



Occurrence Details

Occurrence Number: 105F 130

Occurrence Name: True Blue

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 6/15/2025 11:44:08 AM

General Information

Primary Commodities: gemstones

Aliases: Shark Bowl

Deposit Type(s): Gemstone

Location(s): 61°29'44.29" N - -132°27'59.41" W

NTS Mapsheet(s): 105F08

Location Comments: Based on showing location in AR 095343

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Off-claim mapping and contour ground radiometrics were carried out over the occurrence in 1976 as an extension of work on the Guano 1-22 and Guayes 23-30 claims to the east. The first claims over the occurrence were staked in 1987 by Cascade Pacific Resources- Mathew 1-144 claims. In 1990, the company carried out an airborne magnetic and electromagnetic survey over the entire claim block. The Kulan claims covered the occurrence in 1997, but no work was done at the actual occurrence. In 2000, Dr. Lee Groat from the University of British Columbia working for True North Gems Inc examined a sample collected by D. Eaton of Archer, Cathro and Associates Ltd. in 1976, and identified the mineral as beryl. In Dec 2002, True North Gems Inc contracted Archer, Cathro and Associates (1981) Ltd to explore their various claims holdings for gemstone deposits. Archer, Cathro staked Shark cl 1-16 (YC23168) in Dec/2002 over the area they believed Eaton had previously discovered his blue beryl, and expanded the claim block to 94 claims in 2003. The 2003 exploration program was focused on locating the site of Eaton's initial find and prospecting for any potential beryl mineralization. Archer Cathro located Eaton's original site at the Gill zone (MINFILE 105F 142). In 2003, mapping and soil sampling downhill of the occurrence was carried out. In 2004, beryl sampling occurred at the South Bench just east of the occurrence. Samples were collected for detailed gemological analysis. In Oct/2005 the Shark claims were transferred to True North Gems Inc. In 2009, a silt sample was collected downhill from the occurrence. Great Western Minerals optioned the claims and carried out contour soil sampling downhill from the occurrence and had a helicopter aeromagnetic and radiometric survey flown over the entire property (Shark 1-335 claims) in 2010.

Capsule Geology

The occurrence area is located within the Cassiar Platform, a displaced tectonic element composed of Lower Paleozoic miogeoclinal clastic and carbonate rocks that are overlain and interfingering with felsic to mafic metavolcanic rocks of Mississippian age. These volcanic rocks form the arcuate northwest-trending Pelly Mountain Volcanic Belt and are believed to have been deposited in a continental rift environment. Roughly coincident with the southwestern edge of the volcanic belt is a 32-km-long string of Devonian-Mississippian syenite intrusions which are thought to be the subvolcanic equivalent of extrusive components of the Pelly Mountains Volcanic Belt. The largest of these intrusions underlies the occurrence. This entire package of rocks was subject to several phases of deformation and faulting during arc-continent collision.

The Devonian-Mississippian syenite stock hosting the beryl mineralization is medium to fine grained, equigranular and becomes increasingly mafic towards its margins. The occurrence is primarily a beryl showing where fine, blue beryl grains occur in the syenite ground mass. Beryl mineralization is characterized by a swarm of closely-spaced quartz-siderite-fluorite-allanite veinlets that cut the syenite stock. The veins occupy a dense network of orthogonal tension gashes measuring 0.5 to 20 cm in thickness. Veining is concentrated near the upper contact between the syenite and country rocks. The veins have sharp parallel wall-rock contacts and display coarse-granular crystal growth of gem-quality beryl radiating from nucleation points. Accessory minerals in the quartz veins include siderite, ankerite, allanite, fluorite, ilmenite, minor albite, various sulphide minerals (pyrite, pyrrhotite) and Fe-Ti-Nb oxide minerals. There are also a number of small dykes cutting the syenite that contain higher REE concentrations. One grab sample of a dyke returned 0.45% TREO, 2.64% ZrO₂ and 0.12% Nb₂O₅.

Fluorite from beryl-bearing veins was dated using the Sm-Nd method and yielded an age of 171.4 +/- 4.8 Ma. Temperature estimates from oxygen isotopes in beryl and quartz suggest fluid temperatures between 275 and 425 degrees celsius. Research suggests a metamorphic origin for the beryl mineralizing fluid and local derivation of vein constituents. This result contrasts with formation of beryl at other locales in Yukon, which are related to magmatic-hydrothermal events.

