

GEOLOGICAL AND GEOCHEMICAL REPORT

on the

LOCK 1 and LOCK 2 MINERAL CLAIMS

Latitude 52°38' North
Longitude 124°41' West

N.T.S. 93A/12E

CARIBOO MINING DIVISION

BRITISH COLUMBIA

for

KENTON NATURAL RESOURCES CORPORATION

Calgary, Alberta

by

D. Hoy, B.Sc.

TAIGA CONSULTANTS LTD.

Calgary, Alberta

OCTOBER 1982

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

10,947

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INTRODUCTION

Location and Access

The claim group is located in east-central British Columbia, approximately 65 kilometres northeast of Williams Lake and 7 kilometres west of the settlement of Likely on the Hydraulic map sheet, N.T.S. 93A/12 (52°38'N, 121°41'W). Access to the property is via the McLeese Lake-Likely Road whose junction with Highway 97 is at the north end of the town of McLeese Lake. Likely is approximately 89 kilometres northeast on the McLeese Lake-Likely Road, with direct access to the claims provided by the Old Quesnel Forks road which intersects the aforementioned at Kilometre 83 (Figure 1).

Property and Ownership

The recorded owner of the claims is Canadian-American Loan and Investments Corporation Ltd., of Calgary, Alberta. The project is currently being operated by Kenton Natural Resources Corporation, also of Calgary. The status of the mineral claims (Figure 2) is as follows:

<u>Claim</u>	<u>No.of Units</u>	<u>Record No.</u>	<u>Good Standing to: *</u>
Lock 1	2	58(8)	Aug. 20, 1984
Lock 2	4	59(8)	Aug. 20, 1984
Hinge 1	15	84(10)	Oct. 16, 1985
Hinge 2	8	85(10)	Oct. 16, 1986
Road	2	420(6)	June 13, 1988
Yale	4	416(6)	June 6, 1987
Tails	12	501(10)	Oct. 3, 1985
Hat	10	263(9)	Sep. 24, 1986
Top	2	467(7)	July 29, 1985
Cap	9	262(9)	Sep. 24, 1985

* Pending acceptance by the B.C. Dept. of Mines of the August 17, 1982 submittal of \$4,204 worth of Assessment work.

All of the above claims were grouped as the Lock Group in September 1982.

