Stikine Copper Limited

DRILLING PROPOSAL FROM **REVIEW OF EXPLORATION RESULTS** NORTH AND NORTHEAST OF GALORE CREEK

LIARD MINING DIVISION

NTS: 104G/3 and 104G/4

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SUMMARY

The Galore Creek deposit is located in the Stikine River region of northwestern British Columbia. It is currently held by Stikine Copper Ltd., a private company owned jointly, 55 percent by Kennecott Canada Inc. and 45 percent by Hudson Bay Mining and Smelting Company Ltd. A major programme completed in 1991 by Stikine Copper Ltd. to re-evaluate Galore Creek showed that current capital, operating and transportation costs are not positively offset to provide an acceptable rate of return for the established grades and reserve.

A property submittal from Pioneer Metals Corporation initiated an evaluation of exploration results on the adjacent claims immediately north and east of Galore Creek. The best target is a large IP/resistivity anomaly, about 3.7 km north of Central Zone on the west side df Galore Creek. This enomaly may reflect the presence of another satellite deposit of the large Galore Creek magmatic-hydrothermal system. The claims in this area are underlain by variably altered volcanics intruded by syenite dykes. Widely scattered chalcopyrite and magnetite occurrences are also present. The IP anomaly is situated near the some regional structure that cuts the Southwest and Central Zones at Galore Creek.

The claims on the east side of Galore Creek do not show much promise for hosting significant mineralization.

A programme of 3,000m of diamond drilling is recommended on Pioneer Metals' claims at a cost of \$520,000. The drilling will test both flanks of the large IP anomaly along a strike length of 450m. The objective is to discover mineralization that will make a significant positive impact to the economics of the Galore Creek deposit.





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CONCLUSIONS

The best potential for significant mineralization lies in the lower part of the valley, on Pioneer Metals Corporation claims, west of the creek. Here, an untested IP/resistivity anomaly, about 500m by 1,000m in size, on the flank of an airmag high suggests a favourably anomalous geologic situation. The size of this anomaly indicates considerable tonnage potential. It is interpreted to be a large mineralized zone on the margin of an apophyses from the Galore Creek intrusive complex. An east-trending, cross structure indicated by topography in this vicinity is an important favourable element, because it suggests a permissive site for focused magmatic fluids to be localized along the nearby regional structure known as the Central Zone fault.

The claims east of Galore Creek received more intensive exploration, ending with a successful small drilling campaign by Gigi Resources in 1990. The mineralization that was discovered, is however, limited in its potential for size.

PROPOSED PROGRAMME

The objective for exploration of the claims surrounding the Galore Creek deposit is discovery of mineralization that will have a sufficiently positive economic impact on the project to allow early recovery of capital investment, and an adequate rate of return.

Achievement of this objective requires discovery of a large body of mineralized rock (about 100 million tonnes) with higher primary copper and gold grades than are presently known for the global average of the Central Zone. Alternatively, a smaller orebody (about 50 million tonnes) with proportionately higher recoverable gold could achieve the same goal.

The presently known controls for mineralization at Galore Creek are the result of complex geological conditions that resulted in an unusually large concentration of copper-gold mineralization as a single entity in the Central Zone (221.9 million tonnes grading 0.71 % copper and 0.34g/t gold). Additional, smaller, satellite deposits of variable copper and gold grades at the Southwest Zone (34.5 million tonnes grading 0.59% copper and 1.10g/t gold), the Junction Zones and others were also deposited by the same magmatic-hydrothermal system.

The target for the proposed drilling programme is a satellite deposit within the extensive Galere Creek hydrothormal system. It is located 3.7 km north of the Central Zone, and lies close to the same regional structure which cuts the Central and Southwest Zones. The target should be tested by a 3000m diamond drilling programme to determine if it also contains enhanced gold grades, as good as, or better than those at the Southwest Zone with three times the average gold grade as the Central Zone. Two fences with three holes each (for a total of six holes) are recommended to test the large IP anomaly known as the "northwest anomaly" (Figure 3). The drill fences should be about 450m apart to test the long dimensions of the anomaly. The proposed 500m holes would be separated by about 350m within each fence, and inclined at 60 degrees. This configuration should test both flanks and centre of the IP/resistivity anomaly to a depth of 450m. Figures 3 and 4 show the configuration of the proposed holes. A breakdown of costs is given below.

