1989 Assessment Report on the CANYON PROPERTY Gran 12 Claim

Liard Mining Division
NTS:104G/3,6
Lat:57° 14'N
Long:131° 21'W

Owners: Homestake Mineral Development Company
1000 - 700 W. Pender St.
Vancouver, B.C.
and
Equity Silver Mines Ltd.
Suite 13 - 1155 Melville St.
Vancouver, B.C.

Operator: Homestake Mineral Development Company

Author: P. Southam

Date: August 10, 1989

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SUMMARY

The Gran 12 property is located in the Stikine region of British Columbia. The property consists of 1 claim totalling 20 units and is owned by Homestake Mineral Development Company and Equity Silver Mines Ltd.

Work on the property was carried out on June 6, 1989 and involved 1 : 10,000 scale mapping as well as the collection of 1 silt sample and 10 soil samples.

It is recommended that no further work be applied to this property. It has little potential for further development based on poor geochemical results and an absence of favourable alteration and mineralization.

1.0 INTRODUCTION

1.1 Location and Access

The Gran 12 property is located in the Stikine region of northwestern British Columbia approximately 76 km south-southwest of the village of Telegraph Creek (Figure 1.1). The claim is centred at 57° 14'north latitude and 131° 21'west longitude on NTS map sheets 104G/3 and 6.

Access to the property is via helicopter from Telegraph Creek, which is connected to Dease Lake by an all-weather road and serviced by fixed-wing flights from Smithers, B.C. The Stikine River provides navigable water access from Wrangell, Alaska north to Telegraph Creek.

