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#### PROSPECT EVALUATION REPORT

on the

SUSAP PROPERTY

Keromeos District Osoyoos Mining Division British Columbia

82E - AW

CAL BRANCH ONT REPORT

Prepare:

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September, 1989

#### SUMMARY

Aurora Gold Ltd. optioned the Susap property from Mr. L. Little of Penticton, British Columbia on June 6, 1989.

The property, consisting of 24 mineral claims, is located 12 kilometres south of Keromeos and has been intermittently explored since 1903.

The claims are underlain by Mesozoic "Kruger" syenitic through quartz monzonitic lithologies and "Nelson" granodiorite to monzonite intrusive into older volcanics and sediments of the Triassic Old Tom Formation.

Copper, molybdenum, and precious metal sulphide mineralization is closely associated with late stage felsic intrusives, silicified zones, and open fracture linings in characteristic sub-horizontal fracture sets within both intrusive phases.

Diamond drilling coupled with extensive surface and underground sampling has outlined reserves of approximately 1.5 million tonnes @ 0.158% Cu. and 0.075% MoS2. across 8 to 30 metres true width at the main Susap prospect.

Drilling 700 metres east of the main showing has intersected similar mineralization @ 0.132% Cu and 0.010% MoS2 over 9 metres true width.

The Hunter Creek showing, located 1500 metres east of the Susap, averages 1.11% Cu., 0.933% MoS2., 0.633 oz./T. Ag., and 0.01 oz./T. Au.

All three mineralized zones appear to be located along a single mineralized trend at 080/70S.

Regional aeromagnetic data suggests the presence of a buried late stage pluton within the main "Nelson" intrusive beneath the Susap prospect. "Climax type" molybdenum mineralization potentially related to late plutonism may be correlative with the drill defined near-surface mineralization.

A two phased exploration program consisting of VLF electromagnetic surveying and subsequent angled deep and shallow percussion and rotary reverse circulation drilling is proposed for the property and is estimated to total \$200,00.00 over a period of approximately 30 days.

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#### INTRODUCTION

The Susap property, consisting of 24 contiguous mineral claims, is located approximately 12 kilometres south of Keromeos in southern British Columbia.

Previous exploration, dating from 1903, has successfully delineated important copper, molybdenum, and precious metal prospects on the ground. In recognition of the exploration potential of the property, Aurora Gold Ltd. optioned the property from Mr. L. Little of Penticton, B.C. in June, 1989.

This report was commissioned by Mr. G. Nolin of Aurora in order to reassess the geology and mineralization on the property and to subsequently propose additional exploration if warranted.

The author, accompanied by Mr. T.R. Dundas, supervised the rehabilitation of the lower Susap adit, carried out reconnaissance geological mapping, and completed a resampling program on the surface and underground developments on the property over a 5 day period in mid-July of this year.

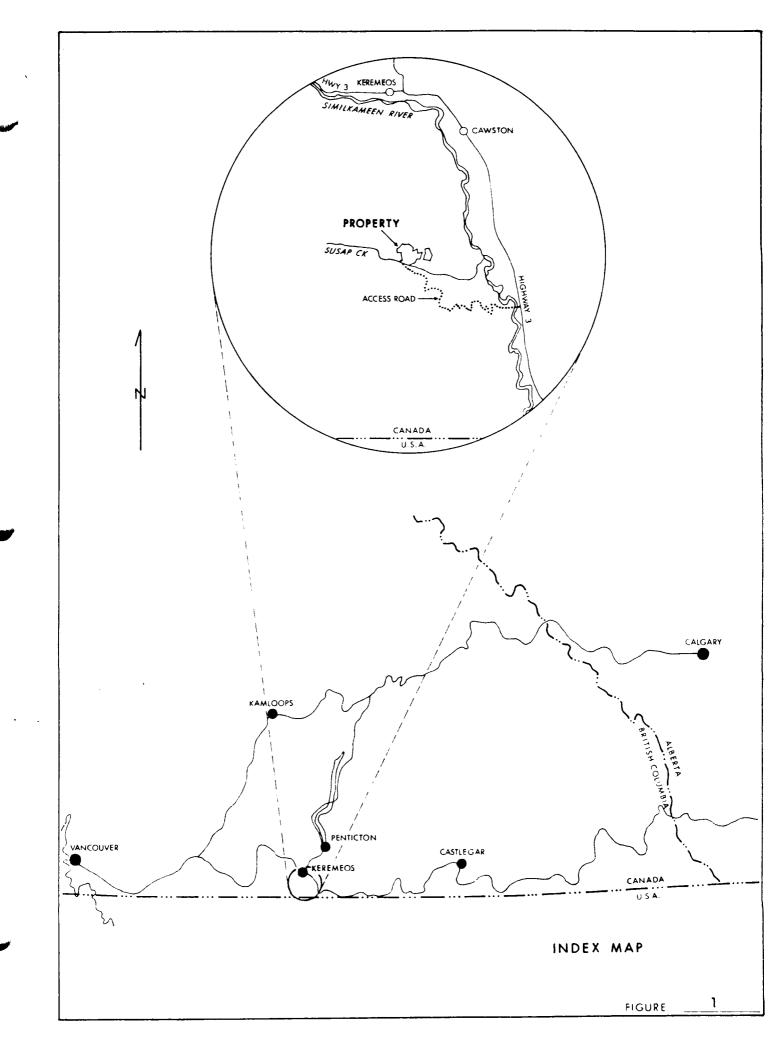
Existing geotechnical data was reviewed, compiled, and correctly re-plotted on standardized base maps and sections for inclusion in this report and combined with additional research to substantiate viable exploration targets proposed for the property.