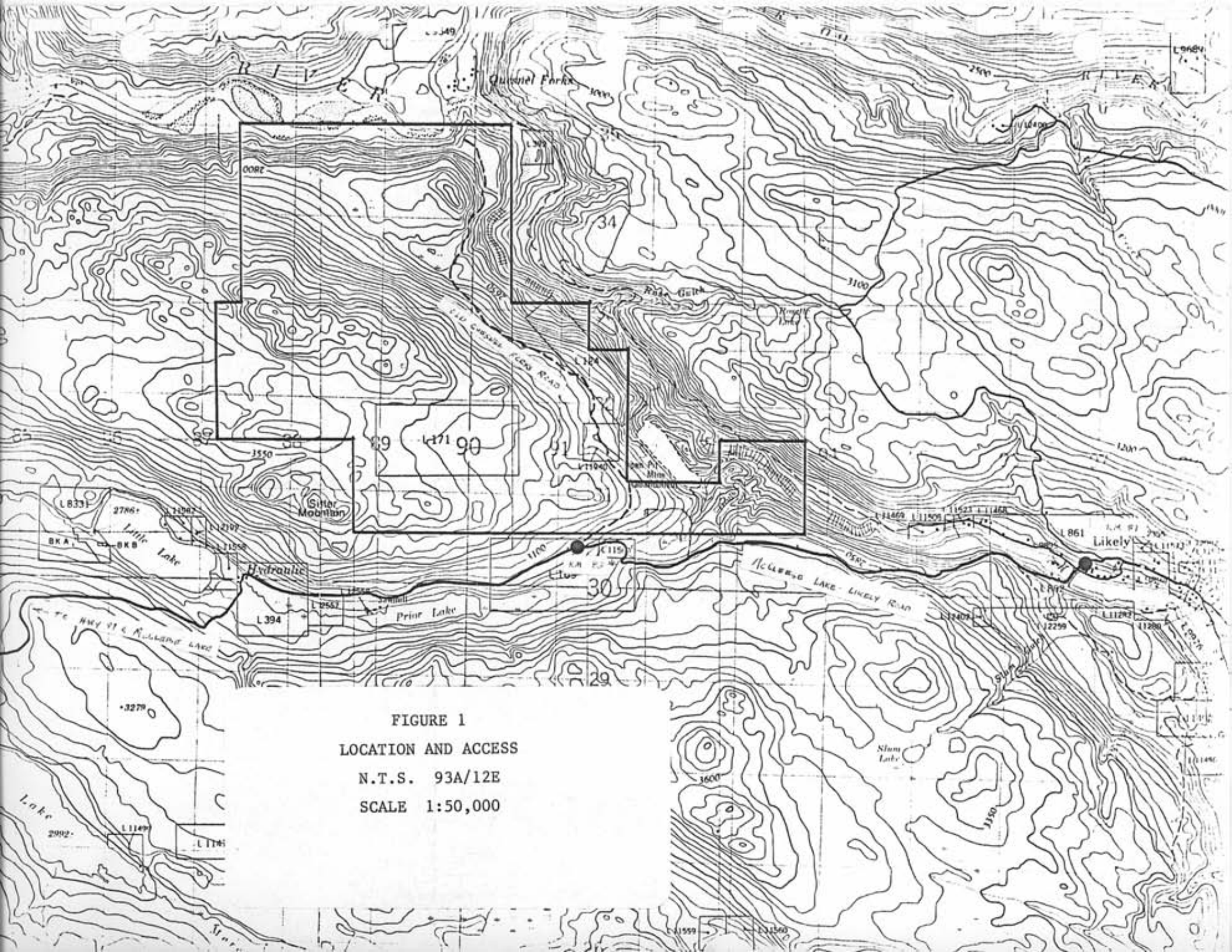
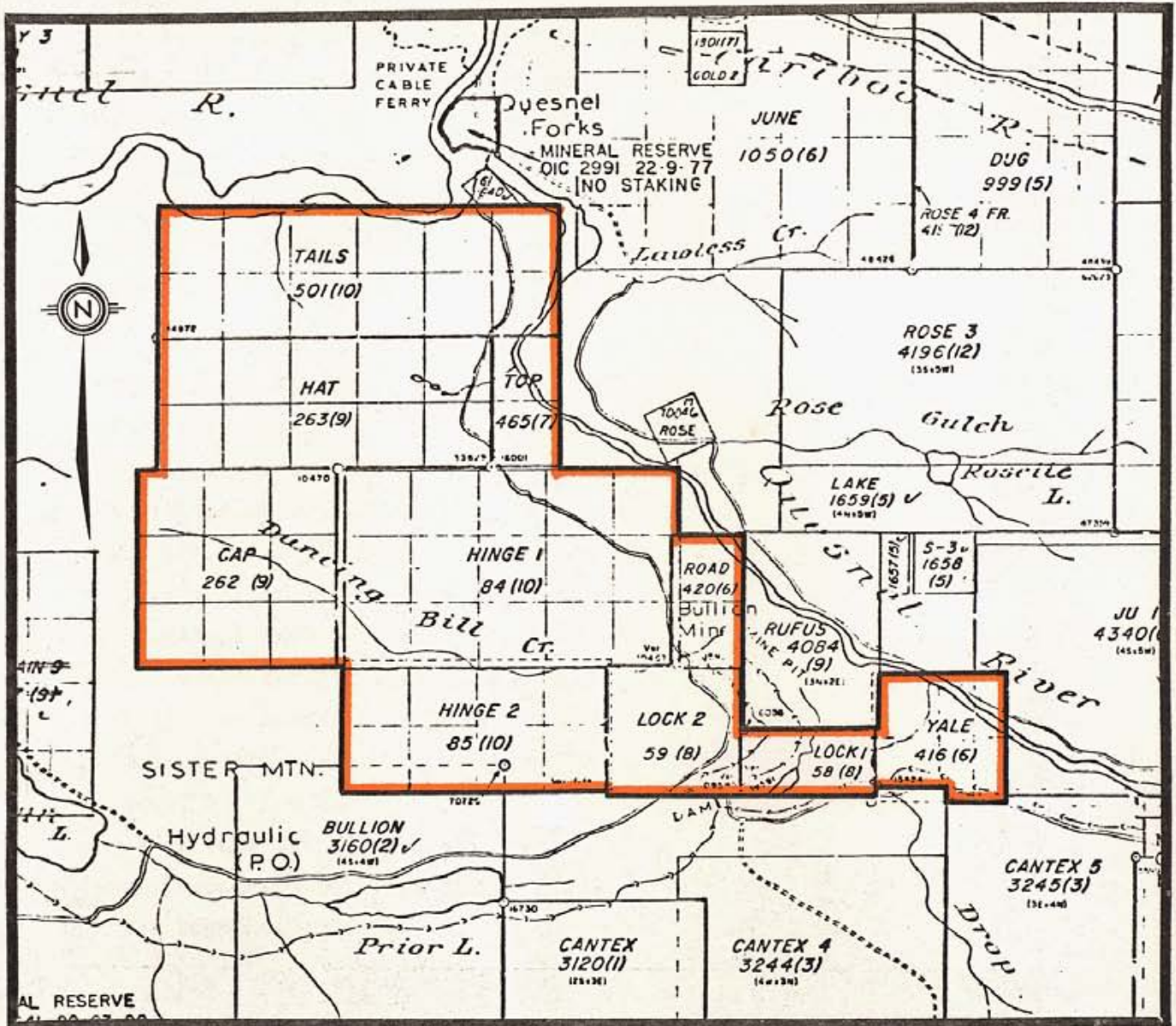


