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GEOLOGICAL AND GEOCHEMICAL REPORT

ON THE

KLINK PROPERTY

Liard Mining Division, British Columbia NTS 104G/4E Latitude: 57°-13'-50" N Longitude: 131°-32'-00"W

on behalf of

SOLOMON RESOURCES LIMITED Vancouver, B.C.



by

Rex Pegg, BASc., P.Eng. **KEEWATIN ENGINEERING INC.** #800 - 900 West Hastings Street Vancouver, B.C. V6C 1E5

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October 05, 1990

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		Keewatin Engir	neering Inc.

INTRODUCTION

The Klink property is located within the 'Galore Creek Gold Camp' which hosts the alkaline porphyry copper-gold Galore Creek deposit and numerous precious metal-bearing mesothermal shear vein and skarn occurrences.

During July of 1990, Keewatin Engineering Inc. was engaged by Solomon Resources Limited, the project operator, for the purpose of conducting a small exploration program on the property. The target was economic gold \pm silver \pm base metal mineralization.

1. Location, Access, Physiography and Climate

The Klink property is situated in northwestern British Columbia, approximately 78 kilometres south-southwest of the town of Telegraph Creek (Figure 1). The property is centred upon 57°-13'- 50" North latitude and 131°-32'-00" West longitude. This is within the 104G/4E NTS map sheet.

Access to the property is by helicopter from Bronson Creek, Telegraph Creek or one of the airstrips in the Stikine River area.

The claim straddles a north flowing tributary of the Scud River. Elevations range from 5,200 feet in the southeast corner of the property to 2,800 feet in the north-central portion. The topographic relief is characterized by relatively steep north trending ridges and the moderately incised north flowing creek.

The majority of the property is above treeline which is transitional at, approximately, 3,800 feet.

The climate is typified by cold, snowing winters and warm, wet summers. Snow accumulations normally range from 2 to 4 metres.

2. <u>Property Status and Ownership</u>

The property, see Figure 2, consists of one claim (8 units). The claim is located within the Liard Mining Division and its' status is summarized as follows:



Claim Name	Record No.	Owner	Expiry Date
Klink	4807	Cominco Limited	July 15, 1990

The property is apparently under option to Solomon Resources Limited.

3. <u>History of Exploration</u>

The earliest exploration in the region appears to have been carried out by prospectors during the late 1800's. Only limited exploration was carried out within the region until the porphyry copper "boom" days (1955-1970) which led to the discovery of the large porphyry copper-gold Galore Creek deposit in 1955. Numerous small showings and prospects were documented during this period.

Following a dramatic increase in precious metal prices in 1979, several companies carried out exploration programs in the region. Unfortunately, metal prices dropped and exploration was curtailed.

During the mid-1980's, the government's regional geochemical survey was carried out in the Galore Creek area. A silt sample from the creek draining the present Klink property returned an analysis of 129/430 ppb gold, 272 ppm copper and 29 ppm lead. In 1988, Cominco Limited staked the Klink claim and carried out a small exploration program. This included mapping at a scale of 1:50,000 and the collection of 25 soil, 1 silt and 8 rock samples. Cominco outlined a large coincident but erratic Cu-Zn-Au-Ag soil anomaly which is sub-parallel to a schistose unit.

During 1989 and 1990, numerous junior companies have been actively exploring the region for precious metal and porphyry copper-gold deposits. Mingold is presently carrying out work on the Galore Creek deposit which has reserves of 125 million tons of 1.06% copper and 0.012 oz/t gold (drill indicated). The Paydirt deposit, discovered in the 1980's, is also active and has reported drill indicated reserves of 200,000 tons of 0.12 oz/t gold.

4. <u>The 1990 Work Program Summary</u>

During July, two 2 man crews prospected and mapped the central and eastern portions of the property. Geochemical rock sampling of sulphide bearing strata was undertaken. Snow cover hampered work in the central claim area.



1. <u>Regional Geology</u> (see Figure 3)

The Galore Creek area lies within the Intermontaine tectono-stratigraphic belt - one of five, parallel, northwest/southeast trending belts which comprise the Canadian Cordillera. This belt of Permian to Middle Jurassic volcanic and sedimentary rocks define the Stikinia/Stikine terrane. This is bounded on the west by the Coast Plutonic complex and overlapped on the east by sediments of the Bowser Basin. The belt has been intruded by at least four episodes of plutonic rocks, from Late Triassic to Oligocene-Miocene.

The property appears to be at or near the contact of Permian and Upper Triassic volcanics and sediments, just to the east of the Coast Plutonic Complex.

2. <u>Property Geology</u> (see Map 1)

The investigated portions of the property are underlain by a mixed sedimentary/volcanic package (Upper Triassic), a limestone unit, with minor siltstone and argillite (Middle and Upper Permian) and a narrow section of chlorite/sericite-quartz schist (Palaeozoic?).

