

REPORT ON
GEOLOGICAL ASSESSMENT WORK ON
ATLIN GOLD PROSPECT, UNION MOUNTAIN AREA,
ATLIN, B.C. 181- #31- # 9055

CONDUCTED JUNE 3 - 10 AND SEPTEMBER 16 - 26, 1980
ON CLAIM UNITS LP1-4, LS1-3, LOT 912 AND LOT 909
ATLIN MINING DIVISION

MAP SHEET NTS 104 N/12 EAST HALF
133° 34' LONGITUDE, 59° 32' LATITUDE

OPERATED BY RIO ALTO EXPLORATION LTD.,
CALGARY, ALBERTA

-BY-

J. BANKOWSKI, B.Sc. (GEOLOGY)

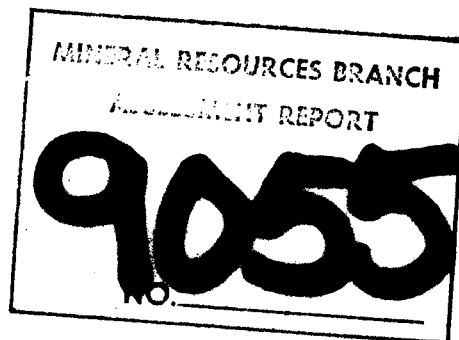
SUBMITTED JANUARY , 1981

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REPORT ON
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1. INTRODUCTION

The Atlin Gold Prospect is located within the Lina Ranges of northwestern B.C. on a deeply eroded plateau region east of the Coast Ranges (Figure 1). The mountains are generally rounded and subdued with relief of about 2000'.

Access to the prospect is by road or small plane to the town of Atlin then 8 km. ESE by helicopter.

The prospect contains two principle mappable units consisting of the Pennsylvanian Cache Creek Group and the Permian Atlin Intrusions (Aitken, 1958). The Cache Creek Group is a volcano-sedimentary sequence of dominant fine grained basic volcanics, carbonates, chert and chert pebble conglomerate (Hoy, 1980). The Cache Creek Group is the dominant lithology on the prospect and flanks the band of coarse grained peridotites, serpentinites and diorite comprising the Atlin Intrusions.

Intense serpentinitization and carbonitization characterize the contacts between the Cache Creek Group and the Atlin Intrusions on the property. Slickensides and slipfibre texture exhibited by serpentine and tremolite give visible evidence of shearing near the contacts.

These rocks are transected by two dominant sets of quartz vein systems bearing at 304° and 108° predominantly within the Cache Creek Group in the north-central portion of the prospect.

The Atlin Gold Prospect consists of the Alexandra and Victoria Crown grants (Lots 912 and 909) and 112

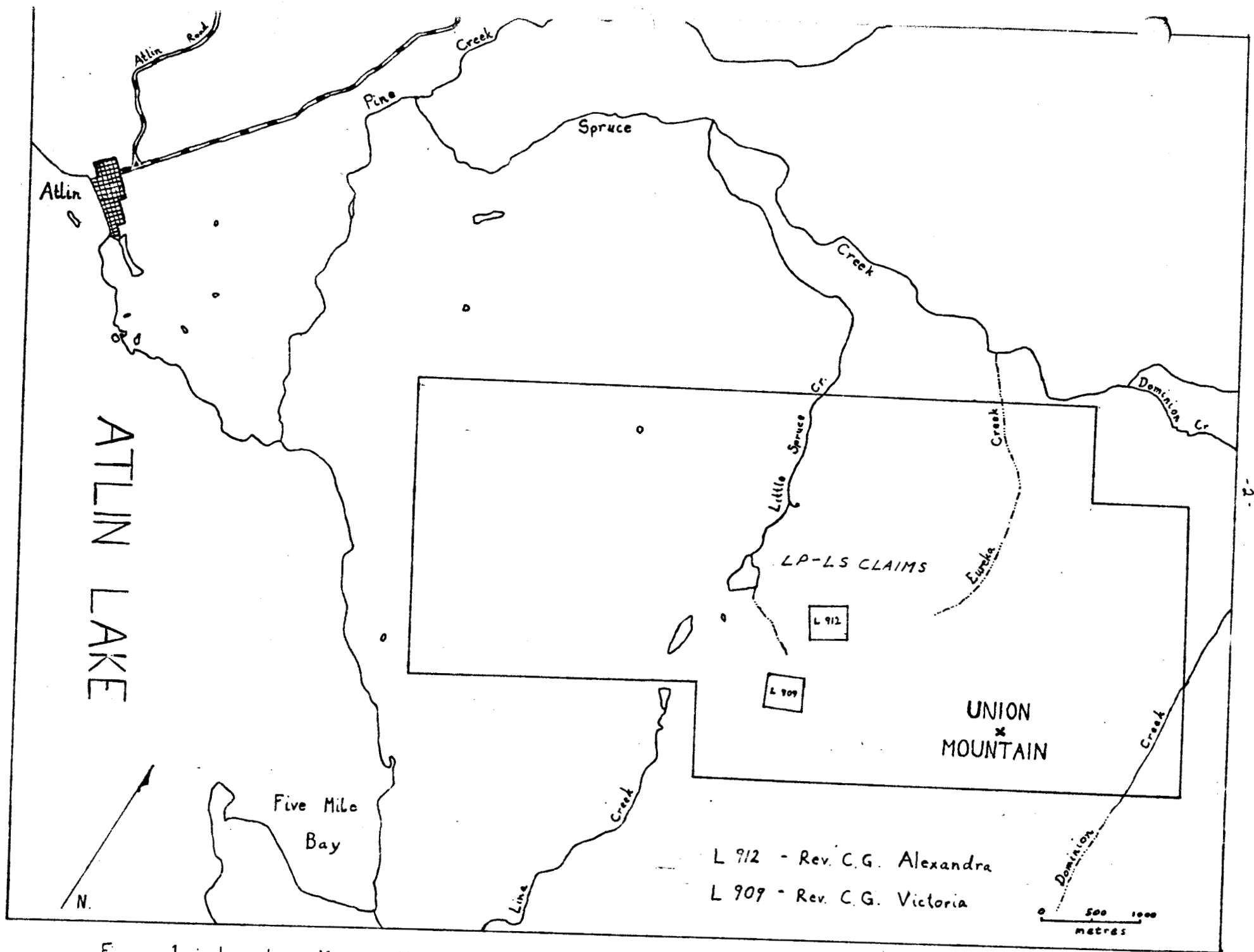


Figure 1 : Location Map of the Atlin Gold Prospect Claims, British Columbia. scale 1:50,000 (after Hoy, 1980)

adjoining claims (Figure 2). The earliest recorded work on the property was performed in 1912 by prospectors, looking for the source of placer gold, who found gold-bearing quartz veins and subsequently staked and patented the Crown grants. An inclined winze, now covered, was sunk on the Alexandra Crown grant. The Victoria Crown grant has no easily visible workings and a search of the records revealed no information.

