

Province of **British Columbia**

Ministry of Energy, Mines and Petroleum Resources GEOLOGICAL SURVEY BRANCH

ASSESSMENT REPORT

DATE SUBMITTED

DECEMBER 1, 1995

TITLE PAGE AND SUMMARY

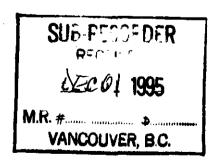
TITLE OF REPORT [type of survey(s)]	PROSPECTING	\$1,066.85
AUTHOR(S) DE LATRE, JOHN S.	SIGNATURE(S) Slave	- Auto
NOTICE OF WORK PERMIT NUMBER(S)/DATE(S)		YEAR OF WORK 1995
STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S		
PROPERTY NAME SILVER HILL		
CLAIM NAME(S) (on which work was done)	SILVER HILL 1, SILVE	ER HILL 2
	SILVER HILL 3, SILVE	ER HILL 4
COMMODITIES SOUGHTGOLD-SILVER		
MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN		
MINING DIVISION NICOLA	NTS092I08W	
ATITUDE 50 ° 22 ' 00 ° L	ONGITUDE 120 ° 20 ·	30 (at centre of work)
OWNER(S)		
DE LATRE, JOHN S.	2)	······
MAILING ADDRESS		
802- 1215 BEACH AVENUE		
VANCOUVER BC V6E 1V5		
OPERATOR(S) [who paid for the work]		
DE LATRE, JOHN S.	2)	· · · · · ·
		
MAILING ADDRESS		
802- 1215 BEACH AVENUE		
VANCOUVER BC V6E 1V5		·· ·
PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigrap	hy, structure, alteration, mineralization, si	re and attitude):
TRIASSIC NICOLA GREENS		
DYKE STRIKING 145 DEGRE	ES AND CARRYING PYRIT	E, PYROLUSITE AND
ANOMALOUS AMOUNTS OF G		
MINERALISED STRUCTURE	IS BELIEVED TO BE REL	ATED TO THE STUMP
LAKE FAULT.		

TYPE OF WORK IN THIS REPORT	EXTENT OF WORK (IN METRIC UNITS)	ON WHICH CLAIMS	PROJECT COSTS APPORTIONED (incl. support)
GEOLOGICAL (scale, area)			,
Ground, mapping			ļ
Photo interpretation			
GEOPHYSICAL (line-kilometres)		1	
Ground			
Magnetic			
Electromagnetic			<u> </u>
Induced Polarization			<u> </u>
Radiometric			<u> </u>
Seismic			
Other		<u></u>	<u></u>
Airborne			<u> </u>
GEOCHEMICAL		}	
(number of samples analysed for)			
Soil			
Silt			
Rock		 	
Other			<u> </u>
DRILLING (total metres; number of holes, size)			
Core		<u> </u>	
Non-core			<u> </u>
RELATED TECHNICAL			-
Sampling/assaying		<u> </u>	
Petrographic	•		
Mineralographic		 	
Metallurgic			
PROSPECTING (scale, area)1:5000	±30 HECTARES	SILVER HI11 1 TO 4	\$1,066.85
PREPARATORY/PHYSICAL			
Line/grid (kilometres)			
Topographic/Photogrammetric (scale, area)			
Legal surveys (scale, area)			<u> </u>
Road, local access (kilometres)/trail			
Trench (metres)			
Underground dev. (metres)			
Other			
		TOTAL COST	

GEOLOGICAL SURVEY BRANCH **ASSESSMENT REPORTS** DATE RECEIVED DEC 13 1995 3.(2)(b) TABLE OF CONTENTS Page 3.(2)(a) TITLE PAGE AND SUMMARY 1 3.(2)(c) INTRODUCTION 4 3.(2)(d)TECHNICAL DATA AND INTERPRETATION 6 3.(2)(e) ITEMIZED COST STATEMENT 13 3.(2)(f) AUTHOR'S QUALIFICATIONS 14 **FIGURES** FIGURE 1 INDEX MAP 1:50000 SCALE 5 FIGURE 2 PROSPECTING SURVEY MAP 1:5000 SCALE 12 APPENDIX

ASSAY CERTIFICATES

15-17



SSESSWENT REPORT

24,165



3.(2)(c) INTRODUCTION

(i) The Silver Hill Claims, or 'Silver Hill', are situated at latitude 50°22' N, longitude 120°20'30" W, 880 metres altitude, about 40 kilometres south of the City of Kamloops. The Claims are easily accessible by vehicle using the Old Kamloops Road (unimproved dirt road) from Highway 5A, either at the south end or the north end of Stump Lake.

