



GOLDEN PORPHYRITE LTD.

PH-1401-13358  
11/85

GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT

ON THE

RAILROAD GROUP

VERNON MINING DISTRICT, BRITISH COLUMBIA

50° 10' N Latitude, 118° 18' W Longitude  
N.T.S. 82L/1

OPTIONEE: LINCOLN RESOURCES INC.  
(Formerly Austin Resources Inc.)  
#1440-625 Howe Street  
Vancouver, B.C., V6C 2T6

OPTIONOR: GOLDEN PORPHYRITE LTD.  
#403-750 West Pender Street  
Vancouver, B.C., V6C 2T7

BY: DAVID M. NELLES, B.Sc.

JANUARY, 1985

13358

GEOLOGICAL AND GEOCHEMICAL ASSESSMENT REPORT

ON THE

RAILROAD GROUP

VERNON MINING DISTRICT, BRITISH COLUMBIA

50° 10' N Latitude, 118° 18' W Longitude  
N.T.S. 82L/1

OPTIONEE: LINCOLN RESOURCES INC.  
(Formerly Austin Resources Inc.)  
#1440-625 Howe Street  
Vancouver, B.C., V6C 2T6

OPTIONOR: GOLDEN PORPHYRITE LTD.  
#403-750 West Pender Street  
Vancouver, B.C., V6C 2T7

**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**13,358**

BY: DAVID M. NELLES, B.T.S.C.

JANUARY, 1985

TABLE OF CONTENTS

INTRODUCTION .....	1
i) LOCATION AND ACCESS .....	1
Location Map	
ii) PROPERTY DEFINITION .....	1
Claim Map	
iii) WORK SUMMARY .....	2
GEOCHEMICAL SURVEY .....	3
Heavy Sediment Location Map	In Pocket
Heavy Sediment Geochemical Results	In Pocket
GEOLOGICAL SURVEY .....	5
Geology Map	In Pocket
RESULTS AND INTERPRETATIONS .....	6
ITEMIZED COST STATEMENT .....	7
CERTIFICATE OF QUALIFICATIONS .....	8

APPENDIX A

Geochemical Results

APPENDIX B

Sample Descriptions

## INTRODUCTION

### i) Location and Access

The Railroad Group is situated in the Vernon Mining Division on N.T.S. Sheet 82L/1, centered at approximately 50° 10' N latitude, 118° 18' W longitude, about 37 km ESE of the town of Lumby, B.C.

The property is accessible via logging roads east of Highway 6 about 10 km southeast of Cherryville, B.C. The roads are in good condition and can be negotiated with two-wheel drive vehicles. Skid roads of varying grades give good access to much of the property.

### ii) Property Definition

The Railroad Group consists of 6 contiguous mineral claims, Railroad 1 - 5 and Crystal 2, totalling 84 units within the Vernon Mining Division, B.C. The claims were staked between October 27th and November 6th, 1983 and are currently optioned by Lincoln Resources Ltd.

The claims lie within the Omineca physiographic division of the Canadian Cordillera. The property and surrounding terrain is typified by broad U-shaped valleys with moderate to steep slopes and distinct ridges. Elevations of the property range from 3,900' (1,189 m) to about 7,000' (2,134 m).

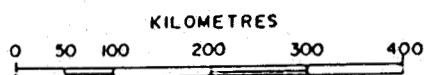
The southern portion of the property has been stripped of merchantable timber allowing secondary growth in the slash. Virgin stands, however, consist of mature fir and cedar with minor spruce. Thicker growth is found on the north facing slopes while



FIGURE 1

GOLDEN PORPHYRITE LTD.

