Occurrence Details

Occurrence Number: 106D 049
Occurrence Name: Pagisteel
Occurrence Type: Hard-rock
Status: Deposit
Date printed: 12/16/2025 7:48:37 AM

General Information

Primary Commodities: iron
Secondary Commodities: copper, gold
Aliases: Steel
Deposit Type(s): Iron Oxide Breccias & Veins (Wernecke Breccias)
Location(s): 64°50'3" N - -134°16'57" W
NTS Mapsheet(s): 106D16
Location Comments: .5 Kilometres
Hand Samples Available: No
Last Reviewed:

Capsule

Work History

Hematite float was noted at the mouth of Bear River in 1898. The source was first staked as GS cl 1-16 (82283) in Jul/62 and Bear cl 1-10 (Y6272) in May/66 by A. Jellinek and P. Runer, who formed a new company in 1964, Pacific Giant Steel Ores Ltd, to develop the showing. The company's main effort was devoted to marketing and transportation studies until 1967, when a marketing agreement was signed with C. Itoh Company Ltd. A winter road and airstrip were constructed and the property was explored with a magnetometer survey and 15 diamond drill holes (1 448.7 m). The south edge of the property was restaked as Kurt cl 1-6 (Y32521) in Jun/69 by Yucan Silver Mines Ltd.
Restaked as Iron cl 1-14 (YA41857) and cl 17-22 (YA418878 in Jul/80 and cl 23-30 (YA42301) by Zelon Enterprises Ltd for Texaco Canada Resources Ltd. The company carried out radiometric surveying, rock geochemical sampling, prospecting and hand trenching in 1981 and 1982.
Restaked as Steel cl 1-16 (YB03020) in Apr/89 by Chevron Mines Ltd which mapped later that year and relogged and sampled old drill core. Chevron added Steel cl 17-34 (YB03532) in Jun/90. Steel cl 17-34 expired at the end of Jun/92 and Archer Cathro and Associates (1981) Ltd purchased the remaining Steel claims from Chevron.
The Bear cl 1-8 (YB22485) were staked over the airstrip by Pamicon Developments Ltd in Aug/93. In Jan/94 the Bear claims were transferred to Westmin Resources Ltd.
Nordac Resources Ltd purchased the remaining 16 Steel claims from Archer Cathro in 1996. Steel claims 1, 3 and 5-16 expired at the end of Apr/2001. Steel claims 2 (YB03021) and 4 (YB03023) which cover the main deposit were kept in good standing. In Jun/2001 Nordac Resources changed its name to Strategic Metals Ltd.
Restaked as Steel cl 1 (YC10395), cl 3 (YC10396), cl 5-28 (YC10397) in Jun/2002 by Strategic Metals Ltd. Strategic carried out a ground total magnetic field and gravity geophysical surveys in February and Mar/2004.
The Bear claims were allowed to lapse at the end of Sep/2004.
In Jan/2005 Twenty-Seven Capital Corporation acquired a 50% interest in the Steel claims from Strategic Metals subject to various financial and work commitments. In Feb/2005 Cash Minerals Ltd purchased the remaining 50% interest in the Steel claims. Cash Minerals and Twenty-Seven Capital formed a Joint Venture to explore the Steel and other commonly owned claim blocks. The Joint Venture drilled 3 diamond drill holes (581 m) on the Steel claims in the summer of 2005 and enlarged the claim block by staking Steel cl 29-44 (YC42810) in May/2006 and Steel cl 45-54 in Aug/2006. In Feb/2007 Twenty-Seven Capital was purchased by Mega Uranium Ltd.

Capsule Geology

The region is underlain by a metamorphosed and altered sequence of Lower Proterozoic Wernecke Supergroup clastic and carbonate rocks (Fairchild Lake Group, Quartet Group and Gillespie Lake Group, from oldest to youngest) that are intruded by Early to Middle Proterozoic mafic sills and dykes, and cut by Middle Proterozoic Wernecke Breccia. To the east, Wernecke Supergroup rocks are unconformably overlain by Middle Proterozoic Pinguicula Group rocks. According to Thorkelson (2000), Wernecke Breccia development is best modeled as a set of hydrothermal and/or phreatic breccias; brecciation being caused by explosive expansion of volatile-rich fluids. Hunt (2005) attributed Wernecke Breccia formation to periodic over-pressuring of dominantly basinal fluids, which lead to repeated brecciation of host strata and mineral precipitation.
Massive hematite with disseminated chalcopyrite forms much of the matrix of a fault-bounded Wernecke Breccia body which outcrops discontinuously over a 270 by 170 m area. The breccia body cuts Lower Proterozoic Quartet Group argillite. The clasts are composed of rounded breccia fragments. The matrix, in addition to hematite and chalcopyrite, contains barite, chlorite and iron carbonate.
Drilling showed that the mineralization is not extensive or continuous, and reserves were estimated at only 1 000 000 tonnes grading 29.2% soluble iron (Archer and Schmidt, 1978). Core samples analyzed by Chevron for rare earth elements returned low values (up to 267 ppm lanthanum, 226 ppm cerium). A specimen of carbonate-rich breccia contained 25.8% barium oxide (BaO).
Radioactive float discovered in 1981 immediately south of the hematite mineralization assayed between 0.178 and 0.244% uranium oxide (U308). Most of these specimens also returned elevated gold values, ranging up to 610 ppb (Cash Mineral press release April 21 2005).
Hitzman et al. (1992) noted a strong resemblance between the Pagisteel occurrence and the giant Olympic Dam copper-uranium-gold deposit in Australia.
The 2004 geophysical survey outlined several gravity anomalies the best of which is coincident with known mineralization. Several magnetic anomalies flank the gravity anomaly. None of the 3 diamond drill holes collared in 2005 intersected significant copper or uranium mineralization. The results are enigmatic because they do not explain the large and coincident magnetic and gravity anomalies.