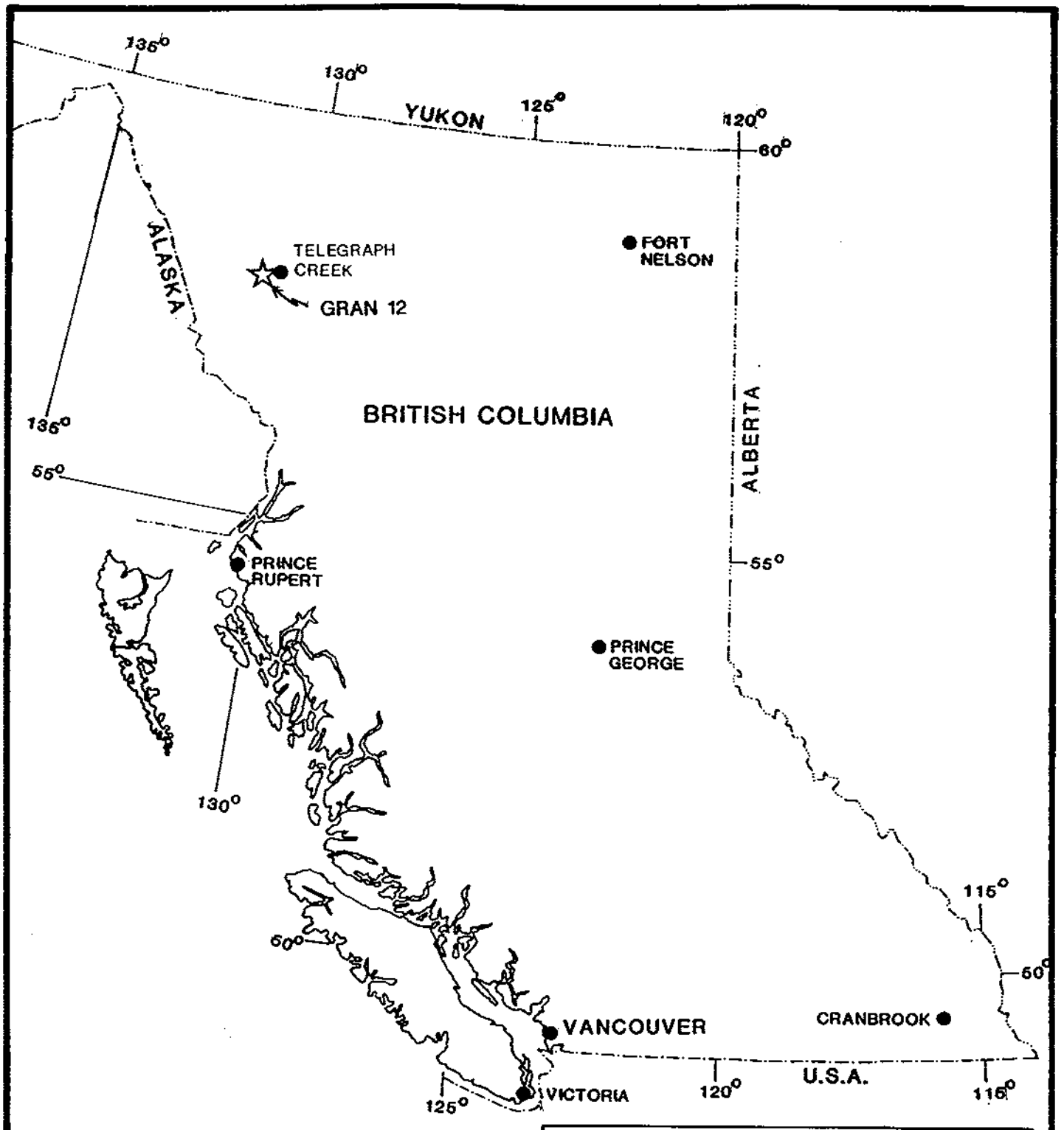
1.2 Claim Status

The Gran 12 property consists of 1 claim totalling 20 units. The claim was recorded on June 14,1988 and is owned by Homestake Mineral Development Company and Equity Silver Mines Ltd. Assuming acceptance of this assessment work, claim data will be as follows:

CLAIM	UNITS	RECORD #	STAKED	EXPIRY DATE
Gran 12	20	4669	14/06/88	14/06/90

1.3 Physiography

The claim covers the valley of the Scud River and the steep west facing slope of the mountain east of Continental Gold's Scud River Camp. The elevation varies from 300 meters in the Scud River valley up to 1300 meters along the eastern edge of the claim.



