

GEOCHEMICAL ROCK SAMPLING

GAM □ CLAIM

BRIAN BORU CREEK AREA

OMINECA M.D. - 93M/4E

LATITUDE 55°04'

LONGITUDE 127°37'

BY R. E. GALE

SEPTEMBER 21, 1984

ASARCO EXPLORATION COMPANY OF CANADA LTD.

**GEOLOGICAL BRANCH
ASSESSMENT REPORT**

12,712

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INTRODUCTION

On August 2, 1984 R. E. Gale and A. Robertson of Asarco Exploration Company of Canada Ltd. and R. McArthur of Noranda Exploration Company Limited flew via Glacier Helicopter to the Killarney showing (GAM II claim) on Brian Boru Creek.

The purpose of the work on the GAM claims on this date was to search for float mineralization within the previously-defined Pb-Zn-Ag soil anomaly (see previous reports), to see if the source of the geochem anomaly could be determined as to location and rock association.

LOCATION - ACCESS

The GAM claims (Brian Boru Prospect) is located in NTS area 93M/4E - Omineca Mining Division, at the headwaters of Brian Boru Creek, about 19.5 kms. south of New Hazelton. (Figures 1 and 2)

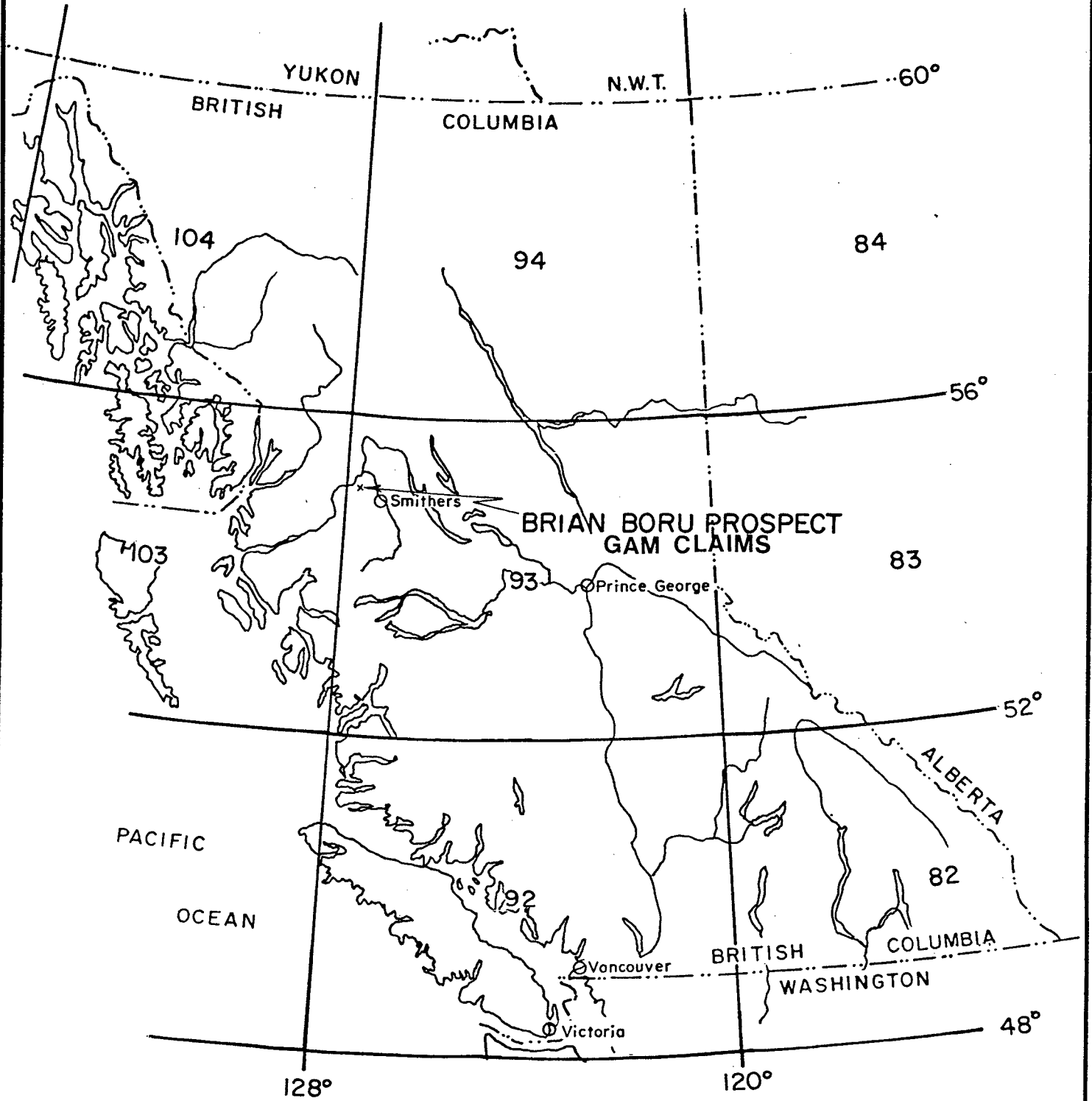
The nearest road access is about 5000 meters northwest along Juniper Creek and at the present time it is necessary to use helicopter transport to the claims. Slopes are fairly brushy and steep and the average elevation is about 1300 - 1400 meters near the Killarney showing.