In 1949, a prospector by the name of N. Matsen, found visible gold in hand trenches on the northwest slope of Union Mountain on the since lapsed eight "Golden View" claims. Further trenching was carried on by Matsen and Trans Continental Resources in 1950. The results of the 1950 program indicate gold values of 0.52 oz/ton over 9" in one location as well as a variety of other lesser gold assays.

The property was abandoned after 1951 and it was not until the 1979 price of gold rose to \$400/oz that Merle Cloutier acquired the Crown grants and Marvin Sherman acquired the 60 adjoining claims. Rio Alto Exploration Ltd., Calgary, is the present operator.

Small flecks of visible gold were found at the "Main" quartz vein system in the northeastern part of the claim group during the 1980 field season (Hoy, 1980). Assays of chip samples from this area have ranged up to 2.76 oz/ton Au. As a result, Rio Alto commissioned the staking of an additional 52 claims during the 1980 field season.

Minor molybdenum, serpentine and tremolite are also present on the prospect.

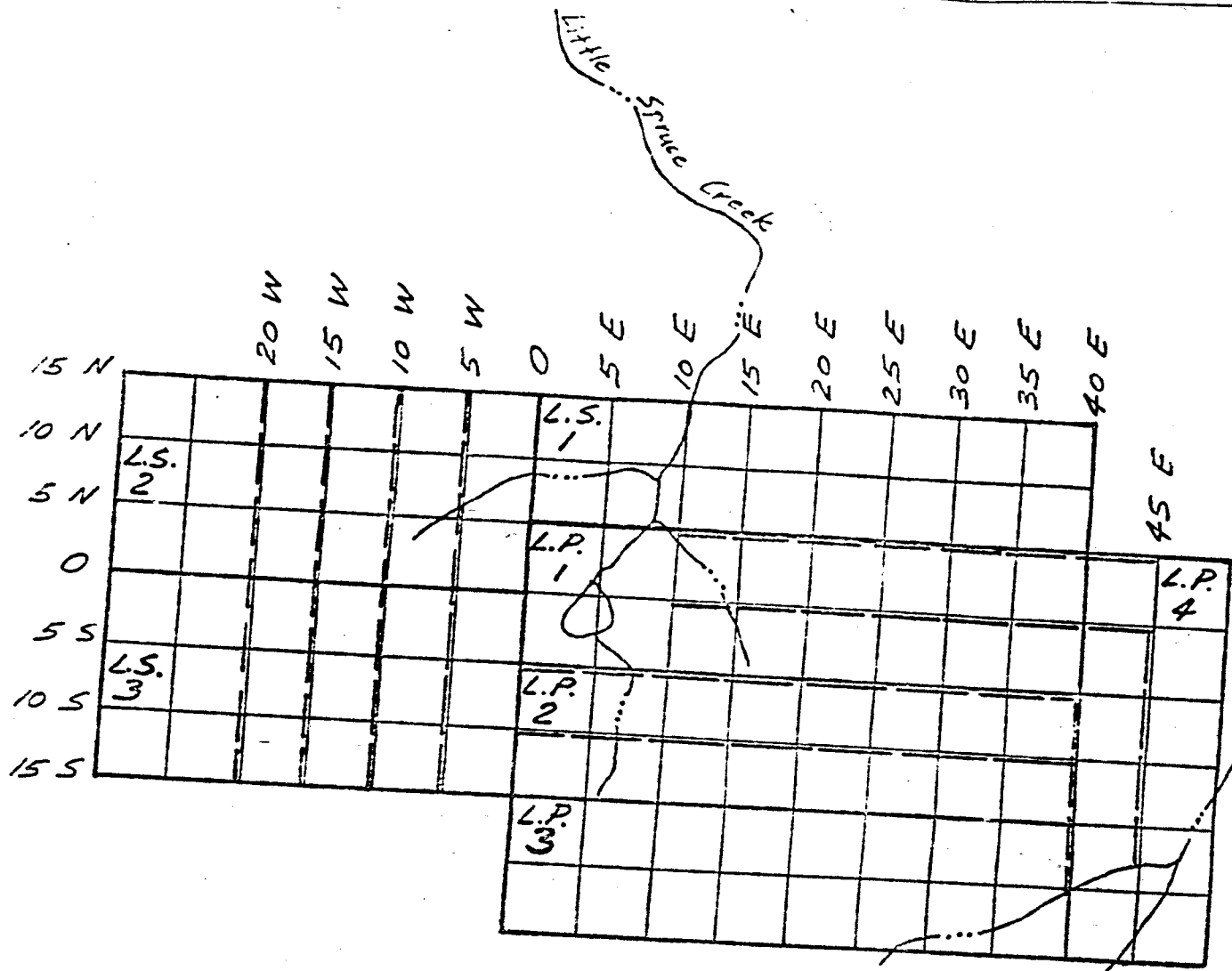
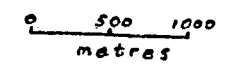


FIGURE 2

- - - - - Lines sampled
 ———— Claim outline

scale: 1:50,000



Claim Group Sketch (after Hoy, 1980)

1A. WORK SUMMARIESi) Geochemical Surveys

- a) Conducted June 3 - 10, 1980:
Thirty-three (33) soil samples designated DH 80 01 to DH 80 33 and nine (9) rock chip samples designated 301 to 309.
- b) Conducted September 16 - 26, 1980:
Two hundred ninety-two (292) soil samples with various coordinate designations and thirty-three (33) rock chip samples.