#### LOCATION and ACCESS

The Susap property is located within the Osoyoos Mining Division at an average elevation of 1400 metres ASL approximately 12 kilometres south of Keromeos in southern British Columbia at 49 degrees 06 minutes North Latitude; 119 degrees 48 minutes West Longitude in N.T.S. grid 82E - 4W (Figure 1).

The area of interest on the property is situated on a steep partially forested ridge between Hunter and Susap Creeks - both tributaries to the Similkameen River.

Access to the property is gained via Provincial Highway No.3 nineteen kilometres south of Keromeos and 14.6 kilometres west across the Similkameen River on a branch road and rough 4X4 access trail to location with an attendant 900 metre elevation gain from the valley floor.



#### PROPERTY

The Susap property consists of 24 contiguous mineral claims (Figure 2) summarized in the following table (Table I):

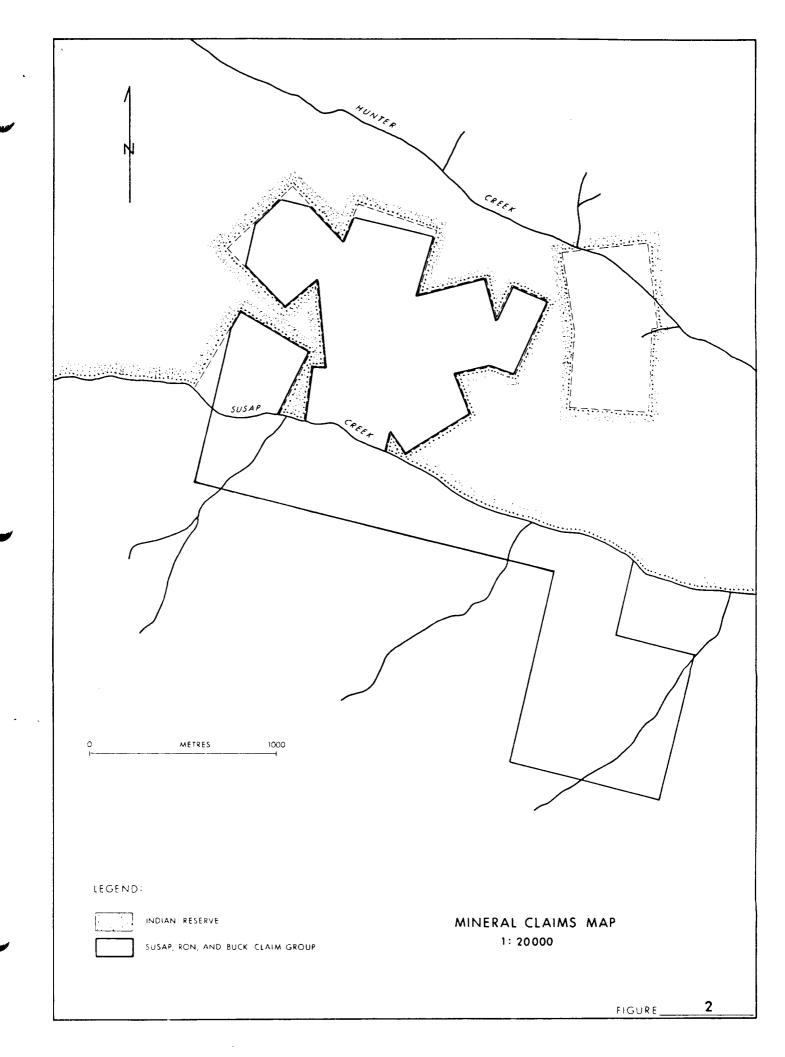
Claim Name	Record Number	Expiry
Susap #2 (Fraction) Susap #3 Susap #4 Susap #5 Susap #6 Buck #11 Buck #12 Buck #13 Buck #14 Buck #15 Buck #16 Buck #17 Buck #18 Buck #19 Buck #20 Buck #21 Buck #22 Buck #21 Buck #21 Buck #23 Buck #24 Ron #1 Ron #2	15736 16608 16609 16610 16611 26218 26219 26220 26221 26222 26223 26224 26225 26225 26227 26228 26227 26228 26229 26230 26231 27428 27429	04-07-90 26-08-90 26-08-90 26-08-90 26-08-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90 03-04-90
Ron #3 Fon #4 Ron #5	27430 27431 27432	14-12-89 14-12-89 14-12-89

The claims located on the north side of Susap Creek are restricted to those lands within ten original Crown Grants exclusive of the Range Indian Reserve 13. Since Susap Creek marks the southern boundary of the reserve, the claims south of the creek are thus wholly unencumbered.

