SILVER STANDARD MINES LIMITED

(NON-PERSONAL LIABILITY)

808-602 WEST HASTINGS STREET VANCOUVER 2, B.C.

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SUMMARY REPORT

on

LORD RIVER GOLD MINES LIMITED (N.P.L.)

Taseko Lake Area, B.C.

Clinton M.D.

by

Wm. St. C. Dunn Superintendent of Exploration

October 1973

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INTRODUCTION:

This report covers the activities on the Lord River Gold Mines property (formerly Pellaire) during 1973. It is made up of a geological and prospecting report by C.F. Kowall, a report on physical work on the property by G.W. Laforme, a Statement of Costs to December 31, 1973, and a proposed program with costs for 1974 by W. St. C. Dunn.

HISTORY:

The development at the property prior to 1973 is detailed in F.J. Hemsworth's report of November 28, 1972. This report also contains Dr. Skerl's 1947 report and maps of the work done by Quebec Gold Corporation in the late 1940's.

During 1973 Silver Standard Mines Ltd. transferred the 29 claims held on the property to Lord River Gold Mines Ltd. Lord River raised sufficient money privately to carry out the 1973 program.

REPORT:

C.F. Kowall's geological report and maps are appended as Appendix "A". This report outlines the major geological structures which control the location of the gold-bearing quartz veins. Four gold-bearing veins in addition to the five veins in the main area are located and further exploration recommended on them.

REPORT - cont'd:

G.W. Laforme's report (Appendix "B") deals with access, campsites, and gives the results of trenching and sampling of the veins in the mine area. He estimates ore reserves at this time as follows:

In 3, 4, and 5 veins - probable ore - 36,750 tons grading 0.504 oz/ton.

In 3, 4, and 5 veins - possible ore - 40,410 tons grading 0.638 oz/ton.

The average width of the veins is approximately 5.0 feet.

Further development of this property should consist of tunneling on the known ore shoots on #2, 3, and 4 veins at 7480 feet elevation, and underground diamond drilling for projected ore shoots on #1 and #5 veins. Surface trenching and sampling of the A, B, East and Southeast veins should also be carried out.

The tunneling and diamond drilling recommended would require the following approximate footages:

Tunneling at 7480 feet elevation -

T CHILLE	77110	- , , ,						_													
	#3	Vein	***	main	adi	t a	anc	1 6	eas	st	dı	rif	t			•		•		1000	feet.
	#3	Vein	-	west	dri:	£t	•		•	•		٠					•		•	300	feet.
	#4	Vein	-	east	dri	Εt			•	•			•							700	feet.
	#2	Vein	-	X-Cui			•							•	•					100	feet.
	#2	Vein	-	drift	· .											•			٠	300	feet.
			TO'	TAL T	JNNE	LI	\(G		•			•	•		•	•			•	2400	feet.

Diamond drilling from #2 and #4 Veins -

		TO	T	AL	DIA	10ND	DRILL	INC	T a		•		•	•	•	٠	2900	feet.
#5	Vein	-	4	-	350	ft.	holes			٠		•	٠			٠	1400	feet.
#1	Vein	-	5	***	300	ft.	holes									•	1500	feet.

The trenching on the four outside veins would require a cat for a month to make access roads and do approximately 1000 feet of trenching.

Some road work would be necessary to establish access from the campsite to the proposed new portal and further work should be done to see if an airstrip could be established in the Fall Creek valley.

The above program could be carried out over a period of five months and estimated costs are given on the following page.

ESTIMATED COSTS - PROPOSED 1974 PROGRAM

Camp setup		•	•	•	•	•	•	•		\$ 12,000.00
Camp operation					•	٠	•	•		20,000.00
Roads and Portal preparation										20,000.00
Trenching and sampling										6,000.00
Tunneling - 2400 feet										240,000.00
Diamond drilling - 3000 feet				•		•				30,000.00
Airstrip construction									•	10,000.00
Engineering, surveying, assa	yiı	ng		•,				•		30,000.00
Management and accounting .										18,000.00
										\$ 386,000.00

Respectfully submitted,

Wm. St. C. Dunn

Superintendent of Exploration

SILVER STANDARD MINES LIMITED

(NON-PERSONAL LIABILITY)

808-602 WEST HASTINGS STREET VANCOUVER 2, B.C.

