Occurrence Details

Occurrence Number: 106C 103
Occurrence Name: Discovery
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 8/5/2025 8:28:10 AM

General Information

Secondary Commodities: antimony, arsenic, gallium, lead, mercury, silver, zinc
Aliases: Azure, Nadaleen, Craig Property
Deposit Type(s): Sediment hosted Mississippi Valley-Type Pb-Zn (MVT)
Location(s): 64°9'1.79" N - -133°19'48.86" W
NTS Mapsheet(s): 106C03
Location Comments: Location is for Discovery zone.
Hand Samples Available: No
Last Reviewed:

Capsule

WORK HISTORY

*This occurrence covers the Discovery (occurrence location) and the Azure and Nadaleen zones which were formerly captured within the Craig occurrence (Minfile Occurrence #106C 073) located approximately 2.8 km to the northwest.

Staked within Craig cl 1-624 (YA6224) from August to Nov/76 by McIntyre Mines Ltd, following an aerial reconnaissance program. In 1976 the company carried out a property wide exploration program consisting of prospecting, reconnaissance geological mapping and rock sampling. In 1977 the company carried out further prospecting, geological mapping, grid, ridge and spur soil sampling and reconnaissance and grid based ground magnetic, electromagnetic and self-potential geophysical surveys. McIntyre Mines also collared 29 diamond drill holes (4 802 m) on the property, of which 6 diamond drill holes (1,040.9 m) were collared on the Discovery zone (this occurrence).

In Jul/79 McIntyre entered a joint venture with Canadian Superior Exploration Ltd, which carried out further detailed mapping and hand trenching. In 1980 Canadian Superior drilled 9 diamond drill holes (1 635 m) on the property. Five holes (720.2 m) were collared on the Nadaleen zone. No further assessment work was carried out on the Discovery, Azure and Nadaleen zones and by Jan/89 all of the Craig mineral claims except for five claims covering the Craig deposit located to the northwest had lapsed.

In Oct/97 Manson Creek Resources Ltd restaked the three zones within Nad cl 1-119 (YB98288). In 1998, the company acquired an option to earn up to a 100% interest in the West zone/Craig deposit from Falconbridge. During the field season Manson Creek carried out a property wide stream sediment sampling program on the Nad claims which included the area covered by the three showings. After 1998 no further exploration appears to have been carried out on or near the showings. The last of the Nad claims expired in Oct/2008.

Restaked within Crag cl 1-32 (YC70637) in Jan/2009 by Strategic Metals Ltd which prospected and sampled the Azure and Discovery zones. The company also re-located historic drill hole collars and digitized and mapped the locations and results of a property wide soil sampling program conducted in 1977 by McIntyre Mines. In July/2009 the company added Crag cl 33-34 (YC99521).

In 2010 Strategic Metals prospected, rock sampled and grid soil sampled the area surrounding the Trent zone (Minfile Occurrence #106C 104) located approximately 5 km to the southeast. No work was carried out on or near this occurrence. The company added Crag cl 35-183 (YD90505) in Sept/2010.

Between Sept/2010 and the end of 2011 Strategic Metals staked further Crag, Hag, Rod, Smac, Stag and Wand claims. At the end of the staking spree the Crag property totaled approximately 401 mineral claims and the entire claim package totaled approximately 2 578 mineral claims. Strategic Metals combined all their claims located within the region into the Midas Touch Project. This occurrence and the neighboring Trent zone/occurrence located to the southeast are located within Crag claims 1-84.

In 2011 Strategic Metals carried out property wide silt and soil sampling programs over their entire property. Ridge and spur sampling was carried out around the Discovery showing and sampling at the Azure and Nadaleen showings was limited to areas outside those areas previously sampled by McIntyre Mines in 1977. Only two silt samples were collected within the occurrence area. Strategic Minerals collared 12 diamond drill holes (3,168.33 m) on the Trent zone located approximately 5 km to the southeast.

In 2012 Strategic Metals geologically mapped around the Trent zone and a soil anomaly (Anomaly #1) located 1 200 m south of the zone/occurrence. Later in the season the company collared 9 diamond drill holes (2 824.27 m) of which 7 holes (2343.6 m) tested the Trent zone and 2 holes (480.67 m) tested soil Anomaly # 1. No appreciable exploration work was carried out on any of the zones associated with this occurrence.

In Sep/2012 Strategic Metals renamed Anomaly # 1, the South Crag zone. To date no further work has been carried out on the Crag property.

GEOLOGY

The occurrence is located approximately 140 km northeast of the town of Mayo, in east-central Yukon. Access is normally by helicopter although recently exploration companies have employed aircraft to ATAC Resources' Rackla airstrip located 10 km to the north-northeast and then helicoptered to the occurrence area.