The north end of the Nicola Valley, a subdivision of the Thompson Plateau, is gently undulating around 950 m in altitude with a drainage system that gently descends to Nicola Lake. The climate is fairly dry, the annual precipitation being around 350 mm. The land is grass range with wooded areas where there is more water. The area is hardly populated, but there are scattered ranches.

(ii) The Silver Hill Claims consist of four 2-post contiguous claims. The tenure numbers of the Silver Hill 1 to 4 Claims are respectively 334900 to 334903, Nicola Mining Division. All the Claims are recorded in the name of John S. De Latre and are plotted on Mineral Reference Map 92I08W. The expiry date of the Claims is April 18,1998 with the acceptance of this mineral exploration assessment work.

Sporadic and rubbly exposures of a quartz reef remained until early 1995 unrecognized and unsampled on a low hill now covered by the Silver Hill Claims. Silver Hill is geologically interesting as a new epithermal—mesothermal mineral showing in proximity to a large gold bearing epithermal system (the Kullagh Lake Zone) and along the southern extension of the Stump Lake Fault, a regional structure.

(iii) This report, written for government assessment work requirement, describes the results of initial prospecting conducted

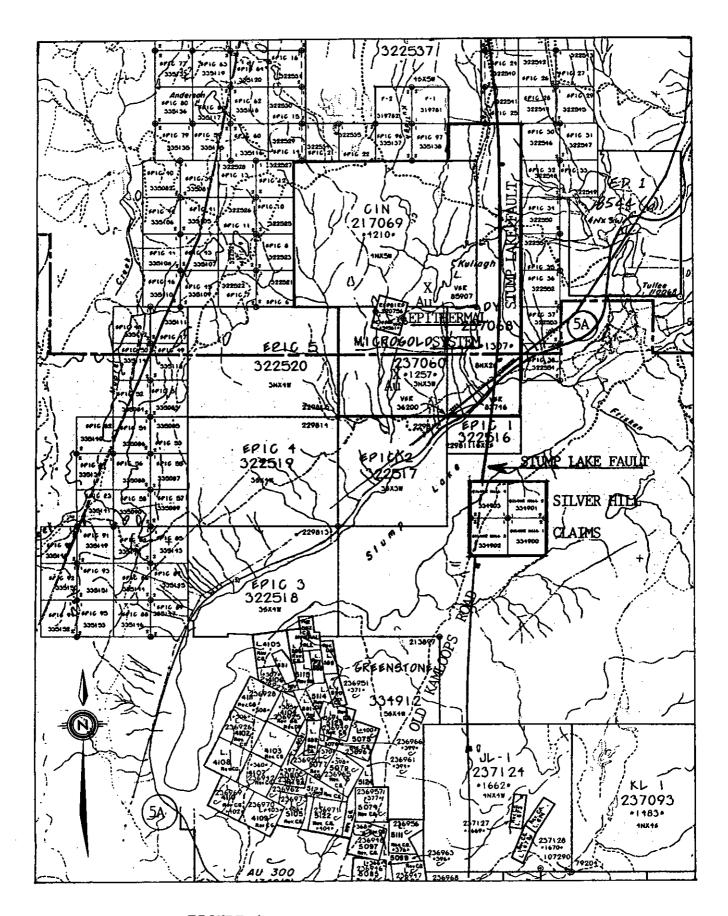


FIGURE 1 INDEX MAP
Mineral Reference Map 92108W
Scale 1:50 000 0 1000 2000 m

by the writer between August 5 and 9 inclusive 1995. The total area prospected is approximately 30 hectares along the mineralised structure. Six geochemical chip samples were analysed for 30 elements and gold.

(iv) The list of claims upon which work was actually performed is as follows:

Silver Hill 1 (334900) Silver Hill 2 (334901) Silver Hill 3 (334902) Silver Hill 4 (334903)

3.(2)(d) TECHNICAL DATA AND INTERPRETATION

General. The 1995 investigation of the Silver Hill Claims combined conventional, geological and geochemical prospecting and resulted in outlining a mineralised structure for more than 100 m along strike. Geological mapping of the area has not been attempted by the writer.