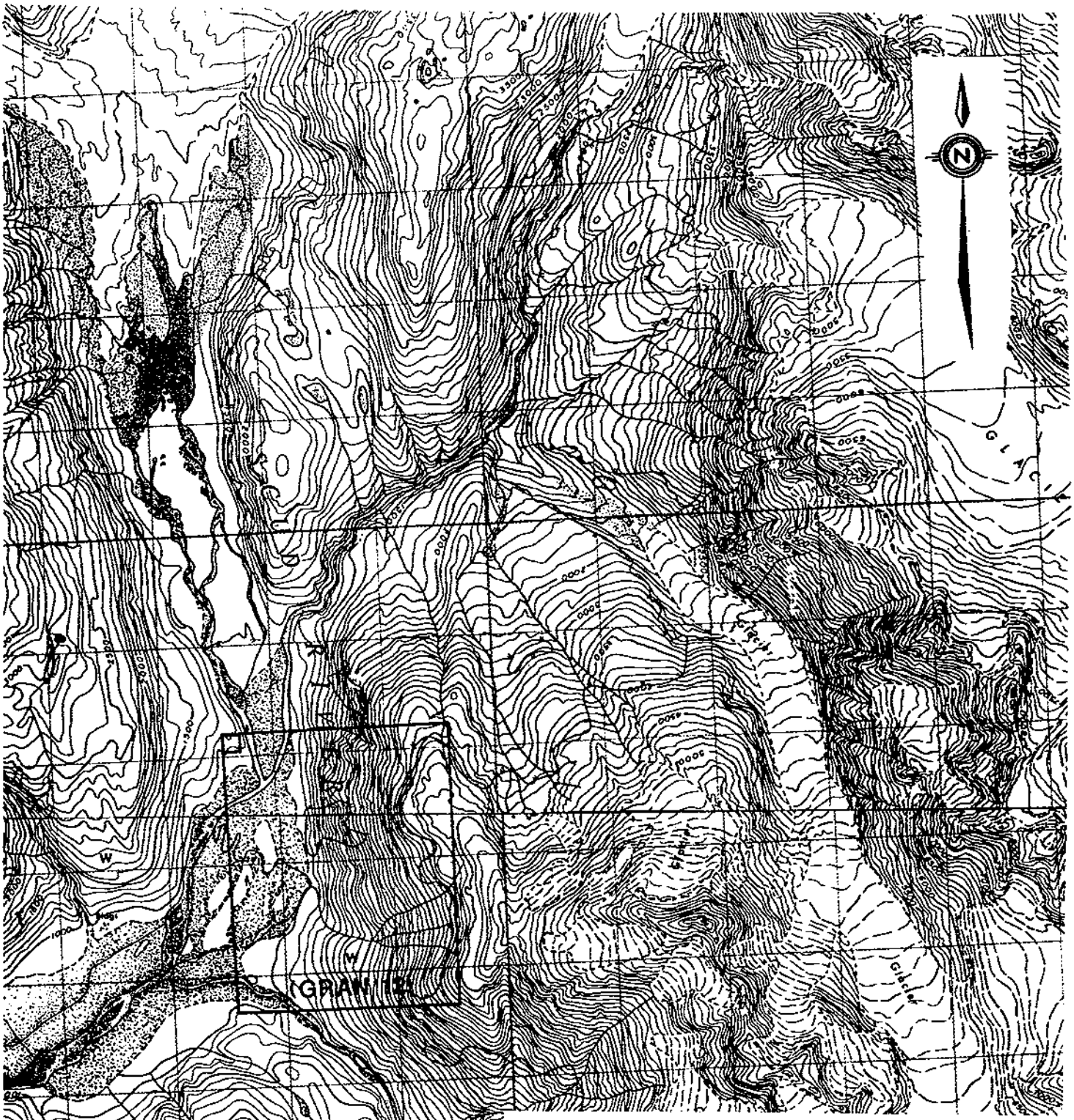
HOMESTAKE MINERAL DEVELOPMENT COMPANY

GRAND CANYON PROJECT, B.C.

GRAN 12

LOCATION MAP

DRAWN	DATE	FILE CODE	
KMc	11/87	104G	FIGURE 1.1
Revised			



SCALE 1: 50,000

HOMESTAKE
MINERAL DEVELOPMENT COMPANY

GRAN 12

DETAILED CLAIM LOCATION

DRAWN	DATE	FILE CODE	FIG. 2.2
P.H.	Aug., 10, 83	1046/3,6	
Revised			

The treeline is down below 360 meters due to the steepness of the slope. Vegatation includes poplar and spruce trees and alders along the valley and where the slope will allow growth.

1.4 Exploration History

No previous exploration known on the claim area.

1.5 Present Work

The 1989 work program outlined in this report was designed to locate areas of anomalous metal values and to assess the economic potential of the property. It consisted of stream sediment sampling, soil sampling and 1:10 000 scale geological mapping.

2.0 REGIONAL GEOLOGY

The property lies on the boundary between the Coast and Intermontane tectonic belts. This area is underlain by rocks of the Stikine Terrane (Stikinia) consisting of Upper Paleozoic to Upper Triassic sedimentary and volcanic rocks of the Stuhini Group (Kerr, 1948), Middle Jurassic to Early Late Cretaceous Successor Basin sediments of the Bowser Lake Group, and Late Cretaceous to Tertiary continental volcanic arc assemblages of the Sloko Group (Logan and Koyanagi, 1989). This stratigraphy is intruded by Upper Triassic to Tertiary plutonic rocks ranging in composition from syenite and quartz monzonite to granodiorite and hornblende diorite (Souther, 1972).

These rocks have undergone multiple stages of deformation, forming a complex structural pattern which is complicated by large differences in the competence of the different units. North- and northwesterly-trending normal faults are dominant with narrow west-trending extensional fault zones postdating them (Souther, 1972).

The most economically important exploration targets are porphyry copper-gold-silver deposits and peripheral mesothermal and shear zone-hosted precious metal veins (Logan et al, 1989).

3.0 PROPERTY GEOLOGY

The dominant rock type on the property is a Permian grey calarenite which contains pods of maroon and green plagioclase crystal lithic tuff. No gossan zones were observed on the property.

132° 00'
45'
30'
15'
131° 00'
58° 00'
45'

1 : 250,000

0 6 12 18 Kilometres 30

MAP MODIFIED FROM SOUTHER, 1971

HOMESTAKE
MINERAL DEVELOPMENT COMPANY

GRAND CANYON PROJECT
TELEGRAPH CREEK B.C.