FIGURE 1
LOCATION AND ACCESS
N.T.S. 93A/12E
SCALE 1:50,000



LOCK GROUP
CLAIMS LOCATION

NTS 93A /12E

Figure 2



SEPT. 1, 1982

History of Work to Date

The claim group is situated in a well known placer gold camp. In the Quesnel Forks area, the original placer discoveries were made in the 1860's. The first commercial production was recorded in 1874. The bulk of the placer mining from the Bullion Pit, which is situated on the eastern claim boundary, was probably conducted pre-1880 with subsequent sporadic mining apparently taking place during the mid-1920's and the early 1930's by a company known as Bullion Placers Ltd.

Lode deposit investigations conducted by Compass Explorations Ltd., contracted by Canadian-American Loan & Investment Corporation, was carried out on the property during the period 1975 to 1978 inclusive. These investigations consisted of soil and rock geochemistry, ground magnetometer and electromagnetic surveying, limited geological mapping, and caterpillar trenching, with the objective of discovering gold in lode-type settings. Soil geochemistry revealed scattered anomalous gold and copper values. Two zones of interest, known as the "Bullion" and "Forks" areas, were subsequently defined. Ground magnetic surveys revealed magnetic highs in these two areas, presumably outlining the presence of underlying ultramafic intrusive bodies (which were noted to crop out on the walls of the adjacent Bullion Pit). Cat trenching was conducted over both of the above zones of interest as well as elsewhere on the property, but failed to reach bedrock in most instances. Geochemical analyses of bedrock exposures in the trenches indicated no significantly anomalous values.

There are no known precious or base metals occurrences within the claim boundaries.

A more complete history of the property can be obtained from the assessment reports prepared by Compass Explorations Ltd. during the period 1975-1978.

Physiography and Glaciation

The property is situated on the fringe of the Fraser Basin physiographic subdivision of the Interior Plateau. This area is characterized by rugged,

heavily forested terrain. Topographic relief ranges from ± 720 metres (2400') to ± 1170 metres (3900') ASL with elevations dropping off rapidly towards the Quesnel River in the northern and eastern portions of the claim group.

The last glacial direction was northerly and northwesterly along the Quesnel trough, the precursor of the present-day Quesnel River. The property is covered by a thick mantle of till (up to 30 metres) of probable glacio-fluvial origin. Scattered sub-crop highs were noted in the Bullion Pit area. Thin discontinuous beds of lacustral silt were also observed.

