Occurrence Details

Occurrence Number: 105K 038
Occurrence Name: Gentian
Occurrence Type: Hard-rock
Status: Showing
Date printed: 12/16/2025 9:02:37 AM

General Information

Secondary Commodities: antimony, arsenic, cadmium, copper, lead, silver, zinc
Aliases: 9.29 Percent Zone, Bordeleau Showing, Scott Claims
Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au
Location(s): 62°54'23.07" N - -132°18'21.68" W
NTS Mapsheet(s): 105K16
Location Comments: Location data taken from Overland Resources location map.
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

R. Berdahl prospected and sampled the area in 1999 while working on his Andrew claims (Minfile Occurrence #105K 089) located approximately 5 km to the northeast. In Aug/2000 Berdahl optioned his Andrew claims to Noranda Incorporated and in Sep/2000 staked Scott cl 3-34 (YC02457) to cover a kill zone and surface mineralization discovered the previous year.

During the winter of 2000/01, Noranda carried out airborne magnetic and EM geophysical surveys over the Scott claims. Although not part of the Noranda option, the surveys were part of a larger survey flown over the newly expanded Andrew property. In Jul/2001 Berdahl staked Scott cl 1-2 (YC02784) and cl 35-36 (YC02786), (known as Scott claims - south area) 5 km to the southwest.

Berdahl obtained a Yukon Mining Incentive Program (YMIP) grant in 2005 and used the money to carry out a grid based soil sampling program on Scott claims 3 - 34.

On February 1, 2007 Overland Resources Ltd announced it had secured a twelve month exclusive option to acquire a 90% interest in the Andrew property from Berdahl for US$50,000.00. The company immediately renamed the property the Andrew Base Metal project. Included in this option were both groups of Scott claims. In Jul/2007 personnel from the company carried out geological mapping and rock and contour soil sampling programs on Scott claims - south area.

In 2008 Overland Resources carried out geological mapping and rock sampling around the newly named Gentian showing (previously called the 9.29 % zone). Later in the summer the company collared 2 diamond drill holes (180.4 m) on the showing.

In 2010 Overland Resources carried geologically mapping and rock sampling on Scott claims - south area and the Red Precipitate Creek area located in the northeast corner of Scott claims 3 – 34.

In Jun/2012 Overland Resources released an updated study into the economics of developing a mining operation at the Andrew Base Metal project. Despite robust grades the economic study indicated a sustained long term improvement in both zinc and lead prices would be required to provide a suitable return to the company. Thus the company elected to suspend all further exploration and mine permitting work for the entire Yukon Base Metal project including both groups of Scott claims.

Capsule Geology

The property area is located approximately 15 km east of Mt Selous, in east-central Yukon. The closest settlements Faro and Ross River, Yukon are located 100 km to the southwest and 115 km south of the property, respectively. A winter trail connects the property to the North Canol Road at Dragon Lake located approximately 60 km to the south. Normal access to the property is by helicopter or short take-off and landing fixed wing aircraft via a 400 m unsealed airstrip located approximately 4 km northwest of the Andrew occurrence.

The property is located in the western portion of the Selwyn Basin; a continental margin rift-fill and cover sedimentary sequence lying off the coast of ancestral North America. The oldest stratigraphic units on the property are the Yusezyu and Narchilla Formations of the Neoproterozoic to Lower Cambrian Hyland Group. They are overlain by Ordovician to Silurian Road River Group rocks which are in turn overlain by Devonian to Mississippian Earn Group rocks. The Hyland Group comprises an upper thrust sheet that overlies the Road River and Earn Group rocks. The entire sequence has been intruded by Cretaceous granite, quartz monzonite and granodiorite intrusions assigned to the Selwyn Plutonic Suite.

In 1999 R. Berdahl discovered a 30 m wide kill zone lying on an east facing slope of the most westerly fork of Gentian Creek. Prospecting around the kill zone uncovered rusty black shales containing sphalerite and galena mineralization. A grab sample from the kill zone returned an assay of 9.29% zinc (other values not reported). Berdahl named the showing the 9.29 % zone (this occurrence).

