



Occurrence Details

Occurrence Number: 106C 116
Occurrence Name: Tetrahedrite
Occurrence Type: Hard-rock
Status: Prospect
Date printed: 6/14/2025 6:16:17 PM

General Information

Secondary Commodities: lead, silver, zinc
Aliases: Val
Deposit Type(s): Manto Polymetallic Ag-Pb-Zn, Sediment hosted Mississippi Valley-Type Pb-Zn (MVT)
Location(s): 64°15'39.74" N - -133°41'26.6" W
NTS Mapsheet(s): 106C05
Location Comments: Location based on Tetrahedrite zone on map in AR 094073
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

The claim block covering the occurrence was staked (Val cl 1-318, YA30884) in July and Aug 1978 by Prism Joint Venture (Asamera Oil Corporation, Chieftain Development Company Ltd., Prism Resources Ltd., Siebens Oil and Gas Ltd. and E & B Exploration Ltd.). Chip and soil sampling, as well as reconnaissance mapping was carried out in 1978 and diamond drilling of two holes was performed in 1979 at the Tetrahedrite occurrence. In 1979, Dome Petroleum Ltd. replaced Siebens in the joint venture. Dome dropped its interest and E & B Exploration's interest was transferred to Imperial Metals Ltd in 1983. In October, 1997, 15966 Yukon Inc a wholly owned subsidiary of Manson Creek Resources Ltd. staked Rusty cl 1-131 (YB99989) over the occurrence. Manson Creek Resources optioned the Val claims in 1998. Manson Creek drilled two holes 50 metres south of the Tetrahedrite occurrence in 1999 and conducted a regional airborne geophysical survey over the claim blocks in 2001 (no report available). ATAC Resources Ltd. re-staked the area as the T series claims (e.g., T 289, YD10019) in 2010, covering the occurrence.

Regional & Property Geology

The occurrence is located at the southern edge of the Mackenzie Platform, a predominantly shallow water carbonate and clastic sequence that formed on the western margin of the North American craton during Lower Proterozoic through Paleozoic times. The regional geology consists of Upper Proterozoic Rapitan(?) Group mudstones overlain by Upper Proterozoic Profeit Formation dolostones and Upper Proterozoic Nadaleen Formation silty limestone. Over these units are minor clastic and carbonate rocks of the Neoproterozoic to Lower Cambrian Hyland Group. Lower Paleozoic platform carbonates unconformably overlie these units. An arcuate east-west trending, south-dipping normal fault lies north of the occurrence, separating it from Paleoproterozoic Wernecke Supergroup clastic rocks and Upper Proterozoic Pinguicula Formation clastics and carbonates to the north.

The following property description is summarized from Kammerer & Eaton (2011):

The southern section of the Rusty property has several distinct units of dolostone, including a unit called the "Val dolostone" which hosts many of the known showing in the area. The Val dolostone contains white, sparry dolomite veins and is characterized by a zebra texture of light and dark layers.

Mineralization & Results

The Tetrahedrite Zone, discovered in 1978, consists of erratic silver-lead mineralization in irregular masses of white dolomite within grey dolomitic host rock, likely correlating to the Profeit Formation.

In 1978, chip sampling over 2.0 m assayed 49.54% Pb, 5.45% Zn and 1046.3 g/t Ag on the Tetrahedrite Zone (090511). Drilling in 1979 (AR 09615) consisted of two holes that indicated discontinuous, high grade mineralization with poorly understood controls.

In 1999, drilling tested IP chargeability anomalies along the structural trend that includes the Tetrahedrite Zone. Two diamond drillholes were completed 50 m south of the Tetrahedrite Zone. This drilling intersected brecciated sparry dolomite mineralized over a 17.3 m section with abundant veins, veinlets and fracture fillings of pyrite, tetrahedrite, galena and red sphalerite. Peak values of 3.4 g/t Ag, 1170 ppm Pb and 10,000 ppm Zn were reported, with the best 5 m interval returning 2.6 ppm Ag, 577 ppm Pb and 6604 ppm Zn. A second hole undercutting the first failed to intersect the mineralized zone (AR 094073).

Work History

| Date | Work Type | Comment |
|------------|---------------------|--|
| 12/13/2001 | Airborne Geophysics | also magnetics, regional survey |
| 12/13/1999 | Drilling | two holes, 50 m south of Tetrahedrite Zone |
| 12/13/1979 | Drilling | 2 diamond drill holes. |
| 12/13/1978 | Geochemistry | |
| 12/13/1978 | Geochemistry | |
| 12/13/1978 | Geology | Reconnaissance mapping. |

Assessment Reports that overlap occurrence

| Report Number | Year | Title | Worktypes | Holes Drilled | Meters Drilled |
|------------------------|------|--|---|---------------|----------------|
| 096607 | 2012 | Assessment Report Describing Metallurgical Testing, Wildlife Monitoring, Heritage Evaluation, and Water Quality and Climate Monitoring Surveys | Water - Geochemistry, Metallurgical Tests - Lab Work/Physical Studies, Environmental Assessment/Impact - Studies, Heritage/Archeological - Studies | | |
| 096253 | 2011 | Assessment Report Describing 2011 Drilling and Geochemical Sampling at the Rusty Property | Diamond - Drilling, Soil - Geochemistry | 9 | 1340 |
| 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 | | |
| 094073 | 1999 | Geophysical, Geochemical and Diamond Drilling Assessment Report for the Val, Vera and Rusty Claims | Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, IP - Ground Geophysics, Line Cutting - Other | 7 | 986.80 |
| 092725 | 1988 | A Preliminary Diamond Drilling and Trenching Report on the Val-Vera Quartz Claims | All Weather Road - Development, Surface, Diamond - Drilling, Drill Core - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Prospecting - Other, Backhoe - Trenching | 12 | 1479.20 |
| 062208 | 1985 | Summary Report on the Val-Vera Property | Research/Summarize - Pre-existing Data | | |
| 062185 | 1983 | Summary Report on the Val-Vera Property | Research/Summarize - Pre-existing Data | | |
| 090721 | 1980 | Assessment Report Diamond Drilling Val 1-318 Claims | Diamond - Drilling, Drill Core - Geochemistry | 9 | 1304 |
| 090615 | 1979 | Assessment Report Geochemistry and Drilling Val 1 - 318 Claims | Diamond - Drilling, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Backhoe - Trenching | 39 | 3158 |
| 090511 | 1978 | Assessment Report on Geology, Geochemistry and Drilling at Val 1-318 Claims | Diamond - Drilling, Silt - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, IP - Ground Geophysics, Self-Potential - Ground Geophysics, Line Cutting - Other, Property Evaluation - Other, Prospecting - Other, Hand - Trenching | 14 | 814 |