1982 Investigation

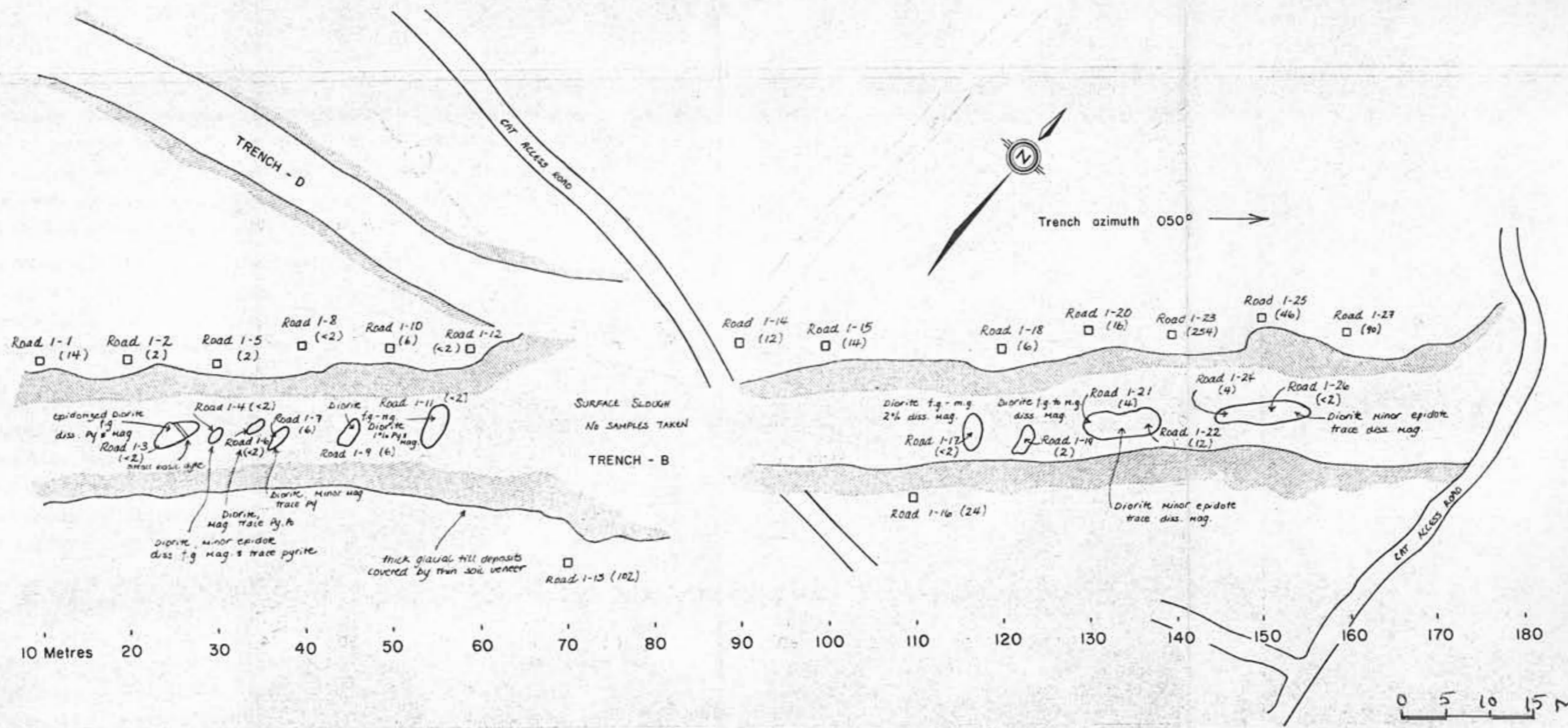
The 1982 property examination consisted of limited soil and rock geochemical sampling, prospecting, and reconnaissance geological mapping. This work was carried out by a two-man crew expediting out of the adjacent settlement of Likely. The objective of the assessment was to re-sample and evaluate the lode gold mineral potential of the "Bullion" and "Forks" areas, defined by earlier work.

A total of 32 rock samples and 32 soil samples were collected during the course of the examination, and were later submitted for geochemical analyses for gold.

