Occurrence Details

Occurrence Number: 105K 077
Occurrence Name: Owl
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 8/5/2025 8:27:06 AM

General Information

Secondary Commodities: copper, indium, lead, silver, tin, zinc
Aliases: Owl Southwest,
Deposit Type(s): Vein Polymetallic Ag-Pb-Zn+/-Au
Location(s): 62°38'55.91" N - -133°21'50.59" W
NTS Mapsheet(s): 105K11
Location Comments: Location marks center of 2011 drilling. Owl Southwest zone = 581674 W 6946190 N, location marks center of 2012 drilling.
Hand Samples Available: No
Last Reviewed: Feb 25, 2015

Capsule

Work History

Staked as Owl cl 1-40 (Y39199) in Oct/69 by Atlas Explorations Ltd for the Hess Project, a joint venture with Quebec Cartier Mining Company Ltd and Phillips Brothers Canada Ltd. Following prospecting, geological mapping, grid soil sampling and silt sampling programs carried out in June/70, the company staked Owl cl 41-84 (Y53528) in July/70. Between July and Sep/70 the company carried out ground magnetic, EM and gravity surveys. The company reportedly drilled 3 diamond drill holes (~ 457 m) in the fall of 1970.

Restaked within Keg cl 54-369 (YD62954) in Jul/2010 by Strategic Metals Ltd following the release of preliminary exploration results from the Keg deposit located 7 km to the south-southeast. The company carried out grid soil sampling and collected 13 grab and composite rock samples from around the occurrence later in the summer. Strategic Metals also flew a regional helicopter borne ZTEM geophysical survey over its entire claims holdings which included this occurrence.

In Aug/2010 the company staked Keg cl 370-549 (YD27420) and cl 550-569 (YD28051). In Sep/2010 following receipt of initial drill results Strategic Metals staked Keg cl 570-1300 (YD31870) and cl 1301-1340 YD90531).

In Nov/2010 the company staked Keg cl 1301-2044 (YD00451) and cl 2045-2270 (YD117925) to cover geophysical anomalies identified from the ZTEM geophysical survey flown earlier in the summer. The company also announced that the Keg property/claims would be joined with the Rebel property (located 23 km to the south) and other newly discovered neighbouring areas of porphyry hosted silver-zinc-lead-copper mineralization to form the Silver Range Project.

On January 11, 2011 Strategic Metals announced its intention to spin-out the Silver Range Project and the gold rich Mint Project (Minfile Occurrence 115F 087) located in southwestern Yukon into a new precious metal focused company; Silver Range Resources Ltd. The company and its shareholders would receive shares and purchase warrants in the new company.

In Jun/2011 Strategic Metal commenced their 2011 exploration program. The company carried out a large exploration program on its entire Silver Range Project. Work carried out on this occurrence includes additional rock sampling and the drilling of 4 diamond drill holes (1 165.45 m).

On July 19, 2011 Strategic Metals shareholders approved the plan to spin-out the Silver Range Project and the Mint property into a new company Silver Range Resources Ltd. On August 9, 2011 the Plan of Arrangement was approved by various securities regulators and Silver Range Resources became the owner/operator of the project.

In 2012 Silver Range Resources prospected and rock sampled a south facing slope located approximately 1 km to the south. The company also prospected and collected 32 float and grab samples at the Owl Southwest zone located approximately 2.75 km to the southwest. Some of the samples were collected from an old trench dug at the base of a hill. Silver Range Resources also dug a new trench at the crest of the hill located approximately 65 m to the south-southwest. In mid-July the company collared 2 diamond drill holes (503.23 m) to test the Owl Southwest zone.

In 2013 Silver Range Resources completed an additional 3 diamond drill holes (396.4 m) on the Owl Southwest zone.

Capsule Geology

The occurrence is located approximately 48 km north of the town of Faro and approximately 356 km by road from Whitehorse. Access to the occurrence location is currently provided by helicopter. The Faro area is world renowned for its zinc-lead-silver-barite massive sulphide deposits, mining of which began in 1969 and continued with interruptions until 1997.