APPENDIX "A"

REPORT

on

RESULTS OF 1973 PROSPECTING PROGRAM

at

THE LORD RIVER GOLD PROPERTY

Taseko Lake Area, B.C.

by

C.F. Kowall Geologist

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	Geolog	gica	al	Ma	ар	•	•	•	•	•	•	•	•	•	•	•	٠	•	1" =	700
	Sampl-	na	M.	213															1" =	700

SUMMARY:

The Lord River Gold property is held by Silver Standard, and is located on Falls Creek, about five miles south-southwest of the upper end of Taseko Lake. A program of prospecting, sampling and geological mapping was deemed necessary in conjunction with the Silver Standard development program, to help re-evaluate this property which had seen no work since the 1940's.

One month was spent in the vicinity of the property examining ground peripheral to the main showings searching for possible new mineralized zones. Part of this time was also spent in working on opening up a new road to the property and setting up a new base camp.

As a result of the prospecting program two new favourable gold-bearing structures have been located, another nearby area shows anomalous soil samples for gold, and an interpretation has been made of how the gold-bearing zones fit into the overall regional geology.

GEOLOGICAL MAPPING:

A geologic map of the claim group was compiled and it became evident that the gold-bearing veins were associated with a system of both thrust and normal faulting in an area of anomalous regional trends along the east flank of the Coast Range.

Rock types consist of a hornblende diorite which has been thrust-faulted northwards over hornfelsed andesitic volcanics and some siltstones. The thrust fault plane dips southward about 45° and strikes east-west. The strike of this fault is at an acute angle with the normal northwesterly trend of the Coast Range in British Columbia.

In addition, a high-angle nearly vertical normal fault parallels the thrust fault about one-half mile to the south. This fault can be traced for at least 10 miles to the east and into the Tchaikazon River country, several miles to the west. This fault, which consists of one or more strands, is thought to be the mineralizer and a major reason for the localization of the gold-bearing quartz veins on the property.

In addition, a late system of northerly-trending dikes of andesitic composition occur through all rock types. They are probably related to regional doming of the Coast Range due to east-west compression, followed by a later period of relaxation in which increased tension resulted in opening of fissures which were filled by quartz veins and andesitic dikes. The dike injection appears to occur over a span of time beginning before introduction of the gold-bearing quartz veins and extending into post-mineral time. An area of andesitic to basaltic outcrops occurs about three-quarters of a mile to the south of the main camp and is extensive enough to be called an andesite plug or dike swarm intersection. Some of the andesites have unfilled vesicles and were probably emplaced in Tertiary time, a period of extensive vulcanism on the Fraser Plateau immediately to the east. Minor felsite dikes are also present. The open vuggy nature of the quartz veins, the mineralogy, consisting of gold tellurides, and the close relation with a Tertiary andesite dike system, all point to a very young age for the mineralized quartz veins, probably of early to middle Tertiary time.

A distinct difference between the metamorphosed older andesitic rocks and the younger relatively unaltered andesite dikes is present and was not always noted in the older reports. The application of heat to the older andesites accounts for their alteration, and hydrothermal solutions penetrating these rocks may have picked up the gold required to form the epithermal gold deposits. The older andesites are thus a probable source rock for the gold in the deposits.

Some relation to the dikes as possible 'dams' in the formation of the higher grade sections has been noted by George Laforme. The dikes may have acted as structural traps to partially hold back hydrothermal solutions, which resulted in more gold deposition and attendant formation of ore shoots.

NEW MINERAL AREAS:

The two new gold-bearing veins found on the east ridge are called the East Vein and the Southeast Vein. These veins occur as sub-outcropping distinct boulder trains and do not outcrop except at one very limited point at the upper end of the Southeast Vein above a slumped cut. Both veins carry considerable friable quartz mineralized with oxidized, rusty, sulphide voids. In addition, a boulder train of barren white quartz parallels both veins immediately to the north. Both of these veins were found to be gold-bearing by taking composite samples of float. Assays show that .1 to .15 oz. gold is present in some of the composites. Opening up of these veins may well show distinct higher grade sections as in the other veins developed to date. The East Vein would be hard to expose by trenching, because of probable depth of overburden, while the Southeast Vein could be trenched starting from the top of the ridge at the slumped cut. Permafrost may be present locally. Much slumping of rock debris occurs below the summits of the ridge, and though windows of locally derived float can be found, much ground cannot be effectively prospected by surface tracings.