RAILROAD GROUP  
 Vernon Mining Division  
**LOCATION MAP**



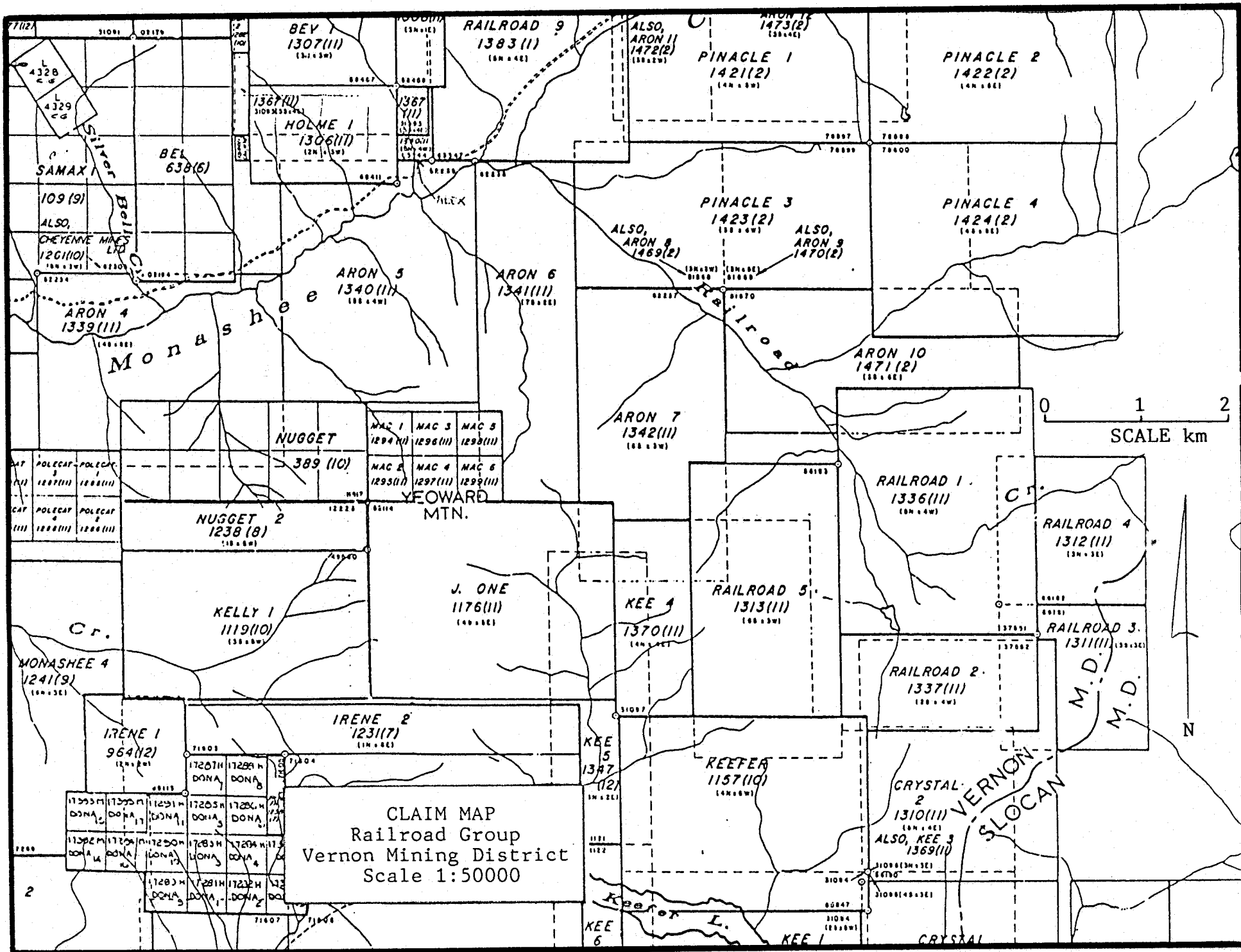
the south slopes tend to be drier and support less underbrush.

iii) Work Summary

The 1984 program on the Railroad Group consisted of geological mapping and sampling and heavy sediment geochemistry. Mapping was done at a scale of 1:25,000 and covered approximately 10 km<sup>2</sup> in the southwest part of the property. Whilst mapping, a total of 18 rock chip and 18 heavy sediment samples were collected. The program was completed in two separate stages, the first of which was unsuccessful due to the inclement weather conditions

The following is a list of the claims and the work performed on each:

Railroad 1	-
Railroad 2	Geological mapping and heavy sediment geochemistry
Railroad 3	Heavy sediment geochemistry
Railroad 4	-
Railroad 5	Geological mapping and heavy sediment geochemistry
Crystal 2	Geological mapping and heavy sediment geochemistry



### GEOCHEMICAL SURVEY

In the process of mapping, a total of 18 rock chip samples were taken from various surface exposures. These samples were extracted using a hammer and chisel and stored in polybags for analysis. All samples were shipped to Chemex Labs in North Vancouver, B.C., where they were analyzed for gold, silver, lead, zinc and copper. There, all rocks were first ring ground to -100 mesh. Analysis for gold required 10 g subsamples to be fused with 10 mg of gold-free silver metal. The fusion was then cupelled and the resulting silver bead parted with dilute nitric acid and treated with aqua regia. The remaining salts were then dissolved in dilute HCl and analyzed for gold via atomic absorption spectrometer with a 1 ppb detection limit.

