



## Occurrence Details

**Occurrence Number:** 115J 036

**Occurrence Name:** Zappa

**Occurrence Type:** Hard-rock

**Status:** Prospect

**Date printed:** 6/14/2025 4:50:17 PM

## General Information

**Secondary Commodities:** copper, gold, molybdenum

**Aliases:** Koffee, Mothers

**Deposit Type(s):** Porphyry Cu-Mo-Au

**Location(s):** 62°44'13" N - 138°58'9" W

**NTS Mapsheet(s):** 115J10

**Location Comments:** .5 Kilometres

**Hand Samples Available:** No

**Last Reviewed:**

### Capsule

#### Work History

Staked as Zappa cl 1-8 (Y36190) and Mothers cl 1-12 (Y36904) in Aug/69 by the Dawson Range Joint Venture (Straus Exploration Inc, Martin Marietta Corporation, Molybdenum Corporation of America, Trojan Consolidated Mines Ltd, and Great Plains Development Company of Canada Ltd), which explored by grid soil sampling and mapping in 1969, and a mag survey in 1970. The adjoining Aztec cl 1-150 (Y37004) were staked in Sep/69 by Trans Columbia Explorations Ltd, which conducted airborne mag and spectrometer surveys followed by grid soil sampling of anomalous areas in 1970 (Minfile Occurrence #115J 035).

Restaked as Koffee cl 1-12 (YA08205) in Sep/76 by Archer, Cathro & Associates Ltd and explored with mapping and sampling in 1980 by Denison Mines Ltd under an option agreement.

Restaked as Koffee cl 1-58 (YB37482) in Sep/92 by Renoble Holdings Inc. Renoble staked Maya cl 1-40 cl (YB37592) to the south west and Aztec cl 1-52 (YB37540) to the southeast at the same time. In Jan/93 Renoble staked Ice cl 1-74 (YB37901) to the west. In Mar/93, Renoble optioned all of its claim holdings in the area (Ice, Maya, Aztec and Koffee) to Eastfield Resources Ltd, subject to a profit sharing agreement. Eastfield also optioned the adjoining Ana claims (located to the east), from Nordac Mining Corp at the same time.

In 1993 Eastfield optioned a 50% interest in the Koffee and portions of the Ice claims to Rockwealth International Resources Corporation in return for certain work commitments and option payments. During the 1993 field season Rockwealth carried out road building, geological mapping, rock and soil sampling and ground magnetic and IP geophysical surveys on the claims. In Sep/93 Rockwealth drilled 1 diamond drill hole (46 m) on Koffee cl 22. Six additional holes (804 m) were drilled on the adjoining Ana claims (Minfile Occurrence #115J 101) at the same time. In 1994 Eastfield built 2.2 km of access road and prepared 5 drill sites for a planned diamond drill program. Rockwealth's option was terminated in 1994.

Archer, Cathro & Associates (1981) Ltd. staked the J cl 1-40 (YB46605) on the northern boundary of the Koffee and Anna claims in Jan/94.

In Jun/96 Eastfield consolidated the Koffee and adjoining Ana, Ice, Aztec and Maya claim blocks into the Canadian Creek property. Following consolidation Eastfield entered into an option agreement with Alexis Resources Ltd whereby Alexis was granted the right to earn an undivided 51% interest in the property by incurring \$ 1 500 000 in expenditures, paying \$250 000 in option payments and issuing 200 000 shares before Jun/2000. In 1996 Alexis completed geophysical and geochemical surveys and extensive excavator trenching on the Koffee and Ana claims.

In May/97 Eastfield reorganized into two companies, one of which is named Wildrose Resources Ltd. The Ana, Koffee, Maya, Aztec and Ice claims were transferred to Wildrose. In 1997 Wildrose and joint venture partner Alexis Resources conducted a program of road-building, drill-pad construction and prospecting on the Canadian Creek property.

In 1999 Wildrose carried out rock and soil sampling on the Koffee and Ana claims. In May/2000 Wildrose optioned 55 claims (Casino "B" claims) located to the east (Minfile Occurrence #115J 101) which adjoin the Ana claims from Great Basin Gold Ltd (Pacific Sentinel Gold's new name). Wildrose also undertook responsibility to file assessment work on the remaining claims which cover the actual Casino deposit (Minfile Occurrence #115J 028).

In 2000 Wildrose Resources drilled 5 diamond drill holes (1 152.45 m) on the Koffee claims in conjunction with a larger program carried out on the Canadian Creek property. The company planned to carry out soil sampling on the Koffee claims in 2001 but the events of September 11, 2001, forced the company to shut down its exploration program prematurely.