CLAIMS

The GAM claims consist of 4 claims GAM I - IV comprising 24 units. The present work was carried out on the GAM II claim at points 600 - 900 metres north of the Legal Corner Post for GAM II (See Figure 3 - in pocket)

HISTORY

The Killarney zone of mineralization was discovered by John Creagh in 1926, rediscovered by ASARCO in 1979 and continually explored by the latter Company up to the present time. The principal work on the Killarney showing is geochemical soil sampling and magnetometer survey in 1980 and an induced polarization survey in 1981.

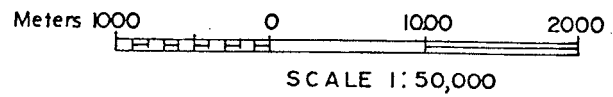
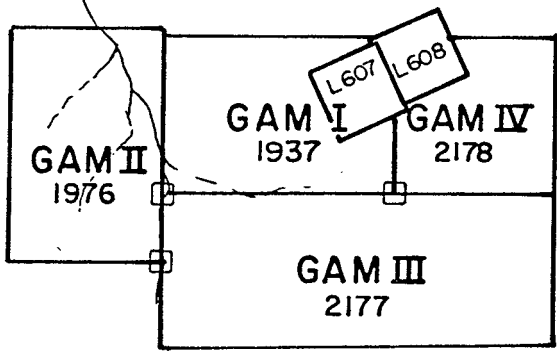
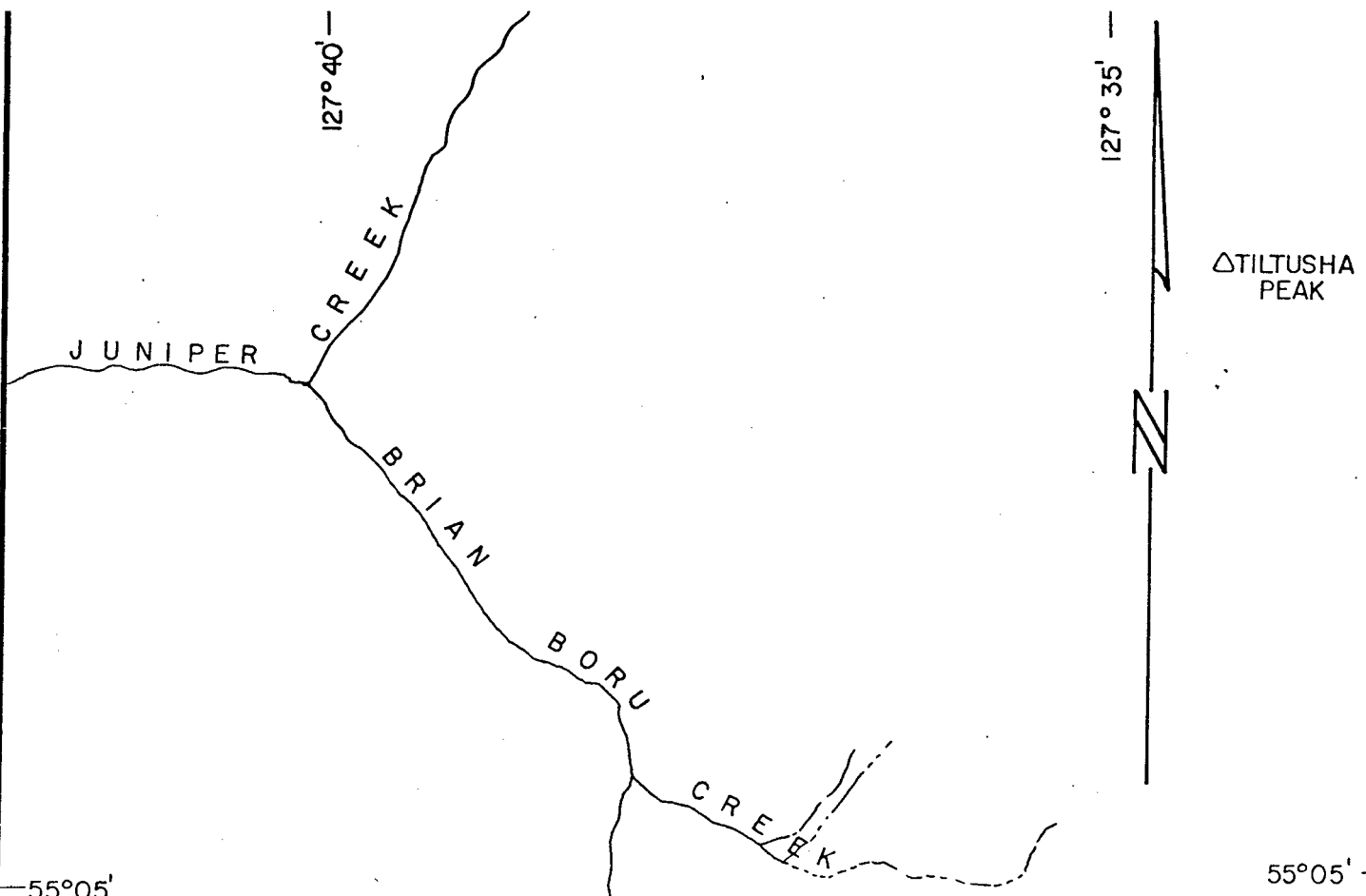