'Mineralised structure' is employed in this report to designate the more or less continuous mass of fractured and silicified or otherwise altered rock, geochemically anomalous, and in which ore shoots may be found.

Despite the good rock exposures in a terrain of open ponderosa pine bush and good road access, apparently no sampling of vein material on surface had been attempted on Silver Hill. There is no evidence of prospect pits or open-cuts anywhere. The area was known to prospectors since the 1880s, but no record of mineral discovery at this locality exists in the literature.

Lithology. The prospected area is underlain almost entirely by green andesites of the Triassic Nicola Group, most of them

bearing conspicuous phenocrysts of augite. Some fresh black basalt has been observed in the southern portion of Silver Hill 3 This basalt is similar to the upper member of the Eocene Kamloops Group which is exposed 3 km to the north on the east side of Stump Lake Fault. A sheared and mineralised dyke of quartz porphyry (porphyritic microgranite) occurs together with the mineralised structure at the localities 702 and 703. This intrusion may be related to the bimodal basalt-rhyolite sequence during the Paleogene as exemplified north of Kullagh Lake.

Alteration. The Nicola andesites in the Silver Hill area are pervasively but variably propylitised which suggests probable intrusive activity or a boiling geothermal system. The propylitic alteration appears to be a broad-scale feature and is not limited to the area of the mineralised structure. Silicification and "sericitic" alteration (i.e. a mica-type mineral + quartz + pyrite) are not yet well defined but appear to be restricted to the mineralised structure. The absence of the high-level acid-sulphate alteration suggests that the exposures represent rocks deeper in the hydrothermal system, closer to the mesothermal level.

Structure. The major structure of the region is a syncline with an axis trending about 020 degrees. The Claims area appears to have undergone very little deformation. The attitude of the Nicola greenstone has not been observed on the Claims. The primary fault structure in the Nicola Lake Area is the Stump Lake Fault, a regional structure which extends at least 12 km north and 8 km south of Silver Hill. This is a steeply easterly-dipping normal fault. The writer believes that the fault passes through the westernmost portion of the Silver Hill property, and does not curve conveniently southwestward under Stump Lake to joint a topographic depression east of Mineral Hill.

Mineralisation. A mineralised structure has been traced for over 100 m along strike on the hilltop and the north slope of the side-hill in about the centre of the Silver Hill property. The structure strikes 145 degrees (at an angle of ±45 degrees with the Stump Lake Fault) and dips ±65 degrees northeast. The width is difficult to determine without trenching. It appears to be at least 1 m at the localities 702-03-04. The quartz-vein and parallel quartz porphyry dyke consist of a quartz-carbonate-mica-pyrite assemblage in a mesothermal to epithermal environment. Adularia was not positively identified but may be present in minute crystals. At the localities 702 and 704 the quartz porphyry is strongly sheared. It is gray to reddish with a fair amount of pyrite and pyrolusite, traces of copper oxydation, and in places much carbonate. The vein rubbles at the localities 705 and 706 (uprooted trees) exhibit ribbon structure of a more epithermal character. At 705 the gray quartz is banded and the vein contains 10% of calcium. At 706 the quartz is drusy and the sulphides have become much oxidized and much pale and dark limonites have been formed. At all these localities blasting or shallow drilling is required for a meaningful investigation.

At the locality 701, along the Old Kamloops Road, a quartz vein 10 cm wide and 3 quartz stringers ± 1 m apart striking 350 degrees and dipping 20 degrees east, occur in a large greenstone outcrop. The veinlets are exposed on a lengthh of up to 25 m. The sample 701 was not assayed for gold because the quartz appears barren and the veinlets are too small to have economic potential.