GRAN 12

REGIONAL GEOLOGY

DRAWN	DATE	FILE CODE	FIGURE 3.1
MJD	08/89		

LEGEND

CENOZOIC

QUATERNARY
PLEISTOCENE AND RECENT

29 Fluviatile gravel; sand, silt; glacial outwash, till, alpine moraine and colluvium

28 Hot-spring deposit, tufa , aragonite

27 Olivine basalt, related pyroclastic rocks and loose tephra; younger than some of 29

TERTIARY AND QUATERNARY
UPPER TERTIARY AND PLEISTOCENE

26 Rhyolite and dacite flows, lava domes, pyroclastic rocks and related subvolcanic intrusions; minor basalt

25 Basalt, olivine basalt, dacite, related pyroclastic rocks and subvolcanic intrusions; minor rhyolite; in part younger than some 26

CRETACEOUS AND TERTIARY
UPPER CRETACEOUS AND LOWER TERTIARY
SLOKO GROUP

24 Light green, purple and white rhyolite, trachyte and dacite flows, pyroclastic rocks and derived sediments

22 23 22. Biotite leucogranite, subvolcanic stocks, dykes and sills
23. Porphyritic biotite andesite, lava domes, flows and (?) sills

SUSTUT GROUP

21 Chert-pebble conglomerate, granite-boulder conglomerate, quartzose sandstone, arkose, siltstone, carbonaceous shale and minor coal

20 Felsite, quartz-feldspar porphyry, pyritiferous felsite, orbicular rhyolite; in part equivalent to 22

19 Medium-to coarse-grained, pink biotite-hornblende quartz monzonite

JURASSIC AND/OR CRETACEOUS
POST-UPPER TRIASSIC PRE-TERTIARY

18 Hornblende diorite

17 Granodiorite, quartz diorite; minor diorite, leucogranite and migmatite

JURASSIC
MIDDLE (?) AND UPPER JURASSIC
BOWSER GROUP

16 Chert-pebble conglomerate, grit, greywacke, subgreywacke, siltstone and shale; may include some 13

MIDDLE JURASSIC

15 Basalt, pillow lava, tuff-breccia, derived volcaniclastic rocks and related subvolcanic intrusions

LOWER AND MIDDLE JURASSIC

14 Shale, minor siltstone, siliceous and calcareous siltstone, greywacke and ironstone

LOWER JURASSIC

13 Conglomerate, polymictic conglomerate; granite-boulder conglomerate, grit, greywacke, siltstone; basaltic and andesitic volcanic rocks, peperites, pillow-breccia and derived volcaniclastic rocks

MESOZOIC

TRIASSIC AND JURASSIC
POST-UPPER TRIASSIC PRE-LOWER JURASSIC

12 Syenite, orthoclase porphyry, monzonite, pyroxenite

HICKMAN BATHOLITH

10 11 10. Hornblende granodiorite, minor hornblende-quartz diorite 11. Hornblende, quartz diorite, hornblende-pyroxene diorite, amphibolite and pyroxene-bearing amphibolite

TRIASSIC
UPPER TRIASSIC

9 Undifferentiated volcanic and sedimentary rocks (units 5 to 8 inclusive)

8 Augite-andesite flows, pyroclastic rocks, derived volcaniclastic rocks and related subvolcanic intrusions; minor greywacke, siltstone and polymictic conglomerate

7 Siltstone, thin-bedded siliceous siltstone, ribbon chert, calcareous and dolomitic siltstone, greywacke, volcanic conglomerate, and minor limestone

6 Limestone, fetid argillaceous limestone, calcareous shale and reefoid limestone; may be in part younger than some 7 and 8

5 Greywacke, siltstone, shale; minor conglomerate, tuff and volcanic sandstone

MIDDLE TRIASSIC

4 Shale, concretionary black shale; minor calcareous shale and siltstone

PALEOZOIC

PERMIAN
MIDDLE AND UPPER PERMIAN

3 Limestone, thick-bedded mainly bioclastic limestone; minor siltstone, chert and tuff

PERMIAN AND OLDER

2 Phyllite, argillaceous quartzite, quartz-sericite schist, chlorite schist, greenstone, minor chert, schistose tuff and limestone