PROPERTY GEOLOGY

Examination of the Bullion Pit, in conjunction with mapping of the trenches and the very sparse outcroppings (<1%) on the property, indicate that the central portions of the property are underlain by an ultramafic to mafic intrusive plug. The intrusive body, best observed in the Bullion Pit, is characterized by serpentized zones and a finer grained dioritic phase (Figure 3) at its outer margin (a probable result of differentiation). The diorite intrudes a sequence of felsic crystal tuffs and flows in addition to schistose black argillaceous metasediments. Volcaniclastic chert pebble conglomerate and breccia were noted in float and may underlie portions of the property. Hypabyssal syenitic bodies in the form of sills and dykes also intrude the diorite and overlying volcano-sedimentary sequence. All of these units are presumed to be Triassic (G.S.C. Open File 574, Quesnel Map Sheet, 1:125,000).

Mineralization appears to be confined to the dioritic intrusive and its contacts with the overlying package of volcanics and metasediments. Weakly mineralized epidotized diorite, containing 1% to 3% disseminated pyrite, traces of magnetite and accessory pyrrhotite, were sampled in the Bullion Pit and also in Trench B on the Road claim (Figure 3). Trace to minor fine-grained disseminated pyrite (1% to 3%) occurred in rock samples collected from felsic crystal tuffs and metasediments cropping out in the Tails claim (Map 1). One sample from the Bullion Pit (RA-33) returned 512 ppb gold; the balance of the samples contained less than 20 ppb Au.



Road 1-1	Soil geochem sample location	Po	Pyrrhotite
Road 1-3	Rock geochem sample location	Py	Pyrite
○	Trench outcropping	mag.	Magnetite
(14)	Au (ppb)	diss.	Disseminated
—	Trench outline	f.g.	Fine grained

GEOLOGICAL BRANCH
ASSESSMENT REPORT

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Figure 3
TRENCH B
ROAD MINERAL CLAIMS
DETAILED GEOLOGY AND
GEOCHEM SAMPLE LOCATIONS

SCALE 1:500

GEOCHEMISTRY

A total of 32 soil samples and 32 rock samples were collected and submitted to TerraMin Research Labs Ltd. of Calgary, Alberta, and analyzed geochemically for Au utilizing a combined fire assay and atomic absorption technique (see Appendix I). Results of the geochemical analyses are included in this report as Appendix II.

The 500-gram soil samples were taken at a depth of 5 cm to 30 cm. Gold in soil values obtained from the 1982 analyses (Figure 3 and Map 1) were significantly lower than those obtained from earlier (1975-1978) geochemical surveys. Only seven of the 1982 samples returned values in excess of 100 ppb Au and the highest result was 284 ppb, whereas the previous "best" samples were in the range of 6000 to 6500 ppb Au. This wide discrepancy is attributed to the previously utilized and somewhat questionable technique of pre-concentrating the sample by "panning" the heavy minerals and then geochemically analyzing this material. The results are considerably amplified without a corresponding increase in the definition of the "anomalous" level.

The extensive glacial overburden blanketing the majority of the claim group casts considerable doubt on the validity of the analyses obtained from soils in previous geochemical surveys. Residual soils are poorly developed on the property with the possible exception of the "Forks" area (in the vicinity of the HAT soil samples, collected in 1982) which may have escaped glaciation as a topographic high. Elsewhere on the property, the presence of an extremely thin soil veneer (15cm to 20 cm thick) implies that the medium of previous soil geochemical surveys was glacial-fluvial and/or glacial-lacustral material. This suggests that the values obtained from these soils do not reflect the signature of underlying bedrock mineralization.

SUMMARY AND CONCLUSIONS

There are no known in situ precious metal occurrences on the property nor are there any significantly anomalous geochemical expressions of gold enrichment in this environment.

Results of the 1982 property examination suggest that the previously utilized technique of pre-concentrating the soil geochemical samples by panning disproportionately enhanced the obtained gold values. Hence, none of the prior years' geochemical data are considered reliable. Furthermore, surficial mapping indicates that soil geochemistry is locally a poor exploration tool, given that for the most part the sample medium is inappropriate (i.e., glacial-fluvial and/or glacial-lacustral gravels and silt).

