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A GEOLOGICAL REPORT ON THE

ARGENTUM CLAIM

Dewdney Creek, Hope Area

New Westminster Mining Division

92 H / 6 E

LOG NO: 0304	RD.
ACTION:	
FILE NO:	

CO-ORDINATES

49° 25' 30" N / 121° 06' 30" W

OWNER OF CLAIMS:

SILVER SADDLE MINES LTD.
16 - 2971 Qu'Appelle Street
Victoria, B.C.
V9A 1V3

OPERATOR:

SILVER SADDLE MINES LTD.

CONSULTANT:

HAROLD M. JONES, P.ENG.

AUTHOR:

HAROLD M. JONES, P.ENG.

October 29, 1987

GEOLOGICAL BRANCH
ASSESSMENT REPORT

17,117

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SUMMARY

Argentum claim is located in the New Westminster Mining Division on Dewdney Creek, approximately 23 km east-northeast of Hope, B.C. It is accessible by four-wheel drive vehicle along an old logging road.

The property is underlain by Dewdney Creek Group, an Upper Jurassic package of volcanic sediments - sandstone, conglomerate, breccia (agglomerates), tuff and argillaceous tuff. These rocks are intruded by dioritic sills and dykes.

All rocks strike N10-20W, dip 60°W except near the west edge of the claim. Here, a reversal in dip indicates a synclinal structure in the sediments. One fault occurs in this area as evidenced by offsets in the geology.

Mineralization in the surveyed area was restricted to disseminated pyrrhotite and pyrite. One unit, a black argillaceous tuff, commonly contains several percent disseminated pyrrhotite and is coated by a thin veneer of limonite on all weathered surfaces.

Immediately east of Argentum claim, previous work by Silver Saddle Mines and others located a number of quartz-carbonate-sulphide veins in east-west striking fault zones, one of which is currently being "high graded". It is concluded that Argentum claim is on strike to the west and underlain by geology similar to the known mineralized areas. For this reason, a program of prospecting and soil sampling is recommended on Argentum claim followed by, if warranted, geophysical surveys and trenching.

INTRODUCTION

At the request of Silver Saddle Mines Ltd., the writer, on October 27-28, 1987, examined the company's Argentum claim and conducted reconnaissance geological mapping. The purpose of this work was to search for possible mineralized structures on the western part of the claim as well as plan additional exploration for the next field season.

The writer was accompanied by N.P. Wrede and P. Wrede, who assisted on the examination as well as cleared a slide blocking the access road.

Location and Access

49° 25' 30" North Latitude) to approximate centre
121° 06' 30" West Longitude) of the claim

The Argentum claim is located in the New Westminster Mining Division approximately 140 km east of Vancouver and 23 km east-northeast of Hope. It is situated at the headwaters of Dewdney Creek, covering the west-flowing tributary of this creek (see Figure 2).

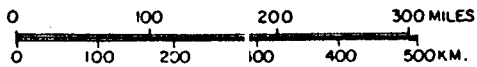
The claims are accessible from the Coquihalla Highway at the Carolin Mine turnoff, approximately 21 road kilometers northeast of Hope. A logging road, which follows up Dewdney Creek, is taken for 12 km from the highway turnoff to the claim. The lower part of the logging road is in good condition, the remainder has several poor sections partially blocked by slides. A four-wheel vehicle is required to travel the latter parts of the road.