Silver analysis required 1 gram portions of each sample to be digested in concentrate perchloric-nitric acid for approximately 2 hours. The digested sample was then cooled and made up to 25 ml with distilled water. The solution was then mixed and solids were allowed to settle. Silver concentration was then determined using corrected atomic absorption techniques with a detection limit of 0.1 parts per million.

Analysis for copper, lead and zinc involved the digestion of 1.0 gram portions to the sample in a  $\text{HNO}_3$  -  $\text{HClO}_4$  mixture for 6 hours. Metal concentrations were then determined using corrected atomic absorption techniques with a detection limited of 2, 1, and 1 ppm respectively.

In addition to the above sampling, a total of 18 heavy sediment samples were taken at key points on various creeks draining the property. Once collected, the approximately 2 kg samples were bagged and shipped for analysis. Where lack of sediment and/or



water prevented proper heavy sediment sampling technique, samples were obtained by concentrating stream sediments by prospectors pan. In most cases, approximately 5 kg of material was panned and the concentrates saved for analysis.

These samples were submitted to Chemex Labs in North Vancouver, B.C. where they floated in tetrabromoethene to isolate minerals with specific gravity greater than  $2.95 \pm 0.1 \text{ g/cm}^3$ . This fraction was then crushed to -100 mesh and geochemically analyzed for gold and silver.

For gold, five (5) gram portions were ashed at  $800^\circ \text{ C}$  for one hour, digested with aqua regia, twice to dryness and taken up in 25% HCl. Gold was then extracted as a bromide complex into Methyl Iso Butal Ketone and analyzed via atomic absorption with a 10 parts per billion detection limit.

Silver analysis was carried out as for rock chips.

Note: Because most of the results obtained from these samples were not considered anomalous, only significant values were plotted against their location.

### GEOLOGICAL SURVEY

Property geology was mapped at a scale of 1:25,000 using elevation, topography and roads as controls. Having been heavily glaciated during the Quaternary the property is covered with a thick layer of till, masking much of the outcrop in the valleys. Most of the outcrop was therefore confined to road cuts and ridge tops, where accessible. An area of approximately 10 km<sup>2</sup> was covered.

Most of the outcrop encountered is believed to belong to the Upper Triassic Sicamous Formation and consisted of dark massive fine grained siltstone, pale green volcanically derived sandstone/greywacke and intermediate to mafic volcanics. These rocks were locally oxidized, brecciated, sulphitic and/or calcareous.

The members displayed widely varying attitudes but roughly paralleled the southeast-northwest regional trend.

In the southern portion of the claims, an earthy grey fractured sedimentary breccia is exposed. This unit contained angular limestone fragments of varying sizes but displayed little economic mineralization.

Mineralization encountered within the claims consisted of disseminated sulphides, including pyrite, chalcopyrite and pyrrhotite. Minor quantities of other sulphides were also present.

## RESULTS AND INTERPRETATIONS

Heavy sediment sampling carried out in the 1984 program was successful in obtaining several anomalies which better isolate the source of the gold mineralization on the Railroad group. Samples from three creeks, aside from those delineated by the 1983 program, were found to carry gold. The best of these samples, at the headwaters of Barnes Creek, a known placer producer, assayed 2,240 ppb Au and 60 ppm Ag. From this and previous work, it is apparent that the gold source is probably within the Crystal 2 claim. High values obtained in 1983 from creeks draining this claim however were not confirmed by this year's sampling. This was probably due to the different sampling method used in this program because of lack of water in the creeks. It is therefore probable that sampling carried out under better conditions would return more consistent results.

The limited sampling and mapping carried out on the Crystal 2 claim was unsuccessful in locating the source of gold. With more detailed mapping however, the mineralization should be found. Sampling from elsewhere on the claims did not return significant values.