The southern part and the westernmost part of the Silver Hill property are covered by glacial drift, probably no more than a few metres thick, and have good potential for gold-silver deposits at depth related to the Stump Lake Fault. Rock Geochemistry. Six vein-quartz and quartz porphyry chip samples, of about 1 kg each, were collected by the writer during the course of the initial prospecting. The samples were analysed (0.5g) for 30 elements by ICP and for gold by Wet Extraction (10g digested in aqua regia, MIBK extraction, analysed by graphite furnace AA) at Acme Analytical Laboratories. Only arsenic and antimony were weakly anomalous. Gold was only 7 to 28 ppb. Three reject samples were rerun at SGS General Testing Laboratories. Gold and silver were determined by standard Fire Assaying (one assay ton). Gold was 70 to 150 ppb, silver 3 to 5 ppm and arsenic 90 ppm. Considering the small size of the samples (1 kg), these results are encouraging; gold being 50 times clarke, silver 50 to 70 times clarke. The reader is referred to Table 1 next page for the results and geochemical interpretation of this preliminary test.

The geochemical signature of the mineralised structure suggests an epithermal - mesothermal system in which gold is in general anomalous at parts per billion levels and concentrated in ore shoots. Arsenic and antimony are respectively 45 and 100 times clarke. Colloidal As-Sb sulphides may be kinetically instrumental in producing ore grade precipitates in epithermal type gold-silver deposits.

The more sporadic the distribution of a constituent of interest is and the lower its concentration, the larger is the volume of the sample needed. One kilogram of sample is inadequate for the determination of gold. It is noteworthy that gold was first identified at the Manhattan mercury mine — now the famous McLaughlin gold mine, California — in a 20-kg sample. It is also clear that standard Fire Assaying is the only reliable method for gold determination.

TABLE 1. ANALYTICAL RESULTS AND GEOCHEMICAL INTERPRETATION

ICP Analysis and Geochemical Gold Analysis by Wet Extraction* (ACME):

	pp	m £	Pb opm	Zn ppm	Ag ppm	N1 ppm	PPm PPm	<u>Mn.</u>	/ [#	AS. ppta	DDM DDM	Au ppm	Th ppm	\$r ppm	Çd ppm	<u>sb</u>	B∮ ppm	V	Ca ¥	P Y	La ppm	PPM PPM	Mg	Ba ppm	Ti Y	8 mag	Al 2	Na Y	K ¥	ppm ppm	Au*
ppm				- Print	- Print	to bear.	PP	pp		pp.	PPI	P	bb	PP"	PPIII	PP-11	PPII	Phil			PPII	b-in		Phil		PPIII				PPIII	PPD
E 90702 2	10	2	12	48	.3	49	27	1033	4.67	14	<5	<2	<2	228	<.2	<2	<2	109	6.42	.072	2	163	3.44	118	.03	<3	2.01	.02	.37	<2	23
E 90703 <1	11	2	7	55	.3	55	31	1327	5.33	28	<5	<2	<2	250	<.2	<2	<2	75	6.11	.074	3	168	4.21	162	.02	6	1.09	.02	.42	<2	18
E 90704 3	1	1	5	18	<.3	13	4	953	1.67	51	<5	<2	<2	200	<.2	3	<2	12	5.92	.029	<1	12	2.42	117	<.01	4	.12	.01	.06	3	28
E 90705 1	3	5	6	22	<.3)	67	13	1044	2.98	34	<5	<2	<2	254	<.2	<2	<2		9.66	-	4	76	4.30	106		3	.36	.01	.08	<2	7
E 90706 2	11	3	6	49	₹.3	49	25		2.97	74	<5	<2	<2		<.2	23	<2	54			4		.51	177		3	.70	<.01	.03	<2	8
																_															ĺ
E 90707 2	11	1	8	56	<.3	30	22	907	4.91	11	<5	<2	<2	169	<.2	<2	<2	90	3.86	.084	1	48	2.90	349	. 14	6	1.84	.03	.97	<2	4
RE E 90707 3	- 11	0	5	55	<.3	27	22	892	4.80	12	<5	<2	<2	165	<.2	<2	<2	88	3.75	.082	1	42	2.83	341	. 14	5	1.81	.03	.97	<2	7
STANDARD C/AU-R 18	5	8	41	137	6.9	69	32	1072	3.76	41	15	5	37	54	17.8	17	16	59		.091	40	63	.91	193	.09	29	1.84	.06	.16	11	550