The occurrence is located within the Selwyn Basin a tectonic element comprising deep water clastic rocks, chert and minor carbonate that accumulated along the North American continental margin during Paleozoic time. In the occurrence area the Selwyn Basin lies immediately northeast of units belonging to Slide Mountain and Yukon-Tanana Terranes the most easterly of the allochthonous terranes. Deformation and metamorphism associated with accretion of the terranes was initiated in Jurassic and culminated in Cretaceous. More recently, strike-slip faulting along the Tintina fault resulted in about 450 km of dextral offset during Early Tertiary time. The area is located about 40 km northeast of the fault.

Based on geological mapping completed by Silver Range Resources, the Owl zone is underlain by Carboniferous to Permian Mount Christie Formation chert and siltstone which are structurally overlain by Mississippian Tay Formation limestone and arenite. Mount Christie Formation siliceous siltstone is the lowest exposed unit observed on the east-west trending ridge that hosts the Owl zone. This sub-unit is conformably overlain by a thin package of Mount Christie Formation maroon and grey cherts. The entire formation has been pervasively altered by silica and sulphide mineralization characterized by rusty weathering; light grey-green to grey, laminated to massive, silica-altered rocks which commonly host veinlets and disseminations of arsenopyrite with rare arsenopyrite-galena veins. The alteration zone comprises much of the area hosting the Owl zone.

The Tay Formation outcrops along the top of the ridge and is defined by fossiliferous limestone and discontinuous bands of very fine-grained siliceous rocks. Thick beds of medium grained arenite are regularly exposed within the limestone unit. Rare, grey fine grained, laminated to thinly bedded calcareous siltstone and black coarse-grained, quartz-rich, lithic sandstone are also mapped within the Tay Formation.

Based on Yukon Geological Survey regional-scale mapping and interpretations (Cobbett, 2012) (Pigage, 2004), Tay Formation was thrust faulted over Mount Christie Formation. All units were cut by near vertical faults that strike north-northwest and were offset by up to 150 m. Fracture and vein sets are orientated parallel to these faults and are commonly mineralized.

The Owl claims were staked to cover anomalous copper-lead-zinc soil values detected during a regional sampling program carried out in August and Sep/69. Atlas Exploration was exploring the area for massive volcanogenic sulfides similar to the mineralization recently discovered at the neighbouring Faro mine. Soil sampling identified a coincident copper, lead and zinc anomaly measuring approximately 1 524 by 365 m in the southern half of the claim block.

Prospecting and geological mapping identified gossanous talus and bedrock exposed along a cliff band on the north side of a northwest trending ridge (Owl zone). Within the zone, Atlas identified two types of veins; 1) sphalerite-galena-chalcopyrite-arsenopyrite and pyrite fracture filling veins. The company identified approximately 15 veins with a maximum width of 0.3048 m. Sample # 9713 (exact location unknown) returned 600.7 g/t silver, 0.32 % copper, 11.4 % lead and 0.12 % zinc. A second sample #9715 returned 0.343 g/t gold, 263 g/t silver and 4.0 % lead. The second vein type consists of minor disseminated arsenopyrite and chalcopyrite hosted in quartzite. Sample 9712 returned trace gold and 2.1 g/t silver.

Atlas Explorations also collected several small pieces of sulphide bearing float in talus in the vicinity of a granitic plug located approximately 5 km to the west (near the Buzz grid). The float samples contained vein type mineralization consisting of arsenopyrite with lesser amounts of galena and chalcopyrite in quartz gangue. Sample 4028 returned 0.171 g/t gold, 57.6 g/t silver and 1.7 % copper. A second sample (4030) returned trace gold, 541.7 g/t silver, 0.14 % copper, 7.5 % lead and 0.40 % zinc. The company also recovered a piece of a piece of vein quartz containing arsenopyrite and stibnite while staking the original Owl claims. Despite prospecting the area, a bedrock source could not be located.