In Dec/2002 Wildrose optioned a 60% participating interest in its Canadian Creek property, including the Casino "B" claims, to Canley Developments Inc (subsequently renamed Sargold Resources Corporation). In Jul/2003 Canley Developments changed its name to Sargold Resources Corporation and in Sep/2003 the company carried out a detailed soil sampling program over the central portion of the Casino "B" claims. In Feb/2004, Sargold terminated its option and returned the claims to Wildrose. In Feb/2004, Sargold terminated its option and returned the claims to Wildrose.

In Feb/2005 Wildrose optioned a 60% interest in the Canadian Creek property to Veraz Petroleum Ltd for cash, shares and certain work commitments. In the summer of 2006 the company extended the Casino B grid, carried out limited soil sampling and surveyed the location of all known drill holes and other notable features. In Oct/2006 Wildrose re-organized such that, Wildrose retained ownership of the Spanish Mountain gold project in British Columbia and transferred all their other exploration properties including Canadian Creek to a new company, Cariboo Rose Resources Ltd. Veraz Petroleum retained their option.

In Jul/2007 Veraz Petroleum funded a 5 hole (879 m) diamond drill program on the eastern end of the Casino B claims. In Feb/2008 Veraz Petroleum terminated its option and returned the property to Cariboo Rose. In 2008 Cariboo Rose carried out a remote sensing "Aster image" program of the entire property.

In Jun/2009 Cariboo Resources optioned a 60% interest in the Canadian Creek property to Alder Resources Ltd for cash, shares and certain work commitments. Alder Resources immediately staked Kana cl 1-35 (YC99879) and fractional claims 36-45 (YC99914) on the northern boundary of the Ana and Koffee claim blocks. The claims were registered to Eastfield Resources Ltd the underlying owner of the Canadian Creek property. During the summer of 2009 Alder enlarged the existing soil grid to cover the entire property and carried out infill soil sampling. In the fall of 2009 Alder drilled 10 diamond drill holes (1 425 m) on the property.

#### Capsule Geology

The region around the occurrence largely escaped Pleistocene glaciation. The result is that there is less than 1% outcrop by area over much of the region and weathered rocks commonly extend to depths of greater than 75 m. Johnston (1995) used data acquired from an airborne multiparameter geophysical survey conducted in 1993 and 1994 to improve the existing geological knowledge of the region.

Johnston's work indicates that the area is underlain by Yukon Tanana Terrane rocks, consisting of Devonian to Mississippian metavolcanic and metaigneous rocks belonging to the Wolverine Creek Metamorphic Suite. The metamorphic rocks form a synform which is cored by intermediate rocks of the Mid-Cretaceous Dawson Range Batholith. The batholith consists of mafic, intermediate and felsic phases. The mafic and intermediate phases are sheet or sill-like bodies that are concordant with foliation in the 'pendant' and in adjacent metamorphic wall rocks. The felsic phase forms discordant plugs that intrude the more mafic phases of the batholith and its wall rocks.

The Dawson Range batholith is in turn intruded by the Casino Plutonic Suite which is represented by fine- to medium-grained leucocratic granite, quartz monzonite and alaskite with associated aplite phases. The Casino Plutonic Suite is composed of stocks up to 18 km in diameter and is only exposed in the Colorado Creek (NTS 115 J/9) and Selwyn River (NTS 115 J/10) map areas. The Casino Plutonic Suite was originally thought to be Late Cretaceous (70 Ma) but work by Selby et al., (1999) indicates that although the Casino Plutonic Suite intrudes the Dawson Range Batholith, its age is indistinguishable (104.2 +/- 0.5 Ma, U-Pb zircon). Late Cretaceous igneous activity produced a northwest-trending belt of small stocks, one of which, the Patton porphyry intrudes the Casino Plutonic Suite rocks and producing the copper-gold-molybdenum mineralization present at the neighboring Casino deposit (Minfile Occurrence #115J 028).

The occurrence is underlain by Devonian-Mississippian Wolverine Metamorphic Suite intermediate to felsic metavolcanics and related finely layered metasedimentary rocks. Dawson Range Batholith granodiorite intrudes the metamorphic suite to the south. The batholith is in turn intruded by a small stock of pyritized and altered quartz porphyry belonging to the Casino Plutonic Suite. Strong copper response is associated with the quartz porphyry while a moderate molybdenum soil anomaly occurs immediately to the northwest.

The 1993 program outlined a large multielement soil geochemical anomaly which coincides with a magnetic high and a chargeability anomaly. The 1993 drill hole was collared over a coincident gold-copper soil anomaly and a mid-range chargeability and resistivity geophysical anomaly. The hole encounter 6.71 m of frozen overburden followed by 40 m of predominantly frozen regolith. The hole was abandoned at 46.6 m when the casing fell into the drill hole and could not be retrieved. The regolith consisted of relatively fresh Patton Porphyry. Assays returned anomalous Cu values averaging 500 ppm over 40 m.