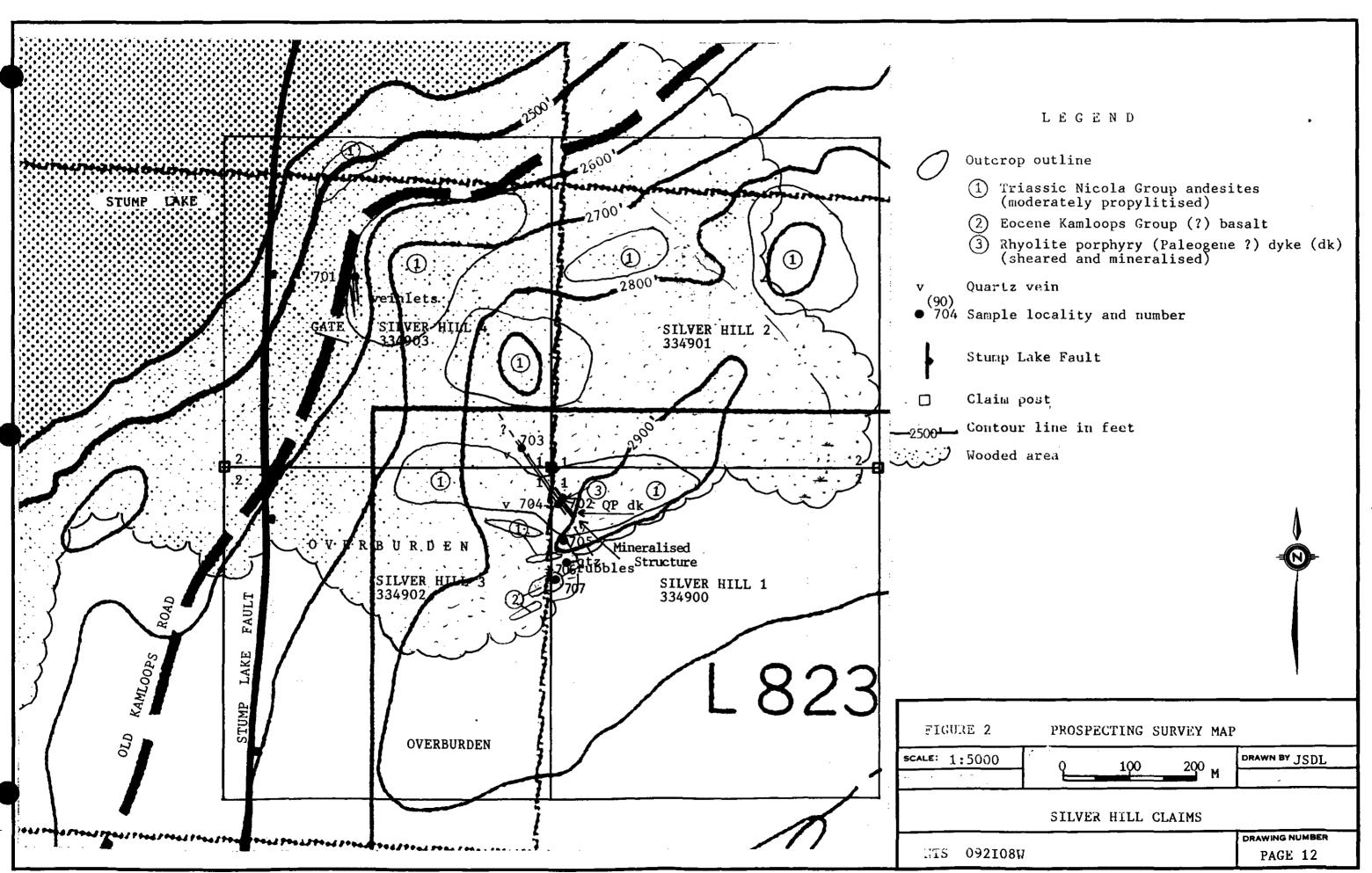
Unadjusted Fire Assay Analyses (SGS) :

10

Locality and Sample Nos.	Description	Ounces per ton	Parts per million (PPM	Enrichment above andesitic abun- dance (clarkes)	Abundance in andesitic rocks in PPM (average)
702-704	702 sheared qtz po-	Au 0.004	Au 0.15	50 times	Au 0.003
(mixed)	rph. >1m width 704 white, vitre- ous qtz v. >50cm f.gr. pyrite,6% Ca	Ag 0.09	Ag 3.4	50 -	Ag 0.07
7 05	Banded bluish gray	Au 0.003	Au 0.11	40 times	
	gtz, 10% Ca (rubbles), minor pyrite	Ag 0.15	Ag 5.0	70 times	
706	Drusy qtz, much	Au 0.002	Au 0.07	25 times	
	Fe/Mn oxydes,1.5% Ca (rubbles), fine	Ag 0.08	Ag 3.00	45 -	
	grained pyrite		As93.	45 -	As 2.0
			Sb23-30 > (ICP)	100 -	Sb 0.2

Conclusions.