In conclusion, it is suggested that the property remains largely unexplored by the previous geochemical surveys. However, lacking any obvious exploration targets at this stage, there is little encouragement to continue investigations. No further participation in this project is presently warranted.

DATED at Calgary, Alberta this 15th day of October, A.D. 1982.

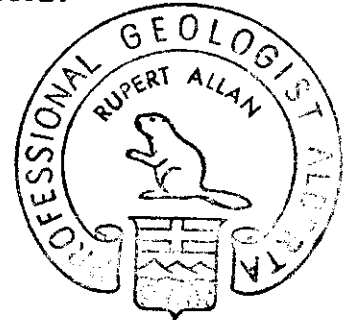
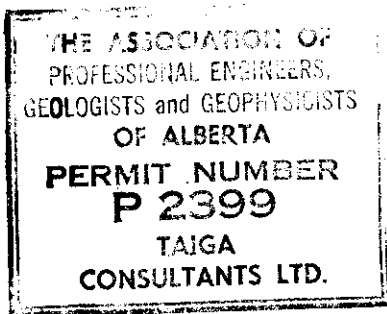
Respectfully submitted,

Donald Hoy

D. Hoy, B.Sc.

J. R. Allan

J. R. Allan, P.Geol.



1982 SUMMARY OF EXPENDITURES

Project: BULLION PROJECT, LIKELY, B.C., Caribou Mining Division
 Claims: LOCK 1 and LOCK 2 Claims
 Recorded Owner: Canadian-American Loan and Investment Corporation Limited
 Operator: Kenton Natural Resources Corporation
 Contractor: Taiga Consultants Ltd.
 Period of Work: July 31, 1982 - August 9, 1982

PREFIELD PREPARATION

Literature research, equipment assembly, filing of 10-11 forms			
J.R.Allan, P.Geol.	July 31/82 - ½ day @ \$300/diem	\$ 150	
D. Hoy/Geologist	July 31/82 - ½ day @ \$140/diem	<u>70</u>	\$ 220.00

FIELD EXPENDITURES

<u>PERSONNEL</u> (1 day travel, 3 days field time)			
J. R. Allan	August 6 - 9 incl. 4 days @ \$300/diem	1,200	
D. Hoy	August 6 - 9 incl. 4 days @ \$140/diem	<u>560</u>	1,760.00

ACCOMMODATION

Meals & Travel Expenses	249.85	
Motel & Rented Cabin	<u>170.70</u>	420.55*

TRANSPORTATION

4-W-D 3/4ton truck rental, 4 days @ \$75/diem	300.00	
Fuel	<u>125.30</u>	425.30*

MISCELLANEOUS

Drafting, Reproductions & photo-copying*	264.30	
Disposable field supplies	28.99*	
Long distance telephone, courier service	53.50*	
Topographic map	<u>3.00*</u>	349.59

GEOCHEMICAL ANALYSES

TerraMin Research Labs Ltd., Calgary		
32 soil samples, Au analyses @ \$6.05 each incl. prep.	193.60	
32 rock samples, Au analyses @ \$6.05 each incl. prep.	<u>193.60</u>	387.20*

POST FIELD EXPENDITURES

Final Evaluation Report & Assessment Filing	420.00
Handling Charges @ 12% of all third-party expenditures	
\$1,683.54 x 12%	202.02
Miscellaneous	19.14

TOTAL	<u>\$4,204.00</u>
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PERSONNEL

J. R. Allan, P.Geol. 3609 - 1A Street S.W., Calgary, Alberta July 31, August 6-9	4½ days
D. Hoy, B.Sc. 4524 Brisebois Dr. N.W., Calgary, Alberta July 31, August 6-9, October 5-6	<u>6 days</u> 10½ days

CERTIFICATE

I, the undersigned, of the City of Calgary in the Province of Alberta, do hereby certify that:

1. I am a geologist with an office mailing address of Suite 100, 1300 - 8th Street S.W., Calgary, Alberta.
2. I am a graduate of the University of Western Ontario with a B.Sc. in Geology (1980).
3. I have worked in the field of mineral exploration since 1977.
4. I have personally worked on the claims and assisted in the exploration work carried out there and described in this report.