The only practical means of servicing this drill programme is by helioopter because of difficult access. The worn condition of the old road construction equipment at the Galore Creek camp precludes its heavy use for road construction to gain access to the drill sites.

This budget assumes use of the Galore Creek camp for a 60 day period. Daily shift change <u>might</u> be effected, partly by vehicle access along the old Jack Wilson Creek cat road. A 1 to 1.5 km hike along a cut trail to the individual drill sites would be required beyond the end of the road. The budget assumes this option.

Drilling costs assume an average \$98.42 per metre (\$30/ft) direct drilling plus consumable materials and are based on the 1991 Galore Creek project, allowing for an incremental unit cost increase. Five helicopter moves between drill sites plus helicopter service of the drills will be required. These costs, and those for mobilization

and de-mobilization were estimated from the 1991 project, again allowing for an incremental unit cost increase for a smaller programme.

PROPOSAL BUDGET

1.	DRILLING Direct Costs 3000m @ \$98.42/m Helicopter servicing	\$295,275.00	
	Hughes 500D 20 hours @ \$700.00	14,000.00	
	5 moves @ 5 hrs 25 hrs @ \$700.00	17,500.00	
	6 sites preparation @ \$1,000.00	<u>6,000.00</u>	\$332,775.00
2.	MOB/DEMOB		
	Freighting	\$ 15,000.00	
	Helicopter service	00.000.00	
	Bell 205 15 trips @ \$2,000.00	30,000.00	
	Hughes 500D 12 hrs @ \$700.00	<u>8,400.00</u>	\$ 53,400.00
3.	PERSONNEL		
	Core logger 60 days @ \$250.00	\$ 15,000.00	
	Splitter 60 days @ \$150.00	<u>9,000.00</u>	\$ 24,000.00
4.	BOARD	÷	
	9 X 60 man days X \$41.67 per day	\$ 22,500.00	
	Cook 2 mo. @ \$30 <u>0</u> 0(00	<u>6}000.00</u>	\$ 28,500.00
5.	ANALYTICAL COSTS		
	500 samples @ \$15.00 each		\$ 7,500.00
6.	REPORT PREPARATION		
0.	21 days @ \$250.00 per day	\$ 5,200.00	
	Drafting	3,000.00	\$ 8,200.00
			+ 0,200.00
7.	RECORDING FEE FOR ASSESSMENT		
	40 units for 10 years (max)		\$ 8,000.00
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8.	GOVERNMENT BONDING & RECLAMA	TION	\$ 10,000.00
9.	10% MANAGEMENT FEE		\$ 47,238.00
			<u></u> _
	TOTAL		\$ <u>519,613.00</u>

INTRODUCTION

A property submittal of claims north of Galore Creek, was brought to Stikine Copper Ltd. by Pioneer Metals Corporation. This initiated an evaluation of exploration results on adjacent claims north and east of the Galore Creek deposits. Sources of data include assessment reports, a few private company reports, and discussions with several geologists familiar with the area. Personal knowledge of the Galore Creek deposit was also helpful. The relevant claims are shown in Figure 2.

Interest north of Galore Creek grew from the results of the 1991 Stikine Copper Ltd. programme. Specifically, the IP/resistivity surveys at the north end of the property, showed a north-trending chargeability anomaly that is open to the north. In drilling the north fence of holes across this IP anomaly, short intervals of significant copper and gold were intersected in altered volcanics in hole GC-413 (Figure 3). Whereas drilling in 1991 proved no tennage potential for e hypothetical north extension of the Central Zone, the question of the existence of significant mineralization north of the Galore Creek claims boundary remained unanswered.

Copper mineralization at Galore Creek is broadly controlled by geologically longlived regional structures, often manifested as faults. At Galore Creek, a regional structure that is both pre-, and post-mineralization was identified in the Contral Zone. It can be projected south to the Southwest Zone, as well as north, beyond the claims boundary. This fault system was intersected in at least one drill hole (GC-415) in the north part of the Galore Creek claims. Intersections of such regional structures with east-west cross structures are of importance, as these intersections allow focus for mineralizing magmatic-hydrothermal systems. This can be demonstrated at both the Central and Southwest Zones.