The Upper Triassic strata were observed within the eastern portion of the property. This mixed package is dominated by interbedded siltstone, sandstone/grit and minor greywacke. Two sections of intermediate ash to lapilli (monolithic) tuffs and porphyritic flows were also observed. Beddings are generally at $065^{\circ}-080^{\circ}/70^{\circ}$ SE. All of the units are moderately to strongly foliated with attitudes of $350^{\circ}-360^{\circ}/80^{\circ}-85^{\circ}$ E. Locally, these rocks are cut by swarms of quartz/carbonate veins which trend $070^{\circ}-075^{\circ}/80^{\circ}$ NW to SE. These veins are generally narrow (5-10 cm) but were observed in widths of over one metre. All of the above units have been cut by late stage, northeast trending augite porphyry dykes which range in width from two to twenty metres.

The Middle and Upper Permian package consists, predominantly, of grey limestone which is locally crinoidal and fetid. Minor amounts of siltstone, chert and tuff were also observed. Locally, the well bedded, dark grey to black siltstone displays chevron folding and silicification. Ankeritic alteration of the limestone was also observed at one locality.



The 100 metre wide chlorite/sericite-quartz schist unit straddles a structural lineament which trends along the creek near the centre of the property. The schist is strongly sheared and foliated $(010^{\circ}-020^{\circ}/85^{\circ} \text{ W})$. The intense alteration is assumed to be associated with the creek structure. Near the claim's north boundary, a postulated 110° trending structure cuts the main fault/shear and down drops the limestone to the creek level (see Map 1).

3. <u>Mineralization</u>

Most of the Upper Triassic sediments in the eastern portion of the property are weakly pyritized (1-2%) and the siltstones are often gossanous. On this side of the property, the quartz (± carbonate) veins locally contain up to 3% bleb chalcopyrite and minor malachite. One area of veining, straddling the south claim boundary approximately 400 metres east of the main creek, was not investigated.

In the central area two types of mineralization were observed. Irregular quartz (\pm carbonate \pm feldspar) veins, usually less than 10 cm wide and 5 metres long, were found chiefly near the southern claim boundary. Locally these veins contain up to 3% chalcopyrite, minor malachite and 1% magnetite and pyrite (eg. sample 90TKR-003). The second type is gossanous shears paralleling the north trending creek lineament. These shears are locally up to 7 metres wide (90TKR-004) and contain up to 10% pyrite and traces of chalcopyrite and sphalerite. One leached and narrow (0.50 m+) shear, near the south claim boundary, contains 5% pyrite and trace amounts of visible chalcopyrite and sphalerite. A nearby angular float/subcrop (?) sample (90TKR-002) of quartz-chlorite schist contained 5% pyrite, abundant hydrozincite, up to 1% sphalerite and trace amounts of chalcopyrite.

GEOCHEMISTRY

1. Sampling

During the course of the prospecting/mapping traverses, a total of eight rock samples were collected. These eight mineralized rocks represent seven grab samples and one float/subcrop(?) sample.

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2. <u>Analysis</u>

The rock samples were shipped to Min-En Laboratories in Smithers for preparation and then to their lab in North Vancouver for analysis. The analysis consisted of faa Au and an eight element I.C.P. package (Ag, As, Cu, Mo, Pb, Sb, Zn and Hg).

3. Description and Discussion of Results

Rock sample results from the eastern side of the property indicate only one geochemically elevated copper value. This 451 ppm copper is from a 1.0 to 1.5 metre wide quartz vein which contains up to 1% bleb chalcopyrite and minor malachite staining. All of the other results are at background levels.

The four rock sample results from the central portion of the property display geochemically elevated to anomalous values for all nine of the analyzed elements. Results range up to 172 ppb Au, 14.2 ppm Ag, 65 ppm As, 1163 ppm Cu, 130 ppm Mo, 6568 ppm Pb, 9 ppm Sb, 10894 ppm Zn and 10625 ppm Hg. The two samples from the north trending shears near the southern claim boundary exhibit multi-element anomalous values. The highest gold-silver-lead-antimony-zinc-mercury results are from the angular float/subcrop(?) sample which is probably near source. The highest molybdenum value is from a 0.5 metre wide quartz/feldspar flooded portion of a 7.0 metre wide, pyritic shear zone.

ECONOMIC GEOLOGY

No economic mineralization was encountered during the course of the two traverses. It should be noted that snow cover hindered thorough exploration of the creek valley.

CONCLUSIONS

The quartz (\pm carbonate) vein swarms prospected on the east side of the property are not precious metal bearing and are not of interest, at the time.

In the central portion of the property, the observed quartz veins are irregular, have limited strike length and do not carry significant mineralization. The north trending shears, paralleling the creek drainage, contain pyrite (to 10%), chalcopyrite (to 3%) and sphalerite/hydrozincite (to 3%)

mineralization. These shears are probably, at least in part, the source of Cominco's reported north/south trending Cu-Au-Ag-Zn soil anomaly. Snow cover along the creek hampered effective prospecting of the chlorite/sericite-quartz schist section but results from this year's limited investigation confirm the presence of at least geochemically elevated precious metal and anomalous base metal contents in this schist unit.