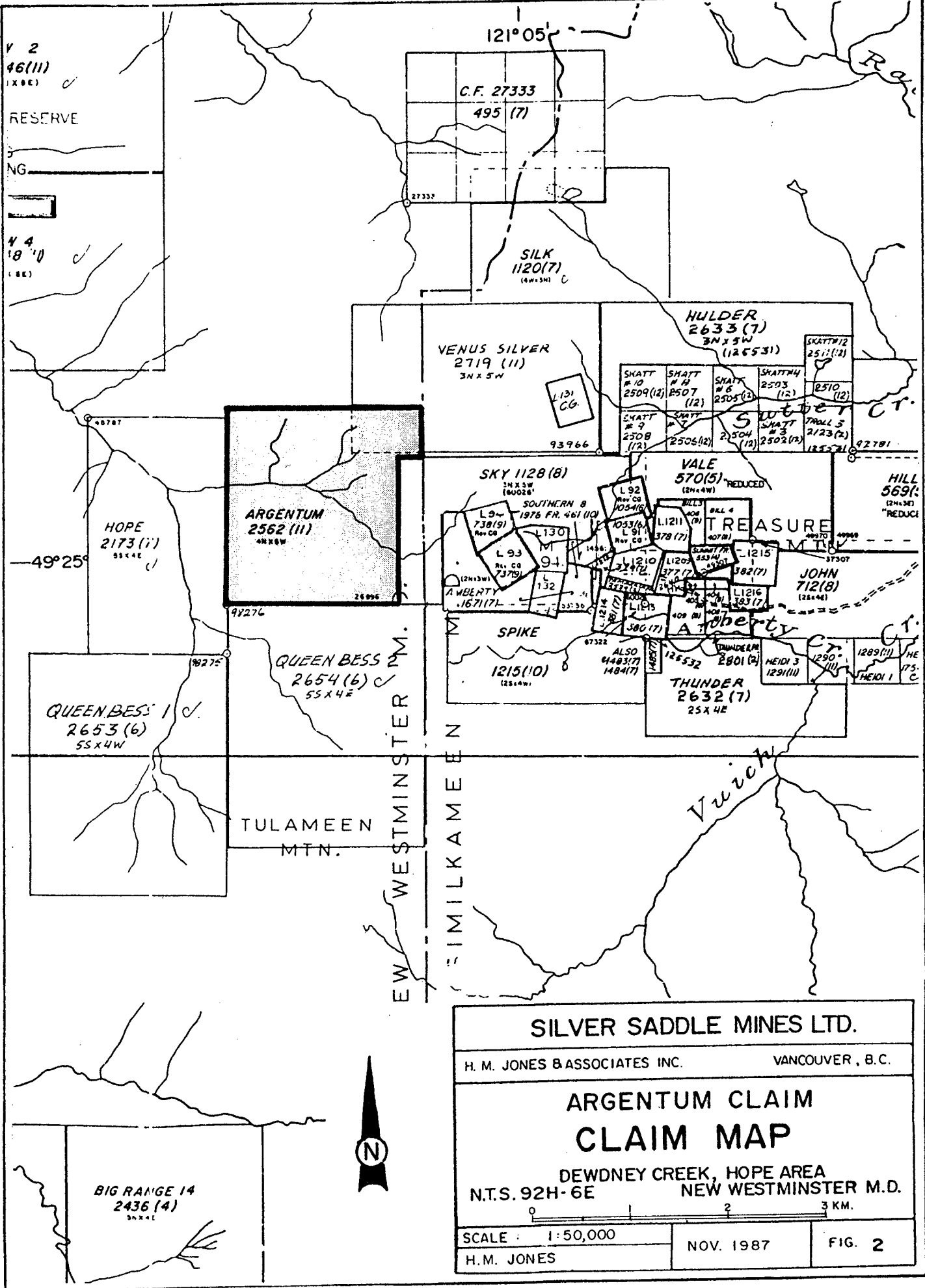
Topography and Vegetation

The claim is located within the Hozameen Range, which is characterized by high, rugged mountains separated by narrow, deeply incised valleys. All slopes on the claim are very steep and are cliff-forming at its eastern edge. Elevations range from 910 meters in the creek on the west boundary to over 1,825 meters on the ridge at the east boundary.



SILVER SADDLE MINES LTD.	
H. M. JONES & ASSOCIATES INC.	VANCOUVER, B.C.
ARGENTUM CLAIM	
LOCATION MAP	
DEWDNEY CREEK, HOPE AREA	
N.T.S. 92H-6E	NEW WESTMINSTER M.D.
SCALE : AS SHOWN	NOV. 1987
H.M. JONES	FIG. 1





SILVER SADDLE MINES LTD.		
H. M. JONES & ASSOCIATES INC.		VANCOUVER, B.C.
ARGENTUM CLAIM CLAIM MAP		
DEWDNEY CREEK, HOPE AREA N.T.S. 92H-6E NEW WESTMINSTER M.D.		
SCALE : 1:50,000	NOV. 1987	FIG. 2
H.M. JONES		

Most of the western half of the claim is devoid of mature timber. The lower part of the valley appears to have been logged while the upper slopes are partly logged(?) and/or burned off by a forest fire. The eastern and southern parts of the claim are in steep terrain well forested with commercial-sized fir. The creek bed, which runs through the western half of the property, has been scoured of all vegetation by obviously high run-offs during periods of snow melt and/or heavy rains.