The obvious area of exploration interest is along strike of the Central Zone fault structure that can be traced north along Galore Creek valley. The lower valley of Galore Creek is rugged, with steeply incised stream beds that reveal local outcrop. Deep overburden generally obscures bedrock in the valley floor. Thick vegetation with mature stands of hemlock, spruce and fir contain thick underbrush of alder, devil's club and huckleberry. The steep valley sides have good exposures of bedrock.

ACCESS

Effective access to most of the area north and east of the Galore Creek claims is by helicopter. An old cat road that was initially constructed to gain access to Jack Wilson Creek in the mid-1960s was partly cleared of second growth in 1989 by Pioneer Metals Corp. to get access onto their claims.

The main access road that connected the Galore Creek camp to the Scud airstrip in the mid 1970s follows the east side of the creek. Much of this road is covered by second growth alder.

PROPERTY AND EXPLORATION HISTORY

The Grace 1 and 2 claims covering the lower Galore Creek valley west of the creek are held by Pioneer Metals Corporation. The remainder of the claims, mainly east of the creek, are owned by Gigi Resources Ltd. Both claim blocks have a long history of exploration initiated by the discovery at Galore Creek, but little diamond drilling was conducted, especially west of the creek.

The claims north and east of Galore Creek can be conveniently divided into two distinct blocks of interest for discussion (Figure 2). Earliest exploration dates back to 1964 when the Scud Venture (a joint venture between Asarco and Silver Standard) was formed and claims were staked covering both sides of the valley. The "Stikine North Group" claims at that time covered an area larger than Pieneer Metals' claims west of Galore Creek and the "Stikine East Group" covered much of the ground now held by Gigi Resources. Exploration by previous companies is described below.

West side of Galore Creek

1964

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Scud Venture conducted mapping, prospecting and ground magnetometer surveys. IP was recommended.

1965 IP/resistivity surveys were conducted which identified the "northwest anomaly" and "southwest anomaly". See Figure 3. Drilling was recommended, and one 1800 ft. hole was drilled on the "southwest anomaly" because it was underlain by "syenite porphyry breccia with very minor sulphides" and it was open to the south towerd the Galore Creek claims. The drill logs have been lost. Dunn (1992 personal communication) stated his father (Bill Dunn) recollected that the hole intersected the Centhal Fault zone (its target) and



that weak mineralization consisting of pyrite and chalcopyrite with grades visually estimated at less than 0.5% copper was present in the core.

1980s The claims lapsed.

- 1987-1988 Pioneer Metals Corporation restaked the claims and conducted limited mapping, prospecting and stream sediment sampling.
- 1989 The claims lapsed and were quickly restaked as Grace 1 and 2. Using the cat from the Galore Creek camp several north spur roads were constructed from the Jack Wilson Creek road for access from the Galore Creek claims onto the Grace 2 claims.
- 1990 An Aerodat helicopter geophysical survey covered Pioneer's claims and a large area including the adjacent claims to the east, Copper Canyon, and part of the Galore Creek complex as far south as the Central Zone.
- 1991-1992 Pioneer's exploration efforts were limited to covering annual assessment costs. Local mapping, sampling, and prospecting showed highly anomalous copper and gold levels in soils along two north spurs of the cat road. A local, gold-bearing shear zone adjacent to a syenite dyke was discovered but found to have limited size potential.

East side of Galore Creek

1961-1965 Scud Venture completed mapping, stream sediment, and local ground mag surveys. Anomalous copper was identified in streams draining the North 110 syecite area. An IP/resistivity survey (same as was completed at the west side of the creek) identified a large anomaly known as the "east anomaly" (Figure 3). The Murray showing was discovered and shown to contain low copper (0.10% copper over 11.9m.) Two holes were reported drilled in 1965 but exact locations are unknown.

1966 Limited trenching was conducted on the "east anomaly"; it failed to reach bedrock.

- 1974 Four barren holes were drilled along the Galore Creek access road east of Galore Creek but the IP "east anomaly" identified in 1965 was evidently not drilled.
- 1980s The claims lapsed.
- 1987 The area east of Galore Creek was staked by Continental Gold Crop. who conducted regional mapping and sampling.
- 1989 Gigi Resources (Prime Resources Greup) optioned claims and enlarged their holdings with more staking to cover the area between Copper Canyon, Galore Creek and Scud River to the north. They conducted mapping and prospecting.
- 1990 An Aerodat helicopter geophysical survey was flown. Follow up work consisted of sampling and prospecting airborne arromalies. Among others, an area of interest known as the "Galore Grid" was identified, and was covered by ground mag, IP/resistivity and soil surveys. A total of 830m. was drilled in four holes. The best intersection came from the last hole with 0.94g/t gold across 49.5m.