Berdahl returned to the area in 2000 to stake the Scott 3 – 34 claims and carry out further prospecting and rock sampling. Prospecting led to the discovery of the Bordeleau showing approximately 450 m northeast of the 9.29 % zone. The showing is exposed in the bed of the most westerly fork of Gentian Creek and consists of a one m wide, steeply dipping graphitic shale unit containing specks of pyrite and malachite and veinlets of galena and sphalerite. Three grab samples returned values up to 3.8% zinc, 1.6 % lead, 11.5 g/t silver, 500 ppm cadmium and 516 ppm antimony. Berdahl also noted that Gentian Creek contained a milky white precipitate.

Berdahl discovered a second showing 450 m to the southeast described as a 50 m long slump of silicified siltstone containing significant amounts of pyrrhotite. A grab sample from this showing which Berdahl called the Slump showing returned 281 ppm zinc, 460 ppm lead and 347 ppm arsenic.

Noranda's airborne geophysical survey shows that the 9.29 % zone is flanked by a conductivity high and a magnetic low. The Bordeleau showing, which strikes at 320 degrees, corresponds to a similar trending magnetic high, several EM anomalies (> 20) and a conductivity high.

The 2005 soil sampling program outlined 2 parallel (> 300 ppm zinc), northwest trending anomalies measuring approximately 500 m long by 50 m to 150 m wide, in the northeast corner of the Scott claims. The 9.29 % zone returned two zinc spot anomalies (> 300 ppm zinc) immediately below the known occurrence. The area surrounding the Bordeleau showing did not return any anomalous results.

The Scott claims - south area was geologically mapped and sampled by Overland Resources staff in 2007. Regional geological mapping released by the Geological Survey of Canada shows lower two-thirds of the claim block is underlain by Precambrian to Cambrian Hyland Group rocks. A Cretaceous intrusion, associated with the Mt Selous batholith which outcrops to the north intrudes the upper third of the claim block. Overland personnel mapped black and grey shales through the center of the claim block. The company made no effort to assign a unit or age to the rocks. The best results appear to have been recorded near the centre of the claim block where a rock sample collected from a black shale outcrop cut by a prominent gully returned 2 003 ppm zinc 479 ppm copper and 7.56 ppm lead. The black shale contains thin calcite stringers along foliation planes. Fracture surfaces are coated with manganese and rusty blebs of fine grained pyrite. A soil sample collected in this area returned vales of 3 488 ppm zinc and 437 ppm copper while lead values ranged from 68 to 71 ppm. Other spot anomalies were located outside the claim block.

Overland Resources prospected Scott claims 3 – 34 in 2008. Regional mapping released by the Geological Survey of Canada shows the claim block is underlain by Precambrian to Cambrian Hyland Group rocks. A Cretaceous intrusion intrudes the southwest end of the claim block. Overland Resources personnel did not carry out any detailed geological mapping and only recorded the rock types of samples collected. The best results were obtained from the Gentian zone (formerly called 9.29 % zone) where a grab sample returned 32 800 ppm zinc, 23 140 ppm lead 10.35 ppm silver, 130.5 ppm germanium and 1 470 ppm manganese.

The company collared two diamond drill holes to test the continuity of sphalerite and galena mineralization beneath the kill zone. The first hole was drilled below sphalerite bearing float in the kill zone and intersected abundant feldspar-amphibole porphyry dykes up to 20 m thick but typically 5 to 10 m thick intruding black mudstone and fine grained calcareous sandstone. Trace sphalerite mineralization was observed sporadically from 69 m to 87 m depth within chaotic sphalerite – galena calcite veins. Sphalerite mineralization occurred entirely within sedimentary rock and rarely, occurred in abundance greater than 15 % over 1.5 m. Contacts between the porphyry and sedimentary rocks were commonly brecciated and locally cemented by calcite. The best intersection returned 5.1 % zinc over 1.5 m at a depth of 82.6 m. The second hole was collared 50 m south of the kill zone. It intersected finely laminated black mudstone and calcareous siltstone. The hole was abandoned at 73.76 m due to poor ground conditions.