Total for 1980 field season is:

325 Soil Samples
42 Rock Chip Samples

ii) Geological Surveys

- a) An area approximately 2400 m x 2000 m was geologically mapped on a scale of 1:20,000 during the period June 3 - 10, 1980 (Hoy, 1980, Figure 2).
- b) An area approximately 1500 m x 300 m was geologically mapped on a scale of 1:3,048 during the period September 16 - 26, 1980 (Hoy, 1980, Figure 2).
- c) Two areas, one approximately 60 m x 40 m (Hoy, 1980, Figure 5) and the other approximately 100 m x 40 m (Hoy, 1980, Figure 3) were geologically mapped on a scale of 1:250 during the period September 16 - 26, 1980.
- d) An area approximately 50 m x 150 m was geologically mapped on a scale of 1:500 during the period September 16 - 26, 1980 (Hoy, 1980, Figure 4).

iii) Prospecting

An area of roughly 3000 m x 2500 m was propected during the periods June 3 - 10 and September 16 - 26, 1980.

iv) Linecutting

A total of 12 kilometers of line was cut during the 1980 field season to establish a geochemical sampling grid.

1B. WORK LOCATIONS

The claims upon which various types of work were performed are as follows:

i) Geochemical Surveys

- a) June 3 - 10, 1980: LP 1 - 2
- b) September 16 - 26, 1980: LS1 and LP1

ii) Geological Surveys

- a) June 3 - 10, 1980: LP1 - 2
- b) September 16 - 26, 1980: LS1 and LP1

iii) Prospecting

- a) June 3 - 10, 1980: LP1 - 2
- b) September 16 - 26, 1980: LP1 - 4 and LS 1 - 3

iv) Linecutting

LS1 - 3

2. TECHNICAL DATA AND INTERPRETATION

In March of 1980, Cloutier and Sherman, to whom the

Crown grants and 60 adjoining claims were respectively registered, approached P.S. White, representing Rio Alto Exploration Ltd., to be their agent for the combined prospect areas.

White researched the property in March-June, 1980, examined it in May and June, 1980 and supervised a brief prospecting and sampling program with a staff geologist and assistants during the period June 3 - 10, 1980. Sufficient assay verification of the research data was obtained to recommend acquisition of the prospects by Rio Alto Exploration Ltd.

Subsequent to the results of the June 3 - 10, 1980 program and the recommendations of P.S. White, the property was acquired by Rio Alto as operator and 52 additional claims were staked to better cover the volcanic-intrusive contact.

A program of geological mapping, geochemical sampling, prospecting and bulldozer trenching was conducted during the period September 16 - 26, 1980. The primary objectives of this program were:

- a) Geochemically sample the Atlin Intrusion-Cache Creek Group contact and also verify the anomalous assays obtained from samples collected in June, 1980,
- b) Determine possible extensions of known vein systems and gold mineralization using bulldozer trenching and so outline possible 1981 drill targets,
- c) Prospect the claim block to locate any additional mineralization.

The results obtained from both the June and September, 1980 programs were encouraging. Assays of soil samples

(Appendix, Figures 3-13) were generally not anomalous but assays of rock chip samples (Appendix, Figures 14-17) from known mineralized areas yielded up to 2.76 oz. Au/ton. Maps of sample locations from the June, 1980 program (Appendix, Figure 18) and chip sample locations from the September, 1980 program (Appendix, Figures 19-21) are included.

Bulldozer trenching during the September, 1980 program was restricted to three main areas designated as the North Vein Trench System (Appendix, Figure 19), the Main Vein Trench System (northwest branch) (Appendix, Figure 20) and the Main Vein Trench System (southeast branch) (Appendix, Figure 21) (Hoy, 1980).

Two subparallel quartz veins about 5 inches wide and striking at 323° were traced over a strike length of 70 meters in the North Vein Trench System before they dissipated into a network of small veinlets striking at 300° in the northwest area of the trench. Malachite, pyrite and chalcopyrite occur in the "bull" quartz veins. Fourteen (14) chip samples across this trench system yielded up to 0.14 oz. Au/ton. No visible gold was found in this trench (Hoy, 1980).

Two, discontinuous, subparallel quartz veins averaging 6 inches in width were exposed over a strike length of 130 meters at a bearing of 316° in the Main Vein Trench System (southeast branch) but dispersed to quartz veinlet networks at the extreme southeast area of the trench. Malachite staining and minor pyrite are found in the quartz. Thirteen (13) chip samples from this trench yielded up to 0.57 oz. Au/ton. No visible gold was found in this trench.

A vein of smoky quartz averaging 12 inches in width containing visible gold, malachite, pyrite, azurite and arsenopyrite was exposed in the Main Vein Trench System (northwest branch) but due to topography and ground conditions, could only be traced for 10 meters. The vein strikes at 350° and apparently is an extension of the quartz vein exposed in the Matsen main pit. Five chip samples yielded assays of .005, .002, .002, .270 and .750 oz. Au/ton.

Several mineralized showings were located during the June program (Hoy, 1980).

The Molybdenum Showing (Mo) consists of veinlets and coarse rosettes of molybdenum and disseminated pyrite in a massive, milky quartz vein which is hosted in a coarse grained, equigranular diorite. Molybdenum was also seen within the diorite itself.

The Malachite Showing (M) consists of malachite and pyrite in a quartz vein and silicified rock of the Cache Creek Group.

The Serpentine Showings (S) consist of partially to completely serpentized bodies of ultramafic rocks of the Atlin Intrusions and less commonly basic rocks of the Cache Creek Group in close proximity to the volcanic-intrusive contact. Slip fibre texture and slickensides were present indicating proximity to a shear or fault zone.

The Tremolite-Crysotile? Showing (T) consists of elongated, fibrous, needle-like crystals of tremolite in highly sheared basic volcanics of the Cache Creek Group close to the volcanic-intrusive contact in a small fractured zone.

The Gold Showing (Au) consists of small flecks of visible gold in the main (Matsen) pit of the Main Vein Trench System. The gold is within veins of smoky to milky quartz hosted in tan to orange carbonatized rocks of the Cache Creek Group. Azurite, malachite, pyrite, magnesite and calcite are also found in the vein.

Gold placer operations have figured prominently in the history of the Atlin area since before the turn of the century to the present. An inspection of the regional geology shows that the major placer operations such as Pine, Birch, Otter and Spruce Creeks have drainages across greenstone of the Cache Creek Group. Several local lode occurrences of Au, one in the Cache Creek greenstone and two in Atlin Intrusive rock are also present.

It is generally accepted that greenstones have high background values in gold especially Archean greenstone terrain. Paleozoic greenstone would be expected to have lesser values but still significant Au content.

In addition to the greenstone across which the major placer creeks drain, there is also spatially associated rocks of the Atlin Intrusions, As a matter of a fact, it can be seen that the major placer gold camps of the area are generally located closer to Atlin Intrusive rocks than Cache Creek Group volcanic rocks.

