

NAME OF PROPERTY

ENGINEER

OBJECT LOCATED - Symbol on Map 104 M.

UNCERTAINTY IN METRES 500. Lat. 59°29'15" Long. 134°14'

Mining Division Atlin District Cassiar

County Township or Parish

Lot Concession or Range

Sec Tp. R.

OWNER OR OPERATOR AND ADDRESS

DESCRIPTION OF DEPOSIT

The formation consists of argillite, siltstone, slate, and greywacke of the Laberge group of Lower Jurassic age. Several outcrops of granitic rock of the Coast Intrusives occur in the vicinity of the mine. A shear zone, with a known length of some 4,000 feet, strikes southeasterly through the property. Where crosscut, on the 5th and 8th levels, the zone shows a width of from 20 to 40 feet of crushed and brecciated slates well mineralized with quartz heavily impregnated with pyrite. Low grade but indicative gold values were found in sections of the shear zone.

Small veins, ranging in width from mere stringers up to 2 feet, strike at angles of about 45° or less to the shear zone. The veins are divided into two groups, the Double Decker, Engineer, and Jersey Lilly veins lying to the west, and the Boulder, Andy, and Blue veins lying to the east of the shear zone. Most of the veins are quartz filled; the Engineer vein, however, has a calcite-mariposite filling. In these veins and see Card 2

Associated minerals or products of value - Silver.

HISTORY OF EXPLORATION AND DEVELOPMENT

The property is located on the east shore of Tagish Lake, about 8 miles south of Graham Inlet.

In 1899 a locating party of Engineers for the White Pass & Yukon Railway discovered a narrow stringer of quartz carrying free gold. They staked 13 claims and organized The Engineer Mining Company, of Skagway, Alaska. Development work during 1900-1901 was done in a 240 foot crosscut adit, and 2 shafts 20 and 70 feet deep. The installation of a stamp mill was begun in 1902 but never completed.

The claims lapsed in about 1906 and were restaked by Edwin Brown and associates. In 1907 the property was sold to James Alexander, John Dunham, Konrad Warwecka, and Benjamin Green-Nicoll, of Atlin, who operated under the name Northern Partnership Syndicate. Crown-grants were issued during the period 1910-1914 for the Engineer No. 1 (Lot 19), Northern Partnership No. 1 (Lot 918 G. 1), Northern Partnership No. 2 (Lot 20 G. 1), Northern Partnership No. 4 Fr. (Lot 209), Northern Partnership No. 5 (Lot 972), Mickey (Lot 967), and Daisy (Lot 970) claims.

A 2-stamp mill was installed in 1910 and operated intermittently. In about 1912 James Alexander, with the backing of A.T. Smith, of Philadelphia, acquired the interests of his partners. A shaft was sunk to 230 feet on No. 4 vein and levels established at 75, 110, 175, and 230 feet. Mining and milling operations continued into 1918. Work ceased in October 1918 on the death of Mr. Alexander in a shipwreck while travelling outside to negotiate the sale of the property. Litigation continued into 1922 when a decision was reached in favour of the heirs of the late Mr. Smith of Philadelphia. In 1922 the property was under an examination option by L.H. and N.A. Timmins.

New York interests began development work in 1923 and the Engineer Gold Mines, Ltd., Inc., was incorporated in Wilmington, Delaware, to operate the mine. The old crosscut adit was extended to a length of 1,200 feet in 1924. During 1925 over 4,000 feet of underground development was done on a 5th level and in exploration of 5 veins intersected by the crosscut before reaching the "E" vein. A 50 ton-per-day concentrator was put into operation in November 1925. In 1927 an interior shaft was sunk from the 5th level to the 6, 7, and 8 levels. Additional claims (Lots 4654-4656, 4657, 4659, 4667-6671) were Crown-granted to the company in 1927 see Card 2

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

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HISTORY OF PRODUCTION

From 1913-1952, 17,157 tons of ore were milled. From this ore 18,058 ounces of gold and 8,950 ounces of silver were recovered.

MAP REFERENCES

Map 19-1957, Bennett, (Geol.), Sc. 1":4 miles.

Map 94 A, Taku Arm, (Geol.), Sc. 1":4 miles - accomp. Memoir 37.

#Map 104 M, Skagway, (Topo.), Sc. 1:250,000.

REMARKS

Comp./Rev. By	DMacR						
Date	10-75						

REFERENCES

Cockfield, W.E.; The Mining Industry in Yukon and Parts of Northern British Columbia in 1930; Summary Report 1930, Pt. A., pp. 11-15, Geol. Surv. of Canada.

Reports of Minister of Mines, British Columbia: 1900, pp. 760, 778; 1902, p. 39; 1903, p. 44; 1904, p. 80; 1908, p. 50; 1910, pp. 55, 57, 246; 1911, pp. 60, 287; 1912, pp. 60, 324; 1913, p. 72; 1914, pp. 79, 89, 512; 1915, p. 64; 1916, pp. 46, 438; 1917, p. 80; 1918, p. 90; 1919, p. 91; 1922, p. 91; 1923, p. 90; 1924, p. 77; 1925, pp. 113, 355; 1926, p. 106; 1927, pp. 112, 480; 1928, p. 123; 1929, pp. 120, 505; 1930, p. 122; 1932, p. 65; 1933, p. 73; 1934, p. B-35; 1944, p. 40; 1945, pp. 43, 61; 1946, p. 60; 1948, p. 60; 1952, p. 39.

Galloway, J.D.; Lode-Gold Deposits of British Columbia; Bulletin No. 1, 1932, p. 24, British Columbia Dept. of Mines.

Cairnes, D.D.; Portions of Atlin District, British Columbia; Memoir 37, pp. 74-89, Geol. Surv. of Canada, 1913.

Mineral Development Sector; Corporation Files: "Engineer Gold Mines, Ltd., Inc."; "The Mining Corporation of Canada, Limited"; "Nu-Energy Development Corp."

Mines Branch, Ottawa; Investigations in Ore Dressing and Metallurgy; 1935, Rept. 763, pp. 3-5 (No. 609).

NAME OF PROPERTY

ENGINEER

DESCRIPTION OF DEPOSIT (continued)

stringers some very rich small pockets of ore occur in erratic distribution. The gold occurs in the form of very thin scales, thin leaves, fine dendritic forms, and sometimes distributed through the quartz in fine grains.

HISTORY OF EXPLORATION AND DEVELOPMENT (continued)

and 1929. Summer operations only were carried on from 1927 to 1930 when work was suspended. Lessee Reginald Brooks selectively mined high-grade ore during 1932-34.

The assets of the company were sold at a Sheriffs sale to The Mining Corporation of Canada, Limited, in 1934. Lessees Forbes, Kirkwood, and Sweet worked the property in 1945 and were reported as owners of the property in 1946. Ore was shipped from the dump in 1948. Further work in 1952 was done under the name Engineer Partnership, of Atlin.

The property was acquired in 1962 or 1963 by interests who incorporated Tagish Gold Mines Ltd. in December 1973 to acquire the Engineer No. 1 and Northern Partnership 1-4 Crown-grants.

Nu-Energy Development Corp. amalgamated with Tagish Gold in June 1975.

The Lady Gold Mines in 1980 AL 104

Wentworth No. 1 & 2 in 1981

Sept 10 1981 14/09/81