



Occurrence Details

Occurrence Number: 105K 103

Occurrence Name: Tenas

Occurrence Type: Hard-rock

Status: Prospect

Date printed: 12/16/2025 7:47:56 AM

General Information

Secondary Commodities: arsenic, bismuth, gold, lead, zinc

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

Location(s): 62°2'54" N - 132°13'54" W

NTS Mapsheet(s): 105K01

Location Comments: 1 Kilometres

Hand Samples Available: No

Last Reviewed:

Capsule

Work History

Staked as Tenas cl 1-41 (Y80346) in Aug/74 by Welcome North Mines Ltd which staked the adjoining Mat and Bar claims at the same time. In 1975 Welcome North optioned the claim block to Boliden-Preussag Exploration Ltd which explored with mapping, geochemical sampling, a Turam survey and 2 diamond drill holes (306 m) on the Tenas claims. Reoptioned in 1976 by Tenas Joint Venture (Du Pont of Canada Exploration Ltd and Western Mines Ltd), which staked a large block of T claims to the south, late in the year. In 1977 the joint venture explored with mapping, geochemical sampling, a gravity survey and one diamond drill hole (120 m) on the Tenas claims. In 1978 the joint venture carried out, a helicopter-borne mag-EM survey over most of their claim block. In 1981, the Tenas group was optioned by Cyprus Anvil Mining Corporation, which drilled 2 holes (920 m) on the Tenas claims. The company performed minor property work in 1982. The Du Pont interest was transferred to CSA Minerals Inc in 1984 and to Goldsearch Inc in 1985. Restaked as Breakaway cl 1-10 (YB57481) by Expatriate Resources Ltd in Mar/95. Between Jun and Oct/95 Expatriate added Breakaway cl 11-40 (YB57645) to their claim holdings. In the summer of 1995 Expatriate carried out a small exploration program consisting of hand trenching, soil sampling, prospecting and geological mapping. In 1996 Expatriate carried out geological mapping, prospecting, grid soil sampling, HLEM and magnetometer surveying and machine trenching. The company drilled a single hole (92 m) in 1997.

Capsule Geology

The occurrence is located within the northwestern part of the Finlayson Lake segment of the Yukon-Tanana Terrane. Mapping by Expatriate Resources Ltd shows that the occurrence is probably underlain by mid to Upper Paleozoic biotite muscovite phyllites and rhyolites. A mid-Cretaceous age, quartz monzonite stock occurs in the northern part of the claim block and as dykes within the biotite muscovite phyllite. The 1977 drilling tested an EM conductor with coincident geochemical response, and intersected minor sphalerite and galena in pyritic quartz-sericite phyllite. Expatriate focused most of its efforts on relocating roads, grids, drill hole locations and two Pb-Zn soil geochemical anomalies previously discovered in 1976 by the Tenas Joint Venture on the original Tenas claims. The soil samples returned high Pb and Zn values but also yielded anomalous results for elements which were not previously reported including Cu, Ag, Mo, As and Bi. Hand pitting uphill of the geochemical anomaly yielded anomalous gold values from a 0.4 m thick hematitic soil horizon, which machine trenching showed was related to a zone of limonite hosted by phyllite. Drill testing beneath the limonite zone intersected a 22 cm wide horizon containing semi-massive pyrrhotite and minor sphalerite.

References

BOLIDEN-PRESUSSAG EXPLORATION LTD, 1975. Assessment Report *#090004 by J.B.P. Sawyer.

BOLIDEN-PRESUSSAG EXPLORATION LTD, Aug/76. Assessment Report *#091200 by H. Linder.

CYPRUS ANVIL MINING CORPORATION, Nov/81. Assessment Report #090898 by J.W. Mustard.

DU PONT OF CANADA EXPLORATION LTD, Oct/77. Assessment Report *#091201 by R. MacLean.

DU PONT OF CANADA EXPLORATION LTD, Oct/77. Assessment Report #092905 by R. MacLean.

EXPATRIATE RESOURCES LTD, Jun/96. Assessment Report #093486 by W.A. Wengzynowski.

EXPATRIATE RESOURCES LTD, Mar/97. Assessment Report #093629 by G.J. Duso.

EXPATRIATE RESOURCES LTD, Mar/98. Assessment Report #093823 by W.A. Wengzynowski.

MINERAL INDUSTRY REPORT 1975, p. 113-114; 1977, p. 62-63; 1978, p. 40.

TENAS JOINT VENTURE, 1977. Assessment Report *#061652 by F.M. Smith.

TENAS JOINT VENTURE, 1977. Assessment Report *#061653 by C.A. Ager.