The area was geologically mapped in the early 1970's by S Blusson of the Geological Survey of Canada (1974 – 1:250 000 scale) as part of Operation Stewart. Blusson's maps were used by most geologists and exploration companies until 2010 when the Yukon Geological Survey initiated a project to better understand the geology of the area following the discovery of Carlin-type gold mineralization on ATAC Resources' Rackla Gold Project located to the north. M. Colpron of the Yukon Geological Survey geological mapped topographic map sheet 106C 03 (Mount Ferrell – 1:50 000 scale) in the summer of 2011 and a preliminary geological map was released in 2012.

In 1976 McIntyre Mines discovered significant silicic alteration within a carbonate unit. Further investigation led to the discovery of 5 zones hosting silver-lead-zinc mineralization over a distance of 6.5 km; 1) Craig deposit (Minfile Occurrence #106C 073) located approximately 2.8 km to the northwest, 2) Discovery, Azure and Nadaleen zones (this occurrence) and 3) Trent zone (Minfile Occurrence 106C 104) located approximately 5 km to the southeast. Until Colpron completed his geological mapping all 5 zones appeared to be hosted by the same geological unit. The release of Colpron's map in 2012 revealed that the 3 principal areas were hosted by different geological environments and units.

The Discovery (occurrence location), Azure and Nadaleen zones are all located on the northern margin of the Selwyn basin and on the hanging wall side of the Dawson thrust, a crustal break which thrusts regionally metamorphosed basinal sediments north onto carbonate platform rocks assigned to the Mackenzie platform. Colpron's geological map shows the Nadaleen

zone lying north of the Dawson thrust. Prospecting and reconnaissance geological mapping performed by Strategic Metals in 2009 located the zone approximately 350 m to the south, placing it south of the Dawson thrust. The location error likely resulted from poor topographic control in the 1970's and errors associated with the change in North American Datum, from NAD 27 (1927) to NAD 83 in 1983.

The Discovery, Azure and Nadaleen zones are located within an east-southeast trending horizon of Neoproterozoic to Lower Cambrian, Algae Lake Formation (unit PCHn), dolostone and lesser limestone informally referred to as the Crag Carbonate Horizon. The carbonate horizon strikes east-southeasterly and dip steeply northward at the Nadaleen and Discovery zones (central and east ends) and southward at the Azure zone (west end). It is offset by a north trending fault between the Discovery and Nadaleen zones.

Follow-up prospecting and rock sampling carried out by McIntyre Mines in 1976 identified lead, zinc and silver mineralization at the three zones. In general dolomite forms the principal host to sulphide mineralization with breccia zones located within the dolomite forming the principal sites of sulphide accumulation. Sphalerite and subordinate galena are the major sulphide minerals while pyrite and tetrahedrite occurs in minor amounts. Chalcopyrite is seen occasionally and silver forms an important but minor constituent. Smithsonite and hydrozincite are common in the zone of oxidation and sparry dolomite and quartz are the chief gangue minerals. The mineralization observed at the three zones has been classified as carbonate-hosted Mississippi Valley (MVT) type.

It appears that McIntyre Mines did not file an assessment report for its 1976 field program, thus specific details of their prospecting and rock sampling results are not known. In 2009 Strategic Metals collected four rock samples from around the Azure (western most) zone (UTM 580455 E 7115210 N) in order to verify the presence of mineralization. Three of four samples collected by the company returned values ranging from 35.6 to 68.3 g/t silver and 2.68 to 9.02 % lead. One sample also yielded 11.5 % zinc and 414 ppm copper. The samples also returned strongly anomalous values for gallium 124.0 ppm (the highest of the 12 samples) and moderate anomalous values for arsenic 148.5 ppm (1 395 ppm highest) and antimony 334 ppm (> 10 000 ppm). All the samples were collected from rusty weathering, strongly silicified dolomite.

Soil sampling in 1977 produced strongly anomalous lead and zinc values over the Azure zone. Soil sampling carried out in 2011 by Strategic Metals focused on outlying areas not covered by McIntyre Mines original survey. No new anomalies were detected. The Azure zone has not received any diamond drilling by McIntyre Mines or Strategic Metals and only cursory attention by Strategic Metals.

Strategic Metals collected 8 rock samples in and around the Discovery zone (occurrence location). Five of the samples yielded values between 52.5 and 283 g/t silver, 6.98 and 53.28 % lead and 1.96 and 16.90 % zinc. The highest values were returned from samples which contained visible galena and sphalerite mineralization within silica rich dolomite. One of the five rock samples also returned 4.70 % copper. Soil sampling carried out in 1977 returned strongly anomalous values of silver, lead and zinc to the east of the Discovery zone. No samples appear to have been collected over the actual zone. A self-potential geophysical survey provided a clear response directly associated with the massive sulphide mineralization present at the zone.