Respectfully submitted,

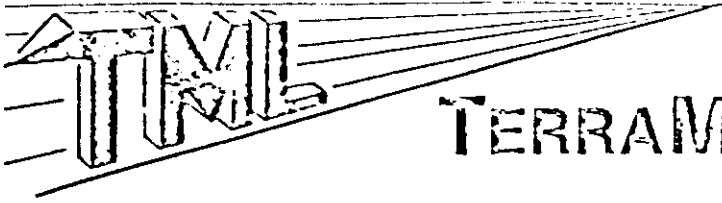
Donald Hoy

Donald Hoy, B.Sc.

October 1982

A P P E N D I X I

Analytical Techniques



TERRAMIN RESEARCH LABS LTD.

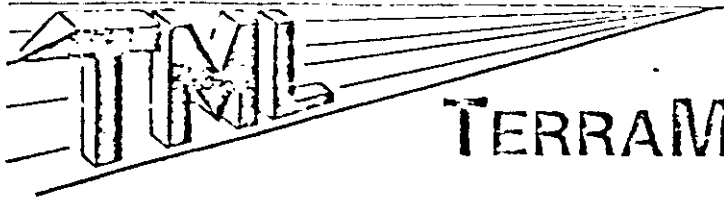
14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

SAMPLE PREPARATION

Soil and sediment samples are dried and sieved to -80 mesh (approx. 200 micron).

Rock Samples:

The entire sample is crushed to approx. 1/8" maximum, and split divided to obtain a representative portion which is pulverized to -200 mesh (approx 90 micron).



TERRAMIN RESEARCH LABS LTD.

14-2235 - 30th Avenue N.E. Calgary, Alberta T2E 7C7
(403) 276-8668

ANALYTICAL METHOD FOR GOLD AND SILVER

Approximately 1 assay ton of prepared sample is fused with a litharge/flux charge to obtain a lead button. The lead button is cupelled to obtain a prill. The prill is dissolved in nitric/hydrochloric acids (aqua regia), and the resulting solution is analysed by atomic absorption spectroscopy.

A P P E N D I X I I

Analytical Certificates



TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 82-156

Taiga Consultants Ltd.

Date Sept. 16, 1982

Client Project BC-82-2

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Sample No.	Au ppb
<u>Rock</u> RA-21	2
22	20
23	4
24	10
25	4
26	2
27	2
28	2
29	-2
30	-2
31	-2
32	2
33	512
34	20
35	-2
36	-2
37	-2
38	2
39	14
40	6
Road 1-3	-2
1-4	-2
1-6	-2
1-7	6
1-9	6



TERRAMIN RESEARCH LABS LTD.

ANALYTICAL REPORT

Job # 82-156

Date

Client Project BC-82-2

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Sample No.	Au ppb
<u>Rock</u> Road 1-11	-2
1-17	-2
1-19	2
1-21	4
1-22	12
1-24	4
1-26	-2
<u>Soil</u> Road 1- 1	14
1- 2	2
1- 5	2
1- 8	-2
1-10	6
1-12	-2
1-13	102
1-14	12
1-15	14
1-16	24
1-18	6
1-20	116
1-23	254
1-25	46
1-27	90
HAT 1	284
2	64
3	106