ITEMIZED COST STATEMENT

June 7th - 9th and Aug 3rd - 9th

Wages - 13 mandays at \$143.75	
- 22 mandays at \$115.00	\$ 4,398.75
Board - 27 mandays at \$21.68	585.35
Room - 24 mandays at \$14.11	338.65
Transportation	151.99
Equipment and Expendables	1,022.22
Analysis - 18 rock chip at \$17.39	
18 heavy sediment at \$18.90	653.23
Report and research	2,067.90
Office expenses	<u>781.11</u>
Subtotal	\$ 9,999.20
Management fees (10%)	<u>999.92</u>
Total	<u><u>\$10,999.12</u></u>

CERTIFICATE OF QUALIFICATIONS

I, David Nelles, do hereby certify that:

1. I am a Geologist with business offices at 403 - 750 West Pender Street, Vancouver, B.C., V6C 2T7, and am employed by Golden Porphyrite Ltd.
2. I am a graduate of the University of B.C. with a Bachelor of Science degree in Geology.
3. This report is based on ten days of field exploration of the Railroad Claims
4. I have no interest, direct or indirect in the Railroad claims or Lincoln Resources Ltd., nor do I expect to receive any.

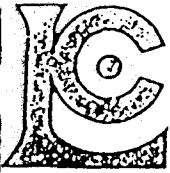
Dated this 15 day of January, 1985 at Vancouver, British Columbia.



David M. Nelles, B.Sc.

A P P E N D I X A

Sample Results



# Chemex Labs Ltd.

Analytical Chemists • Geochemists • Registered Assayers

212 Banksbank Ave  
North Vancouver, B.C.  
Canada V7J 2C1  
Telephone (604) 984-0221  
Telex 043-52597

## CERTIFICATE OF ANALYSIS

TO : GOLDEN PORPHYRITE LTD.

403 - 750 W.O. PENDER ST.  
VANCOUVER, B.C.  
V6C 2T7

CERT. # : A8414720-001-A  
INVOICE # : 18414720  
DATE : 16-AUG-84  
P.O. # : NONE

Sample description	Prep code	Cu ppm	Pb ppm	Zn ppm	Ag ppm Aqua R	Au ppb FA+AA	
R400-RG 0001	205	24	1	82	0.1	1	
R400-RG 0002	205	11	3	63	0.1	<1	--
R400-RG 0003	205	92	1	66	0.1	<1	--
R400-RG 0004	205	18	46	250	0.4	<1	--
R400-RG 0005	205	30	2	78	0.2	<1	--
R400-RY 0004	205	27	1	64	0.3	21	--
R400-RY 0005	205	168	1	73	1.3	<1	--
R400-RY 0006	205	18	1	26	0.1	<1	--
R400-RY 0007	205	17	1	30	0.2	<1	--
R400-RY 0008	205	120	3	120	1.0	24	--
R400-RY 0009	205	70	1	83	0.2	2	--
R400-RY 0010	205	63	1	83	0.2	<1	--
R400-RY 0011	205	57	1	75	0.1	<1	--
R400-RY 0012	205	30	4	60	0.1	<1	--
R400-RY 0013	205	25	5	50	0.3	<1	--
R400-RY 0014	205	7	4	90	0.1	3	--
R400-RY 0015	205	55	2	80	0.2	<1	--
R400-RY 0016	205	6	7	68	0.1	<1	--

Certified by Hart Buchler

\$ TYPE A8414721.FIN

W.O. # : A8414721  
Client : GOLDEN PORPHYRITE  
# of samples : 39  
Received Date : 10-AUG-84  
Project  
Comments

Sample Description	Ag ppm Aqua R	AU-AA ppb
R400-HS 0011	6.0	2240
R400-HS 0012	0.8	<20
R400-HS 0013	2.8	400
R400-HS 0014	1.8	20
R400-HS 0015	2.6	20
R400-HW 0012	1.2	<20
R400-HW 0013	1.4	<20
R400-HW 0014	0.4	<20
R400-HW 0015	0.2	<20
R400-HW 0016	0.2	<20
R400-HW 0017	0.2	<20
R400-HW 0018	1.0	<20
R400-HW 0019	0.8	1600
R400-HW 0020	2.2	40
R400-HW 0021	0.8	<20
R400-HW 0022	1.2	<20
R400-HW 0023	3.6	<20
R400-HW 0024	1.0	<20