DISCUSSION OF HIGHLIGHTS OF GEOLOGY AND MINERALIZATION

The only mapping of consequence on the western side of Galore Creek was conducted in 1964 by Gale (1964) for the Scud joint venture. Although Gales's mapping extended to the east side of Galore Creek, more recent mapping was conducted there by Continental Gold and Gigi Resources.

A large anticline with axis close to Galore Creek was inferred by Gale (1964) from generally opposite dips found in stratified rocks on upper slopes of either side of the valley. The dips generally are inclined away from each other. Our experience at Galore Creek suggests that the structural geometry of the stratified rocks is more complicated, possibly by two or more phase folding. For example, near the Central Zone, stratified rocks strike east. In addition, a thick mylonite zone was identified on the west side of the Galore Creek complex indicating a major ductile deformational event.

The predominant geology that underlies the claims north and east of Galore Creek is an Upper Triassic volcanic assemblage of andesitic volcaniclastics and flows with interbedded sedimentary units. Volcanlcs are variably epidote and K-feldspar altered and are cut by numerous syenite dykes and small stocks. These units are the predominant host rocks for the Stikine Copper deposits.

Unfortunately, outcrop in the valley floor is very limited. Consequently, the most reliable mapping was conducted along the well exposed cliffs higher up the slopes, where rocks are less altered. The more interesting geology underlies the valley floor. Here, scattered outcrops and exposures along creek gulleys west of Galore Creek show numerous small syenite dykes. Two types of syenite have been recognized (Kasper, 1991) and include a coarse mega-porphyry and medium grey, K-feldspar porphyry unit. To the east of Galore Creek two bodies of syenite were mapped. The largest body is the "North 110 syenite" which is a sill-like body, about 600m by 1800m in size, described as "medium-grained equigranular to megacrystic, with K-feldspar phenocrysts in grey to pink medium-grained groundmass". Chloritized biotite and epidots are common. The other sysnite bedy occurs farther north, near the Galore Creek access road (Figure 3).

Abundant, scattered, small mineral occurrences of chalcopyrite, magnetite and pyrite are present in altered volcanic rocks and in syenitio dykes. Many occurrences are plotted in Figure 3. Results from limited soil geochemistry surveys shown in Figure 3 indicate presence of mineralization. Two soil sample lines were run along the north spurs of the old cat road on the west side of Galore Creek. The results show strong copper and gold anomalnus soils and probably reflect a two-mile, down-ice dispersion of Central Zone mineralization. Overburden in this area is deep. The soil line along the upper road north of Steep Creek is likely to reflect weaker, but proximal down slope metal dispersion from nearby volcanics to the west.

The best showing on the Grace 2 claim is located on Bolt Creek where a sample assayed 0.23% copper over 6.1m. Gold was not analysed. No drilling was conducted in this area due to difficult access. According to Blusson (1988 and personal communication), scattered outcrops in the thick bush and along Bolt Creek indicate that hydrothermal alteration, as secondary K-feldspar, aerioite and epidote, is more widespread than the few outcrops indicate. On that basis he defined the outer limits of a "sheared and altered zone" as shown on Figure 3.

A small, shear-hosted gold showing, associated with a syenite dyke in the Galoro Creek canyon (Figure 3) was re-sampled in 1992 (Dunn, 1992) by drilling and blasting. Results indicate an average of 4.17g/t gold over 2.2m. which is not ore grade.

On the east side of Galore Creek, a weak copper mineralized area known as the Murray showing was found in the North 110 syeoite area by old stream sediment surveys. This general area known as the "Galore Grid" was extensively explored by Gigi Resources. Mineralization at the Murray showing was reported as 0.10% copper over 11.9m in the North 110 syenite. Anomalous soil geochemistry and high chargeability anomalies led Gigi Resources to drill three holes (TR90 - 7 to 9) in the area immediately north of the North 110 syenite sill. Description of drilling results and significant intersections are given in the Appendix. Low levels of copper (X000ppm) and 0.4 to 0.7 g/t gold were intersected in widths up to several metres.