A geochem anomaly occurs in the vicinity of the quartz stockwork overlooking the Lord River, several hundred feet above the East Vein. Sampling of rubble and one 30-foot chip sample only showed .02 oz. gold. However, a gold-bearing vein easily could have been missed in the overburden. Against a background of < 30 ppb, anamolous soil samples ran as high as 350 ppb in gold.

Two other veins called the 'A' and 'B' veins were found again to sub-outcrop as boulder trains on the main ridge about three-quarters of a mile south of the main showings. These veins are rusty and contain sulphide voids, but composite samples showed only low gold values.

The #2 Vein was stripped above Pelletier's old adit for approximately 200 feet. The vein appeared to be quite flat and to outcrop near the summit of the ridge where extensions are limited by the downward slope of the hill, so that most of the vein has been eroded away. This vein showed two samples of .17 oz. gold and .2 oz. gold at its northern end. A composite chip of material on the dump ran .35 oz. gold and 2.20 oz. silver. This is the area where Pelletier attempted to mine high grade ore and mill it on the property.

RECOMMENDATIONS:

A follow-up program of this season's work should be oriented towards extending the known reserves at the mine.

The main program, of course, should be directed towards extending reserves on the developed veins. In conjunction with this work, a program of bulldozer trenching should be undertaken on the East and Southeast veins, and a grid geochem survey at 50° x 100° spacing should be undertaken on the gold geochem anomaly overlooking the Lord River.

The 'A' and 'B' veins cannot be bulldozed because of inaccessibility, but may possibly be hand trenched.

SURFACE SAMPLING

Sample No.	Location	Description	Au	Ag
15301	S.E. vein	Composite of float, lower end of 250-ft. boulder train above snow patch on pass east of the glacier	of .13	.58
15302	S.E. vein	Compsoite of float 100 ft. above 51301	.03	.26
15303	S.E. vein	Composite of float 75 ft. south of vein at 15302	.03	.25
15304	S.E. vein	Composite of float at slumped trench 50 ft. below top of pass 100 ft. above 15302	.04	.31
15305	East vein	Composite of float East vein	.10	1.5
15306	Toe of glacier	Composite of float at moraine hill	.02	.11
Quartz Sto	ckworks overloo	king Lord River -		
15307		200-ft. chip of float	.02	•04
15308		200-ft. chip of float	.02	•05
15309		200-ft. chip of float	.02	.11
15310		30-ft. chip of bedrock	.02	• 05
15311	'A' vein	Composite of float	.02	•25
15312	'B' vein	Composite of float	.02	• 04
15313	East vein	Composite of float 200 ft. downhill from 15305	. 14	.86
15314	Pelletier's dump	Composite of qtz dump on road	. 35	2.2
15315	#1 vein	2 1/2-ft. chip above adit	.02	.10

Sample No.	Location	Description	Au	Ag
15316	#1 vein	15" chip 30 ft. above 15315	. 02	.03
15317	#1 vein	4-ft. chip 60 ft. above 15316	.02	.09
15318	Pelletier's adit	Vein 50 ft. south, dips 30° northeast - 5-ft. chip	.03	.15
15319	'A' vein	Composite of float	.03	.15
15320	'B' vein	Composite of float	.02	.02
15321	#2 vein	Above Pelletier's adit - 12" crushed qtz.	.06	.24
15322		10 ft. north of 15321 - 2 ft. crushed qtz	.07	.31
15323		50 ft. north of 15322 - 2 ft. rusty gouge and black dike - very little qtz.	.03	.17
15324		15 ft. north of 15323 - 3 ft. qtz above gouge and black dike	.03	.24
15325		4 ft. qtz above gouge - 10 ft. north of 15324	.01	.13
15326		20 ft. north of 15 3 25 - 4 ft. qtz.	.19	2.8
15327		45 ft. north of 15326 - 3 ft. crushed qtz.	.17	.63

Respectfully submitted,

Charles F. Kowall Charles F. Kowall Geologist

SILVER STANDARD MINES LTD. (N.P.L.)

MEMO

REPORT ON 1973 PROGRAM

LORD RIVER GOLD MINES LIMITED (N.P.L.)

Clinton M.D.

