Resources/Aben Resources have broken the Hyland Group rocks into three subunits, which based on previous work are tentatively assign to the Neoproterozoic Yusezyu Formation. To the north, a northwest-southeast trending fault separates the Hyland Group rocks from a thin to medium bedded limestone unit assigned to the Cambrian to Ordovician Rabbitkettle Formation. Two periods of compressional deformation are recorded in the rocks and the package is bounded to the north and south by inferred lateral to oblique-slip faults in the Sprogge and Dayo Creek valleys. Mid-Cretaceous age quartz monzonite and quartz-biotite monzonite dykes and related veining associated with stocks of the Tombstone Plutonic suite have intruded tensional features related to the inferred faulting.

The Norquest Joint Venture originally discovered copper mineralization consisting of sparsely disseminated chalcopyrite accompanied by fine-grained pyrrhotite in several irregular pods of pyroxene skarn. This discovery area was later named the Main (Justin) zone. Grab samples assayed up to 0.46% copper and 0.34 g/t gold.
Soil sampling, trenching and rock sampling carried out in 1996 and 1997 defined the Kangas zone (MINFILE 105H 105), located approximately 1 km north of the Main zone.

Battle Mountain Canada's 1997 assessment report marked the first time the Confluence zone was officially recognized. The zone is located approximately 1.3 km east of the Main zone and is currently described as a 600m by 250m area of coarse clastics hosting considerable chalcedonic veining. Veins are typically sulphide poor and range in size from nearly microscopic to up to 2.00 m in width. Aben Resources has reported that historic grab samples from the zone returned values as high as 59.25 g/t gold and historic chip sampling averaged 4.24 g/t gold over 4.5m. Further sampling in 2010 on the Confluence zone returned results including 1.6 g/t Au, 2.4 g/t Ag over 4.00 m. Highlights from 2011 sampling included 4.60 m grading 1.15 g/t Au. Trenching in 1997 returned 4.24 g/t Au over 4.50 m (trench SN97-3); continuous channel sampling east of this intersection returned elevated values up to 0.64 g/t Au.

The 1998 and 1999 exploration programs basically confirmed earlier results and better defined the three mineralized zones (Main, Confluence and Kangas) located on the Justin property. A diamond drilling program was proposed in 2000 to test the three targets, however the late signing of the option agreement between NovaGold and Kennecott Canada delayed the start of drilling until September by which time snow had begun to accumulate in the property area. Drilling was restricted to lower elevations thus only four drill holes were completed on the neighbouring Sprogge claims before the field season ended. Following completion of the 2000 field season Kennecott Canada dropped its option on the claims and in Apr/2001 NovaGold dropped its option and returned the claims B. Kreft (the property owner).

The Justin property lay dormant until 2008 when Eagle Plains Resources carried out a small prospecting and rock sampling program to confirm earlier results. Seven grab and float rock samples collected from the Main and Confluence zones returned values similar to earlier results. The 2008 assessment report marks the first time the Main and Confluence zones are shown on maps to occur within the SP claims.

In 2010, Eagle Plains flew an airborne geophysical program attempting to locate any buried intrusions and major structural features that might be controlling and influencing mineralization on the property. The survey successfully identified several major features thought to play a major role in controlling mineralization on the property. Many areas of magnetic highs identified in the survey correlate with known hornfels zones and some areas of magnetic lows were equated with buried intrusions.

Follow-up exploration of the geophysical results led the company to discover the POW zone, located approximately 2.5km northwest of the Main zone. In addition, rock sampling was carried out on the Main, Confluence and Kangas zones and confirmed earlier results.

Aben Resources 2011 exploration program was geared towards drill testing the Main, Confluence, Kangas and POW mineralized zones (refer to related MINFILES for drill details on each zone). Three diamond drill holes (520.2 m) were drilled from one location to test the Main zone. Only one of three holes (494.2m) collared on the Kangas zone reached the target depth. Two diamond drill holes (461.0m) were collared from one drill pad to test the Confluence zone. Low-grade gold mineralization was intercepted in both holes confirming historic grades and proving the mineralized structures extend to a depth of 115m below surface. The gold mineralization is structurally controlled and occurs in zones of quartz-sulphide veining and brecciation.

