

Location/Identification

MINFILE Number:	082FNW155	National Mineral Inventory Number:	082F14 Ag54
Name(s):	<u>OTTAWA (L.4968)</u>		
	MEMPHIS, OTTAWA FR. (L.6932), BLOSSOM FR. (L.4774), HAMILTON (L.4771), A.B.C. FR. (L.6930), JINNIE (L.4773), TORONTO (L.4772), ALMA B. (L.6922), BILOXIE (L.6929), I WONDER (L.6928), ARICLE (L.6459), MAYETA (L.6460), LOUISVILLE (L.6461), SURVEY FR. (L.6931), FLYETTE (L.6921)		
Status:	Past Producer	Mining Division:	Slocan
Mining Method	Underground	Electoral District:	Nelson-Creston
Regions:	British Columbia	Forest District:	Arrow Boundary Forest District
BCGS Map:	082F074		
NTS Map:	082F14W	UTM Zone:	11 (NAD 83)
Latitude:	49 47 06 N	Northing:	5514802
Longitude:	117 23 46 W	Easting:	471486
Elevation:	1606 metres		
Location Accuracy:	Within 500M		
Comments:	The Ottawa mine is centred on a group of about 20 Crown granted claims and fractions, on the north slope of the valley of Springer Creek, 5 kilometres northeast of Slocan. Access to the mine site is from the Slocan highway via the Springer Creek road. Location is of adits, dumps and buildings. Names also include the Hamilton Fr. (Lot 5986), Mayeta Fr. (Lot 6933) and Biloxie Fr. (Lot 6926).		

Mineral Occurrence

Commodities:	Silver, Lead, Zinc, Gold, Copper		
Minerals	Significant:	Silver, Argentite, Tetrahedrite, Galena, Sphalerite, Pyrite, Chalcopyrite	
	Associated:	Quartz, Barite	
	Mineralization Age:	Unknown	
Deposit	Character:	Vein, Breccia, Discordant, Disseminated	
	Classification:	Epigenetic, Hydrothermal, Mesothermal	
	Type:	I05: Polymetallic veins Ag-Pb-Zn+/-Au	
	Shape:	Bladed	Modifier: Fractured, Sheared
			Strike/Dip: 360/40E
Comments:	Two veins 350/30 and 030/20 contained within a north-south shear zone.		

Host Rock

Dominant Host Rock:	Plutonic		
Stratigraphic Age	Group	Formation	Igneous/Metamorphic/Other
Middle Jurassic	-----	-----	Nelson Intrusions
Isotopic Age	Dating Method	Material Dated	
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Lithology:	Feldspar Porphyritic Granite, Felsite Dike, Lamprophyre		

Geological Setting

Tectonic Belt:	Omineca	Physiographic Area:	Selkirk Mountains
Terrane:	Plutonic Rocks, Quesnel		

Inventory

Summary Production

		Metric	Imperial
	Mined:	26,476 tonnes	29,184 tons
	Milled:	9,109 tonnes	10,040 tons
Recovery	Silver	55,940,682 grams	1,798,535 ounces
	Gold	982 grams	32 ounces
	Lead	360,085 kilograms	793,852 pounds
	Zinc	12,774 kilograms	28,162 pounds
	Copper	793 kilograms	1,748 pounds

Capsule Geology

The Ottawa mine is centred on a group of about 20 Crown granted claims and fractions, on the north slope of the valley of Springer Creek, 5 kilometres northeast of Slocan. Access to the mine site is from the Slocan highway via the Springer Creek road.

The history of the Ottawa mine dates back to 1896 when the Ottawa claim (Lot 4968) was located, however, it was not until 1902 that major development work by a Pittsburg syndicate was attempted. By 1904 the property was developed by 1067 metres of tunnel on 4 levels. It was operated intermittently by the owners until 1908 and then by leasers until 1913. In 1913 the group of over 20 claims was acquired by the Consolidated Mining & Smelting Co. Ltd. and extensive development work was carried on until 1918 when the mine was closed and the equipment removed. The workings at this time consisted of 5 adits at vertical intervals of 30.4 metres and a 6th level driven from a shaft. In 1920 a 50-ton per day mill was constructed. Leasers continued to operate the mine until 1935. In 1935 the group, consisting of 31 claims, was acquired by the Ottawa Silver Mining & Milling syndicate of Spokane, who, in 1937, built a 100-ton per day flotation plant which burned shortly after. They drove an 8th level as a crosscut for 366 metres and then drifted on the vein. Leasers worked the property intermittently from 1941 to 1950. An option on the property was given to Violamac Mines (B.C.) Ltd. in 1950. The following year Harrison Drilling and Exploration Co. Ltd. of Vancouver held operating control under an agreement with Violamac Mines. Harrison Drilling and Exploration Co. Ltd. was reorganized in 1953 under the name of Hardex Mines Ltd. and a diamond drilling program was carried out. In 1956 the owners resumed operations. An option on the property was given to the Yukon Western Mining & Prospecting Co. Ltd. of Slocan City in 1958. In 1960 the name of this company was changed to Skylane Mines Ltd. Most of the work done at this time was confined to stoping in the West vein on No. 8 level. In 1960 Ottawa Silver Mines Ltd. bought the option from Skylane Mines Ltd. Later in the year an option was given to the Silver Buckle Mining Co. of Wallace, Idaho. This option was dropped in December after a geological examination of the property had been made. A 9th level was started at this time. In 1962 a ventilation raise was driven from No. 8 level to No. 6 level, a distance of approximately 143 metres, following the dip of the vein. In driving the raise, several lenses of very high-grade ore were opened up and subsequently stoped out. The No. 9 level drift was extended to a length of 152 metres. During 1963 and 1964 exploration and development work was carried out on No. 9 level. A 75-ton mill was built in 1963 and put into part time operation in 1964. In 1963 the company was reorganized under the name Slocan Ottawa Mines Ltd. In 1980 the mine was owned by the Slocan Development Corporation Limited and leased to C. Thickett and Memphis Mines Ltd. between 1976 and 1982.