The syenite itself is enriched in fluorine, rare earth elements, high field strength elements and is moderately enriched in beryllium. Pervasive alteration has destroyed much of the primary mineral assemblage of the syenite.

At the occurrence, beryl occurs in a 700 by 400 m area in outcrop and talus. The beryl ranges in color from green to yellow and pale to dark blue. Clarity of the beryl is very good in small crystals however larger specimens tend to be moderately fractured and contain numerous inclusion. The crystals range from millimetres in length and width up to 5 cm long and 2.5 cm wide. Two mini-bulk samples (113 kg and 59 kg) of blue beryl in moderately quartz vein syenite were collected from the Shark Bowl. The samples were collected from outcrop and locally derived talus and showed at least minor beryl mineralization on exposed veins. Processing of the 59 kg sample yielded 57.9 grams of gem grade beryl. Individual crystals reached 38 mm in length and 11 mm in diameter. It was estimated that quartz veins comprised 8% of the sample.

In Oct/2003 consulting mineralogists and gemologists confirmed that the blue beryl discovered on the Shark claims is a unique type of aquamarine. Electron microprobe analysis of the beryl demonstrated high concentrations of Fe (up to 5.79 wt% FeO) as well as high Mg and Na. The Shark Bowl is the main area of dark blue gem-beryl mineralization. At the Shark Bowl 785 kg of concentrated vein material was extracted from syenite talus and bedrock exposures during a two-week period. Samplers concentrated on collecting samples from bedrock exposures in hopes of reducing damage from natural surficial processes such as rock fall.

Work History

Date	Work Type	Comment
12/31/2009	Geochemistry	

12/31/2004	Geochemistry	Specimens collected for scientific study and evaluation.
12/31/2004	Geology	Property wide.
12/31/2004	Other	Property wide.
12/31/2003	Geochemistry	Mini bulk sample of gemstone material collected.
12/31/2003	Geology	
12/31/2003	Geochemistry	downhill from occurrence
12/13/2010	Geochemistry	Contour soils downslope from occurrence
12/13/2009	Lab Work/Physical Studies	Samples studied at UBC x-ray lab.
12/13/1990	Airborne Geophysics	
12/13/1990	Airborne Geophysics	
12/13/1990	Airborne Geophysics	VLF
12/13/1976	Ground Geophysics	contour radiometric survey
12/13/1976	Geology	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095343	2010	Geological Report on the True Blue Project Describing the Geology, Geochemistry and REE Mineralization of the Shark Property	Gamma-Ray Spectrometry - Airborne Geophysics, Magnetic - Airborne Geophysics, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other		
095169	2009	Assessment Report for Geological Work on the Guano REE Project at the Shark Property	Rock - Geochemistry, Silt - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Magnetics - Ground Geophysics, Scintillometer - Ground Geophysics, Prospecting - Other		
094538	2004	Assessment Report Describing Geology, Mineralization and Geochemistry at the Shark Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
094463	2003	Assessment Report Describing Geology, Mineralization and Geochemistry at the Shark Property	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Backhoe - Trenching		
093756	1997	1997 Report on the Diamond Drilling Program on the Mamu 11, 12, 30 and 32 Claims, Mamu-Bravo-Kulan Property	Diamond - Drilling	3	415.45
093411	1996	1995 Report on the Soil Geochemistry and Magnetometer and VLF-EM Geophysical Surveys on the Mamu 1-23 Claims, Bravo 24-44 Claims.	Soil - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Magnetics - Ground Geophysics		
092879	1990	Geophysical Report Mathew Claims	Electromagnetic - Airborne Geophysics, Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
092685	1988	1988 Program of geological Mapping, Geochemistry and Prospecting on the Mathew Claim Group	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology		
090260	1977	1977 Geological and Geochemical Report on the CPA 1-12 and Gag 1-24 Mineral Claims	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Magnetics - Ground Geophysics		

Related References

Number	Title	Page(s)	Reference Type	Document Type
YEG2004_21	Mineralogical and geochemical study of the True Blue aquamarine showing, Shark property, southern Yukon		Yukon Geological Survey	Annual Report Paper