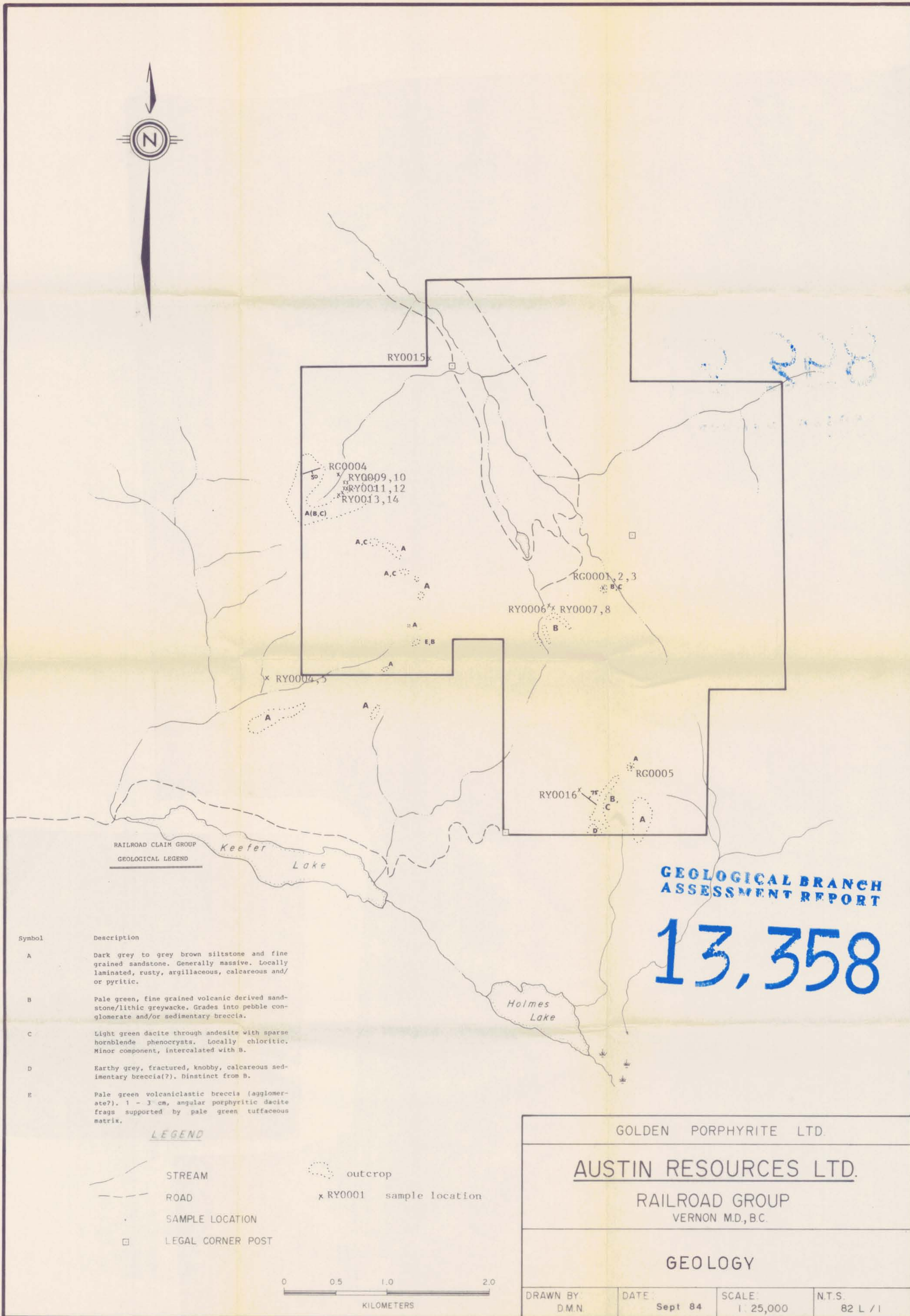


A P P E N D I X B

Sample Descriptions

APPENDIX B

<u>SAMPLE</u>	<u>DESCRIPTION</u>
R400 RG 0001	Andesite cut by grey diorite dyke
R400 RG 0002	Silicified, fractured quartz veined andesite
R400 RG 0003	Grey fine grained feldspar porphyry with pyrrhotite
R400 RG 0004	Green aphanitic weathered volcanic rock with sulphides
R400 RG 0005	Dark grey fine grained greywacke
R400 RY 0004	Oxidized grey dacite with 2 to 3% pyrrhotite
R400 RY 0005	Oxidized dark grey volcanoclastic with minor pyrite
R400 RY 0006	Green-grey greywacke with minor pyrite
R400 RY 0007	Quartz calcite veining with pyrite
R400 RY 0008	Brown weathering grey altered volcano-sediments
R400 RY 0009	Grey siltstone/tuff with pyrrhotite
R400 RY 0010	Grey-green dacite with mafic phenocrysts
R400 RY 0011	Grey-green dacite with mafic phenocrysts
R400 RY 0012	Contact zone between andesite and greywacke
R400 RY 0013	Calcite vein within chloritic volcanics