In 1977 McIntyre Mines collared 6 diamond drill holes (1 040.9 m) on the Discovery zone. Three of the holes intersected significant sulphide mineralization with diamond drill hole C77-19 returning the best result. The hole returned 6.1 m grading 1.5 % lead, 22.2 % zinc and 26.7 g/t silver. The other three holes returned similar assays but smaller intersections. McIntyre Mines reported that the grade and widths obtained in the program were attractive but continuity was not established.

Strategic Metals soil sampled around the Discovery zone in 2011. The survey outlined a 1 170 long by 190 m wide northwest trending anomaly, strongly anomalous in thallium and very strongly anomalous in arsenic, mercury, antimony, lead and zinc. A second anomaly (VII) was located approximately 1.4 km to the south-southeast. The anomaly measures approximately 350 m wide and is of unknown length (due to lack of samples to the south and east). It returned weakly anomalous values for antimony, thallium and lead, strongly anomalous values for mercury and very strongly anomalous values for arsenic. Strategic Metals did not carry out any follow-up exploration on either target.

The Nadaleen zone (UTM 583605 E 7114455 N) is the eastern most showing. No rock assays from McIntyre Mines could be located. Strategic Metals did not collect any rock samples in 2009. Soil sampling carried out in 1977 returned an anomaly strongly anomalous in silver, lead and zinc however no dimensions were reported. Follow-up soil sampling completed in 2011 by Strategic Metals outlined a 1 450 m long by 670 m wide anomaly which returned moderate gold values and very strongly anomalous arsenic, mercury, antimony, thallium, lead, zinc and copper values.

Trenching completed by Canadian Superior Exploration Ltd in 1979 exposed lead, zinc silver mineralization however no values were reported (Assessment Report #090672, p. 5). Diamond drilling conducted in 1980 intersected low grade mineralization in two of the five holes. Diamond drill hole CSN-4 returned a 1.5 m intersection which assayed 3.4 g/t silver, 0.75 % lead and 5.25 % zinc and a 3 m intersection assaying 0.47 % zinc, 0.6 % lead, 0.019 % copper and 1.4 g/t silver. Diamond drill hole CSN-5 returned a 1.7 m intersection assaying 4.19 % zinc, 0.44 % lead and 12.3 g/t silver. Other than follow-up soil sampling conducted in 2011 the Nadaleen zone did not see any further work.

Work History

Date	Work Type	Comment
12/13/2011	Geochemistry	Property wide soil and silt sampling program.
12/13/2009	Geochemistry	Sampled Azure and Discovery zones.
12/13/2009	Other	Prospected and located mineralized zones.
12/13/2009	Pre-existing Data	Digitized McIntyre Mines 1977 soil sampling results and printed then out.
12/13/1998	Geochemistry	Property wide program.
12/13/1980	Drilling	Nine holes (1 635 m) total, Five holes (720.2 m) collared on Nadaleen zone.
12/13/1979	Trenching	Trenched known showings.
12/13/1979	Geology	Further mapping.
12/13/1977	Drilling	Twenty-nine holes (4 82 m) total, 6 holes (1 040.9 m) collared on Discovery zone.
12/13/1977	Geochemistry	Grid and ridge and spur sampling.
12/13/1977	Ground Geophysics	Reconnaissance and grid based surveys. Also ran electromagnetic and self-potential surveys.
12/13/1977	Geology	Around mineralized showings.
12/13/1976	Geochemistry	Property wide.
12/13/1976	Geology	Property wide.
12/13/1976	Other	Property wide.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095906	2011	Assessment Report Describing Geochemical Sampling, Geological Mapping and Diamond Drilling	Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Prospecting - Other	12	3168.33
095693	2009	Assessment Report Describing Prospecting and Rock Geochemical Sampling	Rock - Geochemistry, Prospecting - Other		
093968	1999	Geochemical, Geological and Geophysical Assessment, Report for the Val,Vera,Rusty,KLA,Nad and Craig Claims	Orthophoto - Airphotography, Silt - Geochemistry, Bedrock Mapping - Geology, Detailed Bedrock Mapping - Geology, Prospecting - Other, Research/Summarize - Pre-existing Data		
090307	1977	Geological Report on the Craig Property	Diamond - Drilling, Drill Core - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Gravity Survey - Ground Geophysics, Prospecting - Other	29	4802.43

Related References

Number	Title	Page(s)	Reference Type	Document Type
MIR1977	Mineral Industry Report 1977	p. 37.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report
YEG2011_03	Preliminary observations on the geology of the Rackla belt, Mount Ferrell map area (NTS 106C/3), central Yukon	p. 27-43.	Yukon Geological Survey	Annual Report Paper
2013-13	Geological map of the Rackla belt, east-central Yukon (NTS 106C/1-4, 106D/1)		Yukon Geological Survey	Open File (Geological - Bedrock)
YEG2010_OV	Yukon Exploration and Geology Overview 2010	p. 24.	Yukon Geological Survey	Annual Report
YEG1979_80	Yukon Geology and Exploration 1979-80	p. 225-230.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Exploration & Geological Services Division	Annual Report