Property

The property consists of one claim. It is:

<u>Claim Name</u>	<u>No. of Units</u>	<u>Record No.</u>	<u>Date of Record</u>
Argentum	20	2562(11)	November 5, 1984

The claim is owned by Silver Saddle Mines Ltd., 16 - 2971 Qu'Appelle Street Victoria, B.C. V9A 1V3.

The claim is shown on Figure 2, which is reproduced from B.C. Ministry of Energy, Mines and Resources' claim map 92H6E. The claim is incorrectly plotted on this map and should extend for an additional 500 m to the east. Until it is corrected on the government map, it will be shown as on Figure 2.

Any legal aspects pertaining to the claim is beyond the scope of this report.

History

The general area of the Argentum claim was explored intermittently from the late 1800's to the present time. Most of the exploration and mining activity was concentrated on the south slopes of Treasure Mountain, one to two kilometers east of Argentum claim.

The first significant work in this area was done during 1909-1912 on the Silver Chief group. It included 775 feet of crosscuts and 395 feet of drifts. During the same period, veins on the Morning Star and Blue Bell claims were explored by trenches and short adits. Work ceased in this area during World War I. Work was renewed in this area during 1927 with considerable drifting and crosscutting being conducted on the above properties. Other claims on Treasure Mountain being explored at this time included the Nickel Plate, Queen Bess and Morning Star.

In 1929, three car-load lots of hand-sorted ore was shipped from the Treasure Mountain properties. A small mill was latter erected and in 1932 about 130 tons of lead concentrate was shipped. Work in the area ceased at this time and except for a brief period of activity during 1955-1957 and 1970 remained dormant until 1983.

In 1971, N.P. Wrede acquired several of the old properties located on Treasure Mountain and transferred them to Silver Saddle Mines Ltd. They are included in mineral lease 94 (lot 130 - Summit No. 2 and lot 132 - Blue Bell) which was optioned in 1983, along with other adjoining claims in the area, by Unicorn Resources Ltd. This company conducted soil sampling, magnetometer and VLF-EM surveys, geological mapping, trenching and diamond drilling on these claims. They terminated their option in 1984.

During 1984-85, Silver Saddle Mines Ltd. conducted a program of prospecting, stripping, bulk sampling, road building and engineering studies on mineral lease 94. Work during these programs indicated east-west trending mineralized structures projecting into open ground at the

headwaters of Dewdney Creek. Argentum claim was staked in 1984 to protect this area.

The only reported mineral occurrences on Argentum claim appeared in the 1913 B.C. Mines Annual Report. These included Black Jack and U.S. Rambler. Their locations are not known but are indicated (B.C. Mineral Inventory Map 92H, ~~3E~~^{3W}) to be within Argentum claim. Both properties have a vein structure mineralized with small amounts of pyrite, marcasite, galena and sphalerite.