R400 RY 0014	Calcite vein within chloritic volcanics
R400 RY 0015	Oxidized quartz porphyry
R400 RY 0016	Oxidized rhyolitic volcanics with quartz eyes



13,358

RAILROAD CLAIM GROUP  
GEOLOGICAL LEGEND

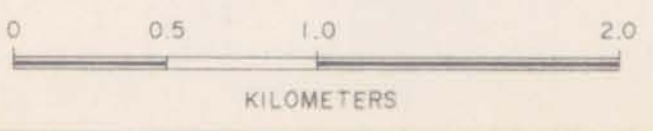
GEOLOGICAL BRANCH  
ASSESSMENT REPORT

13,358

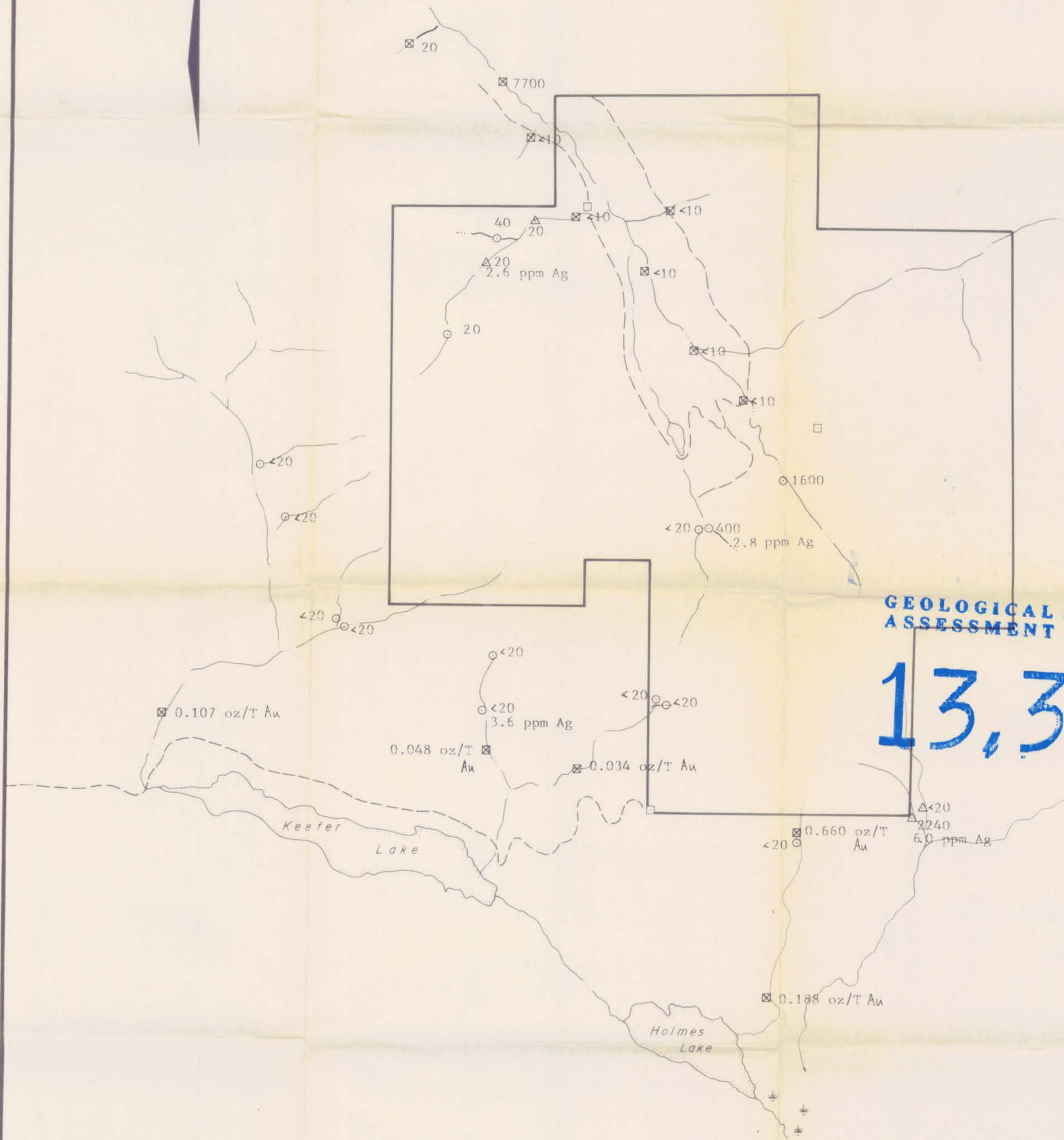
Symbol	Description
A	Dark grey to grey brown siltstone and fine grained sandstone. Generally massive. Locally laminated, rusty, argillaceous, calcareous and/or pyritic.
B	Pale green, fine grained volcanic derived sandstone/lithic greywacke. Grades into pebble conglomerate and/or sedimentary breccia.
C	Light green dacite through andesite with sparse hornblende phenocrysts. Locally chloritic. Minor component, intercalated with B.
D	Earthy grey, fractured, knobby, calcareous sedimentary breccia(?). Distinct from B.
E	Pale green volcaniclastic breccia (agglomerate?). 1 - 3 cm, angular porphyritic dacite frags supported by pale green tuffaceous matrix.