MISSISSIPPIAN

1 Limestone, crinoidal limestone, ferruginous limestone; maroon tuff, chert and phyllite

B Amphibolite, amphibolite gneiss; age unknown probably pre-Upper Jurassic

A Ultramafic rocks; peridotite, dunite, serpentinite; age unknown, probably pre-Lower Jurassic

Geological boundary (defined and approximate, assumed)

Bedding (horizontal, inclined, vertical, overturned)

Anticline

Syncline

Fault (defined and approximate, assumed)

Thrust fault, teeth on hanging-wall side (defined and approximate, assumed)

Fossil locality Ⓕ

Mineral property 15 ×

Glacier

INDEX TO MINERAL PROPERTIES

1. Liard Copper	5. Bam	9. MH	13. Ann, Su
2. Galore Creek	6. Gordon	10. BIK	14. SF
3. QC, QCA	7. Limpoke	11. JW	15. Goat
4. Nabs	8. Poke	12. Copper Canyon	16. Mary

GRAND CANYON PROJECT B.C.

GEOLOGICAL LEGEND

4.0 GEOCHEMISTRY

Two types of geochemical samples (stream silt and soil) were collected during the work program. Sample locations and results are plotted on Figure 4.1.

4.1 Stream Sediment Samples

1 sediment sample was taken from the Gran 12 property. The sample was collected with a hand trowel and placed in a kraft sample bag, air dried and shipped to Acme Analytical Labs of Vancouver, B.C. Sample analysis consisted of 30 element ICP and gold by fire assay. The sample site was located by elevation and topography and marked by a metal tag and orange flagging tape.

The only stream silt sample was taken from a creek flowing into the Scud River from the southeast at the south end the property. It returned a value of 6 ppb gold.

4.2 Soil Samples

10 soil samples were collected using a maddock, placed in kraft paper bags and air dried. They were then shipped to Acme Analytical Labs where 30 element ICP and gold by fire assay was done. As with other samples, locations were marked in the field with metal tags and orange flagging tape.

The soil samples were taken at the base of the mountain on the east side of the property. Only the southern portion of the property could be sampled for soil due to talus slides along the northern slopes. The results of the contour soil line returned a maximum value of 5 ppb gold and were not anomalous in any other elements.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The Gran 12 claim shows little potential for further mineral exploration due to lack of significantly altered rocks or major structural features. It is recommended that the claim be allowed to lapse.

6.0 REFERENCES

Brown, D.A. and Gunning, M. (1989): "Geology of the Stikine River Area, Northwestern B.C.", B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Field Work, 1988, Paper 1989-1, pp. 251-267.

Kerr, F.A. (1948): "Lower Stikine and Western Iskut River Areas, B.C.", GSC Memoir 246.

Logan, J.M. and Koyanagi, V.M. (1989): "Geology and Mineral Deposits of the Galore Creek Area, Northwestern B.C.", B.C. Ministry of Energy, Mines and Petroleum Resources, Geological Field Work, 1988, Paper 1989-1, pp. 269-284.

Souther, J.G. (1972): "Telegraph Creek Map Area, B.C.", GSC Paper 71-44.

7.0 STATEMENT OF COSTS

Labour		
Geologist	1 days @ $165/day	$ 165.00
Junior Assistant	1 days @ $90/day	$ 90.00
Food and Accommodation	2 mandays @ $ 90/day	$ 180.00
Geochemical Analysis + Freight		
Silt Samples	1 @ $ 25/sample	$ 25.00
Soil Samples	10 @ $ 25/sample	$ 250.00
Supplies		$ 200.00
Mob/Demob		$ 200.00
Helicopter Support (including fuel)	1.2 hrs @ $700/hr	$ 840.00
Report Preparation	2 days @ $165/day	$ 330.00
TOTAL		$2280.00

APPENDIX I

Analytical Results

ACME ANALYTICAL LABORATORIES LTD. 852 E. HASTINGS ST. VANCOUVER B.C. V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

HASTER
NTS: STIKINE/CANYON
11. BC. 104G
RMB/ACCT

ICP - .500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER. THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B W AND LIMITED FOR NA K AND AL. AU DETECTION LIMIT BY ICP IS 3 PPM.
- SAMPLE TYPE: Soil -80 Mesh AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.