(formerly Pellaire Gold Mine)

This group consists of 28 claims and one fraction held by location. At about 8000 feet elevation, sub-parallel, gold and silver bearing quartz veins, steeply dipping to the northwest, are exposed for distances of up to 700 feet across a ridge bearing north-south.

In September 1973, the access road to the property (not used since 1947) was re-opened, and an examination of this group was made.

Portal to No. 2 Adit on No. 4 Vein was cleared of talus and sampling along the surface trace and underground was carried out. The final 15 feet to the northeast of No. 2 Adit was caved.

Portals to Nos. 4 and 5 Adits on No. 5 Vein were cleared of fallen rock. Part of the surface trace of No. 5 Vein was sampled.

Portal to No. 3 Adit was caved - partially cleared by cat.

Trenching with a D-8 cat exposed a portion of No. 3 Vein along one of the existing roads on the east side of the ridge. An attempt at further trenching eastwards along strike was defeated because of permafrost in the talus.

Two hundred (200) feet of a flat-lying segment of No. 2. Vein was exposed immediately above Pelletier's adit. Samples were taken in all trenches showing quartz in place.

Assay results of samples taken were similar to those recorded by Dr. A.C. Skerl in his report on Pellaire Gold Mine, September 9, 1947.

Ore reserves taken to the greenstone-granite contact are:

Probable ore in Nos. 3, 4, and 5 veins is 36,750 tons at .504 oz. gold per ton.

Possible ore in Nos. 3, 4, and 5 veins is 40,410 tons at .638 oz. gold per ton.

A silver-gold ratio of 3.5 : 1 was determined.

Further ore can certainly be developed because the surface trace of No. 3 Vein extends for approximately 100 feet into the greenstone. Samples taken show the vein in the greenstone as ore grade.

In No. 5 Adit, No. 5 Vein extends into the greenstone and assays show this portion of No. 5 Vein to be ore grade.

More detailed sampling of No. 2 Vein could produce ore grade material.

Permafrost in some of the talus slopes at high elevations made road clearing and trenching difficult and in some cases impossible.

A tent camp was established on the access road to the mine on the east bank of Falls River. Approximately one mile south, at the junction of Falls River and a stream flowing from the McLeod Glacier, a permanent campsite was located. A truck road was built from the tent camp to this permanent campsite.

An ample supply of mine timber is available along the access road within five miles of the mine site.

Water in sufficient quantity for mining purposes can be obtained from a lake to which a road has been bulldozed. This lake is 500 feet in elevation below the mine site and 8400 feet to the south.

Transportation facilities to the Lord River property are presently as follows:

- Williams Lake to Lee's Corner 20 miles paved, balance gravel 56 miles.
- 2. Lee's Corner to Taseko River bridge gravel 48.4 miles.
- 3. Taseko River bridge to Taseko Lake ford dirt 16.5 miles. (narrow, twisting, suitable only for 4-wheel drive)
- 4. Ford across Taseko River at Lower Taseko Lake outlet - requires vehicles to be towed by cat - impossible in high water.
- 5. Ford to Fishem Lake dirt, some gravel, rocky 13.0 miles. (suitable only for 4-wheel drive vehicles).
- 6. Fishem Lake to Falls River dirt, some gravel 10.0 miles. (suitable only for 4-wheel drive vehicles).
- 7. Falls River ford can be safely driven by 4-wheel drive vehicles in low water - probably impassable during high water.
- Ford to mine site 2000-foot elevation change . . . 3.7 miles. (rocky, rough, steep, tight switch backs, 4-wheel drive vehicles only).

Accommodation:

- 1. Williams Lake full facilities.
- Lee's Corner gasoline restaurant phone, closed after 8:00 p.m. and all day Wednesday.
- 3. John Murdock's camp at Taseko River ford:-Cabins for 4 to 5 men. Meals can be provided by prior arrangement. Small cat - D-4 - radio, telephone.
- 4. Fishem Lake camp:-Cabins for 6 to 7 men. Meals can be provided by prior arrangement.

John Murdock)	
P.O. Box 471) can be reached by	
Williams Lake, B.C.) radio station CKWL	
) Williams Lake - 392-551	.2
Bob Daniel) messages broadcast 3 ti	mes
McLeese Lake - has D-8 and D-7E cats) daily - no charge.	

G.W. Laforme - Geologist