ASARCO

Vancouver

**BRIAN BORU PROSPECT
LOCATION MAP
HAZELTON AREA Omineca M.D.**

Drawn by	Date	N.T.S.	Figure
R. E.G.	SEPT/84	93M/4E	1



ASARCO		Vancouver		
BRIAN BORU PROSPECT				
CLAIM MAP				
HAZELTON AREA		OMINECA M.D.		
Drawn by	Date	N.T.S.	Figure	
R.E.G.	SEPT/84	93M/4E	2	

REGIONAL GEOLOGY

The GAM claims cover faulted and conformable contacts between sedimentary rocks of the Red Rose Formation and overlying, younger andesitic flows and tuffs of the Brian Boru Formation. The age of both types of rock is designated as Upper Jurassic - Lower Cretaceous.

These sedimentary and volcanic rocks are intruded by granodiorite of the Cretaceous Rocher De Boule Batholith. The GAM claims lie about 5.5 kms southwest of the southwest border of the Batholith.

GEOLOGY - KILLARNEY SHOWING

As shown in Figure 3, the NNW trending steep dipping Cap Fault crosses the northeast corner of the GAM II claim forming the contact between black graphitic argillite of the Red Rose Formation (unit 3 on map) on the east side of the fault and fine grained buff-colored andesite tuff of the Brian Boru Formation (unit 4 on map) on the west side of the Cap Fault.

The Killarney showing consists of a series of old pits trending northeasterly down a small gully. These pits disclose numerous angular boulders of brecciated buff colored andesite which is veined by carbonate containing disseminations and masses of pyrrhotite, pyrite sphalerite and galena. An unidentified tin mineral is also present with the sulfides.

No outcrops of the breccia have been found in the area and a large area of cover extends out in all directions from the old pits showing the mineralization.

The soil geochemical survey in 1980 was successful in outlining a northwest trending anomaly heading off from the pits which is about 150 meters wide and 500 meters long. The soil anomaly is partially coincident with a weak to moderate I.P. anomaly, which suggests that the source of the lead-zinc breccia lies northwest of the old pits.