**LEGEND**

- STREAM
- ROAD
- SAMPLE LOCATION
- LEGAL CORNER POST
- outcrop
- RY0001 sample location



GOLDEN PORPHYRITE LTD.			
<b>AUSTIN RESOURCES LTD.</b>			
RAILROAD GROUP VERNON M.D., B.C.			
<b>GEOLOGY</b>			
DRAWN BY: DMN	DATE: Sept 84	SCALE: 1:25,000	N.T.S. 82 L / 1

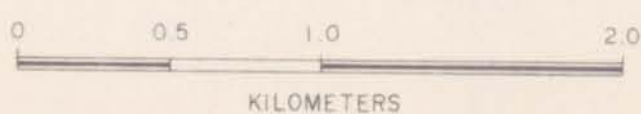


GEOLOGICAL BRANCH  
ASSESSMENT REPORT

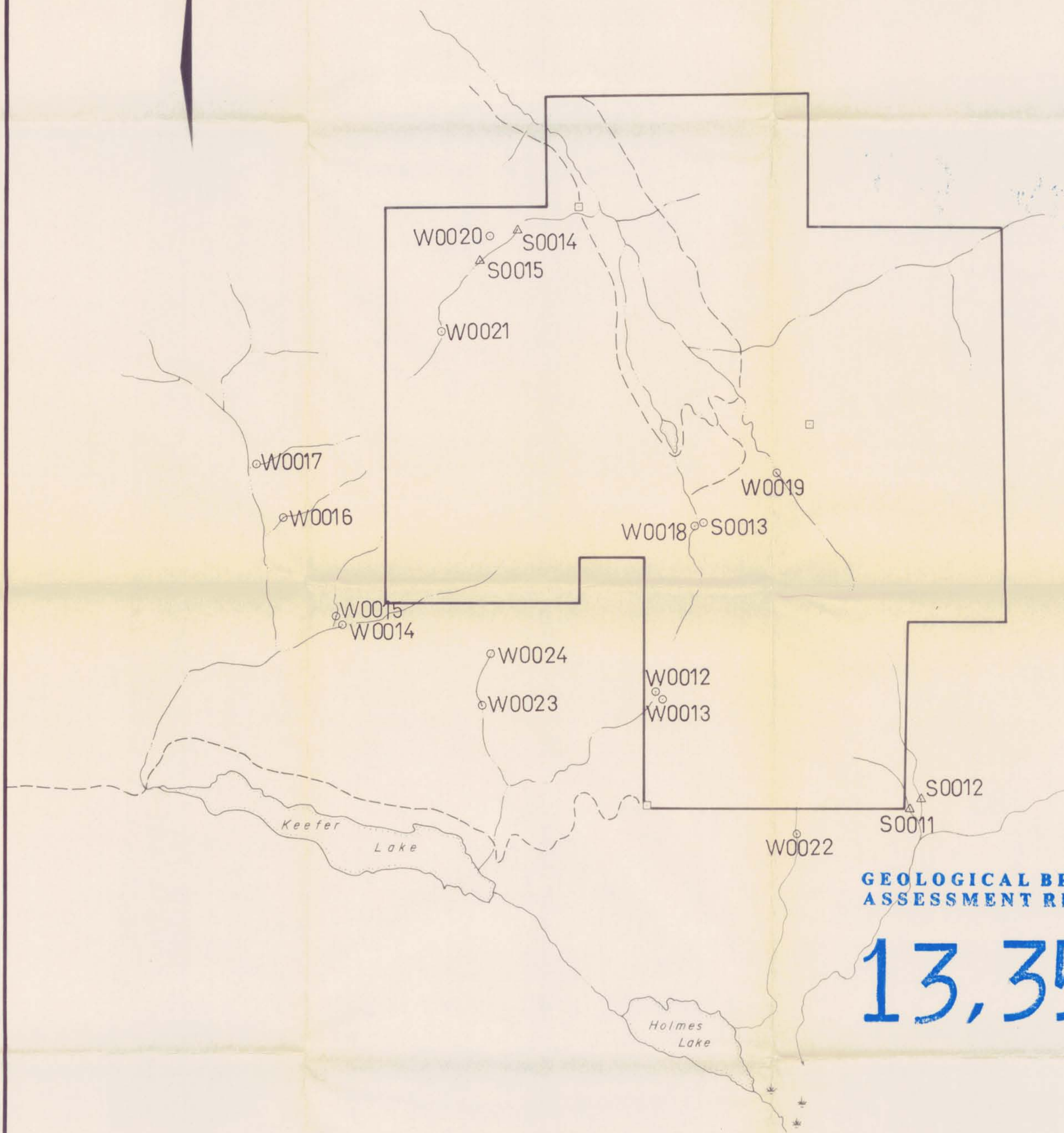
13,358

LEGEND

- STREAM
  - ROAD
  - SAMPLE LOCATION
  - LEGAL CORNER POST
  - HEAVY SEDIMENT SAMPLE 1983
  - HEAVY SEDIMENT SAMPLE 1984
  - PANNED CONCENTRATE 1984
- All values in ppb Au except as noted.



GOLDEN PORPHYRITE LTD.			
AUSTIN RESOURCES LTD.			
RAILROAD GROUP VERNON MD, BC.			
HEAVY SEDIMENT GEOCHEMICAL RESULTS			
DRAWN BY DMN	DATE Sept 84	SCALE 1" = 25,000'	NTS 82 L / 1

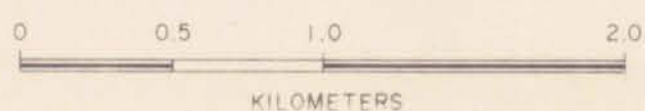


**GEOLOGICAL BRANCH  
ASSESSMENT REPORT**

**13,358**

LEGEND

- STREAM
- ROAD
- SAMPLE LOCATION
- LEGAL CORNER POST
- HEAVY SEDIMENT SAMPLE LOCN.
- PANNED CONCENTRATE LOCATION



GOLDEN PORPHYRITE LTD.			
<b>AUSTIN RESOURCES LTD.</b>			
RAILROAD GROUP VERNON M.D., B.C.			
HEAVY SEDIMENT SAMPLE LOCATIONS			
DRAWN BY DMN	DATE Sept 84	SCALE 1" = 25,000	N.T.S. 82 L / 1