It is suggested that the Cache Creek greenstone rock has anomalous Au background values which have been mobilized and concentrated by the Atlin Intrusions resulting in Au lode occurrences within both the Cache Creek Group and the Atlin Intrusions and spatially related to the volcanic-intrusive contact. Erosion of local Au lodes has

resulted in the placer Au of the area. This idea is reinforced by the Timmins-Porcupine area of Ontario where rich Au lodes are found in greenstone, sediments or intrusives nearly always close to volcanic-intrusive contact and are often geometrically related to the intrusives.

Since the Atlin Gold Prospect is located within this favourable volcanic-intrusive terrain, the possibility of finding an economic concentration of lode gold is excellent and warrants further exploration.

3. COST STATEMENT

A. Period of June 3 to 10, 1980, 8 days

i) Wages

Supervisor at \$200/day for 2 days	\$	400
Geologist at \$150/day for 8 days		1,200
Assistant at \$100/day for 1 day		100
Assistant at \$100/day for 8 days		800
		<hr/> 2,500

ii) Accommodation

Cabin at \$100/day for 8 days		800
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iii) Food

\$20/day for 19 man-days		380
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iv) Transportation

4WD, 2-3/4 ton trucks, leased at \$800/mo. each for 8 days		425
Helicopter at \$100/trip for 16 trips		1,600
		<hr/> 2,025

v) Analyses

33 soil samples assayed for Au \$3/sample		99
9 rock samples assayed for Au, Ag, Cu & Mo, \$9/sample		81
		<hr/> 180

TOTAL COST (JUNE)	\$	<hr/> 5,885
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B. Period of September 16 to 26, 1980, eleven days	
i) <u>Wages</u>	
Geologist at \$150/day for 11 days	\$ 1,650
Geologist at \$150/day for 3 days	450
Assistants (3) at \$100/day for 11 days	3,300
	<hr/>
	5,400
ii) <u>Accommodations</u>	
Cabins (2) at \$100/day for 11 days	2,200
iii) <u>Food</u>	
\$20/day for 47 man-days	940
iv) <u>Transportation</u>	
4WD, 3/4 ton trucks (2) leased at \$800/mo. each for 11 days	585
Helicopter at \$100/trip for 22 trips	2,785
	<hr/>
	2,785
v) <u>Analyses</u>	
127 soil samples assayed for Ag and Cu \$4/sample	508
83 soil samples assayed for Ag, Cu and Mo \$5/sample	415
82 soil samples assayed for Au, \$3/sample	246
33 rock samples assayed for Au, Ag and Cu \$7/sample	231
	<hr/>
	1,200
vi) <u>Geochemical Survey</u>	
Linecutting of 12 km for grid at \$100/km	1,200
vii) <u>Equipment</u>	
Bulldozer and operator cost	3,265
	<hr/>
TOTAL COST (SEPTEMBER)	\$ 16,990
TOTAL COST (JUNE AND SEPTEMBER)	<hr/> <hr/>
	\$ 22,875

4. AUTHOR'S QUALIFICATIONSEducation - Degrees

- a) Geological Technician, Cambrian College, Sudbury, Ontario
1972 (*Bankowski*)
- b) Hon. B. Sc. (Geology), University of Western Ontario,
London, Ontario, 1980. (*Hoy and Bankowski*)

5. REFERENCES

- Aitken, J.D. 1958 Atlin Map-Area, British Columbia
(104N) Geol. Surv. of Can. Mem. 307
- Aitken, J.D. 1958 Atlin Map-Area, British Columbia
(104N) Geol. Surv. of Can. Map
accompanying Mem. 307
- Hoy, D. 1980 Preliminary Report of Geological
Program Conducted June 3 - June 10,
1980. Company Report (unpublished).
- Hoy, D. 1980 Report of Geological Assessment,
September 16 - 26, 1980. Company
Report (unpublished).

APPENDIX



136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523
TELEX: 036-8-460

Geochemical Lab Report

FROM: Paul White & Associates

REPORT NUMBER: 40 - 137

PROJECT: _____

DATE: July 5, 1980

SAMPLE NUMBERS	Au ppb								
DH 80 01	5								
02	L5								
03	65								
04	75								
05	L5								
06	L5								
07	30								
08	L5								
09	L5								
10	L5								
11	L5								
12	L5								
13	5								
14	L5								
15	5								
16	L5								
17	L5								
18	L5								
19	L5								
20	L5								
21	L5								
22	L5								
23	L5								
24	5								
25	L5								
26	L5								
27	L5								
28	L5								
29	5								
30	L5								
31	110								
32	5								
33	5								

L denotes less than

Figure 3

FOR METHOD, EXTRACTION AND FRACTION USED - SEE ATTACHED



BONDAR-CLEGG & COMPANY LTD.

136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523

TELEX: 036-8-460

Geochemical Lab Report

FROM: Paul White & Associates

REPORT NUMBER: 40 - 438

PROJECT:

DATE: October 13, 1980

SAMPLE NUMBERS	Ag ppm	Cu ppm						
5U 1000E	0.6	76						
1200E	0.5	35						
1350E	0.4	27						
1500E	0.3	28						
1650E	0.2	16						
1800E	0.2	25						
1950E	0.2	16						
2100E	0.2	18						
2250E	0.1	34						
2400E	0.1	38						
2550E	0.2	11						
2700E	0.1	15						
2850E	0.2	52						
3000E	0.1	26						
3150E	0.1	13						
3300E	0.4	14						
3450	0.1	10						
3600	0.1	12						
3700	0.1	11						
3900	0.1	10						
4050E	0.1	7						
4250E 2200	0.2	14						
4350	0.2	10						
5N 1050	0.3	26						
1200	0.1	25						
1350E	0.1	20						
1500	0.1	23						
1650	0.2	14						
1800	0.2	9						
1950	0.1	16						
2100E	0.2	21						
2250	0.1	15						
2400	0.1	10						
2550	0.1	8						
2700	0.1	26						