FLOAT-ROCK GEOCHEMISTRY

The present program of work starting in August is planned to map and sample rock float within the soil anomaly to try to more closely locate the source of the lead-zinc breccia rock and also to get further information on the precious metal and tin values in rocks in the area.

The locations of 5 samples collected on August 2nd are shown in Figure 3. Descriptions of samples and assays are included as Appendix Two.

CONCLUSIONS - RECOMMENDATIONS

Float rocks in the area are believed to be locally derived and have not been moved any appreciable distance due to glaciation.

Weak gold and silver values are present with lead and zinc in float near the old pit showings and silver values in rocks carry on into the area of the soil geochem anomaly northwest of the pits. Tin values are significant but variable in the breccia from the old pits and tin values may weaken in rocks farther northwest.

Further sampling and mapping of float as a means of assessing the soil geochem anomaly is warranted.

R E Gale

R. E. Gale, P. Eng.
September 21, 1984

APPENDIX ONE

COST STATEMENT

SALARY - August 2, 1984 R. Gale, D. McArthur	\$ 300.00
A. Robertson	40.00
HELICOPTER CHARTER	394.53
ASSAY COSTS	202.20
MEALS	75.00
TRANSPORTATION EXPENSES	80.00
DRAFTING AND REPORT WRITING	100.00
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TOTAL	\$1191.73
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R E Gale

R. E. Gale, P. Eng.

September 21, 1984

NORANDA EXPLORATION COMPANY, LIMITED

N.T.S. 93 M/4E

PROPERTY BRIAN BORU - Killarney Showing

DATE Aug. 7/84

SAMPLE REPORT

SAMPLE NO.	LOCATION & DESCRIPTION	TYPE	WIDTH	ASSAYS						SAMPLED BY
				Au	Ag	Cu	Pb	Zn	Sn	
				gmt	gmt	%	%	%	%	RM
39254	Sample from dump at adit - main showing area bleached volcanic breccia with small clots and fracture filling dark sphalerite (est. 1.5% Zn) minor chalcopyrite (est. less than 0.5% Cu)	grab		0.17	11.1	0.01	0.23	2.13	0.01	
39255	Same area - similar to above; more pyrite, more Fe carbonate, less sphalerite. Sulphides form ring around breccia fragment.	grab		0.17	16.6	0.02	0.36	0.42	0.11	"
39256	Similar to above - boulder near baseline 10,000S @ 98+50E.	grab		<0.07	7.9	<0.01	0.06	0.94	0.02	"
39257	Boulders in creek above chopper pad - bleached volcanic with diss. and ff py-po-cpy?? less than 5% sulphides	grab		<0.07	< 0.7	<0.01	<0.01	0.01	<0.01	
39258	Bleached volcanic with diss. grey metallic (poss Sph - galena) from main pit area	grab		0.14	6.0	0.01	0.20	0.32	<0.01	"
39259	Calcrete-tuffa-coldspring deposit; sample from break in slope area above chopper pad to east.	grab			Ag ppm	Cu ppm	Pb ppm	Zn ppm		"
					0.4	8	5	91		

APPENDIX TWO

APPENDIX THREE

STATEMENT OF QUALIFICATIONS

I, Robert E. Gale of 4338 Ruth Crescent, North Vancouver, B.C. hereby certify that:

1. I graduated from Stanford University in June 1965 with a PhD in Geology.

2. I have been continuously employed in geological exploration in British Columbia since that time.

3. I am and have been a registered Professional Engineer in the British Columbia Society of Professional Engineers since June 1966.

R. E. Gale

R. E. Gale, P. Eng.

September 21, 1984

REFERENCES

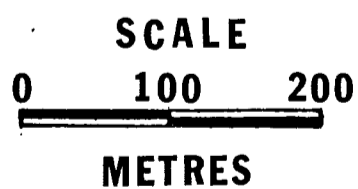
OLSON, D. H. - GAM Group - Assessment Report 8332, 1980