DATE RECEIVED: JUN 29 1989 DATE REPORT MAILED: July 7/89 SIGNED BY. C. Leong .D.TOYE, C.LEONG, J.WANG; CERTIFIED B.C. ASSAYERS

HOMESTAKE MINERAL DEV. CO. PROJECT 5711CN (G12) #21 File # 89-1837

SAMPLE#	Mo PPM	Cu PPM	Pb PPM	Zn PPM	Ag PPM	Ni PPM	Co PPM	Mn PPM	Fe %	As PPM	U PPM	Au PPM	Th PPM	Sr PPM	Cd PPM	Sb PPM	Bi PPM	V PPM	Ca %	P %	La PPM	Cr PPM	Mg %	Ba PPM	Ti %	B PPM	Al %	Na %	K %	W PPM	AU* PPB
31361	3	65	9	77	.1	84	15	547	3.65	18	5	ND	1	74	1	2	2	49	7.92	.065	8	70	2.51	38	.03	3	1.43	.01	.09	1	1
31362	1	79	9	63	.1	79	15	477	3.23	9	5	ND	1	24	1	2	2	56	1.16	.090	9	70	1.65	71	.05	7	1.33	.02	.07	1	1
31363	5	28	12	81	.1	35	10	476	3.21	16	5	ND	1	30	1	2	2	34	2.90	.071	9	43	1.43	22	.01	5	.98	.01	.03	1	1
31364	1	53	6	33	.1	62	10	270	3.03	4	5	ND	3	27	1	2	2	87	1.97	.088	7	78	1.28	39	.05	5	.67	.01	.05	1	1
31438	1	64	7	60	.1	28	12	569	3.46	13	5	ND	1	71	1	2	2	76	3.89	.077	6	34	1.35	96	.06	12	.99	.02	.04	1	6
31439	1	9	8	19	.1	9	2	95	.83	2	5	ND	1	9	1	2	2	33	.26	.023	4	42	.16	18	.11	5	.31	.01	.02	1	5
31440	2	30	5	53	.1	35	10	528	3.75	11	5	ND	1	9	1	2	2	78	.15	.053	5	60	.59	22	.07	5	1.05	.01	.02	1	5
31441	2	12	11	26	.1	35	4	122	2.16	4	5	ND	1	8	1	2	3	68	.15	.025	4	91	.34	24	.10	2	.56	.02	.02	1	2
31442	1	5	5	18	.1	6	2	71	1.07	2	5	ND	1	4	1	2	2	12	.09	.030	8	13	.03	19	.10	5	.37	.04	.05	2	1
31443	2	32	7	98	.1	78	15	808	3.86	10	5	ND	1	19	1	2	3	47	1.48	.081	22	78	1.28	23	.04	6	1.81	.01	.03	1	1
31444	3	38	8	50	.1	33	9	549	2.60	12	5	ND	1	38	1	3	2	37	3.11	.067	11	41	.61	39	.02	9	.92	.01	.02	1	1
STD C/AU-S	18	61	38	132	6.6	67	31	1018	4.08	40	18	7	38	49	18	15	22	58	.50	.092	39	56	.96	178	.07	35	1.89	.06	.13	11	50

APPENDIX II

Sample Summary

GRAN 12 GEOCHEM

STIKINE GEOCHEM RESULTS

CLAIM GROUP	SAMPLE NUMBER	SAMPLE TYPE	SAMPLE DESCRIPTION	MINERALIZATION	Au ppb	Cu ppm	Pb ppm	Zn ppm	Mo ppm	W ppm	Sb ppm	As ppm
GR-12	31361	soil	5%org.,brown,'b',silty sand		1	65	9	77	3	1	2	18
GR-12	31362	soil	10-15%org,grey,'b',silty		1	79	9	63	1	1	2	9
GR-12	31363	soil	15-20%org,bi-brown,'?',sandy(talus)		1	28	12	81	5	1	2	16
GR-12	31364	soil	<5%org,grey,'?',sandy(Scud R.plain)		1	53	6	33	1	1	2	4
GR-12	31438	silt	4%org,light brown, silty sand		6	64	7	60	1	1	2	13
GR-12	31439	soil	5%org,light grey,'b',fine clay/silt		5	9	8	19	1	1	2	2
GR-12	31440	soil	5%org,grey-brown,'b',silty-clay		5	30	5	53	2	1	2	11
GR-12	31441	soil	10-15%org,grey-brown,'b',silt		2	12	11	26	2	1	2	4
GR-12	31442	soil	20%org,grey,'b',silt-fine sand		1	5	5	18	1	2	2	2
GR-12	31443	soil	5%org,brown,'b',sandy		1	32	7	98	2	1	2	10
GR-12	31444	soil	20-25%org, black,'b?',sandy		1	38	8	50	3	1	3	12