TENAS JOINT VENTURE, 1977. Assessment Report *#090262 by F.M. Smith et al.

YUKON EXPLORATION AND GEOLOGY 1981, p. 154; 1982, p. 11.

Work History

Date	Work Type	Comment
12/31/1997	Drilling	One hole, 92 m.
12/31/1996	Geology	
12/31/1996	Geochemistry	
12/31/1996	Ground Geophysics	Also HLEM survey.
12/31/1996	Other	
12/31/1996	Trenching	
12/31/1995	Geology	
12/31/1995	Geochemistry	
12/31/1995	Trenching	
12/31/1995	Other	
12/31/1982	Other	
12/31/1981	Drilling	Two holes, 920 m.
12/31/1978	Airborne Geophysics	Also magnetic survey.
12/31/1977	Ground Geophysics	
12/31/1977	Drilling	One hole, 120 m.
12/31/1977	Geology	
12/31/1977	Geochemistry	
12/31/1975	Drilling	Two holes, 305.7 m.
12/31/1975	Geology	
12/31/1975	Geochemistry	
12/31/1975	Ground Geophysics	Turam survey.

Assessment Reports that overlap occurrence

Report Number	Year	Title	Worktypes	Holes Drilled	Meters Drilled
093823	1997	Assessment Report Describing Diamond Drilling on the Breakaway Property	Diamond - Drilling, Drill Core - Geochemistry	1	92
093629	1996	Assessment Report Describing Geological Mapping, Prospecting, Geochemistry, Geophysics and Excavator Trenching on the Breakaway Property	Rock - Geochemistry, Soil - Geochemistry, Bedrock Mapping - Geology, Magnetics - Ground Geophysics, Prospecting - Other, Backhoe - Trenching		
093486	1995	Assessment Report Describing Prospecting, Hand Trenching and Geochemical Surveys on the Breakaway Property	Soil - Geochemistry, Bedrock Mapping - Geology, Prospecting - Other, Hand - Trenching		
090438	1978	Helicopter Magnetic and Electromagnetic Survey	Electromagnetic - Airborne Geophysics, Magnetic - Airborne Geophysics		
061652	1977	Report on Geochemical Soil Survey of the Project Area	Soil - Geochemistry		
061653	1977	Tenas Project Gravity Survey	Gravity Survey - Ground Geophysics		
090262	1977	[Reports on Gravity, Geochemistry and Geology on the Tenas Project]	Soil - Geochemistry, Bedrock Mapping - Geology, Gravity Survey - Ground Geophysics		
061317	1975	A Report on Turam Electromagnetic Surveys	EM - Ground Geophysics		
091200	1975	[Diamond Drilling on Tenas Claim Group by Boliden-Preussag Exploration]	Diamond - Drilling, Drill Core - Geochemistry	2	305.70
090004	1975	[Reports on the 1975 Work Program on the Mal, Bar and Tenas Claim Groups]	Soil - Geochemistry, Bedrock Mapping - Geology, EM - Ground Geophysics, Line Cutting - Other		
092062	1966	Geological Map of Faro area	Regional Bedrock Mapping - Geology		

Related References

Number	Title	Page(s)	Reference Type	Document Type
ARMC010393	Airborne electromagnetic survey profiles and filtered magnetic map - Ross River area - Tenas project - sheet 3 of 5		Property File Collection	Geophysical Map
ARMC010394	Airborne electromagnetic survey profiles and filtered magnetic map - Ross River area - Tenas project - sheet 4 of 5		Property File Collection	Geophysical Map
ARMC010395	Airborne electromagnetic survey profiles and filtered magnetic map - Ross River area - Tenas project - sheet 5 of 5 - Map 1B		Property File Collection	Geophysical Map

