



Thomson, Streit & Jensen Ltd.
ENGINEERING CONSULTANTS

D. Peter Jensen, P. Eng. (Civ. E.)
I. (Emery) Streit, P. Eng. (Civ. E.)
Victor Ryback-Hardy, P. Eng. (Geo. & Civ. E.)
Gordon M. Thomson, B.C.L.S.
Peter G. Isaak, B.C.L.S.
A.M. (Abi) Osman, B.C.L.S.
Thomas J. Tryon, B.C.L.S.

Our File: 2426

October, 1978

Report on the Physical Work and
Prospecting Conducted on the Big
Missouri, Winer, and Packer's
Fraction Mineral Claims For
Assessment Credits September 1978

Work performed on the following
Reverted Crown Granted Mineral
Claims:

Big Missouri (Lot 3217) - Rec. No. 438
Winer (Lot 3212) - Rec. No. 437
Packer's Fraction (Lot 5440) - Rec. No. 14

Skeena Mining Division

104-B-1E

56° 06' N 130° 02' W

Owned by:

Consolidated Silver Butte Mines Ltd.

Operator:

Consolidated Silver Butte Mines Ltd.

Consultant: Thomson, Jensen & Co.

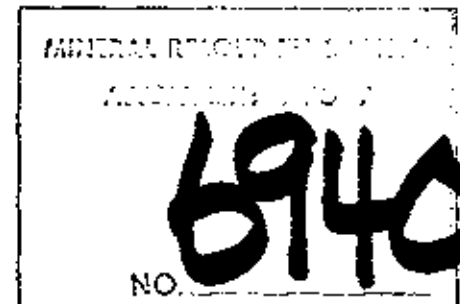
Author: V. Ryback-Hardy, P.Eng.

October 22, 1978

Report prepared for Consolidated Silver
Butte Mines Ltd., (NPL) by Thomson, Jensen & Co.

Table of Contents

Introduction
Access
Physical Work
Cost Statement
Statement of Qualifications
Conclusions and Recommendations



Thomson, Streit & Jensen Ltd.

INTRODUCTION

The assessment work on the Big Missouri, Winer and Packer's Fraction covered in this report was performed on the above mentioned claims between September 9th and September 11th, 1978.

ACCESS

The claims of interest are located on Big Missouri Ridge, a prominent northerly trending ridge on the east side of the Salmon River. The claims are approximately ten miles north-northwest of the town of Stewart, B.C. Access is by road from Stewart to the Premier Mine road, then by secondary access road (passable by two-wheeled drive vehicle) to the Hog Lake camp. From Hog Lake, local mine 4-wheel drive roads provide access to the top of the ridge. From the top of the ridge, access is by foot to the Big Missouri claim (a distance of approximately 250 metres to the south). From the top of the ridge near the south end of the old Province reverted crown grant, an old trail winds down the western slope of the ridge to the Granduc Road. This old trail meets the Granduc Road approximately 700 metres north of "11½ mile". This old trail, although presently passable only by foot, provides access to the centre of the Winer claim. Alternate access is provided by the Granduc Road which passes through the western portion of the Big Missouri property at "11½ mile". At present, the permission of the Granduc Operating Company is required for use of this portion of the road.

HISTORY

The claim group covered by this report is comprised of three reverted Crown-granted mineral claims, the Big Missouri (Lot 3217), Winer (Lot 3212) and the Packer's Fraction (Lot 5540).

The Big Missouri Ridge is one of the oldest mining camps in British Columbia. Mineral exploration commenced in the early 1900's as prospectors heading for the Klondike gold fields through Stewart stopped to examine the nearby rock exposures for lode deposits of gold and silver. The discovery of silver-bearing mineralization in the Salmon River section in 1904 led to the heavy staking on what is now known as Big Missouri Ridge. This exploration activity led to the establishment of a permanent survey monument on the International Boundary at Eagle Point to delineate the disputed border.

Thomson, Streit & Jensen Ltd.

