

82G5

REPORT
ON
MINE & DUMP SAMPLING
ST. EUGENE MINE
MOYIE, B. C.

Fort Steele

MINING DIVISION
Compiled by -
Alexander Smith
June, 1949
MINING ENGINEER

ST. EUGENE MINE

MOYIE, B.C.

SAMPLING ST. EUGENE MINE

There are no assay plans available for the mine workings. Production records for the St. Eugene and Aurora properties, however, give a fair idea of the average tenor of the ore. Known ore bodies were mined out thoroughly. After Company operations ceased, smaller shoots were taken out by leasers.

In 1926 D. S. C. (who may have been an engineer for the C. M. & S., re-examining the property prior to building the tailings treating plant on the lake) sampled the then accessible workings. His results indicate there are a few places where narrow veins contain good values in lead and silver. The most interesting section sampled is that on the 1200' level on the south vein where for a length of 115' he obtained across a width slightly in excess of a foot an average value of -

<u>Pb.</u>	<u>Zn.</u>	<u>Fe.</u>	<u>Ag.</u>
12.2	6.65	12.04	5.4

This is the only record of an oreshoot of any size remaining in the old workings. Probably it was not mined because of its relatively high Zinc and Iron and low Silver content.

There are now no workings accessible where sampling would have any significance.

Alexander Smith
Alexander Smith

Vancouver, B. C.
June, 1949.

RESULTS OF SAMPLING

D. S. C. DECEMBER, 1926

(For location of Samples see Composite Level
Plan - Map No. Mo-16)

Sample No.	Description	Width of Vein				
		Pb.	Zn.	Fe.	Ag.	
1	Outcrop of S.Vein above 100' level	1.0	30.7	0.8	2.8	26.6
2	In 106 Drift, 5' W.of ^o 229 on main vein. On back of drift	0.3	9.1	14.3	16.0	4.2
3	" " " " 10' " " " " " "	0.3	14.0	3.6	14.8	5.4
4	Muck Pile in 106 Drift, about 30 tons		4.3	1.9	5.0	2.3
5	In 270 Drift, 2' W.of ^o 242. S.Vein	0.3	29.3	6.7	11.0	21.0
6	" " " 7' " " " " " "	0.3	23.5	4.2	20.6	27.1
7	" " " 12' " " " " " " (Vein pinches out here)	0.3	10.2	3.3	12.9	2.2
8	Small pillar in 216 Drift	0.5	62.8	6.7	3.6	44.4
9	Pocket of ore in 900 drift, near 902, Length 5'. Back of Drift	0.5	59.8	1.9	2.2	37.6
10	Pocket of ore in 900 drift, 20' East of Sample (9)	0.4	61.4	6.6	3.3	32.1
11	In small raise off 900 drift, 6' above back of 900. Pocket of (9) pinches out here	0.3	4.0	0.5	3.8	1.9
12	End of stope, 60' below 1000' tunnel, 6' above back of intermediate	1.2	41.4	1.1	4.0	26.0
13	" " " " " " " 11' above back of intermediate	1.2	15.4	1.5	2.3	28.6
14	1200' level, 5' from Portal, left side of drift, at back	1.0	14.7	0.9	11.0	9.1
15	1200' level, 5' from portal right side of drift at bottom	1.0	8.9	0.9	14.0	7.5
16	1200' level, 10' from portal left side of drift at back	1.0	22.7	0.5	8.8	11.9

RESULTS OF SAMPLING

Page -2-

contd.