Exploration work carried out by Eastfield and others appears to indicate that the mineralizing system present on the adjoining Casino property (Minfile Occurrence #115J 028) extends onto the Canadian Creek property, although large areas of the leached cap may have been eroded away. Drilling on the Ana claims intersected various intrusive phases ranging from quartz monzonite to Patton porphyry. Potassic alteration with anomalous gold and copper mineralization was intersected in the easternmost holes on the Ana claims.

The J claims were staked to protect any potential mineralization uncovered on the Koffee claims and to provide an area for storage and infrastructure if the adjoining Casino deposit entered into production.

The 1996 through 1998 work programs were carried out to follow up geophysical targets and delineate future drill targets. The bulk of the work was carried out on the Koffee and Ana claim blocks. Trenching returned values up to 0.9 g/t Au over 13 m.

Work on the Koffee claims in 1999 was mainly limited prospecting and to the reclamation of various trenches and drill roads. The 2000 drill holes tested a donut shaped 3 000 m by 2 5000 m chargeability high. The centre of the doughnut contains a strong total field magnetic anomaly combined with a lower chargeability high. The holes were drilled in a fence and all holes encountered predominantly granodiorite although Patton Porphyry (host of the adjoining Casino deposit) was cored in the two centermost holes and in the westernmost hole. Strong phyllic alteration (chlorite-sericite) with a strong quartz pyrite stockwork was encountered on the western edge of the drill fence while strong potassium-magnetite alteration and quartz dominant vein stockwork was encountered in the center and on the eastern side of the fence. Highly anomalous concentrations of copper and/or molybdenum with minor gold were encountered in the central holes.

Prospecting carried out during the drill program located a mineralized angular boulder north of the drill fence that contained a network of millimeter to centimeter scale malachite and chalcopyrite veinlets that returned an assay of 3.25% copper. The source of the boulder is thought to be upslope within a known resistivity high. A 2001 float sample (12-09-01-5) collected about 450 m north of drill hole 2000-6 returned a value of 737 ppb gold, 325 ppm copper and 508 ppm molybdenum.

The 2003 soil sampling program and the 2007 diamond drill program were carried out on the Casino "B" claims. The 2008 Aster Satellite survey highlighted various areas containing iron oxide and alunite alteration on the property. The 2009 soil sampling program was centered on the Koffee and Anna claims. It outlined a series gold and arsenic gold anomalies across the entire 4.0 km width of the grid. The anomalies are defined by 20 ppb gold contours and individual anomalies are up to 1.5 km in length. At a 50 ppb gold threshold the largest anomaly is 1.2 km long and 300 m wide. The anomalies show strong linear trends from east-west to northeasterly. An induced polarization (IP) geophysical survey was also completed over the grid and outlined several anomalies that show the same general trend as the soil anomalies. Both surveys outlined targets associated with this occurrence. The diamond drilling appears to have been centered around the east side of the Ana claims (Minfile Occurrence #115J 101).

## References

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SELBY, D. and NESBITT, B.E., 1998. Biotite chemistry of the Casino Porphyry Cu-Mo-Au Occurrence, Dawson Range, Yukon. In: Yukon Exploration and Geology 1997. Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 83-88.

SELBY, D. ET AL., 1999. Major and trace element compositions and Sr-Nd-Pb systematics of crystalline rocks from the Dawson Range, Yukon Canada. In: Canadian Journal of Earth Sciences, Volume 36, p. 1463-1481.

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WILDROSE RESOURCES LTD, Jan/99. Web Site: [www.direct.ca/wildrose](http://www.direct.ca/wildrose)

YUKON EXPLORATION AND GEOLOGY 1993, p. 4, 6, 8; 1994 p. 10; 1996 p. 24, 30; 1997 p. 24, 35; 2000, p. 25, 27; 2001, p. 24

YUKON GEOLOGY AND EXPLORATION 1979-80, p. 266.

## Work History

Date	Work Type	Comment
12/31/2009	Geochemistry	Grid based, including area surrounding this occurrence.
12/31/2008	Pre-existing Data	Aster Image program over entire property.
12/31/2001	Other	Project curtailed due to events of September 11, 2001.
12/31/2000	Drilling	Five holes, 1,153 m. Collared on Koffee claims, part of larger program carried out on Canadian Creek property.
12/31/1999	Geochemistry	Carried out on Koffee and Ana claims.
12/31/1999	Geochemistry	Carried out on Koffee and Ana claims.
12/31/1997	Development, Surface	Also prepared drill pads.
12/31/1996	Geochemistry	Also rock sampling.
12/31/1996	Trenching	
12/31/1994	Development, Surface	The company also prepared 6 drill pads for future use.
12/31/1993	Geochemistry	Also soil sampling.
12/31/1993	Drilling	One hole, 46 m.
12/31/1993	Geology	
12/31/1993	Ground Geophysics	Also IP survey.
12/31/1980	Geology	
12/31/1980	Geochemistry	
12/31/1969	Ground Geophysics	

## Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
<a href="#">097121</a>	2017	Summary Report of the 2017 Exploration Programme on the Canadian Creek Property	Reverse Circulation - Drilling, Soil - Geochemistry, Magnetics - Ground Geophysics	24	2151.27
<a href="#">095864</a>	2011	Soil Geochemistry, Trenching and Geophysical Surveys on the Canadian Creek Property	Soil - Geochemistry, Soil - Geochemistry, IP - Ground Geophysics, IP - Ground Geophysics, Magnetics - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other, Line Cutting - Other, Backhoe - Trenching, Backhoe - Trenching		
<a href="#">095139</a>	2009	Summary Report of the 2009 Exploration Program on the Canadian Creek Property-Volume 1	All Weather Road - Development, Surface, Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, IP - Ground Geophysics, Magnetics - Ground Geophysics, Prospecting - Other, Data Compilation - Pre-existing Data	10	1425.60
<a href="#">095057</a>	2008	Summary Report of the 2008 Aster Image Program on the Canadian Creek Property	Infrared - Remote Sensing		
<a href="#">094556</a>	2005	Report on the 2005 Prospecting and Sampling Program Completed on the Canadian Creek Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Prospecting - Other		
<a href="#">094244</a>	2001	2001 Target Evaluation Program-Canadian Creek Property	All Weather Road - Development, Surface, Environmental Clean-up - Development, Surface, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Prospecting - Other		
<a href="#">094169</a>	2000	Diamond Drilling and Other Field Works Completed on the Canadian Creek Property	Diamond - Drilling, Rock - Geochemistry, Prospecting - Other, Research/Summarize - Pre-existing Data	12	2066
<a href="#">094206</a>	1999	Report on Rock and Soil Sampling and Road Reclamation on the Canadian Creek Property (Ana, Koffee, Aztec, Maya and Ice Claims)	Environmental Clean-up - Development, Surface, Reclamation - Development, Surface, Rock - Geochemistry, Soil - Geochemistry, Petrographic - Lab Work/Physical Studies		
<a href="#">093532</a>	1996	Report on Trenching, Road Rehabilitation and Road Construction on the Canadian Creek Property	All Weather Road - Development, Surface, Rock - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, Magnetics - Ground Geophysics, Petrographic - Lab Work/Physical Studies, Line Cutting - Other, Backhoe - Trenching		
<a href="#">093249</a>	1994	Road and Drill Site Construction on the Koffee 22, 33, 35, 38	All Weather Road - Development, Surface		
<a href="#">093143</a>	1993	Geological, Geochemical, Geophysical Report on the Koffee Claims	Interpretation - Airphotography, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, Magnetics - Ground Geophysics, Petrographic - Lab Work/Physical		

			Studies, Prospecting - Other, Mechanical - Trenching		
<a href="#">090772</a>	1980	Report on Geology and Geochemistry-Koffee 1-7, 9 , 11	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other		
<a href="#">019923</a>	1972	Aerial Reconnaissance Report-Trans-Columbia Exploration Ltd.- Covering Aztec Mineral Claims	Cursory Property Visit - Other, Data Compilation - Pre-existing Data		
<a href="#">060218</a>	1970	Geological, Geochemical and Magnetometer Surveys-Bulldozer Trenching	All Weather Road - Development, Surface, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Mechanical - Trenching		
<a href="#">060227</a>	1970	Geochemical Report on the Aztec, Squaw, Tlingits Group Claims and Portion of the New Group Claims	Soil - Geochemistry, Property Evaluation - Other, Prospecting - Other		
<a href="#">061956</a>	1970	Geochemical and Petrographic Report on the Aztec, Squaw, Tlingits Group of Claims and a Portion of the New Group Claims	Soil - Geochemistry, Petrographic - Lab Work/Physical Studies, Cursory Property Visit - Other		
<a href="#">019922</a>	1970	Geological Report on the Trans Columbia Explorations Ltd. Properties-Casino Area	Data Compilation - Pre-existing Data		
<a href="#">060217</a>	1969	Geochemical Sampling and Preliminary Geology	Soil - Geochemistry, Line Cutting - Other, Prospecting - Other		

## Related References

Number	Title	Page(s)	Reference Type	Document Type
<a href="#">ARMC016557</a>	Geology map - 115J/10 - Colorado Creek		Property File Collection	Geoscience Map (Geological - Bedrock)
<a href="#">ARMC016558</a>	Geochemical values total extraction map - 115J/10 - Colorado Creek		Property File Collection	Geochemical Map