Figure 4

FOR METHOD, EXTRACTION AND FRACTION USED - SEE ATTACHED

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Geochemical Lab Report

REPORT NUMBER: 40 - 438

PAGE: 2

SAMPLE NUMBERS	Ag ppm	Cu ppm							
ON 2950E	LO.1	12							
3000	LO.1	9							
3150	LO.1	36							
3300	LO.1	16							
3450	LO.1	25							
3600E	LO.1	42							
3750	LO.1	22							
3900	LO.1	31							
4050	LO.1	19							
4200	0.1	25							
4350E	0.2	8							
4500	LO.1	11							
45E 150S	LO.1	6							
300	LO.1	15							
450	LO.1	53							
600S	LO.1	47							
750	0.1	39							
900	LO.1	28							
1050	LO.1	47							
1200	LO.1	32							
1350S	LO.1	26							
1500	LO.1	20							
1650	LO.1	50							
1800	LO.1	25							
1950	0.2	18							
2100S	LO.1	11							
5S 150E	0.1	14							
315	LO.1	18							
450	N.S.	N.S.							
600	LO.1	33							
750E	0.1	34							
900	0.1	78							
1050	LO.1	49							
1200	0.2	26							
1350	0.6	56							
1500E	LO.1	43							
1650	LO.1	41							
1800	LO.1	18							
1950	LO.1	17							
2100	LO.1	22							

Figure 5

17.
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Geochemical Lab Report

REPORT NUMBER: 40 - 438

PAGE: 3

SAMPLE NUMBERS	Ag ppm	Cu ppm							
5S 2250E	0.2	14							
2400	0.5	36							
2550	LO.1	10							
2700	LO.1	23							
2850	LO.1	18							
3000E	LO.1	9							
3150	LO.1	18							
3350	LO.1	17							
3450	LO.1	17							
3600	LO.1	18							
3750E	0.2	16							
3900	LO.1	10							
4000	LO.1	14							
10S 150E	0.2	22							
300	0.1	11							
450E	0.1	9							
600	0.2	20							
700	0.6	47							
900	0.2	18							
1050	0.4	73							
1200E	0.1	29							
1350	LO.1	21							
1500	LO.1	28							
1650	LO.1	18							
1800	LO.1	26							
1950E	LO.1	20							
2100	LO.1	18							
2250	0.2	12							
2400	LO.1	17							
2550E	LO.1	15							
2700	LO.1	28							
2850	LO.1	15							
3000	LO.1	16							
3150	LO.1	15							
3300E	LO.1	38							
3450	LO.1	26							
3600	LO.1	26							
3750	LO.1	10							
3900	LO.1	17							

Figure 6

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Geochemical Lab Report

REPORT NUMBER: 40 - 438

PAGE: 4

SAMPLE NUMBERS	Ag ppm	Cu ppm							
40E 600S	LO.1	25							
700	LO.1	15							
800	LO.1	13							
900	LO.1	21							
1000	LO.1	15							
1100S	LO.1	11							
1200	LO.1	19							
1300	LO.1	67							
1400	N.S.	N.S.							
1500	LO.1	22							
1600S	LO.1	20							
1700	LO.1	19							
1800	LO.1	22							
1900	LO.1	18							
2000	LO.1	40							

L denotes less than
 N.S. denotes no sample

Figure 7



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136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523

TELEX: 036-8-460

Geochemical Lab Report

FROM: Paul White & Assoc.REPORT NUMBER: 40-431

PROJECT: _____

DATE: October, 2/80

SAMPLE NUMBERS	Ag PPM	Cu PPM	Mo PPM						
DW 05	0.7	58	2						
1505	0.3	39	5						
3005	0.2	38	2						
5005	0.2	15	2						
6005	0.3	14	2						
7505	0.4	16	2						
9005	0.3	19	2						
10505	0.2	10	2						
12005	0.3	24	1						
13505	0.3	26	7						
15005	0.2	36	1						
150N	0.3	23	3						
300N	0.2	16	2						
450N	0.2	30	1						
600N	0.2	14	2						
1050N	0.2	36	2						
1200N	0.2	169	2						
1350N	0.2	19	2						
1500N	0.2	12	3						
SW 05	0.3	136	13						
SW 1505	0.3	31	2						
3005	0.2	24	1						
4505	0.4	33	2						
6005	0.2	31	5						
7505	0.3	56	3						
9005	0.3	15	3						
10505	0.2	14	2						
12005	0.2	15	1						
13505	0.2	12	1						
15005	0.2	11	1						
150N	0.2	14	1						
300N	0.2	17	1						
450N	0.1	10	1						
600N	0.2	10	1						
750N	0.2	15	2						

Figure 8

FOR METHOD, EXTRACTION AND FRACTION USED - SEE ATTACHED

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Geochemical Lab Report

REPORT NUMBER: 40-431

PAGE: 2

SAMPLE NUMBERS	Ag PPM	Cu PPM	Mo PPM						
SW 900N	0.2	15	2						
1050N	0.2	13	2						
1200N	0.1	11	1						
1350N	0.2	12	1						
1500N	0.1	10	1						
10W 05	0.1	10	1						
1505	0.1	17	1						
3005	0.1	26	2						
4505	0.2	54	2						
6005	0.2	36	2						
7505	0.2	52	3						
9005	0.2	18	1						
10505	0.2	14	1						
12005	0.2	43	2						
13505	0.2	19	3						
15005	0.4	28	2						
10W 150N	0.2	16	1						
300N	0.2	33	2						
450N	0.1	6	2						
600N	0.2	15	2						
750N	0.1	24	1						
900N	0.2	9	1						
1050N	0.2	16	1						
1200N	0.2	8	1						
1350N	0.2	12	1						
1500N	0.2	13	1						
15W 05	0.2	45	1						
1505	0.2	31	2						
3005	0.2	32	2						
4505	0.3	26	3						
6005	0.2	39	2						
7505	0.2	21	2						
9005	0.2	18	2						
10505	0.2	16	2						
12005	0.2	9	2						

Figure 9


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136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523

TELEX: 036-8-460

Geochemical Lab Report

FROM: **Paul White & Associates Ltd.**REPORT NUMBER: **40431**

PROJECT: _____

DATE: **October 3, 1980**

SAMPLE NUMBERS	Ag ppm	Cu ppm	Mn ppm						
15W 1350 S	0.1	12	2						
1500S	0.3	14	2						
0 N	0.1	13	2						
150 N	0.1	14	2						
300 N	0.1	17	1						
450 N	0.2	12	2						
600 N	0.1	14	1						
750 N	0.1	10	2						
900 N	0.2	14	2						
1050 N	0.2	23	2						
1200N	0.2	12	3						
1350N	0.1	20	2						
1500N	0.2	24	2						