While drilling on the Main, Confluence and Kangas zones Aben Resources carried out follow-up geological mapping and prospecting around the recently discovered POW zone. In 2012, Aben collared 9 diamond drill holes (1,994 m) on the POW zone, completed ground magnetic surveys, detailed geological mapping, prospecting and rock, soil and silt sampling.
No additional work was completed on the Confluence zone until 2017 where trenching, rock and soil sampling was completed on the Confluence and Lost Ace zones. Favourable results were later reported from the Lost Ace zone.

Work History

Date	Work Type	Comment
12/13/2017	Trenching	
12/13/2017	Geochemistry	
12/13/2017	Geochemistry	
12/13/2011	Drilling	2 holes in Confluence zone (totalling 460.84m) as part of 10-hole program.
12/13/2010	Geochemistry	
12/13/2010	Geochemistry	
12/13/2010	Geochemistry	
12/13/2010	Geology	
12/13/2010	Airborne Geophysics	Magnetic and electromagnetic surveys.
12/13/2008	Geochemistry	
12/13/1999	Geochemistry	
12/13/1999	Geology	
12/13/1998	Geochemistry	Chip sampling over areas of known mineralization.
12/13/1998	Geology	
12/13/1997	Geochemistry	
12/13/1997	Trenching	
12/13/1997	Geology	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096714	2014	2014 Assessment Report for the Justin Property	Historical Drill Core - Geochemistry, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Hand - Trenching, Mechanical - Trenching		
096319	2012	2012 Diamond Drilling, Geological, Geophysics and Geochemical Report for the Justin Property and VF Property	Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Metallurgical Tests - Lab Work/Physical Studies	9	1994
095316	2010	Geological, Geochemical and Geophysical Report for the SPROGGE (Justin) Property	Electromagnetic - Airborne Geophysics, Reverse Circulation - Airborne Geophysics, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Regional Bedrock Mapping - Geology		
095153	2008	Geological and Geochemical Report for the SPROGGE (Justin) Property	Rock - Geochemistry		
094225	2000	2000 Geological and Geochemical Assessment Report on the Sprogge Property	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry	4	762
094128	1999	1999 Geological and Geochemical Assessment Report on the Sprogge Property	Rock - Geochemistry, Soil - Geochemistry		
093783	1997	1997 Geological, Geochemical and Trenching Report on the Sprogge 1-74 and Justin 1-25 Claims	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other, Hand - Trenching		
093576	1996	Report on 1996 Exploration Program	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
093495	1995	Sun Prospect Prospecting, Rock Sampling	Rock - Geochemistry, Prospecting - Other		
092148	1987	Geological and Diamond Drilling Report on the Sun Property	Diamond - Drilling, Detailed Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Prospecting - Other	4	389
062165	1980	Report on the Sun 1-8 Mineral Claim Group	Rock - Geochemistry		
017575	1965	Geological and Geophysical Investigation of the Rain Claim Group	Detailed Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Line Cutting - Other		

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG1997	Yukon Exploration and Geology 1997		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG1988_89	Yukon Exploration 1988		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG2005_08	Gold mineralization in the upper Hyland River area: a non-magmatic origin		Yukon Geological Survey	Annual Report Paper
YEG2010_OV	Yukon Exploration and Geology Overview 2010		Yukon Geological Survey	Annual Report
YEG2011_OV	Yukon Exploration and Geology Overview 2011		Yukon Geological Survey	Annual Report
YEG1981	Yukon Exploration and Geology 1981		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
ARMC008142	Heavy mineral sampling map - NTS 105H-9 - MacMillan project - Anmac		Property File Collection	Geochemical Map
YEG1998_OV	Yukon Mining & Exploration Overview 1998		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG1987_OV	1987 Yukon Mining and Exploration Overview		Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report
YEG2017_OV3	Yukon Mineral Exploration Program 2017 Update		Yukon Geological Survey	Annual Report Paper
YEG2018_OV3	Yukon Mineral Exploration Program 2018 update		Yukon Geological Survey	Annual Report Paper
YEG2014_OV4	Yukon Mineral Exploration Program: 2014-2015 Update		Yukon Geological Survey	Annual Report Paper
YEG2012_OV	Yukon Exploration and Geology Overview 2012		Yukon Geological Survey	Annual Report