PRODUCT	MOLYBDENUM	PROVINCE OR TERRITORY	British Columbia	N.T.S. AREA	93 L/3	Card 2 - REF. MO 1

NAME OF PROPERTY LUCKY SHIP

DESCRIPTION OF DEPOSIT (continued)

feldspars. The other (P_2) when unaltered is a light-grey porphyry of abundant feldspar, quartz, and biotite phenocrysts in an inconspicuous aphanitic matrix. One breccia (B_1) is composed largely of P_1 porphyry but includes a considerable amount of exotic fragments, and in its extreme development shows a marked preferred orientation of fragments. The other (B_2) is a homogeneous breccia of fragments of P_1 of greatly varying size. These four phases do not necessarily represent separate and unique intrusions or episodes, and age relationships are not known with certainty and may differ from place to place.

P_1 is composed of phenocrysts of very slightly resorbed quartz bi-pyramids, two feldspars in sub-equal amounts, and minor phlogopite mica in a matrix of very fine sugary textured quartz and feldspar. The plagioclase is albite-oligoclase and the potash feldspar is orthoclase. The matrix in many cases contains schlieren of fine mosaic quartz that give a foliation to the rock. P_2 contains more phenocrysts than P_1 in differing proportions; plagioclase is normally more abundant than quartz, and the potash feldspar is subordinate. The mica is more abundant than in P_1 and is biotite in contrast to phlogopite. The P_2 porphyry is surrounded by a thin sheath of hornfels even where it is essentially in contact with P_1 porphyry.

Alteration other than the metamorphism already described includes silicification, carbonatization, pyritization, talcose alteration, and potash metasomatism. The silicification is the most intense alteration and can be so intense that the origin of a rock is completely obscured. Silicification is most abundant in an annular zone around the periphery of the P_2 plug. It affects the P_2 rock most, the P_1 somewhat less, and the hornfels least. It is intimately connected with a stockwork of fractures and veins. The intensity of silicification and abundance of minor quartz veinlets decrease outward. Larger quartz veins continue outward beyond the zone of intense silicification but are also contained in an annular zone. The quartz veinlets have a characteristic fine mosaic grain, and many of them are clearly replacement veinlets cutting across phenocrysts with no dilation. Others are just as clearly dilation veinlets; however, in most cases criteria to distinguish the one from the other are lacking. In intensely silicified areas the quartz phenocrysts are recrystallized to fine mosaics, and the feldspars are clarified by

continued above .

DESCRIPTION OF DEPOSIT (continued)

recrystallization and minor replacement by quartz. The quartz veins contain a small percentage of potash feldspar and may contain carbonate, pyrite, or molybdenite. The latter occurs in very fine hexagonal plates, most commonly concentrated along reopened fractures in the quartz veins, but also disseminated to some degree throughout the vein.

The mineralization consists almost entirely of molybdenite, but minor chalcopyrite and galena-sphalerite occurs in separate localities. Molybdenite concentration, in general, is highest in a zone immediately peripheral to the contact of P_2 and grades downward in both directions. Other areas of molybdenum mineralization occur, but none appear to be as important. Two drill-holes in the central part of the plug intersect scattered molybdenum mineralization.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

Limited changed its name in August 1979 to Amax of Canada Limited. The Canadian exploration activities of Amax Inc were combined under a new company Canamax Resources Inc, which was incorporated in December 1982. Canamax has 100% interest in the property, subject to a 5% net profits production royalty payable to Wharf Resources Ltd. Geological reserves are 20,000,000 tons at 0.16% MoS_2 (Canamax Resources Inc Listing Statement 2956, July 1983, p. 22).

PRODUCT	MOLYBDENUM	PROVINCE OR TERRITORY	British Columbia	N.T.S. AREA	93 L/3	REF.	MO 1

NAME OF PROPERTY LUCKY SHIP

OBJECT LOCATED - mineralized zone.

UNCERTAINTY IN METRES 200. Lat. 54°01'28" Long. 127°28'40"

Mining Division	Omineca	District	Coast, Range 5
County		Township or Parish	
Lot		Concession or Range	
Sec	Tp.	R.	

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The Lucky Ship prospect is in and about a small rhyolite porphyry plug measuring about 2,000 by 3,000 feet that cuts the Hazelton Group, but may have been one of the volcanic sources of the upper part of this group. The Hazelton here includes a diverse assemblage of intermediate to acid volcanic, pyroclastic, and sedimentary rocks, mostly of volcanic aspect. In the immediate vicinity of the plug the group is composed of volcanic pyroclastic breccias and intercalated greywackes and argillites. Some of the pyroclastic rocks contain a significant proportion of rock fragments identical with or similar to those of the plug. The present structural attitudes of the Hazelton rocks on the whole ridge are fairly uniform, striking north to north 20 degrees east and dipping mostly 30 to 45 degrees east.