13

Figure 10

FOR METHOD, EXTRACTION AND FRACTION USED - SEE ATTACHED



136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523

TELEX: 036-8-460

Geochemical Lab ReportFROM: Paul White & Assoc.REPORT NUMBER: 40-431

PROJECT: _____

DATE: October 20, 1980

SAMPLE NUMBERS	Au ppb								
5W 1350 N	L5								
00 N	L5								
10W 0S	L5								
150 S	5								
300 S	L5								
450 S	L5								
600 S	L5								
750 S	L5								
900 S	L5								
1050 S	L5								
1200 S	L5								
1350 S	L5								
1500 S	L5								
150 N	10								
300 N	L5								
450 N	L5								
600 N	L5								
750 N	L5								
900 N	L5								
1050 N	L5								
1200 N	L5								
1350 N	L5								
1500 N	L5								
15W 0 S	5								
150 S	L5								
300 S	L5								
450 S	L5								
600 S	L5								
750 S	L5								
900 S	L5								
1050 S	L5								
1200 S	5								
1350 S	L5								
1500 S	L5								
0 N/S	10								
150 N	L5								
300 N	5								
450 N	L5								

L denotes less than

Figure 11

FOR METHOD, EXTRACTION AND FRACTION USED - SEE ATTACHED



BONDAR-CLEGG & COMPANY LTD.

136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523
TELEX: 036-8-460

Geochemical Lab Report

FROM: Paul White & Assoc.REPORT NUMBER: 40-431

PROJECT: _____

DATE: October 20, 1989

SAMPLE NUMBERS	Au ppb								
15W 600N	L5								
750N									
900N	L5								
1050N	L5								
1200N	L5								
1350N	L5								
1500N	L5								
OW OS	L5								
150S	L5								
300S	5								
500S	L5								
600S	L5								
750S	L5								
900S	L5								
1050S	L5								
1200S	L5								
1350S	L5								
1500S	L5								
150N	L5								
300N	L5								
450N	L5								
600N	L5								
1050N	5								
1200N	10								
1350N	L5								
1500N	5								
5W OS	L5								
150S	L5								
300S	L5								
450 S	L5								
600S	L5								
750S	L5								
900S	L5								
1050S	L5								
1200S	10								
1350S	5								
1500S	L5								
150N	L5								

37

Figure 12

FOR METHOD, EXTRACTION AND FRACTION USED - SEE ATTACHED



BONDAR-CLEGG & COMPANY LTD.

136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523

TELEX: 036-8-460

Geochemical Lab Report

FROM: Paul White & Assoc,

REPORT NUMBER: 40-431

PROJECT: _____

DATE: October 20, 1980 Pg. 3

SAMPLE NUMBERS	Au ppb								
300N	L5								
450N	15								
600N	L5								
750N	L5								
900N	L5								
1050N	L5								
1200N	5								

Figure 13

FOR METHOD, EXTRACTION AND FRACTION USED - SEE ATTACHED



Certificate of Analysis

TO Poul White & Assoc.
2151 2nd Ave.
Whitehorse, Y.T. Y1A 1C6

REPORT NO. ... A - 40 - 23

DATE ... June 24, 1980

I hereby certify that the following are the results of analyses made by us upon the herein described ... rock samples

MARKED	oz/ton	oz/ton	%	%					
	Au	Ag	Cu	Mo					
301	0.025	L0.05	L0.01	1.09					
302									
303	0.002	L0.05	L0.01						
304	0.002	L0.05	L0.01						
305	2.76	2.77	0.08						
306	0.765	0.90	0.03						
307	0.240	0.06	L0.01						
308	0.020	0.06	L0.01						
309	0.015	L0.05	L0.01						

L denotes less than

Figure 14

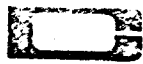
25.

NOTE:

Rejects retained two weeks
Pulps retained three months
unless otherwise arranged

BONDAR-CLEGG & COMPANY LTD.

Steven Simpson



Certificate of Analysis

TO Paul White & Assoc.
2151-2nd Ave,
Whitehorse, Y.T.

REPORT NO. A-40-217

DATE October 28, 1980

I hereby certify that the following are the results of analyses made by us upon the herein described rock samples

MARKED	oz/ton	oz/ton	%						
	Au	Ag	Cu						
601	0.140	0.14	0.01						
602	0.005	0.20	L0.01						
603	0.005	0.09	L0.01						
604	0.005	0.12	L0.01						
605	0.020	0.07	L0.01						
606	0.020	0.17	L0.01						
607	0.005	0.09	L0.01						
608	0.010	0.07	L0.01						
609	0.005	0.17	0.01						
610	0.020	0.13	L0.01						
611	0.010	0.05	L0.01						
612	0.002	L0.05	L0.01						
613	0.002	L0.05	L0.01						
614	0.005	L0.05	L0.01						
615	0.002	L0.05	L0.01						

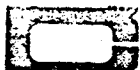
Figure 15

26.

NOTE: L denotes less than
Rejects retained two weeks
Pulps retained three months
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.

Steven Simpson



BONDAR-CLEGG & COMPANY LTD.

136B INDUSTRIAL RD, WHITEHORSE, YUKON Y1A 4X1

PHONE: (403) 667-6523

TELEX: 036-8-460

Certificate of Analysis

TO Paul White & assoc.

REPORT NO. A-40-217

DATE October 28, 1980

I hereby certify that the following are the results of analyses made by us upon the herein described rock samples

MARKED	oz/ton	oz/ton	%							
	Au	Ag	Cu							
616	0.002	L0.05	L0.01							
617	0.002	L0.05	L0.01							
618	0.002	0.06	L0.01							
619	0.002	0.06	L0.01							
620	0.025	L0.05	L0.01							
621	0.010	L0.05	L0.01							
622	0.002	L0.05	L0.01							
623	0.270	0.58	0.02	} main vein (N.W)						
624	0.750	0.50	0.01							
661	0.010	L0.05	L0.01							
662	0.005	L0.05	L0.01							
663	0.040	0.07	L0.01							
664	0.090	L0.05	L0.01							
665	0.570	0.69	L0.01	- main vein (S.E)						
666	0.025	0.13	L0.01							
667	0.005	0.14	L0.01							

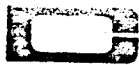
Figure 16

27.

NOTE: L denotes less than
Rejects retained two weeks
Pulps retained three months
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.

Steve Simpson



Certificate of Analysis

TO Paul White & Assoc.

REPORT NO. A-40-217

DATE October 28, 1980

I hereby certify that the following are the results of analyses made by us upon the herein described rock samples

MARKED	oz/ton	oz/ton	%						
	Au	Ag	Cu						
668	0.020	L0.05	L0.01						
669	0.002	L0.05	L0.01						

Figure 17

28.

