



Occurrence Details

Occurrence Number: 105L 037

Occurrence Name: Mcarthur

Occurrence Type: Hard-rock

Status: Prospect

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General Information

Secondary Commodities: gold, lead, silver, zinc

Aliases: Cave

Deposit Type(s): Sediment hosted Sedimentary Exhalative Zn-Pb-Ag (Sedex)

Location(s): 62°55'23" N - -135°21'2" W

NTS Mapsheet(s): 105L14

Location Comments: .5 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Discovered in 1970 by United Keno Exploration Ltd (United Keno Hill Mines Ltd, Falconbridge Nickel Mines Ltd, Canadian Superior Exploration Ltd), which carried out detailed geological mapping in 1972.

Originally staked as part of Kal cl 1-292 (YA43615) between April to Sep/81 by Anaconda Canada Exploration Ltd following airborne magnetometer and EM surveying. The company staked Bum cl 1-32 (YA43696) adjoining the northwest corner of the Kal group in Apr/81. Anaconda carried out geological mapping, geochemical and geophysical surveying of both claim groups in 1982 and added Bum cl 33-106 (YA76589) in July that year. Anaconda's interest was transferred to Fleck Minerals Inc in 1985, which allowed the Kal claims to lapse. The remaining Bum cl 1-32 were optioned to Dromedary Exploration Company Ltd in Jun/88.

Dromedary restaked this occurrence as DMC cl 19-36 (YB02819) in Sep/88 and carried out geological mapping, geochemical sampling and hand trenching the following year. Dromedary also staked DMC cl 1-18 (YB02749) and DMC cl 41-44 (YB02841) 5 km to the southeast (Minfile Occurrence # 105L 054) during 1988. Dromedary carried out a small hand trenching program on the DMC 27, 28 and 33 claims in 1992.

In Aug/93 the DMC claims were optioned to Energold Minerals Inc, which carried out auger sampling, magnetometer surveying and geological mapping that year.

In 1995 G. Carlson acquired 100% interest in the DMC claims from Fleck Minerals and in Jun/96 Carlson optioned the claims to Blackstone Resources Inc which carried out limited geochemical rock sampling that year. Blackstone staked DMC cl 37-155 (YB80838) in Jun/97 surrounding both of the original DMC claim groups forming one contiguous block of claims. In Jul/97 the company carried out geological mapping, prospecting and geochemical rock and soil sampling between the existing grid lines in the area.

Capsule Geology

Sphalerite and argentiferous galena occur with pyrite, pyrrhotite and massive and nodular barite in fine-grained, hornfelsed turbidites of the lower Devonian to Mississippian Earn Group, which are thrust over calcareous muscovite phyllite/siltstone and wavy banded limestone of the Cambrian to Ordovician Ketchika Group. The two showings on this property are located on the southwest flank of Kalzas Mountain. The Dromedary Mountain occurrence (Minfile Occurrence #105L 051) occurs at the same stratigraphic level, 27 km to the east.

The Cave showing is exposed in a creek canyon and consists of pods, bands and disseminations of pyrrhotite, pyrite, galena and sphalerite with small quartz-galena-sphalerite veins cross-cutting stratigraphy. Multiple zones of stratabound mineralization exist within a series of thinly interbedded, calcareous sandstone and fossiliferous, silty shales. Irregular quartz veinlets up to 8 cm thick contain fine pyrite, pyrrhotite, galena and sphalerite stringers. A float boulder sampled in 1984 assayed 18.2% Zn, 0.64% Pb and 12.8 g/t Ag. Chip sampling in 1988 returned values up to 0.64% Pb, 18.17% Zn and 12.8 g/t Ag over 35 cm.

Soil sampling in 1988 outlined coincident lead-zinc-silver anomalies which although discontinuous, extend over a strike length of 7.5 km and cover both the Cave and Kal (Minfile Occurrence #105L 054) showings. Within the 7.5 km anomalous area, further sampling with a hand auger in 1992 outlined a stronger 1 km long anomaly with values up to 5 728 ppm Pb. Samples from hand trench 92-1 located 550 m east-southeast of the Cave showing contained up to 7 395 ppm Pb and 4 504 ppm Zn over a 0.6 m interval of rusty weathering shale and siltstone.

In 1996 Blackstone Resources collected a 2 m composite grab sample from the Cave showing. The sample returned 1.33% Pb, 1.47% Zn and 15.2 g/t Ag. Work in 1997 identified several zones of mineralized float and a new showing along the anomalous trend that are characterized by iron sulfide mineralization, carbonate porphyroblasts, manganese oxide staining and hematitic weathering associated with fossiliferous strata. The Gully Showing, located about halfway between the Kal and Cave showings, returned up to 5.35% Pb and 5.83% Zn from grab samples and 1.2% Pb and 0.6% Zn over 1.0 m from chip sampling.