Atlas carried out various geophysical surveys over the grid originally cut for the soil sample program. Although both the magnetics and EM geophysical surveys returned anomalies the gravity anomalies were judged to be the most significant anomalies. The consultant hired to interpret the gravity data recommended drilling 3 diamond drill holes to test 2 separate anomalies. The booklet "Mines and Minerals North of 60, Mining Activity in the Yukon and the Northwest Territories 1970" (available from the EMR Library), references 3 diamond drill holes (457 m) collared on the Owl claims (p. 25). None of the holes returned significant mineralization. The same information is also recorded in the Canadian Mines Handbook -1971-72 p. 43, and in Mineral Industry Report 1969-70, p. 94. No drill logs or assessment reports can be found that detail the reported diamond drilling program.

Strategic Metals staked the addition Keg claims following the discovery of silver-polymetallic mineralization in the fall of 2010 at the Keg Main zone (Minfile Occurrence #105K 078) located approximately 8 km to the south-southeast. Grid soil sampling completed in the fall of 2010 outlined a 2 000 by 2000 m soil anomaly which returned strongly anomalous, coincident silver, copper and lead values, moderate gold values and accessory arsenic values. Silver values ranged from 5.0 to 87.7 g/t silver. The soil anomaly terminates in areas blanketed by thick layers of organic matter which made further sampling impractical.

Prospecting located a large gossan in the vicinity of the mineralized veins. Five well mineralized rock samples (vein type not reported) averaged 500 g/t silver, 3.52 % zinc, 7.72 % lead, 0.05 % copper, 381 ppm tin and 10.4 ppm indium.

In 2011 Silver Range Resources drilled 4 diamond drill holes to test mineralization hosted within rusty weathering, strong silica altered rocks of Mount Christie and Tay formations. Holes Owl-11-1 and 11-2 tested a mineralized talus slope located near the base of the alteration zone. Neither hole intersected any significant mineralization. Holes Owl-11-3 and 11-4 tested the main alteration zone. Hole 3 intersected a broad mineralized zone which returned 11.77 g/t silver, 0.21 % lead, 0.23 % zinc, 0.02 % copper, 106 ppm tin and 0.51 ppm indium over 28.13 m at a down hole depth of between 65.44 to 93.45 m. Hole 4 intersected several narrow mineralized intervals with the best intersection returning 45.21 g/t silver, 0.78 % lead, 0.38 % zinc, 0.01 % copper. 104 ppm tin and 1.06 ppm indium over 6.09 m, at down hole depth of between 60.5 and 66.14 m.

Additional grid soil sampling completed in 2011 outlined the Owl Southwest zone located approximately 2.75 km southwest of the Owl zone (measured from centre point to centre point). The anomaly measures approximately 700 m long by 600 m wide and is marked by a strong open-ended 200 by 350 m silver in soil geochemical anomaly grading from 10 to 208 g/t silver. The anomaly occurs near the edge of an extensive upland marsh.

Prospecting completed in 2012 uncovered mineralized float along the side of a northwest trending hill. A trench dug at the base of the hill which did not reach bedrock uncovered well mineralized float samples. Eight surface rock samples assayed greater than 1 000 g/t silver, to a maximum of 6 920 g/t silver. A second trench dug to the southwest near the crest of the hill exposed vein mineralization within Mount Christie chert. A chip sample collected from the trench returned 4 770 g/t silver.

In 2012 Silver Range completed two (scout) diamond drill holes (503.23 m) to test for mineralization at the Owl Southwest zone. Both drill holes returned significant silver values, including hole OSW-12-1 which returned 5 370 g/t silver , 0.519 g/t gold, 26.1 % lead and 0.054 % zinc over 0.34 m (from 25.66 to 26.00 m depth). Drill hole OSW-12-2 returned 432 g/t silver, 0.048 g/t gold, 1.165 % lead and 2.79 % zinc over 1.50 m (from 198.5 to 200.0 m depth). The holes targeted mineralization exposed in the trench dug near the crest of the hill.