- 1. The Silver Hill Claims occupy a fault zone which controlled
 - (a) the location of at least one rhyolite porphyry dyke,
 - (b) an epithermal mesothermal system which introduced among others antimony, arsenic, silver and gold.
- 2. A 100-m long mineralised structure on surface shows pyrite disseminations with low values in silver and gold. Exposures are not sufficient to determine the width of the reef shear zone or the extent of the mineralisation.
- 3. The Silver Hill Claims are at the intial prospecting stage. Larger surface samples should be collected on the mineralised structure in order to obtain possibly better gold and silver values. The mineralised structure identified on surface may prove to be of considerable size at depth.
 - 4. The drift covered area west of the mineralised structure in question is highly prospective for both a fracture controlled vein system and a disseminated or stockwork system related to the steeply inclined, normal Stump Lake Fault of limited displacement (<1km).



3.(2)(e) STATEMENT OF EXPENDITURES

Statement of Expenditures with the Prospecting Work carried out on the Silver Hill Claims, located in the Stump Lake Area, Nicola Mining Division for the year 1995.

Fieldwork Costs

J. De Latre, geologist (minimum prospector's wages) 5 days @ \$100.00/day August 5 to 9, 1995 Vehicle Operation (to and fro the Claims); Aug. 4-9 Rations 5 days @ \$12.00/day; Aug. 5-9 Analyses/Assay Costs 6 ICP Analyses for 30 elements and W E gold \$145.72 (Acme Analytical Laboratories) 3 Fire Assays for Au and Ag, 1 assay for As\$101.65 (SGS General Testing Laboratories)	\$ 500.00 114.00 60.00 247.37
Total	\$ 921.37
Report Preparation Costs	

J. De Latre, geologist, 1 day @ 100.00/d Report supplies	ay	\$	100.00
Typing and copying reports	To to 3		25.00
GRAND	Total	•	145.48 1066.85
OMM/D	TOTAL.	•	======

3.(2)(f) AUTHOR'S QUALIFICATIONS

- I, John S. De Latre, of the City of Vancouver, in the Province of British Columbia, do hereby state that:
- 1. I am a graduate of the Université de Paris (Faculty of Sciences) with a degree in applied geology (1956).
- 2. Between 1959 and 1981 I have intermittently held responsible positions in the capacity of a field geologist with various mining companies in Canada, and I have gained wide experience in precious and base metals exploration.
- 3. I have been in the business of prospecting for minerals on behalf of myself in British Columbia since 1982.
- 4. I carried out the prospecting work described in this report.
- 5. I own a 100 percent interest in the Silver Hill Claims.

Dated at Vancouver, B.C. the 1st day of December 1995.

Respectfully submitted,

JOHN S. DE LATRE



%5G	SGS Genera	Canada II I Testing Lab	NC. poratories Divi	sion		
1001 East Pender Vancouver, B.C. Canada V6A 1W2 Telephone (604) 2 Fax (604) 254-214 Telex 04507514 Date: September 1, 19 No.: File: 0302-38317 WE HEREBY CERTIFY THAT THE F MARKED Ore sample received on August 25/95 # 704-02 Further assaying on ore sample received on Aug.23/95	Street 254-1647 18	ATE OF II	NAD III C	MR. JOHN Ste. 802 - Vancouve V6E 1V5	N DE LATRE 1215 Beach / r, B.C.	Ave.,
•		ATE OF U	INADUUSI	ED ASS	PAI	
Date: September 1, 19 No.:	995					
File: 0302-38317			.=			
MARKED	GOLD Au(oz/ton)	SILVER	ARSENIC As (ppm)	XXX	XXX XXX	xxx
		, ,	The state of the s			
Ore sample received on August 25/95		·				
# 704-02	0.004	0.09	-			
Further assaying on ore sample received on Aug.23/95						
706	•	-	93			
						}
NOTE: Rejects retained for one mo				· · · · · · · · · · · · · · · · · · ·		<u> </u>
On request pulps and reject All reports are the confidential propertatements, conclusions, or extracts permitted without our written approvimited to the fee charged.	orty of our clients.	Publication of our reports is not	·	(3 AL	_
				PR	OVINCIAL ASSA	YER
		- 1	.5 -			