APPENDIX III

Statement of Qualifications

STATEMENT OF QUALIFICATIONS

I, Philip James Southam of #D-123 West 14th Avenue, Vancouver, British Columbia, Canada, hereby certify that:

1. I am a graduate of Brandon University, having been granted the degree of Bachelor of Sciences - Specialist in Geology in 1987.

2. I have practiced my profession as a geologist in mineral exploration since 1987.

3. I am presently employed as a geologist with Homestake Mineral Development Company of #1000 - 700 West Pender Street, Vancouver, British Columbia.

4. The work described in this report was done with my participation and a review of all previous available information.

PHILIP SOUTHAM

BLUEBERRY MOUNTAIN PROJECT
Gran 13
Canyon 1-20
TAHLTAN LAKE PROJECT
Tahltan Lk.
Telegraph Cr
Gran 8
GLENORA KING PROJECT
Gran 7
BARRINGTON RIVER PROJECT
TELEGRAPH CREEK
Barrington River
LIMPOKE CANYON PROJECT
Gran 11
Gran 16
Canyon 82
staked
Continental Gold Corp.
Canyon 25
RUGGED MOUNTAIN PROJECT
RIVER
Mess Creek
Canyon 53
NIGHTOUT CREEK PROJECT
Gran 15
STIKINE
Yehiniko
Chutine River
staked
Canyon 28
MISSUS JAY PROJECT
Canyon 29
Dokdaon
staked
MT. HELVEKER PROJECT
Canyon 84
Canyon 85
Creek
Schaft Creek
Yehiniko Lk.
Strata Cr
Continental Gold Corp.
Canyon 22
Canyon 23
DOKDAON PROJECT
Creek
Canyon 24
Gran 14
GRAND POTTER PROJECT
Lacana
Teck Corp.
Mess Creek
RIVER
NAVO CANYON PROJECT
Canyon 21
Canyon 30
Canyon 17
Gran 9
Gran 10
Scud River
Pass Lake Res.
Canyon 20
CANYON PROJECT
Canyon 19
Canyon 18
BHP Utah Mines
NORTHWEST SCUD PROJECT
GC
Canyon 36
Canyon 35
Gran 12
staked
staked
CONTACT CREEK PROJECT
27
28
29
26
Canyon 26-29
staked
TROPHY GOLD PROJECT
Continental Gold Corp.
Galore Creek Cu Deposit
Copper Canyon Cu Deposit
staked
STIKINE