Location of high-grade silver-gold ore at Premier, about 7 Km to the south-south east added further impetus to the exploration and development of the Salmond River area. From 1904 to 1927, development work on the Big Missouri Ridge consisted of open cuts, short adits and limited diamond drilling on the visible surface mineralization. In 1927, the Buena Vista Mining Co., Ltd., assumed control of the claim group being developed by the Big Missouri Mining Co., Ltd. Shortly, thereafter, the Consolidated Mining and Smelting Company of Canada Ltd., took control and eventually brought the Big Missouri Property into production in 1938. Production statistics indicated that about 850,000 tons of ore containing 58,000 ounces gold, 53,000 ounces of silver and 2700 pounds of lead was mined primarily from the Province claim. The mine ceased production in 1942.

Exploration of the ridge was sporadic in the ensuing years. However, the discovery of the Granduc copper deposit about 25 Km to the northwest, renewed exploration activity in the Stewart area once again. In the last ten years, companies such as Granduc, Granby, Falconbridge, Atna Mines, El Paso Mining and Milling, Giant Mascot, and Tournigan Mining and Exploration have conducted exploration programs on the Big Missouri Ridge. At present, Tournigan Mining and Exploration is conducting an active program of underground development, sampling and surface diamond drilling in a serious attempt to outline additional mineral reserves on their holdings. Although two former producing gold-silver mines occur in the proximity of the Big Missouri, Winer and Packer's Fraction claims, this particular area has received very little attention. In 1939, the Buena Vista Mining Co., conducted a program of surface sampling of the sulfide-rich siliceous zones exposed in steep bluffs on the western slope of Big Missouri Ridge. A short adit was driven under the better gold-silver mineralization exposed in the surface cuts. A series of surface samples near the west corner of the Big Missouri claim returned values averaging 0.42 oz. Au/ton, and 0.34 Ag/ton across a width of 53 feet (16m.). Since that time, several companies have chip sampled parts of this extensive siliceous zone. Values ranged from traces of gold and silver and assays as high as 0.5 oz. Au/ton (El Paso Mining and Milling Company - 1971).

Currently, the claims are owned by Consolidated Silver Butte Mines Ltd. The occurrence of an extensive northeasterly striking sulfide-rich siliceous zone within metamorphosed Hazelton andesitic volcanics is similar to the environment in which the Premier ore-bodies are found approximately 7 Km to the south-southeast. Outcrop of mineralized siliceous rock near the north central part of the Winer claims indicates a possibility that this siliceous

Thomson, Streit & Jensen Ltd.

zone extends along a north-northeasterly strike and may be an extension of the mineralization exposed in the surface cuts on the Province claim. The area covered by three claims is considered to be a favourable area for the occurrence of gold-silver mineralization similar to that found at Premier to the south and on the Province claim to the north.

PROSPECTING

Prospecting was directed at finding the extent of the sulfide-rich siliceous zone exposed along a line of steep bluffs on the west side of the Winer and Big Missouri claims. Approximately 60,000 square metres of prospecting was conducted in three days. Two previously undiscovered mineralized outcrops were found and eight rock chip samples were taken.

The rocks examined were andesite flows, argillaceous andesite tuffs, and siliceous flows or tuffs (?) (possible dacites). An extensive sulfide rich siliceous zone was delineated along a north-northeasterly strike (dip 50° to 60° to northwest). Exposures along a series of steep bluffs; outcrop found at the south end of the Big Missouri claim; and at the north-central part of the Winer claim indicates an apparently continuous zone approximately 600 metres along and about 70 metres in width. This sulfide zone can be traced down the west slope of Big Missouri Ridge over a vertical difference of 340 metres from the top of the ridge to the ice level on the Salmon River Glacier. The nature of the siliceous zone and its geologic setting appears to be similar to the siliceous zones found on the Premier property 7 Km to the south. On the Premier, these siliceous zones were the host-rock for the gold-silver mineralization.