Exploration by Gigi Resources also discovered mineralization in another area about 600m northwest of the North 110 syenite, near the Galore Creek access road.

They drilled one hole (hole TR90-10) on coincident high chargeability, low resistivity anomalies associated with a linear, 750m long, gold seil anomaly. This hole intersected 0.94g/t gold across 49.5m in pyritic (up to 10% pyrite), weak to moderate epidote and K-feldspar altered fragmental volcanics. This is the best known intersection on the east side of Galore Creek. The mineralization is, however, limited in size based on the IP and soil geochemistry anomaly patterns. The gold soil anomaly indicates considerable strike, but narrow width extent to this mineralization.

DISCUSSION OF HIGHLIGHTS OF GEOPHYSICS

A number of geophysical surveys were completed in the claims outside Galore Creek. They include several generations of IP/resistivity surveys and helicopter airborne surveys. The main results of these surveys are shown in Figure 3.

Communication with J. Inman (Kennecott geophysicist, Salt Lake City) established that the old Asarco IP/resistivity survey was a time-domain survey and that this data is reliable. The survey was capable of responding to depths of 100 to 150m. Configuration of the geophysical grid is included in the Appendix to show the coverage achieved by this old survey.

The most important results from geophysics are the anomalies from the early Asarco IP surveys. Two large, untested IP anomalies were outlined on either side of lower Galore Creek and are known as the "northwest anomaly" and the "eest anomaly" (Falconer, 1965a and 1965b). See Figure 3. The "northwest anomaly" is considered to be the best of these two anomalies because it is untested, large, and open to the northeast. Its position near a major, northwest-trending, regional structure, as well as on an airmag gradient suggests a geological situation related to the margin of an intrusive body. This anomaly lies on the east flank of a resistivity high, which is interpreted as encouraging because it suggests presence of sulphides related to hydrothermally altered rocks.

The "east anomaly" was trenched in 1966, but failed to penetrate the thick overburden, according to Ostensoe (1966). This anomaly is less attractive because

it is smaller and less intense than the "northwest anomaly".

A rasistivity low was defined by Falconer (1965a, 1965b) along the Galore Creek valley bottom. This feature is interpreted to reflect clay-rich, thick glacial overburden.

Several chargeability anomalies were defined higher up the east slope of the valley by Gigi Resources in 1990 (Figure 3). Most of the drilling (holes TR90-07 to 09) around the North 110 syenite body tested portions of the complex IP chargeability anomaly in that area. They intersected only low levels of copper and gold mineralization.

The most significant IP anomaly from Gigi Resources' work is a narrow chargeability anomaly about 600m northeast of the North 110 syenite area, immediately east of the old Galore Creek access road. A long gold soil anomaly is coincident with this chargeability. A small syenite body was mapped near the south end of this anomaly. Drill results (hole TR90-10) indicate significant gold content, but limited potential for significant tonnage is suggested by the soil geochemistry.

The results of the 1990 airmag survey covering Pioneer's claims were matched with the 1991 Stikine Copper Ltd. survey results over Galore Creek. Both surveys were conducted by Aerodat which simplified matching of the data. These data showed that magnetic highs respond to syenite intrusive complex rocks (Figure 3). J. Inman's interpreted magnetic linears are also shown in Figure 3. The mag high pattern clearly indicates that the Galore Creek syenite complex extends north from the Galore Creek claims boundary onto the Grace 2 claims. It ends as an apophysis-like feature in the vicinity of Bolt Creek, near the position of the "northwest anomaly". This strongly suggests that a sulphides formed on the north flank of a buried syenite apophysis.

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APPENDIX

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SIGNIFICANT INTERSECTIONS: DRILL HOLE TR90-07

Depth (metres)	Length (metres)	A u (g/t)	A g (q/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
21.2 - 27.2	6.0	0.45	<1.7	104	10	61
63.5 - 68.0	4.5	0.69	<1.7	124	<1	16
95.0 - 105.6	10.6	0.45	<1.7	96	<1	24
113.1 - 117.6	4.5	0.45	<1.7	114	<1	24
135.6 - 138.6	3.0	0.51	<1.7	<100	200	66