65•565•565•565•565•565•565•565•565•565•		Canada Ir Il Testing Lab				
1001 East Pender Vancouver, B.C. Canada V6A 1W2 Telephone (604) 2: Fax (604) 254-214 Telex 04507514	Street 54-1647 8			MR. JOHN Ste. 802 - Vancouve V6E 1V5		Ave.,
	,EKTIFIC,	ATE OF UI	NADJUS I	ED ASS	АҮ	
Date: August 23, 1995 No.: File: 0302-38253						
E HEREBY CERTIFY THAT THE F	GOLD Au(oz/ton)	SILVER Ag(oz/ton)	F ASSAYS ON:	SUBMITTED (XXX	xxx
Ore samples received on August 18/95						
# 705	0.003	0.15				
# 706	0.002	0.08				
NOTE: Rejects retained for one mor						
On request pulps and reject All reports are the confidential prope statements, conclusions, or extracts remitted without our written approve imited to the fee charged.	will be stored for rty of our clients. from or regarding	ra maximum of on Publication of our reports is not		PR	B. PEPPE	AYER
		- 16	_			

ACME AND ICAL LABORATORIES LTD. 852 E. HASTINGS ST. DUVER BC V6A 1R6 PHONE(604)253-3158 FAX(60 3-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

J. Ge Latre PROJECT SILVER HILL File # 95-2819

502 - 1215 Beach Ave, Vancouver BC V6E 1V5

SAMPLE# Mo Cu Pb Zn Ag Ni Co Mn Fe As U Au Th Sr Cd Sb Bi V Ca P La Cr Mg Ba Ti B Al Na K W Au

SAMPLE#	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	U	Au	Th	\$r	Cd	\$b	Bi	V	Ca	P	La	Cr	Mg	Ba	Ti	В	Αl	Na	K	W	Au*
	ppm	ppm	bbu	ppm	ppm	ppm	ppm	ppm	^	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm		^	ppm	ppm		ppm	^	ppm		^	^	ppm	ppb
E 90702	2	102	12	48	.3	49	27	1033	4.67	14	<5	<2	<2	228	<.2	<2	<2	109 (5.42	.072	2	163	3.44	118	.03	<3 2	2.01	.02	.37	<2	23
E 90703	<1	112	7	55	.3	55	31	1327	5.33	28	<5	<2	<2	250	<.2	<2	<2	75 6	5.11	.074	3	168	4.21	162	.02	6	1.09	.02	.42	<2	18
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E 90705	1	35	6	22	<.3	67	13	1044	2.98	34	<5	<2	<2	254	<.2	<2	<2	39	7.66	.033	4	76	4.30	106	<.01	3	.36	.01	.08	<2	7
E 90706	2	113	6	49	<.3	49	25	526	2.97	74	<5	<2	<2	44	<.2	23	<2	54	1.50	.089	4	59	.51		<.01	3		<.01	.03	<2	8
E 90707	2	111	8	56	<.3	30	22	907	4.91	11	<5	<2	<2	169	<.2	< 2	<2	90 3	5.86	.084	1	48	2.90	349	. 14	6 '	1.84	.03	.97	<2	4
RE E 90707	3	110	5	55	<.3	27	22	892	4.80	12	<5	<2	<2	165	<.2	<2	<2			.082	1	42	2.83	341	.14	5	1.81	.03	.97	<2	7
STANDARD C/AU-R	18	58	41	137	6.9	69	32	1072		41	15	5	37		17.8	17	16			.091	40	63	.91	193	.09	-	1.84	.06	.16	11	550

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LINITED FOR NA K AND AL.

ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB

- SAMPLE TYPE: ROCK AU* - IGNITED, AQUA-REGIA/NIBK EXTRACT, GF/AA FINISHED.

Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

DATE RECEIVED: AUG 11 1995 DATE REPORT MAILED:

r/95

SIGNED BY D. TOYE, C. LEONG, J. WANG; CERTIFIED B.C. ASSAYERS