ARMC010396	Airborne electromagnetic survey profiles and filtered magnetic map - Ross River area - Tenas project - sheet 1 of 5 - Map 1A		Property File Collection	Geophysical Map
ARMC010397	Airborne electromagnetic survey profiles and filtered magnetic map - Ross River area - Tenas project - sheet 2 of 5		Property File Collection	Geophysical Map
ARMC010398	Geology map - Anvil area compilation - Tenas Creek		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC010399	D0-D1 structural map - 105K/01		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC010400	D2-post D2 structural map - 105K/01		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC010401	Geological map - Tenas Project - sheet 4 of 4		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC010402	Geochemical values map - Cu, Pb, Zn, Ba - MacMillan project - 105K-1 detail area		Property File Collection	Geochemical Map
ARMC003593	Re: Summary report on Anvil and Tenas properties		Property File Collection	Miscellaneous Company Documents
ARMC010365	Map - Tenas property - sheet 1		Property File Collection	Geoscience Map (General)
ARMC010366	Map - Tenas property - sheet 2		Property File Collection	Geoscience Map (General)
ARMC010367	Map - Tenas property - sheet 3		Property File Collection	Geoscience Map (General)
ARMC010368	Map - Tenas property - sheet 5		Property File Collection	Geoscience Map (General)
ARMC010373	Base line and grid section lines map - Mal, Bar, Wop, Tenas, Bell, T mineral claims - Tenas option		Property File Collection	Geoscience Map (General)
ARMC010374	Tenas Creek Joint Venture Claim Map - 'T' claims 401-826 - Tenas Creek area - Map No. 1		Property File Collection	Geochemical Map
ARMC010375	Zinc geochemical contours map - Mal, Bar, Wop, Tenas, Bell, and T mineral claims - Tenas option - Map no. 5		Property File Collection	Geochemical Map
ARMC010376	Lead geochemical contours map - Mal, Bar, Wop, Tenas, Bell, and T mineral claims - Tenas option - Map no. 4		Property File Collection	Geochemical Map
ARMC010377	Copper geochemical contours map - Mal, Bar, Wop, Tenas, Bell and T mineral claims - Tenas option - Map no. 3		Property File Collection	Geochemical Map
ARMC010378	Geological & claims status map - Tenas Creek area - Figure 1		Property File Collection	Geoscience Map (Geological - Bedrock)
ARMC013605	Report of 1977 activities and results on the Mal, Bar, Tenas and Bell claims for Welcome North Mines Limited - With Figures 1 & 2 and Drawings 77-9, 77-8, 77-7, 77-15, 77-14, 77-13, 3-2, 3-1, 5-2, 5-1, 4-2, 4-1. - Tenas project		Property File Collection	Report
ARMC013537	Geological and drilling report - Mal, Bar, Wop, Tenas, Bell and T claim groups - 'Tenas option' - Field work completed Aug 12 to Oct 19, 1982		Property File Collection	Report
ARMC013541	Report on 1977 work programme for Teck Mining Group Limited and R.E. Chaplin - Wop claims		Property File Collection	Report
ARMC013542	Report on Anvil project exploration programme 1974 - Project No. 303		Property File Collection	Report
ARMC013601	Tenas correlation report		Property File Collection	Report
ARMC013532	Tenas Creek with field markings on existing and 1981 extended grid lines - NTS 105K-1		Property File Collection	Geoscience Map (General)
ARMC013538	Report on the geology of the T, Tenas, Wop, Bar and Mal claims - Tenas joint venture		Property File Collection	Report
ARMC013534	Report on the reconnaissance spectral IP survey - Tenas project		Property File Collection	Report
ARMC013535	Report on the reconnaissance spectral IP survey - Tenas project, Whitehorse Mining District, Y.T. - Vol II (a) - Data plots		Property File Collection	Report
ARMC013536	Report on the reconnaissance spectral IP survey - Tenas project, Whitehorse Mining District, Y.T. - Vol II (b) - Data plots		Property File Collection	Report
ARMC013530	Report on the Tenas Creek project, Ross River, Y.T.		Property File Collection	Report
ARMC013598	Report on the Tenas project for Bolider-Preussag Exploration		Property File Collection	Report
ARMC013533	Sketch claim map for Tenas Creek showing T claims		Property File Collection	Geoscience Map (General)
ARMC013531	Map of Tenas Creek showing location sketch for 1981 cut lines on Tenas project - NTS 105K-1		Property File Collection	Geoscience Map (General)

ARMC013599	Lithologic logs - Tenas		Property File Collection	Drill Logs
ARMC013539	Geological, geophysical, geochemical surveys and diamond drill results - Wop mineral claims - Tenas Creek area - Field work completed in 1974 between July and September		Property File Collection	Report
ARMC013540	Gravity survey - Wop claims grid - Addendum: Second vertical derivative		Property File Collection	Report
ARMC019494	Field notes - Tenas		Property File Collection	Miscellaneous Company Documents
ARMC013600	Excerpts from a report - Gravity interpretations of the Pelly, Bar, Tenas anomalies - Tenas Creek area - Excerpt for Welcome North Feb 1 1979 - Figures 4, 5, 6, 7, 3-3, 4-3, 5-3 and Drawing T. 77-12		Property File Collection	Report
ARMC013603	Diamond drill core logs and drilling agreement - Tenas option		Property File Collection	Drill Logs

Drill core at YGS core library					
Number	Property	Year Drilled	Core Size	Photos	Data
T-79-3	Tenas	1979	BQWL	28	1
T-79-8	Tenas	1979	BQWL	6	1