SIGNIFICANT INTERSECTIONS: DRILL HOLE TR-90-08

Depth (metres)	Length (metres)	A u (g/t)	Ag (g/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
30.2 - 34.7	4.5	0.41	<1.7	62	12	40
43.7 - 45.2	1.5	0.45	<1.7	190	7	43
48.2 - 52.7	4.5	0.38	<1.7	225	36	90
60.2 - 61.7	1.5	0.55	<1.7	480	17	41
98.3 - 99.8	1.5	0.72	2.1	300	13	58
105.8 - 107.3	1.5	0.34	2.1	4	14	57
147.8 - 149.3	1.5	0.48	<1.7	4	8	34
179.1 - 180.6	1.5	0.51	2.4	<1	35	36

SIGNIFICANT INTERSECTIONS: DRILL HOLE TR90-09

Depth (metres)	Length <u>(metres)</u>	Au (g/t)	A g (q/t)	Cu (ppm)	Pb (ppm)	Zn (ppm)
49.7 - 62.7	13.0	0.45	<1.7	1144	8	35
86.9 - 87.4	0.5	0.31	<1.7	1200	7	27

SIGNIFICANT INTERSECTIONS: DRILL HOLE TR90-10

Depth	Length	A u	A g	Cu	Pb	Zn
(metres)	(metres)	(q/t)	(q/t)	(ppm)	(DDM)	(ppm)
12.1 - 61.6 including:	49.5	0.94	<1.7	176	4	31
33.1 - 49.6	16.5	1.71	<1.7	301	3	30
and 52.6 - 61.6	9.0	1.01	<1.7	114	3	26

GALORE GRID 1990 DIAMOND DRILL HOLE DATA

Hole	Grid Lo	Grid Location		Dip	Length	
Number	North	East/West	(degrees)	(degrees)	(metres)	
TR90-07	40+46	2+63 E	130	-45	181.96	
TR90-08	40+91	2+17 E	270	-45	255.11	
TR90-09	37+08	3+16 E	310	-45	147.46	
TR90-10	45+91	4+29 W	090	-45	200.25	

Diamond drill hole TR90-07 was designed to test the depth extension of the Popeys Zone. This area is marked by a gold-copper soil anomaly, a broad chargeability high, and a magnetic field high. The drill hole intersected Stuhini Group volcaniclastics and flows that display moderate to intense potassium feldspar and epidote alteration and weak, pervasive chlorite alteration. Mineralization consists of 3% to 9% disseminated and blebby pyrite that is coincident with the strong potassium feldspar and epidote alteration. This alteration is strongest in the upper 165 metres of the hole. Below 165 metres in the hole, potassium feldspar and epidote alteration is weak and pyrite content is less than 1%. A strongly silicified and potassium feldspar altered interval, brecciated by quartz and calcite veins, was intersected at a depth Associated with the guartz-calcite veining is a of 37 metres. style of mineralization and Bineralogy that is very similar to the shear zone within the Popeye Zone, with 7% to 9% pyrite, 1% chalcopyrite, traces of sphalerite and galena, and 3% specular hematite. The zone assayed 0.27 grams/tonne gold (0.008 oz./ton), 16.5 grams/tonne silver (0.48 oz./ton), 0.27% copper, 0.10% zinc, and 0.05% lead over a core length of 2.90 metres. However, this intersection is too far up in the hole to correlate with the Popeye showing, suggesting that this is another shear zone.

All significant intersections in drill hole TR90-07 are associated with moderate to intense epidote and potassium feldspar alteration and 3% to 9% pyrite. This hole did not intersect any of the syenite that is present on surface at the Popeye Zone. This suggests that the syenite, which shows the best gold mineralization on surface, is an east-dipping body and the shear-hosted veining may parallel this intrusive body. No obvious fault structures were intersected in the hole to maggest that the syenite was displaced.

Drill hole TR90-08, located 65 metres northwest of drill hole TR90-07, was drilled to test a gold soil geochemical anomaly in an area of limited outcrop. Geophysical surveys in this area indicate a magnetic field high, a moderate, shallow chargeability high and resistivity low, and a strong VLF cenductor axis. Trench GC-TR-90-04, located on this drill section, exposed mineralized augitephyric andesite with 6% pyrite and gold assays up to 0.55 grams/tonne (0.016 oz./ton). This drill hole intersected Stuhini Group lapilli tuffs and agglomerates with varying degrees of potassium feldspar and epidote alteration. These volcaniclastics contain disseminated and blebby pyrite in concentrations of 3% to 9% in the upper 94 metres of the hole and 1% to 3% below this depth. Locally, there are short intervals, generally less than one metre in length, of brecciated agglomerate containing silicified clasts in a calcareous matrix. These zones contain up to 9% pyrite and traces of chalcopyrite, but are not anomaloua in base er precious metals. A hornblende-feldspar porphyry dyke, similar to those found in TR90-09 and along Camp Creek, was intersected at a depth of 174 metres. This dyke appears to be quite fresh and is barren of sulphides.