PHYSICAL WORK

A series of test pits were excavated along an old geochemical soil grid. In 1971 a program of geological mapping and geochemical soil sampling was conducted by the El Paso Mining and Milling Co., under the supervision of the author. A strong geochemical soil anomaly coincident in lead and silver was delineated. The old grid line was found in 1978 (line 70 N, station 69 E). A series of pits were then blasted out in an attempt to reach bedrock. However, overburden was too deep in this area (greater than 2 metres) and only one test pit uncovered bedrock. The pits were excavated by boring down with a length of drill steel, priming the hole with powder and blasting. The blasted pits were then deepened by hand. The pits will be used in the future for collecting geochemical soils for profiling. See attached

Thomson, Streit & Jensen Ltd.

map for pit details. The first series of pits were excavated to an average depth of 1 metre along a 12 metre long line. The second and third series of pits as shown on the map also averaged 1 metre in depth.

SAMPLING SUMMARY

See assay sheet attached.

Sample #81976 - Grab sample of quartz vein material from uppermost series of blast pits. This particular pit was blasted beneath a large tree.

Sample #81977 - Rock chip sample along cliff face west end of Winer Claim (referred to as Zone II). Sample width 2.5 metres, pyritic siliceous material.

Sample #81978 - Rock chip sample about 5 metres northeast of 81977. Sulfide rich siliceous material sample.

Sample #81979 - Rock chip sample about 5 metres northeast of 81978. Same material sample width 4 metres.

Sample #81980 - Rock chip sample about 7 metres northeast of 81979. Material as above sample width 6 metres.

Sample #81981 - Representative sample, a series of rock chips along a width of 15 metres of pyritic siliceous material containing minor galena and sphalerite. The siliceous material is exposed in a north-flowing creek near the south end of the Big Missouri Claim (referred to as Zone V).

Sample #81982 - Immediately to the north of 81981, Chip sample across 15 metres of similar material to sample 81980. Visible galena and sphalerite.

Sample #81983 - Siliceous pyritic material from a line of bluffs on the Big Missouri claim (referred to as Zone IV). Grab sample.

Cost Statement

PHYSICAL WORK

Wages	-	September 9th to September 11th, 1978	\$ 840.00
		V. Ryback-Hardy, P.Eng	3 days @ \$180.00/day
	-	N. Benkovich	3 days @ \$100.00/day
Travel Expenses			300.00
Room and Board			72.00
Materials - Powder and Fuse			<u>100.00</u>
		TOTAL	<u>\$1,312.00</u>

Thomson, Streit & Jensen Ltd.

PROSPECTING

Wages - 3 days in field September 12th - 14th	\$ 720.00
V. Ryback-Hardy, P.Eng. - Report Preparation	180.00
Assays	148.00
TOTAL	<u>\$1,048.00</u>

CONCLUSIONS AND RECOMMENDATIONS

An extensive mineralized pyritic siliceous zone exists on the Big Missouri and Winer claims. This zone may be continuous through to the Province claim along strike to the northeast. The geologic setting here is very similar to the host rock of the bonanza ore shoots of the Premier deposit 7 Km to the south-southeast. The author, therefore, considers this area to be a prime exploration target which definitely warrants further work. The following recommendations for further development are proposed.

1. Detailed geological mapping of the claim area at a scale of 1:2500 or 1:5000. This would require the establishment of a good horizontal and vertical survey control net as the precipitous slopes precludes the establishment of a rectangular control grid established by compass and chain.

2. Careful surface sampling of the exposures of the siliceous zone of (Zone I through Zone V). This would entail the use of an air-powered, drill and explosives to cut trenches through the very hard rock in order to take a meaningful sample.

3. Bulldozer trenching of the geochemical soil anomaly outlined by El Paso Mining's work in 1971 at the west end of the Winer claim. Further trenching is warranted further to the east where surface prospecting has uncovered a small outcrop of mineralized (galena and sphalerite) siliceous volcanic (?) in a grassy alpine meadow (see map).

4. Geophysical surveys including induced polarization to delineate areas of high concentration of disseminated sulfides and "shoot-back" electromagnetic surveys to delineate possible massive sulfide mineralizations.

5. Surface geochemical rock chips sampling to determine geochemically anomalous areas and further delineate possible drill targets.