References

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Work History

Date	Work Type	Comment
12/31/2005	Drilling	Three holes, 581 m.
12/31/2004	Ground Geophysics	Ground Survey
12/31/1981	Geochemistry	
12/31/1981	Ground Geophysics	
12/31/1981	Trenching	
12/31/1981	Other	
12/31/1980	Geochemistry	
12/31/1980	Airborne Geophysics	Airborne scintillometer survey.
12/31/1980	Geochemistry	
12/31/1980	Trenching	
12/31/1967	Development, Surface	
12/31/1967	Drilling	Fifteen holes, 1,448.7 m.
12/31/1967	Ground Geophysics	
12/31/1967	Development, Surface	Winter road.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
095646	2007	2007 Geological, Geochemical and Geophysical Report on the Wernecke Project	Diamond - Drilling, Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry, Detailed Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Magnetics - Ground Geophysics,	28	6537.96

		Werneckes Project	Scintillometer - Ground Geophysics, Prospecting - Other, Backhoe - Trenching, Hand - Trenching, Handblast - Trenching		
095240	2006	Geophysics and Diamond Drilling at the Steel Property	Magnetic - Airborne Geophysics, Diamond - Drilling	2	914.76
094956	2006	2006 Geological, Geochemical and Geophysical Report on the Werneckes Project	Reverse Circulation - Airborne Geophysics, Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Scintillometer - Ground Geophysics, Prospecting - Other		
094703	2003	Gravity and Magnetic Survey at the Steel Property	Gravity Survey - Ground Geophysics, Magnetics - Ground Geophysics		
092852	1989	Exploration on the Steel Claims (Pagisteel Property)	Drill Core - Geochemistry, Bedrock Mapping - Geology		
091456	1983	Exploration, 1982, Gold, Silver and Uranium Deposits, Glacier Lake Region	Rock - Geochemistry, Silt - Geochemistry, Detailed Bedrock Mapping - Geology, EM - Ground Geophysics, Scintillometer - Ground Geophysics, Petrographic - Lab Work/Physical Studies, Prospecting - Other, Hand - Trenching		
090868	1980	Exploration Report-Year 1980 on the Bear River Properties	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Regional Bedrock Mapping - Geology, Gamma-ray Spectrometry - Ground Geophysics, Prospecting - Other, Hand - Trenching, Handblast - Trenching		
019056	1967	Status of Development Studies and Proposed Exploration Bear River Iron Ore Property	Research/Summarize - Pre-existing Data, Pre-feasibility - Studies		
019057	1967	A Report on Pacific Giant Steel Ores Ltd.	Magnetic - Airborne Geophysics, Rock - Geochemistry, Research/Summarize - Pre-existing Data		
060725	1967	A Report on Bear River Iron Ore Project of Pacific Giant Steel Ores Ltd.	Magnetic - Airborne Geophysics, Feasibility - Studies, Resource Estimate - Studies		
019868	1967	Memorandum Report on the Bear River Iron Ore Property	Magnetic - Airborne Geophysics, Hand - Trenching		
092556	1967	Diamond Drilling on the Pagisteel Property	Diamond - Drilling	9	975.40
092068	1964	[Summary Report on the Giant Steel Property]	Cursory Property Visit - Other		

Resource/Reserve

Year	Zone	Type	Commodity	Grade	Tonnage	Amount	Reported Amount	43-101 Compliant	Cut-off
1978	PAGISTEEL (OPEN PIT)	Historical Estimate	iron	29.2 %	1,000,000		No	No	Unknown

Calculation appears to be a rough estimate based on 15 diamond drill holes collared in 1967-68. Provided as a historical calculation only. Does not meet current National Instrument 43-101 standards.; Archer and Schmidt paper reported in CIM Bulletin August 1978, p. 56. No supporting data can be located. Calculation likely came from internal report prepared for Pacific Giant Steel Ores Ltd.

Drill core at YGS core library

Number	Property	Year Drilled	Core Size	Photos	Data
DDH-4	Pagisteel	1966	BQ	0	1