Sample No.	Description	Side of Drift.		Width of Vein Pb. Zn. Fe. Ag.				
<u>1200' Level</u>								
	<u>From Portal</u>							
17 -	10'	Right	at bottom	1.0	4.6	0.5	10.2	2.5
18 -	15'	Left	" back	1.3	13.4	0.5	9.8	5.6
19 -	15'	Right	" bottom	1.3	5.5	0.5	10.0	2.4
20 -	20'	Left	" back	1.3	53.1	0.8	12.6	13.9
21 -	20'	Right	" bottom	1.3	6.4	0.8	19.1	3.1
22 -	25'	Left	" back	1.3	11.6	0.8	14.0	4.0
23 -	35'	Left	" back	1.0	8.6	0.5	6.4	4.0
24 -	30'	Left	" back	1.0	7.6	0.7	6.6	3.9
25 -	45'	Left	" back	1.0	8.0	0.6	6.6	3.2
26 -	50'	Left	" back	1.0	26.8	0.5	7.5	11.4
27 -	60'	Left	" back	1.3	8.0	0.6	10.0	3.0
28 -	65'	Left	" back	1.3	11.4	1.7	11.5	4.9
29 -	70'	Left	" back	1.3	6.2	0.5	16.6	2.2
30 -	85'	Left	" back	1.0	10.8	0.4	14.5	3.0
31 -	95'	Left	" back	1.0	19.8	0.5	14.7	6.8
32 -	105'	Left	" back	1.0	4.2	0.6	20.6	1.4
33 -	115'	Left	" back	1.0	11.4	0.5	16.3	4.8
34 -	Prospect hole about 900' level. Vein runs from 3' to 1' wide			1.5	27.2	0.4	9.1	36.0
35 -	Small pillar left in stope on 1500' tunnel, 60' above sill, 40' N.W. of 1538R			1.5	10.2	15.1	9.2	6.0
36 -	Sample of filling of cribbing of this stope on 1500' level				9.8	8.5	5.2	5.4

RESULTS OF SAMPLING

Page -3-

contd.

Sample No.	Description	Width of Vein	Pb.	Zn.	Fe.	Ag.
37	- Vein 10' below sill on 1500. Pinching out as it goes down, 80' N.E. of 1538	1.5	6.8	8.4	7.4	1.9
38	- Filling at bottom of cribbing of sample (36), at back of 1500	12.4	8.9	9.3	6.0	
39	- End of stope, 25' above sill, 1500' level at 115' N.W. of 1538 Raise	0.3	13.2	3.0	6.8	7.7
40	- 20' below sill at 1512	1.5	40.8	1.7	15.0	19.2
41	- Muck sample at foot of 1841 chute, 1800' level. Said to be ore in stope above but cave makes this inaccessible.	11.7	4.1	6.6	5.9	

The 300', 400', 800', 1700' and most of the 1800' levels, and 2nd Ave., were inaccessible by 1926.

ST. EUGENE MINE

MOYIE, B.C.

MOYIE MINE DUMP SAMPLES

These samples (#620-634) are a preliminary effort to obtain an idea of the grade of the material on the old mine dumps. They are from the adit levels only. These dumps that contain over 1.2% combined lead and zinc average -

<u>Lead.</u>	<u>Zinc.</u>	<u>Silver.</u>
2.25%	0.42%	1.5 ozs.

There should be a minimum of at least 50,000 tons of this grade available in these dumps, with the possibility of being four or five times that amount. The dumps have not been measured for tonnage estimates as yet. In addition to the adit dumps, there is considerable tonnage of similar material on the shaft dump; also, as shown on the soundings Map Mo-30, there may be 50 thousand tons or so of untreated tailings in the lake.

The results of this preliminary sampling are sufficiently favourable to be followed up by more detailed sampling and tonnage estimates. If there are several hundred thousand tons available on these dumps averaging 2-1/2% combined lead and zinc, and 1-1/2 oz. of silver, they might be milled at a considerable profit. The possibility warrants more investigation.

A.S.
Alexander Smith

Vancouver, B. C.
June, 1949.

ST. EUGENE MINE DUMP SAMPLES

<u>Sample No.</u>	<u>Silver oz.</u>	<u>Lead %</u>	<u>Zinc %</u>	<u>LEVELS</u>
620	1.1	0.9	0.6	1700' - Scraper Pit North side.
621	1.2	1.4	0.5	1700' - Scraper Pit South side.
622	0.9	1.2	0.3	1500' - Lower part of dump 50' up slope from crib.
623	1.5	2.8	1.1	1500' - 50' from top of dump.
624	0.3	0.2	0.4	1300' - 1/4 way down from top.
625	0.8	0.6	0.7	1100' - North half 1/4 way down from top.
626	0.5	0.2	trace	1100' - South 1/2 of dump 1/4 way up from bottom.
627	1.5	2.4	0.4	1000' - -
628	0.8	1.2	trace	900' - Dump by big glory hole. North half of dump.
629	0.4	0.3	0.3	900' - South half of dump poor looking.
630	1.9	3.2	trace	600' - Dump by old blacksmith shop.
631	3.0	4.3	0.6	400' - From dump at top camp, termination of tram line.
632	1.4	1.8	0.4	300' - 1/2 way up dump.
633	0.7	trace	0.3	200' - Near top of dump.
634	0.7	trace	0.6	200' - Same as #633. Near bottom of dump.