6. Diamond drilling of targets outlined by the above work program.

The above program of mapping and sampling would require a field crew of five or six personnel for at least one full season. In addition, control surveys, geophysical work and diamond drilling would be done on contract. A program of

Thomson, Streit & Jensen Ltd.

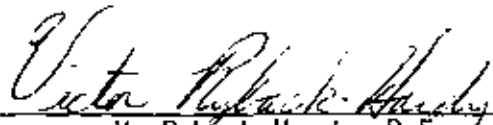
this scope would require an estimated budget of about \$100,000.00. However, this proposed work program could be phased over a longer period with a new phase commencement contingent upon the result of the previous phase.

- Phase I - Surface mapping and sampling (including establishment of survey control). Expected cost \$30,000.00.
- Phase II - Geophysical surveys approximately 6 line miles
Expected cost \$5,000.00.
- Phase III - Diamond Drilling - Initially about 5,000 feet
Expected costs \$60,000.00

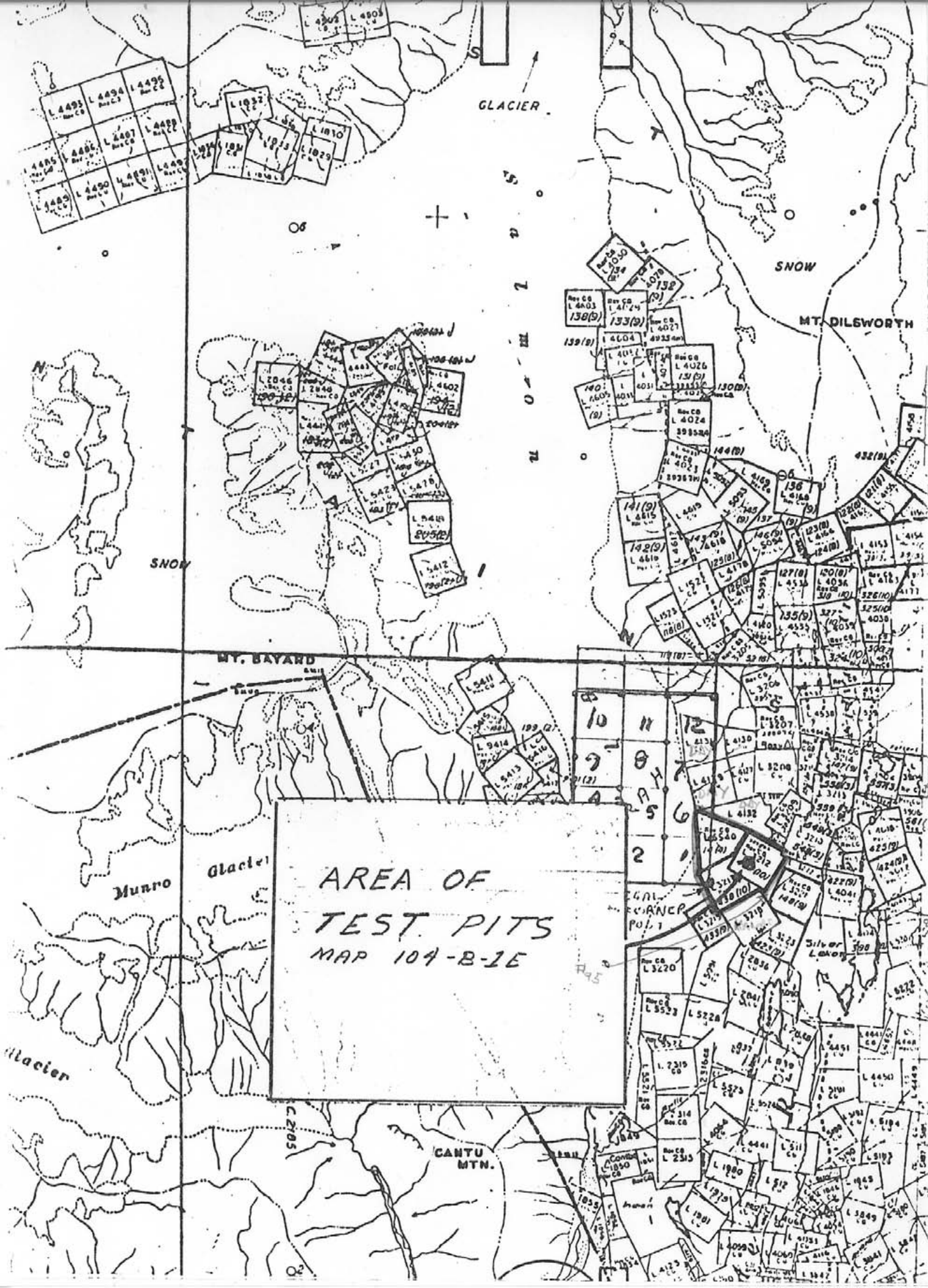
STATEMENT OF QUALIFICATIONS

I, Victor Ryback-Hardy, Professional Engineer, residing at 11691 Trumpeter Drive, Richmond, B.C., declare that:

- a) I am a Registered Professional Engineer (Geological) in the Province of British Columbia (1973).
- b) I was graduated from the University of British Columbia with a Bachelor of Applied Science in Geological Engineering in 1970.