Weakly anomalous gold intersections are dominantly, but not exclusively, found in the upper part of the hole where sulphide percentages are greatest. These intersections are most often associated with moderate to intense epidote and potassium feldspar alteration and containing 1% to 5% disseminated and blebby pyrite.

Diamond drill hole TR90-09 was tergeted at a symplete dyke that A strong, narrow gold-copper soil outcrops along Fly Creek. geochemistry anomaly, as well as a magnetic field high, follows the trend of this dyke. The induced polarization survey delineated a chargeability high in this area. Stuhini Group lapilli tuffs were the dominant rock type intersected in this hole. In the upper portion of the hole, the lapilli tuff is strongly altered to epidote and local patches of strong potassium feldspar alteration. Sulphide mineralization with this alteration includes 1% to 6% disseminated pyrite and traces of chalcopyrite. Lower in the hole, the lapilli tuff displays moderate to strong chlorite alteration with moderate epidote and minor, patchy potassium feldspar alteration. Sulphide content decreases to 1% to 3% disseminated pyrite with no chalcopyrite. Feldspar porphyry dykes, some of which contain euhedral hornblende phenocrysts, were intersected at 74 and 160 metres in the hole. These dykes, devoid of sulphides, correlate well with surface exposures in Camp and Fly Creeks. This drill hole was abandoned before reaching the syenite dyke due to caving in the hole.

A 13.0 metre interval of lapilli tuff, significantly enriched in gold and copper, was encountered at a depth of 49 metres. This zone is intensely fractured and contains 1% to 3% pyrite with traces of chalcopyrite and malachite and is marked by moderate to intense epidote and weak potassium feldspar alteration. This auriferous zone lies directly below a zone of moderately to intensely potassium feldspar altered lapilli tuff with 3% to 6% pyrite and traces of chalcopyrite. A second gold-enriched interval, from 86.9 to 87.4 metres, is related to a 15 centimetre clot of massive magnetite with chalcopyrite.

A larga gold soil geochemistry anomaly, on the west side cf the Galora Grid, was the target of <u>drill hole TR90-10</u>. This area

is marked by an elongate, weak chargeability high and resistivity low that extends continuously for 600 metres. The elongate soil anomaly is coincident with this induced polarization anomaly. This area is underlain by Stuhini Group volcaniclastics, and small outcrops and subcrops of Galore Creek orthoclase porphyritic syenite have been mapped 50 metres to the south of the collar. The lapilli tuffs and agglomerates intersected in this hole are slightly to moderately epidote and potassium feldspar altered. Chlorite and calcite alteration increases in strength where epidote and potassium feldspar alteration is weaker. The clasts in the agglomerates are up to 20 centimetres in diameter, and are comprised of syenitic and volcanic fragments that are commonly well preserved due to the less intense alteration. This texture is similar to the host of the Central Zone of the Galore Creek deposit. The large clast size and the presence of syenitic fragments in the volcaniclastics suggest a proximal volcanic deposit. Mineralization consists of up to 3% disseminated and center. blebby pyrite with traces of chalcopyrite and malachite. In areas of intense epidote and potassium feldspar alteration, the pyrite content increases to as much as 10%, occurring as blebby The lower 90 metres of the hole is dominated by a aggregates. felsic dyke that locally contains feldspar phenocrysts, clots of chlorite, disseminated specular hematite and only traces of pyrite. This dyke outcrops 400 metres to the east of the collar.

The mineralized zone is hosted in lapilli tuffs, with 1% to 3% pyrite and traces of chalcopyrite and malachite, that are moderately epidote and potassium feldspar altered. This auriferous horizon, which is found in the upper 65 metres of the hole, is only weakly enriched in copper, and silver and other base metal values are not anomalous.