RECOMMENDATIONS

A small exploration program consisting of prospecting, mapping and rock geochemistry is recommended in order to fully assess the potential of the sheared schistose unit in the central portion of the property. This work should not commence before late-August when the snow cover should be gone.

Respectfully submitted, KEEWATIN ENGINEERING INC.

Rex Pegg, BASc., P.Eng.



BIBLIOGRAPHY

Brown, D.A. and Wojdak, P. (1989): K-Feldspar Connection: Relationship of K-Feldspar Intrusions to Cu Porphyries and Au Veins, Stewart-Iskut Belt, B.C.

Cominco Limited (1989): Private company memo.

G.S.C. Map 9-1957.

G.S.C. Map 11-1971.

G.S.C. Paper 71-44.

Logan, J.M. and Koyanagi, V.M. (1988): Geology and Mineral Deposits of the Galore Creek Area, Northwestern B.C.; BCDM Paper 1989-1.

Statement of Qualifications

I, REX STEPHEN PEGG, of #1 - 410 Mahon Avenue in the District of North Vancouver in the Province of British Columbia, do hereby certify that:

- I am a graduate of the University of Toronto, BA.Sc. (1976) in Geological Engineering 1) (Exploration option) and have practised my profession continuously since graduation.
- I have over 14 years of experience in exploration for base and precious metals in the Canadian 2) Cordillera.
- I am a member in good standing of the Association of Professional Engineers of British 3) Columbia.
- I am an independent consulting geologist with an office at #1-410 Mahon Avenue, North 4) Vancouver, British Columbia.
- I am presently under contract to Keewatin Engineering Inc. with offices at Suite 800 900 5) West Hastings Street, Vancouver, British Columbia.
- I am the author of the report entitled "Geological and Geochemical Report on the Klink 6) Property, Liard Mining Division, British Columbia", dated October 03, 1990.
- I have personally performed or supervised the work referenced in this report and I am 7) familiar with the regional geology and geology of nearby properties.
- I do not own or expect to receive any interest (direct, indirect or contingent) in the property 8) described herein nor in the securities of Solomon Resources Limited, in respect of services rendered in the preparation of this report.
- I consent to and authorize the use of the attached report and my name in the Companies' 9) Statement of Material Facts or other public document.

Dated at Vancouver, British Columbia this 5th day of October, 1990.



Respectfully submitted,

Rex Pegg, BASc., P.Eng.

Summary of Field Personnel

A. Travis	-	Project Geologist	-	July 6, 1990
A. Muirhead	-	Prospector	-	July 6, 1990
V. Malo	-	Field Assistant	-	July 6, 1990
T. Paquette	-	Field Assistant	-	July 6, 1990

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Statement of Expenditures

i)	Pre-field (map preparation,		\$	325.20
ii)	Labour			
	A. Travis (Geologist)	1.0 days @ \$325/day		
	A. Muirhead (Prospector)	1.0 days @ \$300/day		
	V. Malo (Field Asst.)	1.0 days @ \$185/day		
	T. Paquette (Field Asst.)	1.0 days @ \$160/day		
				970.00
iii)	Room and Board	4.0 man days @ \$60/man day		240.00
iv)	Field Equipment Rentals	4.0 man days @ \$15/man day		60.00
v)	Hand held radios	4 at \$5 each	,	20.00
vi)	Geochemical Analyses	8 rocks @ \$13.75 each		110.00
vii)	Helicopter	1.9 hours @ \$705/hour	-	1,339.50
viii)	Consumables (sample bags, t	yvek tags, paint, etc.)		40.00
ix)	Freight, communications, ex	pediting, courier, etc.		150.00
x)	Report (writing, drafting, co	ompilation, printing, etc.)		765.00
		TOTAL EXPENDITURES:	<u>\$</u> '	<u>4,019.70</u>

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Rock Sample Descriptions

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KEEWATIN ENGINEERING INC.

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KEEWATIN ENGINEERING INC.

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									TRACE CPY, ZnS	
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Geochemical Results



COMP: KEEWATIN ENGINEERING INC. PROJ: 046 ATTN: R.PEGG/R.NICHOLS

MIN-EN LABS - ICP REPORT

705 WEST 15TH ST., NORTH VANCOUVER, B.C. V7M 1T2 (604)980-5814 OR (604)988-4524 FILE NO: 0S-0140-RJ1 DATE: 90/07/19 • ROCK * (ACT:F31)

SAMPLE NUMBER	AU PPB	AG PPM	AS PPM	CU PPM	MO PPM	PB PPM	SB PPM	ZN PPM	HG PPB		
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