PERKINS, E. W. - GAM Group - Assessment Report 9587, 1981

GEOLOGICAL BRANCH
ASSESSMENT REPORT

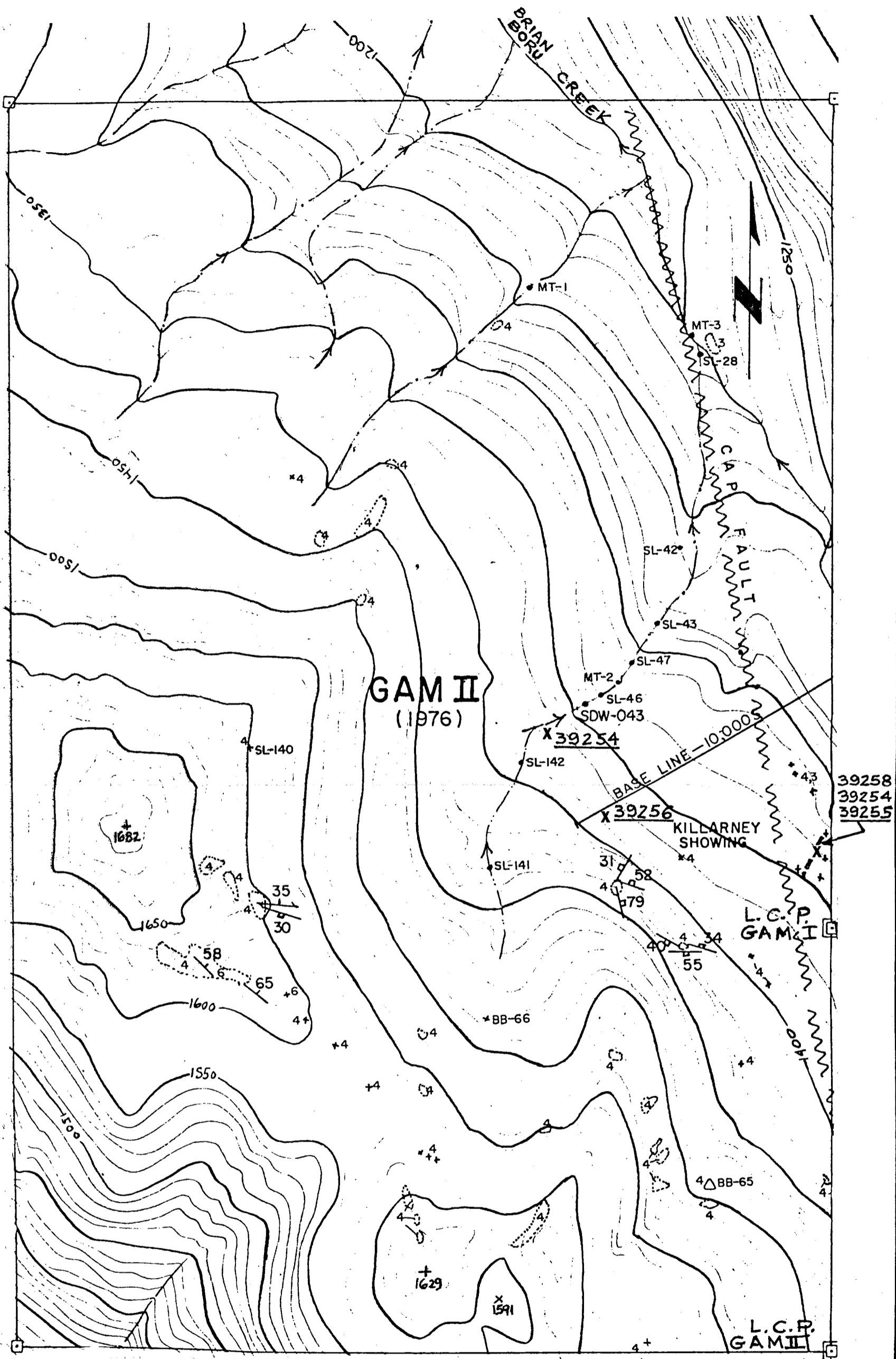
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CONTOURS - 50 METRES



LEGEND

- Argillite - Red Rose Formation
 - Andesite - Brian Boru Formation
 - Fault Inferred
 - Bedding
 - Fracturing
 - X 39254** Rock Geochem Sample Site
 - Claim Legal Corner Post
- Upper Jurassic -
Lower Cretaceous



ASARCO

Vancouver

**GAM II CLAIM
LOCATION OF FLOAT SAMPLES**

Drawn by	Date	N.T.S.	Scale	FIGURE
R.E.G.	SEPT./84	93M	1:5000	3