

PRODUCT PYRITE

PROVINCE OR TERRITORY

British Columbia

N.T.S. AREA 103 H/13

REF. PYR 1

NAME OF PROPERTY

ECSTALL

OBJECT LOCATED - North Lens.

UNCERTAINTY IN METRES 300. Lat. 53°52'25" Long. 129°30'40"

Mining Division Skeena District Coast, Range 4

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR

DESCRIPTION OF DEPOSIT

The regional setting is a northerly trending remnant of Palaeozoic metamorphic rocks intruded by granitic rocks of the Coast Range. The remnant is 3 miles wide at the Ecstall River and has been traced for 6 miles in a north-south direction. The mineral deposits are massive sulphide replacements of quartz-biotite-chlorite schist, quartz-hornblende-chlorite schist, quartzite grading to quartz-mica schist, minor black argillite and granitoid gneiss. In the vicinity of the deposits the rocks strike northward and dip eastward at 80 degrees or more. The two main deposits are known as the North and South lenses, which have an en echelon relationship. These bodies conform to the attitude of the enclosing sediments and are relatively complete replacements of certain favourable beds along a shear zone.

Pyrite is by far the most abundant mineral. It forms cubic crystals which are closely packed but separated from each other by thin gangue layers. This accounts for the rather friable nature of the ore that causes outcrops of it to rapidly dis-

see Card 2 ....

Associated minerals or products - Zinc, copper, lead, gold, silver.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on the Ecstall River some 43 miles southeast of Prince Rupert. Red Gulch Creek, a southerly flowing tributary, exposed the mineralization for a distance of about 2,000 feet between elevations of about 200 to 700 feet.

The showings were apparently discovered by Indian residents of the area, and staked in the 1890's by Charles Todd, Indian Agent for northern B.C. for himself and J.N. MacKay, H.B. Co. Chief Factor at Fort Simpson. Four claims, the Bluestone, Bell Helen, Red Gulch, and Red Bluff were staked on the showings. John Bryden and associates of Victoria purchased the property in 1900 and in March 1901 incorporated The British Columbia Pyrites Company, Limited. The above 4 claims and the Queen claim (Lots 111-115 respectively) were Crown-granted to the company in 1902. Underground work was begun in 1901. A crosscut adit was driven 67 feet to the mineralized zone and drifts totalling about 40 feet were run to the north and south. Diamond drilling totalled 68 feet. A tramline was built 2,360 feet to the river in 1902. A bulk sample of about 100 tons from the mineralized zone was shipped to the Victoria Chemical Works, probably in 1903.

No further activity was reported until late in 1916 when the property was optioned to New York agents for The Granby Consolidated Mining, Smelting and Power Company, Limited. Diamond drilling by the company during the period 1917-1920 totalled about 11,000 feet. The option was given up in the summer of 1920. Granby optioned the property again in 1923. Further diamond drilling and metallurgical studies were reported. The option was given up later in the year and the property reverted to British Columbia Pyrites. Based on diamond drilling to that date the two main mineralized lenses were indicated to contain about 5,000,000 tons averaging 49.35% sulphur, 42.75% iron, 0.2% lead, 2.30% zinc, 0.80% copper, 0.02 ounce gold and 0.71 ounce silver per ton. Included in the above is a section in the west part of the north lens containing an indicated 650,000 tons averaging 1.91% copper, 2.30% zinc, 0.03 ounce gold and 1.0 ounce silver per ton (W.B. Maxwell 16/04/42 - for Metals Controller - British Columbia Pyrites C L).

The Sulphide group of 16 claims (Lots 2661-2676) were staked surrounding the original group and extending south

see Card 2 ....

Mineral Policy Sector, Department of Energy, Mines and Resources, Ottawa  
506616

Reports of Minister of Mines, British Columbia:  
 1900, pp. 788-789; 1901, p. 991; 1902, pp. 47,  
 308; 1916, p. 50; 1917, p. 45; 1918, p. 47;  
 1919, p. 42; 1920, p. 40; 1923, p. 46; 1938,  
 p. B-28; 1939, p. 100; 1940, p. 86; 1952, pp. 81-  
 84<sup>+</sup>; 1957, p. 9; 1966, p. 54.

<sup>++</sup>Roddick, J.A.; Douglas Channel-Hecate Strait Map-Area,  
 Paper 70-41, pp. 50-51, Geol. Surv. of Canada.

Mineral Policy Sector; Corporation Files: "The British  
 Columbia Pyrites Company, Limited"; "Northern Pyrites,  
 Limited"; "Ecstall Mining Company Ltd."; "Texasgulf  
 Inc.".

Janes, T.H.; Sulphur & Pyrites in Canada; Memorandum Series  
 No. 118, p. 78, Dept. of Mines and Technical Surveys,  
 Mines Branch, Ottawa, 1952.

