PRODUCT	COPPER	PROVINCE OR TERRITORY	British Columbia	N.T.S. AREA	104 J/5	REF. CU 1

NAME OF PROPERTY PET (MINERAL HILL)

OBJECT LOCATED - Trench A.

UNCERTAINTY IN METRES 300. Lat. 58°24.0' Long. 131°47.2'

Mining Division	Atlin	District	Cassiar
County		Township or Parish	
Lot		Concession or Range	
Sec	Tp.	R.	

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

Chalcopyrite-hematite mineralization is found in a 300 by 800-foot area and in a number of other occurrences adjacent to the Old Telegraph trail. The area is underlain by volcanic rocks of Upper Triassic age and part of a large Triassic or younger stock ranging in composition from granodiorite to syenite. These Mesozoic rocks are overlain by extensive Tertiary volcanic flows equivalent to the Heart Peak and Level Mountain volcanic rocks. Northeasterly and north to northwesterly trending fault systems are the dominant structural feature. The main mineralized area is contained within granitic rocks which may be classified as a leucocratic, medium-grained, hypidiomorphic-granular, biotite quartz monzonite or quartz-bearing monzonite.

The intrusive rocks are extensively fractured. Locally, strongly foliated rocks have developed along north-south trends and commonly contain narrow brecciated zones in which mineralization normally occurs. The most widespread alteration is a pervasive, pink colouration that may be caused in part by K-

see Card 2 ....

Associated minerals or products of value

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at approximately 3,700 foot elevation between Ketchum and Camp Island Lakes, 65 miles west of Dease Lake.

The Pet 1-91 and Pet 69 Fraction were held by Texas Gulf Sulphur Company. Exploration work carried out by the wholly owned subsidiary Ecstall Mining Limited during 1971-1973 included reconnaissance geological mapping, geochemical and magnetometer surveys over 25 line-miles, trenching on Pet 17, 19, 29, 37, and 39, and diamond drilling in 2 holes totalling 1,260 feet on Pet 19 and 37.

The company name (Texas Gulf) was changed to Texas Gulf, Inc. in 1972 and to Texasgulf Inc. in April 1973.

Mineral Development Sector, Department of Energy, Mines and Resources, Ottawa.
511980 *

HISTORY OF PRODUCTION

MAP REFERENCES

Map 21-1962, Dease Lake, (Geol.), Sc. 1":4 miles.

Map 104 J/5 W, Ketchum Lake, (Topo.), Sc. 1:50,000.

REMARKS

Location from Mineral Deposit Inventory, Map No. 104 J - 25, British Columbia Dept. of Mines.

Comp./Rev. By	DMacR						
Date	4-76						

REFERENCES

Geology, Exploration, and Mining; British Columbia Dept. of Mines: 1971, p. 49; 1972, p. 549 + ; 1973, p. 512.

BCI - 104 J - 25, 28.

PRODUCT	COPPER	PROVINCE OR TERRITORY	British Columbia	N.T.S. AREA	104 J/5	Card 2 REF.	CU 1

NAME OF PROPERTY PET (MINERAL HILL)

DESCRIPTION OF DEPOSIT (continued)

feldspar but is probably largely due to the presence of finely dispersed hematite. However, the most profound alteration is replacement and associated fracture filling by ankerite which may form 10 per cent or more of the rocks. Sheared rocks usually appear bleached due to an increase in sericite and clay minerals and an attendant destruction of biotite.

Mineralization occurs most notably in discontinuous, braided, breccia zones a few inches to a few feet in width. The strongest mineralization consists of coarse-grained specular hematite containing random sulphide grains or, less commonly, patches of sulphide grains with little or no hematite. The most widespread mineralization is scattered grains or stringers of specular hematite and/or sulphides on fracture and shear planes or occasionally with calcite or quartz veinlets.

Detailed examination reveals that in addition to the main sulphides chalcopyrite and pyrite, small amounts of bornite, chalcocite, and minor sphalerite, tennantite, and traces of an unidentified sulphosalt are present. The chalcocite has metallic lustre and appears to be primary. It occurs as grain boundary and crystallographically controlled replacements of bornite and chalcopyrite and as rare, discrete grains on fractures.