NOTE: L denotes less than

Rejects retained two weeks
Pulps retained three months
unless otherwise arranged.

BONDAR-CLEGG & COMPANY LTD.

..... *Steven Seayon*

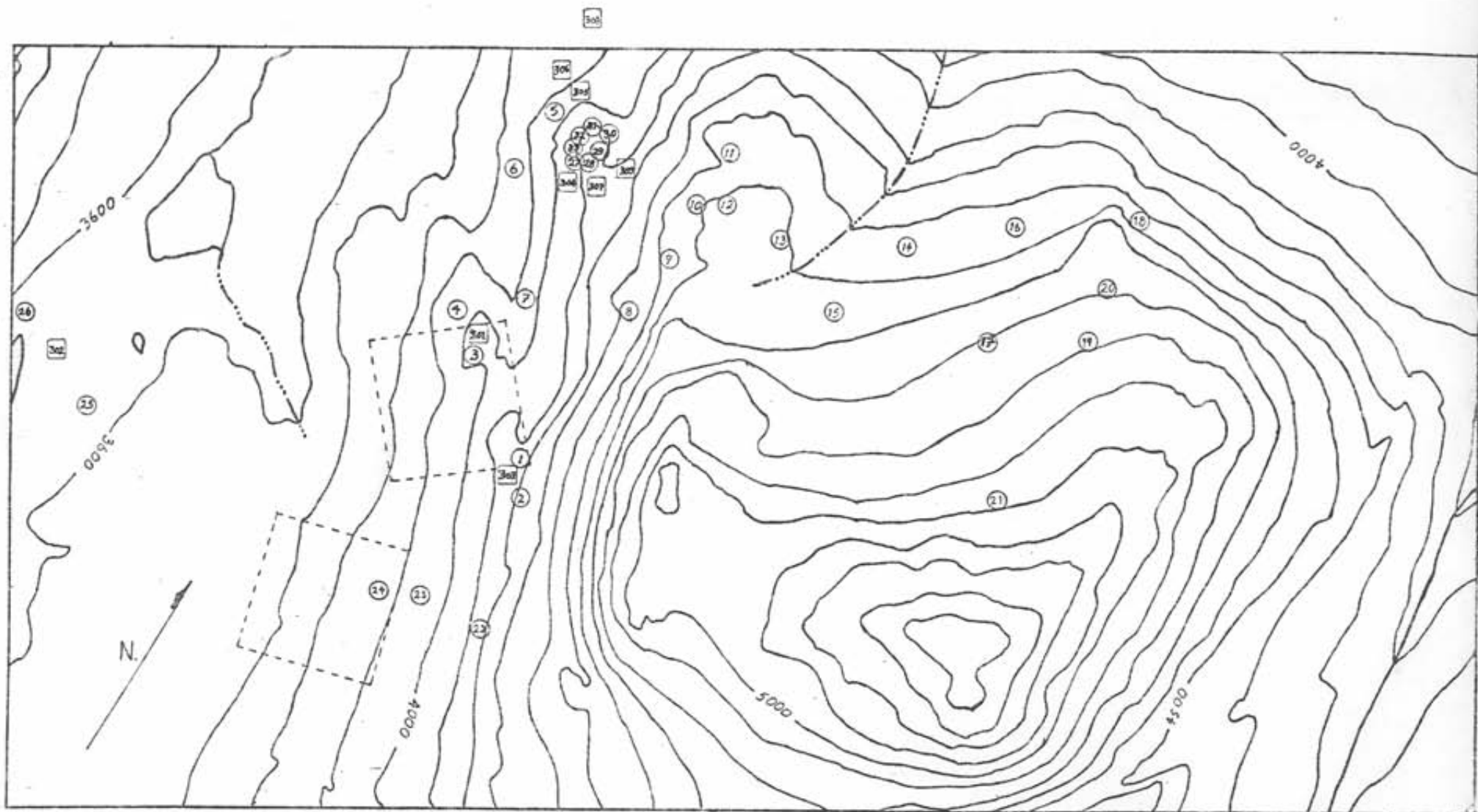


FIGURE 18: LOCATION MAP OF SAMPLING LOCATIONS (after Hoy, 1980)