Investigation No. 2297; Flotation Tests on a Copper-Zinc-  
 Pyrite Ore from Northern Pyrites Ltd., Ecstall River,  
 British Columbia, Report of the Mineral Dressing and  
 Metallurgical Laboratories, Mines Branch, Ottawa, 1948.

Wilson, A.; Pyrites in Canada; Publication No. 167, p. 86,  
 Mines Branch, Ottawa, 1912.

McDonald, H.J.C.; Ecstall - A Mine of the Future; Engineer-  
 ing & Mining Journal, June 11, 1927.

Maxwell, W.B.; Ecstall Property, British Columbia; Rept.  
 for Metals Controller, Ottawa, 1942 - British Columbia  
 Pyrites C L.

Bacon, W.R.; Lower Jarvis Inlet; Bulletin No. 39, p. 41,  
 British Columbia Dept. of Mines, 1957.

Flewin, John; Hidden Creek; Canadian Mining Journal,  
 Feb. 29, 1924, p. 209.

Geology, Exploration, and Mining; British Columbia Dept.  
 of Mines: 1975, p. E-175.

MAP REFERENCES

Map 23-1970, Douglas Channel and Hecate Strait, (Geol.),  
 Sc. 1:250,000 - accomp. Paper 70-41, Geol. Surv. of  
 Canada.  
 #Ecstall River pyrite deposit (Geol. & workings), Sc. 1":  
 300 ft. (approx.), Fig. 2, Report of Minister of Mines,  
 British Columbia, 1952, p. 83.  
 \*Map 103 H/13, Ecstall River, (Topo.), Sc. 1:50,000.

REMARKS

Comp./Rev. By	DMacR	DMacR					
Date	1-79	08-86					

PRODUCT

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TERRITORY

British Columbia

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Card 2 -  
REF. PYR 1

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ECSTALL

## DESCRIPTION OF DEPOSIT (continued)

tegrate. Interstitial among the pyrite crystals are minor amounts of sphalerite, marcasite, galena, and chalcopyrite.

The North and South lenses are large bodies. At the surface the North lens is exposed for a length of 950 feet and has a maximum width of 120 feet. At the adit level its indicated length is 700 feet; its greatest width is in No. 6 crosscut, where 96 feet of massive sulphide is exposed. The underground workings establish 500 feet of backs at the widest part of the North lens. Drilling appears to indicate that the North lens diminishes sharply below the adit level.

At the surface the South lens is exposed for a length of 1,300 feet. For 900 feet of this length the lens is 15 feet wide or more. At the adit level its average width is 24 feet for a length of 1,000 feet. The underground workings establish 240 feet of backs. The deepest drill hole testing the South lens intersected that body at a depth of 900 feet below sea-level.

A smaller untested deposit, known as the Third Outcrop, occurs on the east bank of Red Gulch creek, 2,500 feet north of the north end of the North lens, at an elevation of 1,100 feet. Here massive pyrite is exposed for a length of 100 feet and a maximum width of 8 feet.

## HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

across the Ecstall River; the dates of staking and Crown-granting are not available.

Texas Gulf Sulphur Company purchased the property from British Columbia Pyrites in 1937. A geophysical survey was carried out and some diamond drilling was done to check prior work. An operating company Northern Pyrites, Limited was incorporated in December 1937. A new crosscut adit was begun on the west side of Red Gulch creek at about the 100 foot elevation in 1938. The adit was extended to a length of 2,780 feet in 1940. Seven crosscuts totalling 864 feet were driven across the mineralized zone from the adit and a 60 degree raise was driven about 600 feet to the surface.

The property was transferred to another Texas Gulf subsidiary, Sulgas Properties Ltd., which was incorporated in 1951; Northern Pyrites, Limited was wound up voluntarily in 1952. During 1952 Sulgas carried out 1,378 feet of surface diamond drilling, 8,880 feet of underground diamond drilling, and a low frequency electromagnetic survey. Reserves were reported to be at least 8,000,000 tons, no grade stated (W.R. Bacon, BCDM Bull 39, p. 41, 1957).

The company name (Sulgas) was changed in 1957 to Ecstall Mining Company Ltd. A geophysical survey was carried out over the southernmost claims in 1957.

The assets of Ecstall Mining Company Ltd. were transferred to the parent company, Texas Gulf Sulphur Company, in 1960 and Ecstall was placed in voluntary liquidation in August of that year. In 1966 a ten ton bulk sample was shipped for metallurgical testing.

The company name (Texas Gulf) was changed in 1972 to Texas Gulf, Inc., and in 1973 to Texasgulf Inc. A horizontal loop electromagnetic survey was carried out over 8.7 line kilometres covering Jungle 101 claim (units 1-3, 14-19) in 1975. Texas Gulf back in 1965 incorporated a new subsidiary Ecstall Mining Limited to hold the property; the latter name was changed in 1975 to Texasgulf Canada Ltd. This company was acquired in 1981 by Canada Development Corporation, at that time 87.7% owned by the Government of Canada. The name (Texasgulf Canada) was changed in 1981 to Kidd Creek Mines Ltd.