In 2013 Silver range drilled 5 additional holes to test the Owl Southwest zone. Two drill holes, OSW-13-3 and 7 were lost before reaching their target depths. Drill hole OSW-13-4 was collared ahead of the vein and returned no significant intersections. Drill hole OSW-13-05 intersected 2.61 m grading 152.4 g/t silver, 0.792 % lead and 0.135 % zinc (from 31.52 to 34.13 m depth) while drill hole OSW-13-6 intersected 11.18 m grading 42.58 g/t silver, 0.133 % lead and 0.240 % zinc (from 71.13 to 82.31 m depth).

Work History

Date	Work Type	Comment
12/31/1970	Ground Geophysics	Also ground magnetometer and EM surveys.
12/31/1970	Drilling	Reportedly three holes drilled (~457 m). No drill records or report can be located.
12/31/1970	Geochemistry	Grid based, also silt sampling.
12/31/1970	Geology	Part of larger regional program.
12/13/2013	Drilling	Three holes completed (396.4 m) on Owl Southwest zone.
12/13/2012	Geochemistry	Sampled Owl Southwest zone.
12/13/2012	Drilling	Two scout holes (503.23 m) collared on Owl Southwest zone.
12/13/2011	Geochemistry	Additional rock sampling at Owl zone.
12/13/2011	Drilling	Four holes (1,165.45 m) collared on Owl zone.
12/13/2011	Geochemistry	Additional sampling around Owl Southwest zone.
12/13/2011	Geology	Carried out over Owl zone.
12/13/2010	Airborne Geophysics	Flown over entire project area.
12/13/2010	Geochemistry	Grab and composite samples collected on Owl zone.

12/13/2010	Geochemistry	Grid based on Owl zone, contour sampling on Owl Southwest zone.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096979	2016	Assessment Report describing Equipment Backhauling at the Keg Property	Reclamation - Development, Surface		
096836	2015	Assessment Report Describing Geological Mapping and Sample Collection by PhD Candidate, Drill Pad Reclamation and Equipment Backhauling	Reclamation - Development, Surface, Rock - Geochemistry, Bedrock Mapping - Geology, Process/Interpret - Pre-existing Data		
096671	2013	Assessment Report Describing Geological Mapping, Prospecting, Geochemical Surveys and Diamond Drilling	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other, Hand - Trenching	9	1182.44
096480	2012	Assessment Report Describing Geology, Mineralization, Geochemical Surveys, Diamond Drilling, Metallurgical Testing and Mineral Resources at the Keg Property	Diamond - Drilling, Rotary - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other	84	30320.42
096033	2011	Assessment Report Describing Geological Mapping, Prospecting, Geochemical Sampling, Geophysical Surveying, Baseline Water Surveying, Wildlife Surveying, Trenching and Diamond Drilling	Diamond - Drilling, Rock - Geochemistry, Soil - Geochemistry, Water - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, Magnetics - Ground Geophysics, Prospecting - Other, Environmental Assessment/Impact - Studies, Hand - Trenching	51	16808.37
060180	1970	Report on Geology, Geochemistry and Geophysics of the Owl Group	Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Gravity Survey - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other, 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		
092062	1966	Geological Map of Faro area	Regional Bedrock Mapping - Geology		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC000050	Geological Map - Barwell Lake		Property File Collection	Geoscience Map (Geological - Bedrock)
MIR1969_70	Mineral Industry Report 1969 - 70	93-94.	Indian & Northern Affairs Canada/Department of Indian & Northern Development: Geology	Annual Report
YEG2011_OV	Yukon Exploration and Geology Overview 2011	37-38.	Yukon Geological Survey	Annual Report
YEG2012_OV	Yukon Exploration and Geology Overview 2012	42-43, 63.	Yukon Geological Survey	Annual Report
YEG2013_03	Peliminary observations on the geology of the Anvil Lake area (parts of NTS 105K/11 and 12), central Yukon	31, 44, 47.	Yukon Geological Survey	Annual Report Paper
YEG2013_OV	Yukon Exploration and Geology Overview 2013		Yukon Geological Survey	Annual Report
15	Bedrock geology compilation of the Anvil District (parts of NTS 105K/2,3,5,6,7 and 11), central Yukon		Yukon Geological Survey	Bulletin
2015-2	Geological map of the Anvil Lake area, central Yukon, parts of NTS 105K/11 and 105K/12		Yukon Geological Survey	Open File (Geological - Bedrock)
ARMC015624	Regional geochemistry map - Cu, Pb, Zn, Mo in ppm - Owl group		Property File Collection	Geochemical Map
ARMC015634	Worksheet line grid - Owl group		Property File Collection	Miscellaneous Company Documents
ARMC016354	Geochemical locations and values overlay map of 105K-NW		Property File Collection	Geochemical Map
ARMC015619	Owl mineral claims - Gravity survey - Preliminary examination of survey results		Property File Collection	Report
ARMC015636	Reports - Owl group exploration June 1 toJune 30, 1970 and proposed exploration July-August 1970		Property File Collection	Report
ARMC015627	GSC annual report - Owl group - 105K/11 - Owl claims 1 to 87		Property File Collection	Report
ARMC015635	Proposed exploration report - Owl mineral claims		Property File Collection	Report
ARMC016744	Geological map - 105K/11		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC015611	Geology map - Owl claims		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC015623	Two sketches - Electromagnetic and magnetic graphs - Owl group		Property File Collection	Geophysical Map