GEOLOGY

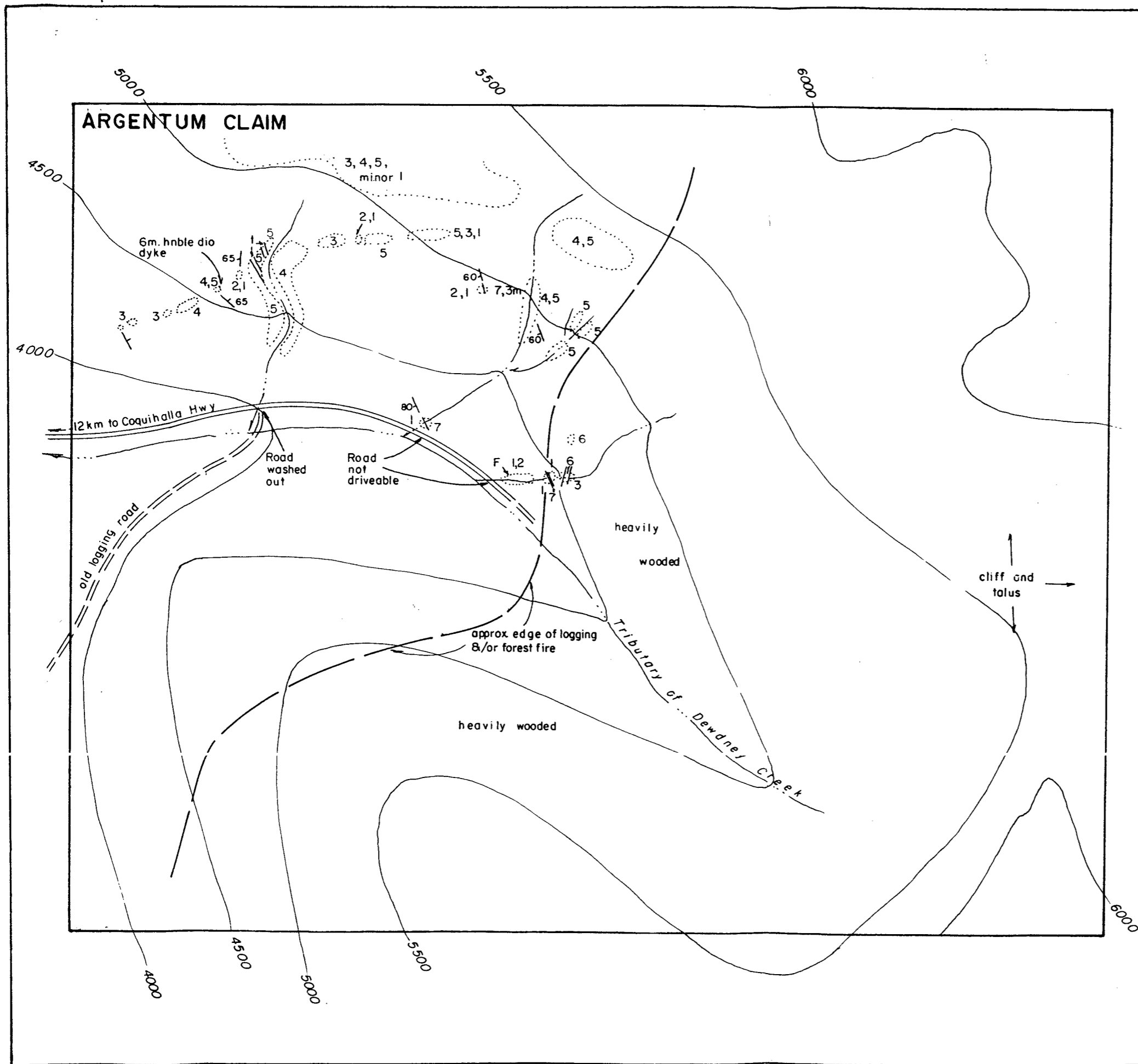
Regional Geology

The Argentum claim is underlain by Upper Jurassic Dewdney Creek Group sediments. They conformably overlay Lower to Middle Jurassic Ladner Group sediments. These rocks are in fault contact to the east with Cretaceous Pasayten Group sediments. All of the above are intruded by mid-Tertiary stocks, sills and dykes.

Property Geology

Reconnaissance geological mapping was conducted on the western part of Argentum claim north of the creek. This area was selected because of the abundance of rock exposed by logging and/or a forest fire and the references in the literature to several mineral occurrences in this vicinity. Traverses were made up of a steep creek gully at the edge of the clearing and along the upper south-facing slope.

These areas expose a monotonous sequence of interbedded volcanic sandstone, volcanic conglomerate, volcanic breccia (agglomerate), tuff and tuffaceous argillite. Occasional dykes and sills intrude these various units. Other than the latter unit, all weather various shades of light to dark grey.



LEGEND

- 7 HORNBLLENDE DIORITE
 - 6 DIORITE
 - 5 VOLCANIC SANDSTONE
 - 4 " CONGLOMERATE
 - 3 " BRECCIA
 - 2 TUFF
 - 1 ARGILLACEOUS TUFF
- OUTCROP
 - BEDDING
 - F FOSSIL SITE
 - == ROAD
 - - - CREEK

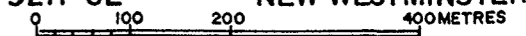


SILVER SADDLE MINES LTD.

H. M. JONES & ASSOCIATES INC. VANCOUVER, B.C.

**ARGENTUM CLAIM
GEOLOGY**

DEWDNEY CREEK, HOPE AREA
N.T.S. 92H-6E NEW WESTMINSTER M.D.



SCALE: 1:10,000	NOV. 1987	FIG. 3
H.M. JONES		

The most abundant rocks observed are the volcanic sandstones, volcanic conglomerates and volcanic breccias (agglomerates). They are all similar in composition, being composed mainly of felsic volcanic clasts. Mafic clasts are chloritized. Quartz occurs in the sandstones as small grains, in the conglomerates as rounded glassy pebbles and in the breccias as quartz eyes.