References

ANACONDA CANADA EXPLORATION LTD, Nov/82. Assessment Report #091393 by R.D. Hall.

BLACKSTONE RESOURCES LTD, Mar/97. Assessment Report #093595 by D.A. Caulfield and J. Weber.

BLACKSTONE RESOURCES LTD, Feb/97. Assessment Report #093618 by D.A. Caulfield and J. Weber.

BLACKSTONE RESOURCES LTD, Feb/98. Assessment Report #093755 by M.I. Jones.

BLACKSTONE RESOURCES LTD, 21 Jun/96, 21 Sep/96, 10 Jun/97, 14 Aug/97. News Release.

BUTTERWORTH, B.P. and JONES, M., Geology and mineralization on the Dromedary property, central Yukon. In: Yukon Exploration and Geology 1997, Exploration and Geological Services Division, Yukon, Indian and Northern Affairs Canada, p. 121-124.

DROMEDARY EXPLORATION COMPANY LTD, Mar/90. Assessment Report #092850 by H.J. Keyser.

DROMEDARY EXPLORATION COMPANY LTD, Nov/92. Assessment Report #093048 by H.J. Keyser.

ENERGOLD MINERALS INC., Dec/93. Assessment Report #093148 by H. Sellmer and R. Zuran.

GEORGE CROSS NEWSLETTER, 7 Nov/96, 1 Aug/97,

YUKON EXPLORATION 1990, p. 9, 11.

YUKON EXPLORATION AND GEOLOGY 1996, p. 21-22, 32; 1997, p. 22, 35.

Work History

Date	Work Type	Comment
12/31/1997	Geochemistry	Also soil sampling. Carried out in areas of mineralization.
12/31/1997	Geology	
12/31/1997	Other	
12/31/1996	Geochemistry	
12/31/1993	Geology	
12/31/1993	Geochemistry	Used auger to collect samples.
12/31/1993	Ground Geophysics	
12/31/1992	Trenching	
12/31/1989	Geology	
12/31/1989	Geochemistry	
12/31/1989	Trenching	
12/31/1982	Geology	
12/31/1982	Geochemistry	
12/31/1982	Ground Geophysics	Also magnetic survey.
12/31/1981	Airborne Geophysics	Also magnetic survey.
12/31/1972	Geology	
12/13/1988	Trenching	
12/13/1981	Geochemistry	

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
096191	2011	Assessment Report on the 2011 Geophysical Survey of the REK 1-320 Claims	Gravity Survey - Ground Geophysics, Magnetics - Ground Geophysics		
093755	1997	1997 Exploration Program on the Dromedary Property, Ace, Nora, Queen, King and Dmc Claims	Rock - Geochemistry, Soil - Geochemistry, Regional Bedrock Mapping - Geology, Gravity Survey - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other, Prospecting - Other, Hand - Trenching		
093764	1997	1997 Exploration Program on the Dromedary Property, Ace, Nora, Queen, King and Dmc Claims	Rock - Geochemistry, Soil - Geochemistry, Regional Bedrock Mapping - Geology, Gravity Survey - Ground Geophysics, Magnetics - Ground Geophysics, Line Cutting - Other, Prospecting - Other, Hand - Trenching		
093595	1996	1996 Exploration Program on the Dromedary Property	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Regional Bedrock Mapping - Geology, Prospecting - Other	5	939
093618	1996	1996 Exploration Program on the Dromedary Property	Diamond - Drilling, Drill Core - Geochemistry, Rock - Geochemistry, Regional Bedrock Mapping - Geology, Prospecting - Other	4	939
093157	1993	1993 Physical Assessment on the Dromedary Mountain Option	Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics		
093148	1993	1993 Physical Assessment on the Dromedary Mountain Option	Soil - Geochemistry, Regional Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Data Compilation - Pre-existing Data		
093048	1992	1992 Trenching Program on the Dmc Claims	Rock - Geochemistry, Soil - Geochemistry, Hand - Trenching		
092850	1990	Report on the 1989 Geological and Geochemical Assessment Work on the Dmc 19-36 and 37-44 Claims	Rock - Geochemistry, Silt - Geochemistry, Soil - Geochemistry		
091393	1982	Report for Assessment Geological, Geochemical and Geophysical Evaluation of the Kal 1-292 Claims	Rock - Geochemistry, Soil - Geochemistry, EM - Ground Geophysics, Magnetics - Ground Geophysics		
091065	1982	Report for Assessment Geological and Geochemical Evaluation of the Kal 81-192 Claims Selwyn Project, Kalzas Mountain Area, Mayo Mining District, Yukon Territory	Rock - Geochemistry, Silt - Geochemistry, Regional Bedrock Mapping - Geology		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC006269	Mylar overlay map of McArthur - Grey Hunter Creek		Property File Collection	Geoscience Map (General)
ARMC006270	Mylar overlay map of McArthur - Grey Hunter Creek		Property File Collection	Geoscience Map (General)