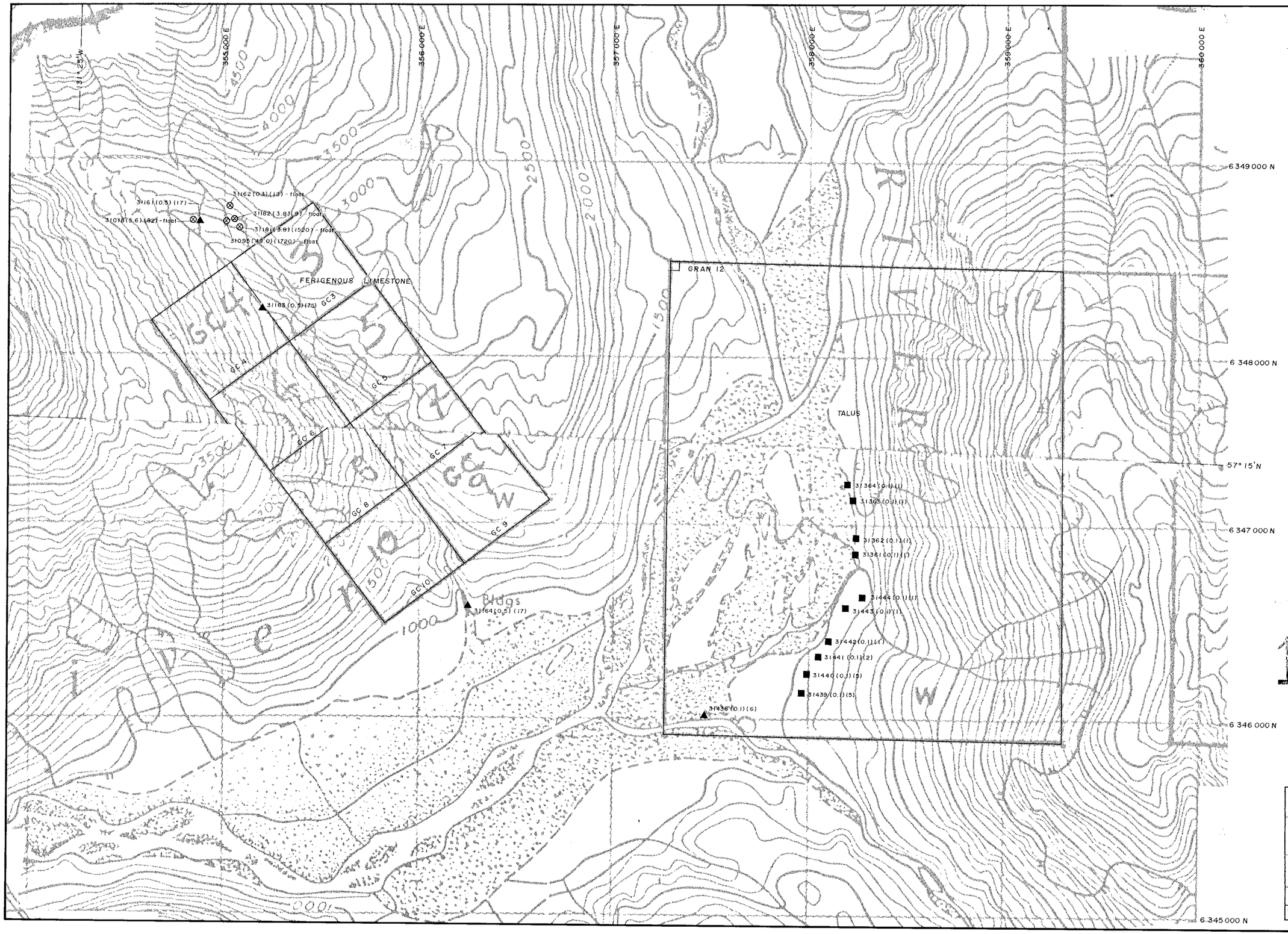
SCALE
0 5 10 15km
1 : 250,000

HOMESTAKE / EQUITY SILVER PROPERTY
HISTORIC GOLD SHOWING
COPPER-GOLD DEPOSIT

HOMESTAKE
MINERAL DEVELOPMENT COMPANY

GRAND CANYON PROJECTS
CLAIM LOCATION MAP

DRAWN	DATE	FILE CODE	FIGURE
PS	01/89	104 G	2.1
Revised			



LEGEND

- ⊗ Rock Sample
- ▲ Silt
- ■ Soil
- ● Heavy Mineral
- • Mapping Station
- Geological Contact/Limit of Outcrops
- Fault
- Outcrop

Ag-ppm Au-ppb

⊗ 31395 (0.5) (93)
Sample Number
Sample Site

● 31395 (0.5) (93)
(1000) (10000) Heavy Mineral - 150 mesh
(500) (2000) Heavy Mineral - 60 + 150 mesh

Py	Pyrite
Po/Pr	Pyrrhotite
Mg/Mag	Magnetite
qtz vn	Quartz Vein
Sil	Silicified
EP	Epidote
Bi	Biotite
cp	Calchopyrite
F.G	Fine Graned

SCALE 1: 10,000

0 100 200 300 400 600 800
METERS

HOMESTAKE MINERAL DEVELOPMENT COMPANY

CANYON PROPERTY

B.C.

(GRAN 12)

GEOLOGY AND SAMPLE LOCATIONS

DRAWN	DATE	FILE CODE	
P.H.	AUG., 2, 1989	104G/6,3	FIG.4.1
Revised			