- c) I have practised my profession for eight years.


V. Ryback-Hardy, P.Eng.
October 24, 1978





GLACIER

SNOW

MT. DILEWORTH

SNOW

MT. BAYARD

Murro Glacier

AREA OF TEST PITS MAP 104-B-1E

CANTU MTN.

10 11 12
13 14 15 16
17 18 19 20
21 22 23 24
25 26 27 28
29 30 31 32
33 34 35 36
37 38 39 40
41 42 43 44
45 46 47 48
49 50 51 52
53 54 55 56
57 58 59 60
61 62 63 64
65 66 67 68
69 70 71 72
73 74 75 76
77 78 79 80
81 82 83 84
85 86 87 88
89 90 91 92
93 94 95 96
97 98 99 100

7926



CHEMEX LABS LTD.

217 BROOKSBANK AVE.
NORTH VANCOUVER, B.C.
CANADA V7J 2C1
TELEPHONE: 985-0648
AREA CODE: 604
TELEX 043-57597

• ANALYTICAL CHEMISTS • GEOCHEMISTS • REGISTERED ASSAYERS

CERTIFICATE OF ASSAY

TO: Thompson - Jensen & Company
5722 Glover Road
Langley, B.C.

CERTIFICATE NO. 34403
INVOICE NO. 28245
RECEIVED Sept. 18/78
ANALYSED Sept. 25/78

ATTNy, Ryback - Hardy

SAMPLE NO. :	% Lead	% Zinc	oz/t Silver	oz/t Gold	Ag/Au ratio
81976	0.06	0.02	0.26	0.062	7.17
81977	0.03	0.06	0.22	0.022	10.00
81978	0.27	0.51	0.87	0.076	11.45
81979	0.36	1.03	1.43	0.074	19.32
81980	0.04	0.10	1.02	<0.003	340 +
81981	0.21	0.44	0.20	<0.003	67 +
81982	<0.01	<0.01	0.06	0.005	12
81983	0.01	0.01	0.16	<0.003	53 +