- ⊙ Soil Sample Location
- ⊠ Chip Sample Location
- Reverted Crown Grant

scale 1:20,000 0 200 400
metres

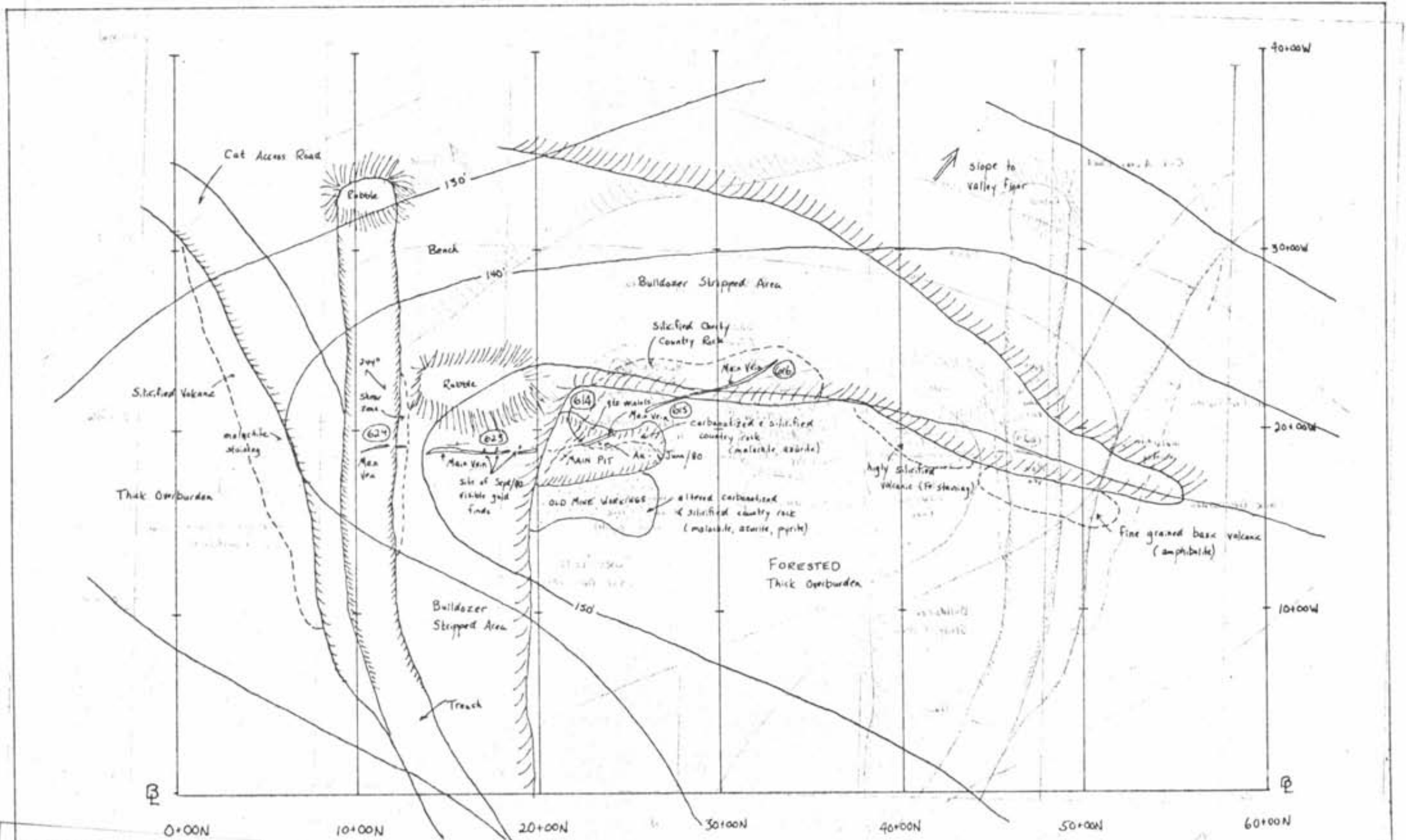
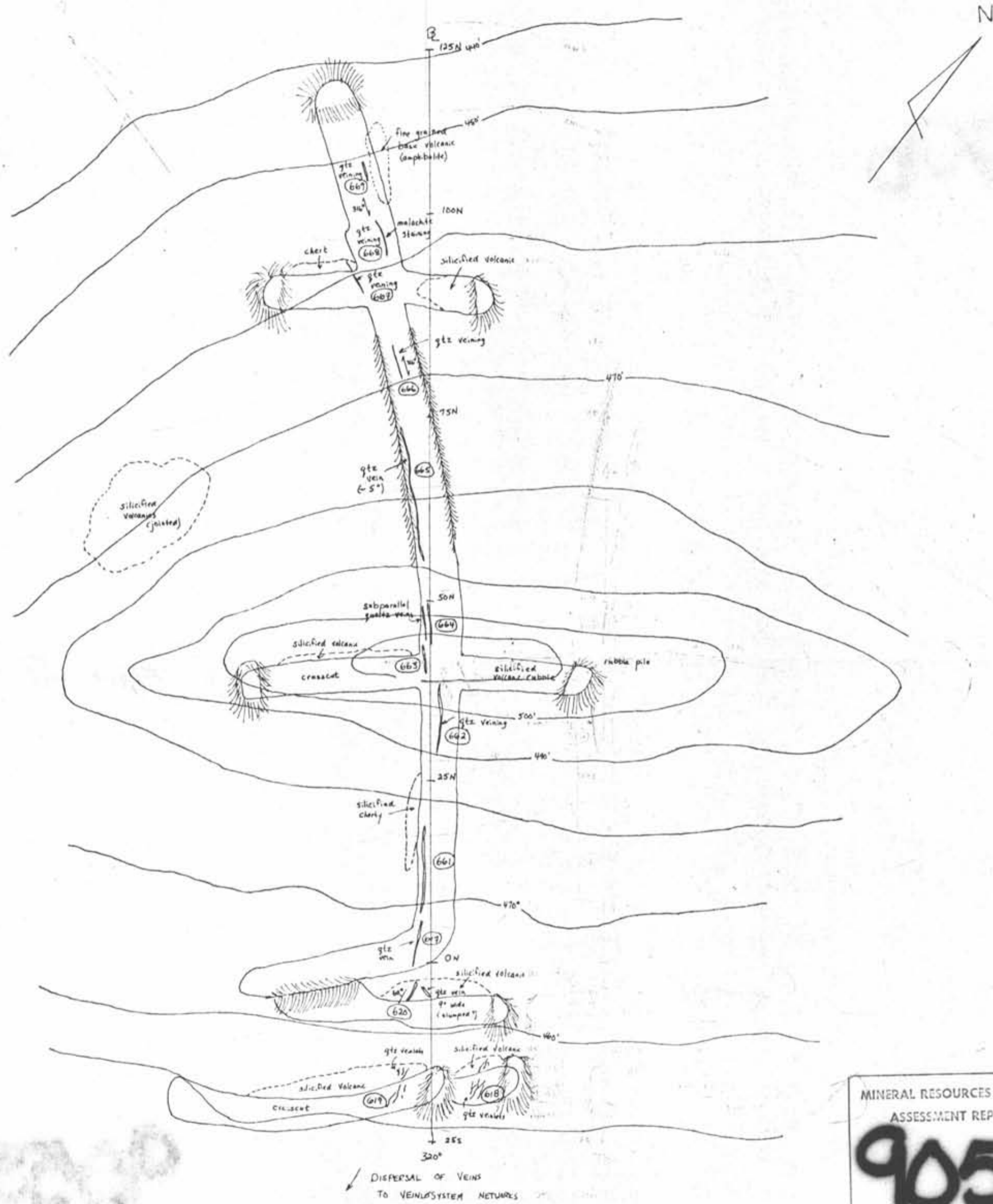


FIGURE 20 (after Hoy, 1980)

* Note: elevations given in feet above valley floor

GEOLGY & SAMPLE LOCATIONS FOR THE MAIN VEIN SYSTEM (NORTHWEST BRANCH): SCALE 1 CM = 25 M
 1:250
 ○ DISCOP (614) SAMPLE LOCATION • GOLD OCCURRENCES D. HOY OCT/80

MINERAL RESOURCES
 ASSESSMENT REPORT
9055
 NO. _____



MINERAL RESOURCES BRANCH
 ASSESSMENT REPORT
9055

FIGURE 21 (after Hoy, 1980)
 Geology & Sample Locations for the Man Vein Trench System (Southeast Branch). Drawn by: D. Hoy, October, 1980.
 Scale 1 cm. Smeves 0 5 10 15 20
 ○ outcrop ○ 618 sample location