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ANALYTICAL REPORT

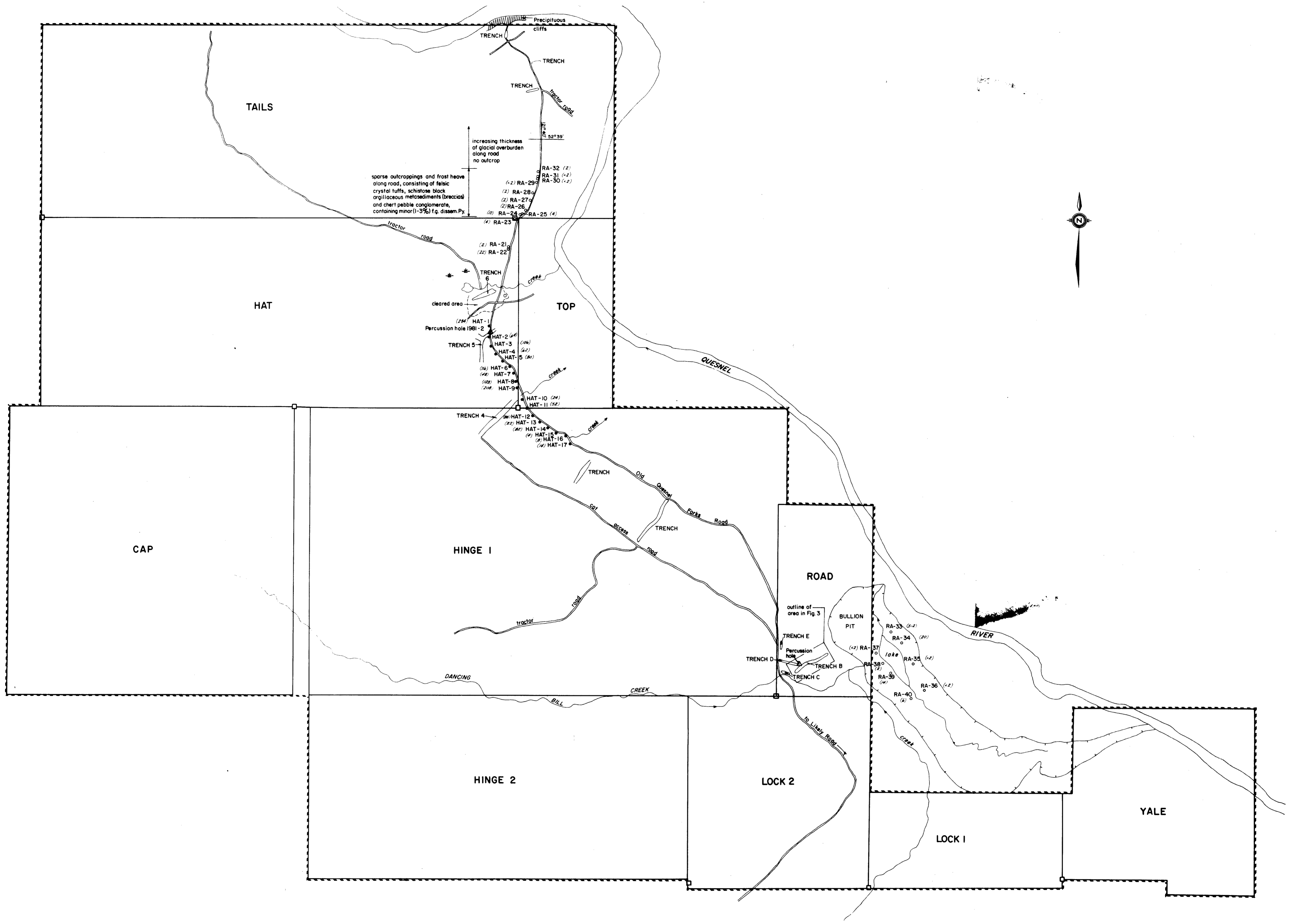
Job # 82-156

Date

Client Project BC-82-2

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Sample No.	Au ppb
HAT-4	62
5	80
6	56
7	48
8	128
9	208
10	24
11	52
12	88
13	22
14	82
15	4
16	8
17	14



sparse outcroppings and frost heave along road, consisting of felsic crystal tufts, schistose black argillaceous metasediments (breccia) and chert pebble conglomerate, containing minor (1-3%) f.g. dissemin. Py.

increasing thickness of glacial overburden along road no outcrop

- RA-21 Rock geochemistry sample location
- HAT-6 Soil geochemistry sample location
- (26) Au value (ppm)
- Ridge
- Swamp
- Claim post
- - - - - Claim group boundary

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KENTON NATURAL RESOURCES CORPORATION	
LIKELY, B.C.	
GEOCHEMICAL SAMPLE LOCATIONS LOCK GROUP	
DATE OCT. 15, 1982	NTS 93A/12E
PROJECT BC-82-2	MAPPED/ J.R. ALLAN/D. HOY DRAWN BY BC
SCALE 1:10,000	0 100 200 300 400 500 METRES
TAIGA CONSULTANTS LTD	MAP 1