On fresh surfaces, it is often difficult to distinguish the texture of the various rocks. All appear medium to coarsely granular. However, some weathered surfaces clearly indicate the nature of the clasts, whether they are angular, rounded or sub-rounded.

Most of the above rocks are medium to coarse grained, with the coarser clasts commonly 2 mm to 5 mm in diameter. In the volcanic conglomerates most clasts are 2 mm to 10 mm with occasional boulders to 20 cm diameter.

The tuffaceous and argillaceous rocks are the most distinctive units seen on the traverses. The tuffs are finely bedded with individual laminae commonly being 1 mm to 2 mm wide. They alternate between gray and green beds, each 10 mm to 40 mm wide. All beds are fine grained, some are cherty.

The tuffaceous argillaceous rocks are black, fine grained and massive. Bedding is not obvious in these rocks but is occasionally seen on fresh surfaces where it grades to slightly coarser units. These rocks usually occur as distinctive bands three to six meters wide bounded on either side by the well-bedded grey and green tuffs. Their weathered surface and fractures are always coated with a thin "varnish" of orange-brown to dark brown limonite.

A one meter-wide fossiliferous bed was seen in the argillaceous rocks in the eastern most creek. They were bi-valved with a pronounced ribbing on the shell-pelycypods.

Several sills(?) were noted within the above described sedimentary package. They consist of abundant lath-like hornblende crystals in a haphazard array in a white, carbonate-altered matrix. In outcrop they have a characteristically dark rounded weathered surface. The field term hornblende diorite was applied to these rocks.

One diorite dyke was seen which appears to crosscut the general trend. Its attitude was N20E/90 as compared to the sediment at N10-20W / 60-80W. Shearing along its western contact was accompanied by a narrow zone of quartz veinlets.

Structure

In the central part of the claim bedding attitudes are generally N10-20W / 60W. However, at the western edge of the claim, they change to N30-40W / 50-60E, indicating a synclinal fold structure, the axis of which lies near the western-most creek.

The above creek lies within a deep, cliff-lined gulley which probably reflects faulting. Rusty, limonitic argillaceous tuffs, exposed on its upper western wall, do not appear across the creek on the eastern wall, indicating right hand movement along a N30E trending fault. The "Z" shape to this creek may reflect the N30E fault being offset along a N20W bedding plane fault (or fault paralleling the synclinal fold axis).

Other than bedding plane shears, no other structures were recognized.

Mineralization

Pyrrhotite and lesser pyrite are commonly disseminated throughout the sedimentary rocks. They are generally present in amounts less than one percent except in the argillaceous units. In these latter rocks pyrrhotite, up to several percent, occurs as disseminations and coatings on fractures and bedding.

Two mineral occurrences are mentioned in the literature and are indicated to be present on or near Argentum claim (B.C. Min. Inv. Map 92HSE). They were not located during the traverses. The Black Jack showing is described as being 20 feet from the bed of Dewdney Creek, an area which is now completely obliterated by logging debris and boulders from the high stream run-offs. This showing is described as being a one foot wide crushed zone paralleling the sediments mineralized with small amounts of pyrite and traces of galena and sphalerite. A sample over 12 inches assayed traces in gold and silver.

The U.S. Rambler occurrence was described as being situated above Dewdney Creek at an elevation of 5,400 feet. It consisted of a 2 to 4 foot wide vein striking N10°E parallel to the enclosing sediments. The vein filling is mostly altered country rock carrying minor pyrite and, in places, traces of galena and sphalerite. It was tested by a 50 foot adit and several open cuts. One sample from near the adit face assayed over 2.5 feet: gold - tr; silver - 0.5 oz/ton.

Abundant heavily iron stained float was seen in the creeks and the logging road. In almost all cases these were argillaceous rocks with pyrrhotite. One piece of strongly ankerite-altered sediment was found at the north end of the logging road.

DISCUSSION

A number of silver-bearing lead-zinc veins are present in old workings on Treasure Mountain located immediately east of and in similar geology to Argentum claim. These consist of quartz-carbonate-sulphide veins filling fractures and replacing wallrock along east-west striking faults. They are mineralized with sphalerite, galena, pyrite, and pyrrhotite and, at times, minor chalcopryrite, magnetite, arsenopyrite, tetrahedrite, and stibnite. The silver-lead ratio is reported (Black, 1952) to be between two and three ounces silver to one percent lead. Cairnes (1922) suggests that silver occurs as argentite contained in the galena.