Total recorded production between 1903 and 1984 amounts to 26,476 tonnes mined, yielding 55,940,682 grams of silver, 982 grams of gold, 360,085 kilograms of lead, 12,774 kilograms of zinc and 793 kilograms of copper.

The property is developed on nine levels, 5 of which are serviced by adits driven at vertical intervals of about 30 metres. These workings explore a broad shear/breccia zone in coarse grained, porphyritic Nelson quartz monzonite cut by felsite and lamprophyre dikes. The zone trends nearly north and dips easterly from 25 to 45 degrees. The zone comprises two rather well-defined lodes known as the West or Noble and East or Ottawa veins, respectively. Mining at the surface and underground indicates that these lodes are not exactly parallel, but approach each other towards the south and may join. On the No. 5 level the lodes are about 10 metres apart. Most of the work has been done on the East lode that is 0.6 to 6 metres wide, composed of crushed and broken granite, gouge and vein material - the latter having been stoped in places across a width of as much as 2.4 metres. The West lode is as much as 15 metres wide in places and it is reported to have produced some good ore in the uppermost workings. On No. 8 level, the stoped vein on the West lode, strikes 025 to 040 degrees and dips 20 degrees southeast. The vein is up to 0.3 metres wide - bounded by a sharply defined gouge- filled slip along the footwall and an irregular hanging wall. The East lode on the No. 8 level is strong and composed of about 1 metre of gouge and breccia cemented by quartz. It strikes 170 degrees and dips 30 to 40 degrees east.

The ore minerals consists mostly of mixture of galena, pyrite, sphalerite and a little chalcopyrite, native silver, argentite and tetrahedrite disseminations in quartz gangue. In some high grade ore, barite is reported to be predominant gangue mineral.

Bibliography

EMPR AR 1896 65,67,68,73; 1898-1072; 1900-830; 1901-1027,1226; 1902- 150; 1903-138; 1904-164,203; 1905-161; 1906-146,249;

1907-101,214; 1908-100; 1909-116,273; 1910-100,244; 1911-154,285; 1913-126,420; 1914-289,510; 1915-133,445; 1916-198,516; 1917-190,448; 1918-195; 1919-126; 1920-146; 1921-138; 1922-203; 1923-229; 1924-201; 1925- 246,248; 1926-288; 1927-280; 1935-E32,G51; 1936-E50; 1937-E50; 1938-A37,E31; 1939-40,96; 1940-27,65,81; 1941-27,75; 1942-27,73; 1944-40,72; 1945-43; 1946-35,167; 1947-173; 1948-148; 1949-192; 1950-150; 1951-43,177; 1952-44,180; 1953-46,143; 1956-A51,99; 1957-A47,57; 1958-A46,49; 1959-A49; 1960-A55,77; 1961-A50,78; 1962-A50,84; 1963-A50,79; 1964-A56,127; 1966-218; 1967-A55,250; 1968-A55,248; 1969-A56; 1970-A55; 1971-A55; 1972-A55; 1973-A55; 1975-A95; 1976-A104; 1977-116; 1978-128; 1979-130

EMPR ASS RPT 8311

EMPR BC METAL MM01351

EMPR EXPL 1975-36

EMPR GEM 1969-324; 1970-448; 1971-411; 1972-56; 1973-73

EMPR INDEX 3-208; 4-124

EMPR IR 1984-2, p. 102; 1984-3, p. 108; 1984-4, p. 121; 1984-5, p. 115; 1986-1, p. 111

EMPR MINING 1975-1980, Vol. 1, pp. 35, 56, 60, 64, 67, 71, 74

EMPR OF 1998-10

EMPR P 1989-5

EMPR PF (Plan of the Ottawa Mineral Claims (1925); Starr, C.C. (1930): Notes on Mines on Springer and Ten-Mile creeks, in 082FNW152)

EMP MP CORPFILE (Ottawa Silver Mining & Milling Syndicate; Slocan Ottawa Mines Ltd.)

GSC MAP 272A; 1091A; 1956-3

GSC MEM *184, p. 182-183; *308, pp. 133, 140-141, Fig. 10

GCNL #193 (Oct.5), 1984

Date Coded:	1985/07/24	Coded By:	BC Geological Survey (BCGS)	Field Check:	N
Date Revised:	1997/07/22	Revised By:	B. Neil Church(BNC)	Field Check:	Y