An Overland Resources geologist spent 4 days in 2010 carrying out geological mapping and rock sampling on the Scott claims - south area. The company mapped out general geological unit boundaries on the four claims. Intrusive rocks were assigned to the Cretaceous Mt. Selous Pluton. Sedimentary units were not assigned to a specific stratigraphic unit. A limestone unit was reported to underlie the sandstone and mudstone units previously reported in 2007. Rock sampling generally returned background levels in base metal elements. The highest rock sample returned 2 450 ppm zinc and 3.04 ppm silver from a fault breccia cutting mudstone. The sample was collected approximately 100 m northwest of the best result recorded in 2007.

Overland Resources also geologically mapped and chip sampled in the Red Precipitate Creek area, located in the northeast corner of the main Scott claim block. The majority of the area covered is located on the southwest side of a ridge overlooking the northern most fork of Gentian Creek. The program covered the uplands of Gentian Creek and any possible source of mineralization which could have caused the red precipitate observed locally in the creek. The company observed the usual sandstone, mudstone and quartzite units observed elsewhere on the claim block. Chip sampling did not identify any anomalous areas of sulfide mineralization.

Exploration work on both groups of Scott claims ended in 2012 when Overland Resources suspended exploration and permitting work on the entire Yukon Base Metal project.

Work History

Date	Work Type	Comment
12/13/2010	Geochemistry	Carried out on Scott claims - south area and Red Precipitate Creek area (northeast corner of main Scott claim block).
12/13/2010	Geology	Carried out on Scott claims - south area and Red Precipitate Creek area (northeast corner of main Scott claim block).
12/13/2008	Geochemistry	Carried out around Gentian occurrence.
12/13/2008	Drilling	Two holes (180.4 m) collared at Gentian occurrence.
12/13/2008	Geology	Carried out around Gentian occurrence.
12/13/2007	Geochemistry	Carried out on Scott claims - south area.
12/13/2007	Geochemistry	Contour sampling, Carried out on Scott claims - south area.
12/13/2007	Geology	Carried out on Scott claims - south area. Only mapped rock type not units.
12/13/2005	Geochemistry	Carried out on Scott 3 - 34 claims.
12/13/2005	Other	Carried out on Scott 3 - 34 claims.
12/13/2001	Airborne Geophysics	Also magnetics. Flown over winter of 2000/2001
12/13/1999	Other	Berdahl prospected area while working on neighboring Andrew claims.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095705	2010	Geological, Geochemical and Drilling Assessment Report for Quartz Mining Claims Grouping HM02805	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Metallurgical Tests - Lab Work/Physical Studies, Prospecting - Other, Environmental Assessment/Impact - Studies, Geotechnical - Studies		3712.10
095648	2008	Geological, Geochemical and Diamond Drilling Assessment Report on the Yukon Base Metal Project	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other, Backhoe - Trenching	135	23424.70
094973	2005	Prospecting & Geochemical Report on Scott Project	Soil - Geochemistry		
094378	2000	Scott Claim Group Prospecting & Geophysics Report	Electromagnetic - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Prospecting - Other		
018941	1968	Hess Project Report 1968 Laforce Lake - Mount Selous Area	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Regional Bedrock Mapping - Geology, Prospecting - Other		
019809	1968	Hess Area Project Proposed Property Follow-Up 1968 Field Season	Research/Summarize - Pre-existing Data		
018947	1967	Hess River Project Report	Rock - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology		
019032	1967	Hess River Project Report	Data Compilation - Pre-existing Data		

Related References

Number	Title	Page(s)	Reference Type	Document Type
2003-9(D)	Yukon Digital Geology (version 2)		Yukon Geological Survey	Open File (Geological - Bedrock)