CRH



MEMBER
CANADIAN TESTING
ASSOCIATION

B. Swaites

REGISTERED ASSAYER, PROVINCE OF BRITISH COLUMBIA

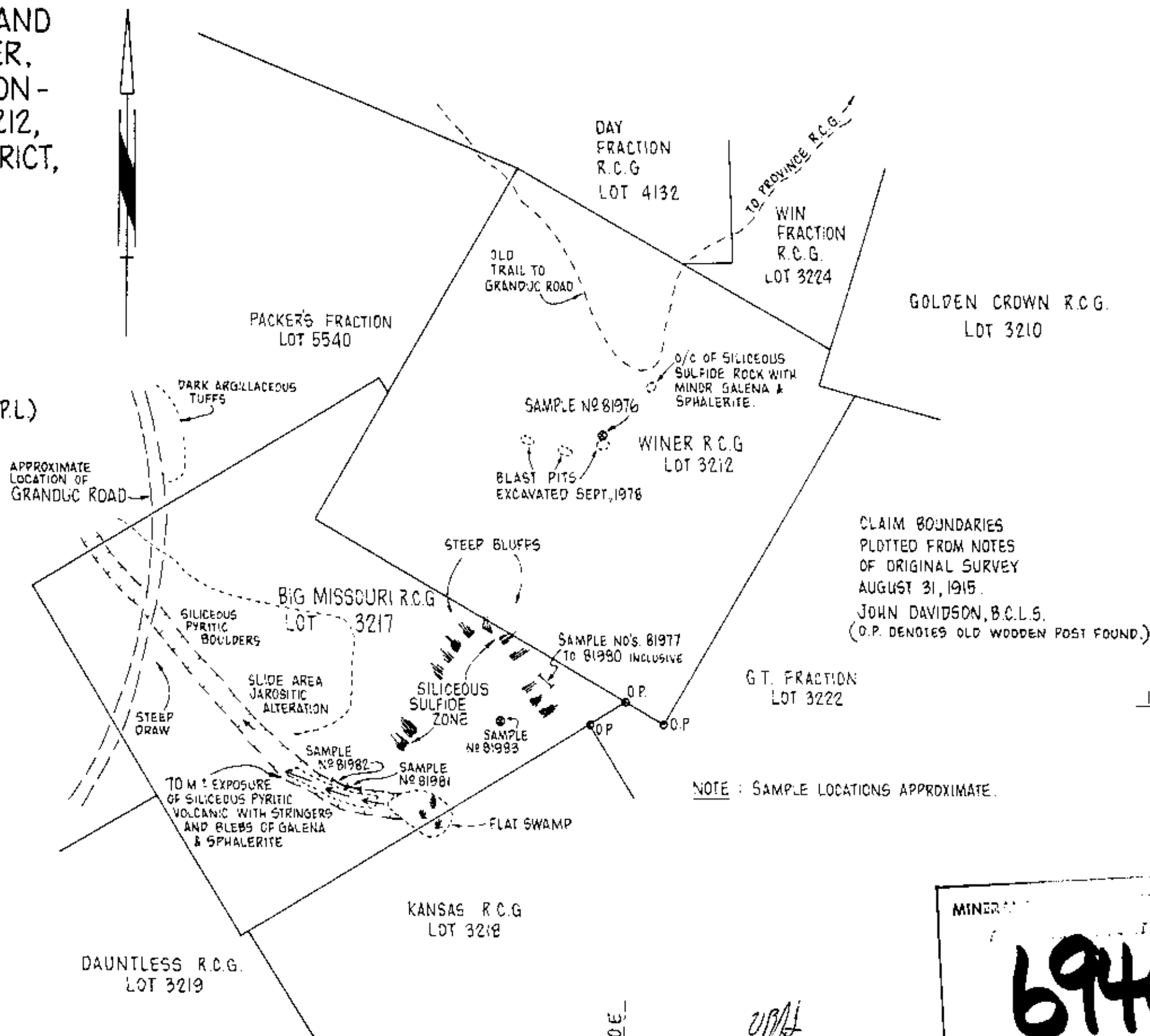
SKETCH SHOWING PHYSICAL WORK AND PROSPECTING RESULTS OF THE WINER, BIG MISSOURI AND PACKER'S FRACTION - REVERTED CROWN GRANTS - LOTS 3212, 3217 AND PART 5540, CASSIAR DISTRICT, PROVINCE OF BRITISH COLUMBIA.

TO ACCOMPANY ASSESSMENT REPORT BY V. RYBACK - HARDY, P. ENG.

DATE: OCTOBER 22, 1978.

CLIENT:
 CONSOLIDATED SILVER BUTTE MINES LTD. (N.P.L.)
 705 - 850 W. HASTINGS ST.
 VANCOUVER, B.C.

SCALE - 1 : 5000



THOMSON, JENSEN & CO. LTD.
 ENGINEERING CONSULTANTS
 5122 GLOVER ROAD,
 LANGLEY, B.C. V3A 4H8
 phone 533-2411

MINERAL
 6940