The rhyolite porphyry plug is not a simple structure but is formed of at least four distinguishable phases which include two separate porphyries and two breccias. The porphyry (P_1) that forms the majority of the plug is a white aphanitic rock when fresh, with sparse phenocrysts of bi-pyramidal quartz and chalky

see Card 2 ....

Associated minerals or products of value

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located at approximately 4,000 foot elevation on the east side of Morice Lake, 42 miles southwest of Houston.

The showings were discovered and staked (15 claims) in 1957 by Matthew Sam and B. McRae, of Topley. The Consolidated Mining and Smelting Company of Canada, Limited, optioned the property and in July 1957 carried out 203 lineal feet of trenching.

Plateau Metals Limited optioned the property from the original owners in about 1963, and in September 1963 optioned 42 claims and fractions to Southwest Potash Corporation, a subsidiary of American Metal Climax, Inc. Additional staking was done to a total of 109 recorded claims and fractions. Work during 1963-64 included geological mapping, geochemical and magnetometer surveys, trenching, and 4,303 feet of diamond drilling in 5 holes.

In August 1965 the property was transferred to Amax Exploration, Inc., another wholly owned subsidiary of American Metal Climax, Inc. Amax relocated all the claims, Lucky Ship 1-81, on a regular grid. Additional detailed geochemical, induced potential, and magnetometer surveys, and 16,885 feet of wireline diamond drilling, was carried out during the year. Work in 1966 included geological, geophysical, and geochemical surveys, 2,000 feet of trenching, and 7,783 feet of diamond drilling in 7 holes. During 1967 additional trenching was carried out, and one BQ hole was drilled to a depth of 3,284 feet near the centre of the stock. In 1968 further geological mapping, 3 acres of bedrock stripping by bulldozer and hydraulicking, and 2,718 feet of diamond drilling in 2 holes was carried out. Open pit reserves were estimated at 19,600,000 tons averaging 0.14% MoS_2 to a depth of 400 feet (VSE SMF 22/4/74, Wharf Res. Ltd.).

By an agreement of September 30, 1970, Plateau Metals Limited sold to Amax Exploration, Inc., its rights in the Lucky Ship 1-81, and Pat 14, 16, 18-37, 39, 41 claims for $90,000 but retaining a 5% interest in the net profits from the property, as defined in the agreement. Plateau Metals changed its name in 1972 to Wharf Resources Ltd.

Amax Exploration, Inc. changed its name in 1971 to Amax Potash Limited. The parent company, American Metal Climax Inc., changed its name in 1975 to Amax Inc. Amax Potash

see reverse Card 2 ....

Mineral Development Sector, Department of Energy, Mines and Resources, Ottawa
507817

HISTORY OF PRODUCTION

MAP REFERENCES

#Geological Map of the Lucky Ship Property, Sc. 1":400 ft., Fig. 13, Report of Minister of Mines, British Columbia, 1965.

Map 69-1, Smithers, Hazelton, and Terrace Areas, (Geological compilation), Sc. 1":4 miles, British Columbia Dept. of Mines.

Map 971 A, Smithers-Fort St. James, (Geol.), Sc. 1":8 miles, Geol. Surv. of Canada, 1949.

*Map 93 L/3, Lamprey Creek, (Topo.), Sc. 1:50,000.

General Geology West-Central British Columbia, Sc. 1": 5 miles, Fig. 8, Bulletin 64.

REMARKS

Comp./Rev. By	DMacR	DMacR	DMacR				
Date	12-75	1-79	12-83				

REFERENCES

Brown, A. Sutherland; Lucky Ship; Report of Minister of Mines, British Columbia, 1965, pp. 84-87.

Reports of Minister of Mines, British Columbia: 1957, p. 12; 1963, p. 28; 1964, p. 53; 1966, p. 104; 1967, p. 109; 1968, p. 139.

Mineral Policy Sector; Corporation Files: "Wharf Resources Ltd."; "Southwest Potash Corporation"; "Amax Exploration, Inc.".

Hornbrook, E.H.W.; Biogeochemical Prospecting for Molybdenum in West-Central British Columbia; Paper 68-56, Geol. Surv. of Canada, 1969.

Carter, N.C.; Porphyry Copper and Molybdenum deposits, West-Central British Columbia; Bulletin 64, p. 126, B.C. Dept. of Mines, 1981.