ARMC01 5628	Air photo overlays - Owl - A12186-329, 330, A12203-409, 410		Property File Collection	Geoscience Map (General)
ARMC01 5639	1970 Yukon gravity program on the Lorna, Jean, Owl, Roto, Sun & Gran claims for Atlas Explorations Limited		Property File Collection	Report
ARMC01 5630	Silt and soil sample logs - Owl - Geochemistry - Air photos A12186-330, A12203-409		Property File Collection	Miscellaneous Company Documents
ARMC01 5599	Map of geochemical results by atomic absorbtion spectrophotometer analysis - Magnetic anomaly - Owl group		Property File Collection	Geophysical Map
ARMC01 5622	Sketch geochemical map - Owl claims - With notations		Property File Collection	Geochemical Map
ARMC01 5629	Sketch map - Owl group silt		Property File Collection	Geochemical Map
ARMC01 5637	Sketch map of Owl group area showing recent staking, recce claim lines and recce regional lines		Property File Collection	Geoscience Map (General)
ARMC01 5626	Diamond drill record - Owl mineral claim group - DDH 70-1, 70-2, 70-3		Property File Collection	Drill Logs
ARMC01 6349	Geochemical survey values map - Cu, Pb, Zn - 105K/11 Barwell Lake		Property File Collection	Geochemical Map
ARMC01 5638	Gravity survey - Preliminary examination of survey results - Owl mineral claims		Property File Collection	Report
ARMC01 5633	Geochemical graphs - Copper, lead, zinc, molybdenum - Owl claims - Figures 1a to d		Property File Collection	Miscellaneous Company Documents
ARMC01 5620	Assay results - Hess - Owl mineral claims		Property File Collection	Assays
ARMC01 5625	Atlas Explorations Limited - Analytical work sheets - Geochemical - Owl - Report No. 70-3-OW, 70-5-H		Property File Collection	Miscellaneous Company Documents
ARMC01 5616	Atlas Yukon - Owl group - Line 20W with notations		Property File Collection	Geoscience Map (General)
ARMC01 7517	Analytical worksheet - Geochemical - Silt & soil claims - "Owl"		Property File Collection	Miscellaneous Company Documents
ARMC02 1090	Gravity data maps - Atlas Owl 70-164		Property File Collection	Geophysical Map
ARMC01 5632	Field notes - Magnetic survey - Owl claims		Property File Collection	Miscellaneous Company Documents
ARMC01 5618	Residual gravity map - Owl claim block		Property File Collection	Geophysical Map
ARMC01 5615	Compilation map - Soil sampling and magnetics - Hess project - Owl group		Property File Collection	Geophysical Map
ARMC01 5617	Gravity interpretation report - Owl claim group - Yukon Territory		Property File Collection	Report
ARMC01 5631	Field notes - Crown JEM survey notes - Owl		Property File Collection	Miscellaneous Company Documents