Work by Unicorn Resources Ltd. and Silver Saddle Mines Ltd. traced several of the above veins westward for up to 900 meters. The projected strike of these veins, and the well mineralized Treasure Mountain fault, is toward Argentum claim.

Huldra Silver Inc. are currently mining and sorting ore on their Treasure Mountain property. This ore, rumoured to contain appreciable silver along with base metals, is to be shipped out before the onset of winter.

From the above summary it is apparent that Argentum claim is favourably located for hosting either extensions of the known Treasure Mountain veins or other, as yet, undiscovered veins. The property warrants additional exploration.

CONCLUSION

While no mineralized zones were observed in the area traversed, it is concluded that Argentum claim has the potential for hosting silver-bearing base metal veins similar to those on Treasure Mountain. An exploration program is recommended.

RECOMMENDATIONS

It is recommended that Argentum claim be thoroughly prospected, especially in its eastern part, to search for mineralized fault structures. Geochemical soil sampling should be conducted in conjunction with prospecting on north-south trending lines to intersect possible east-west striking mineralized veins. Any anomalous zones or mineralized faults should be detailed with VLF-EM surveys, and trenched with a backhoe, if feasible.

ESTIMATED COSTS

Stage I - prospecting, limited soil sampling - 2 weeks

Prospectors, two at \$125/day	\$ 3,500	
Soil samples, 400 at \$10/sample	4,000	
Room and board at \$40/man/day	1,120	
Vehicle at \$50/day	700	\$ 9,320
Contingencies		<u>1,380</u>
Total Stage I		\$ 10,700

Stage II - contingent on Stage I
- VLF-EM survey, trenching - one month

VLF-EM survey, allow	\$ 10,000	
Trenching	20,000	
Road construction	15,000	
Labour, 4 men	20,000	
Accommodation	5,000	
Vehicle	1,500	
Geological consulting and supervision	<u>5,000</u>	\$ 76,500
Contingencies		<u>11,500</u>
Total Stage II		\$ 88,000

Respectfully submitted,


Harold M. Jones, P.Eng.

REFERENCES

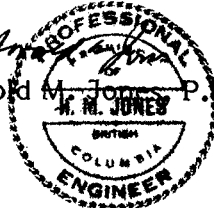
- Black, J.M. (1952) - B.C. Minister of Mines Annual Report, 1952, pp. 119-134.
- Cairnes, C.E. (1922) - Geol. Surv. Can., Summary Report, 1922, Part A, pp. 38-107.
- Janes, R.H. (1985) - Report on Mineral Lease 94, Similkameen Mining Division, B.C. for Silver Saddle Mines Ltd.
- Monger, J.W.H. (1969) - Geol. Surv. Can., Paper 69-47.

CERTIFICATE

I, Harold M. Jones, of the City of Vancouver, British Columbia, do hereby certify that:

1. I am a Consulting Geological Engineer with offices at 605-603 West Hastings Street, Vancouver, British Columbia.
2. I am a graduate of the University of British Columbia in Geological Engineering, 1956.
3. I have practised my profession as a Geological Engineer for over 30 years.
4. I am a member of the Association of Professional Engineers of British Columbia, Registration No. 4681.
5. I examined Argentum claim on October 27-28, 1987 and prepared a sketch map of a part of the property. I also reviewed the data listed under "References" in this report.
6. I have no interest in, nor do I expect to receive any interest, direct or indirect, in the Argentum claim or in the securities of Silver Saddle Mines Ltd.

Dated at Vancouver, B.C. this 31st day of October, 1987

Harold M. Jones
Harold M. Jones P. Eng.


APPENDIX I

STATEMENT OF EXPENDITURES

STATEMENT OF EXPENDITURES

Wage:

N. P. Wrede - assisting geologist October 27-28, 1987 2 days at \$150 per day	\$ 300	
P. Wrede - assisting geologist October 27-28, 1987 2 days at \$125 per day	250	
H. M. Jones, P.Eng. - consulting geologist October 27-28, 1987 2 days at \$400 per day	<u>800</u>	\$ 1,350

Room and board:

Three men, two days at \$40 per man per day	240
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Vehicle:

Two days at \$45 per day + mileage at 15¢/km	140	
Gas for vehicle	<u>50</u>	190

Report and maps:

Report - H.M. Jones, P.Eng.	800	
Drafting	90	
Secretarial	<u>75</u>	<u>965</u>
		<u>\$ 2,745</u>