Acquisition of the mineral rights on the Reserve remains as negotiable with the local Indian Band.

Pursuant to Section 19 of the Mineral Tenure Act Regulations of the Province of British Columbia, annual assessment work credits amounting to \$100.00 for each of the first three years and \$200.00 for every year thereafter (or an equivalent cash payment in lieu) must be applied to each claim to maintain the lands in good standing.

The Susap Property is owned by Mr. Lyle Little of Penticton, British Columbia and was optioned to Aurora Gold Ltd. of Calgary, Alberta on June 6, 1989.



#### EXPLORATION HISTORY

Previous exploration dates from 1903 with the first recorded work on the property by King Edward Mines Ltd. Two important copper - molybdenum - silver and gold showings were located 1500 metres apart on the north side of Susap Creek and immediately southwest of Hunter Creek.

A 46 metre adit intersected the Susap mineralization at an elevation of 1241 metres in 1904. A second adit of 11 metres length was driven in the showing at an elevation of 1276 metres during 1935.

The Hunter Creek prospect was similarily explored by a 10 metre adit and nearby 5 metre shaft.

Mineralization was reported to be intermittantly traceable across widths of 3 to 12 metres between the two prospects.

The property was later acquired by Friday Mines Ltd. who, in 1962, completed trenching and sampling of the Susap and Hunter Creek adits. General geological mapping, prospecting, longwire Afmag geophysics preceded the drilling of four short X-ray drill holes at the Susap location.

Combined airborne e/m, magnetic, and radiometric surveys were completed over the property by Grand Duchess Mines Ltd. in 1967.

Noranda Exploration Company optioned the property in 1967 and carried out geological mapping and soil sampling in addition to continued trenching and sampling over a small portion of the present property.

Cro-Mur Mining and Exploration Co. Ltd acquired the property in 1970. Upon completion of bulldozer trenching and access road construction, an evaluation report was prepared by Mr. W.V. Smitheringale. The claims were subsequently optioned to Scurry Rainbow Oil Ltd. in 1971.

Scurry remapped both the surface and underground geology and completed considerable trenching and a limited extension of one of the Susap adits. They followed their initial year's work with an IP and magnetometer survey and completed three diamond drill holes in the Susap Creek area in 1972.

Canadian Scidental Petroleum Ltd. operated the property under option in 1973. A very comprehensive regional and detailed geological, magnetometer, soil sampling, and access road construction program ensued over a large area extending well past the presently held lands. One 305 metre drill hole was completed beneath the earlier Scurry drilling at the Susap prospect in late 1973 and the option allowed to lapse.

Brenda Mines Ltd. completed a single 122 metre diamond drill hole just west and beneath the main Susap showing in 1977.

Teck Corporation Ltd. sampled the lower Susap adit in 1977.

United Hearne Resources Ltd. optioned the property from Cro-Mur in late 1978 and carried out a general prospect evaluation by G.A. Noel early the following year. The company subsequently resampled and mapped the old Hunter Creek workings and completed 6 diamond drill holes on the Susap prospect.

The property has apparently lain dormant until its acquisition by Mr. L. Little and the current option agreement with Aurora Gold Ltd.

#### **GEOLOGY**

The Susap property straddles the contact between the Jurassic / Cretaceous aged "Kruger" and "Nelson" batholithic intrusions and the older Triassic or Earlier volcanics of the Old Tom Formation (Figure 3).

The Old Tom Formation consists of varicoloured cherts with greenstone volcanic flows and tuffs which regionally occur as northerly trending open folds. Various sets of late stage faults result in displacement of the folded volcano-sedimentary complex.

Massive plutonic intrusives transect the earlier lithologies along an east - west trending contact on the property north of Susap creek. Syenitic through monzonitic rocks of the "Kruger" phase comprise a hybrid contact assemblage nearest the volcanics. The main "Nelson" batholith is apparently younger than the "Kruger" package and includes gradiational granodiorite and monzonite intrusives. Felsic dikes transect both the Triassic volcanics and the younger batholithic phases.

The "Kruger" intrusive occurs as medium grained grey to pink-grey syenite, diorite, granodiorite, and monzonite lithologies composed of potassic and sodic feldspars, hornblende, biotite, and quartz.

The main "Nelson" lithologies are described as coarse grained, locally pophyritic, light grey granodioritic through monzonitic material of potassic and sodic feldspar, quartz, hornblende and augite composition.

Intrusive and gradiational contacts between the "Kruger" and "Nelson" phases are both observed on the property.

#### ADDENDUM

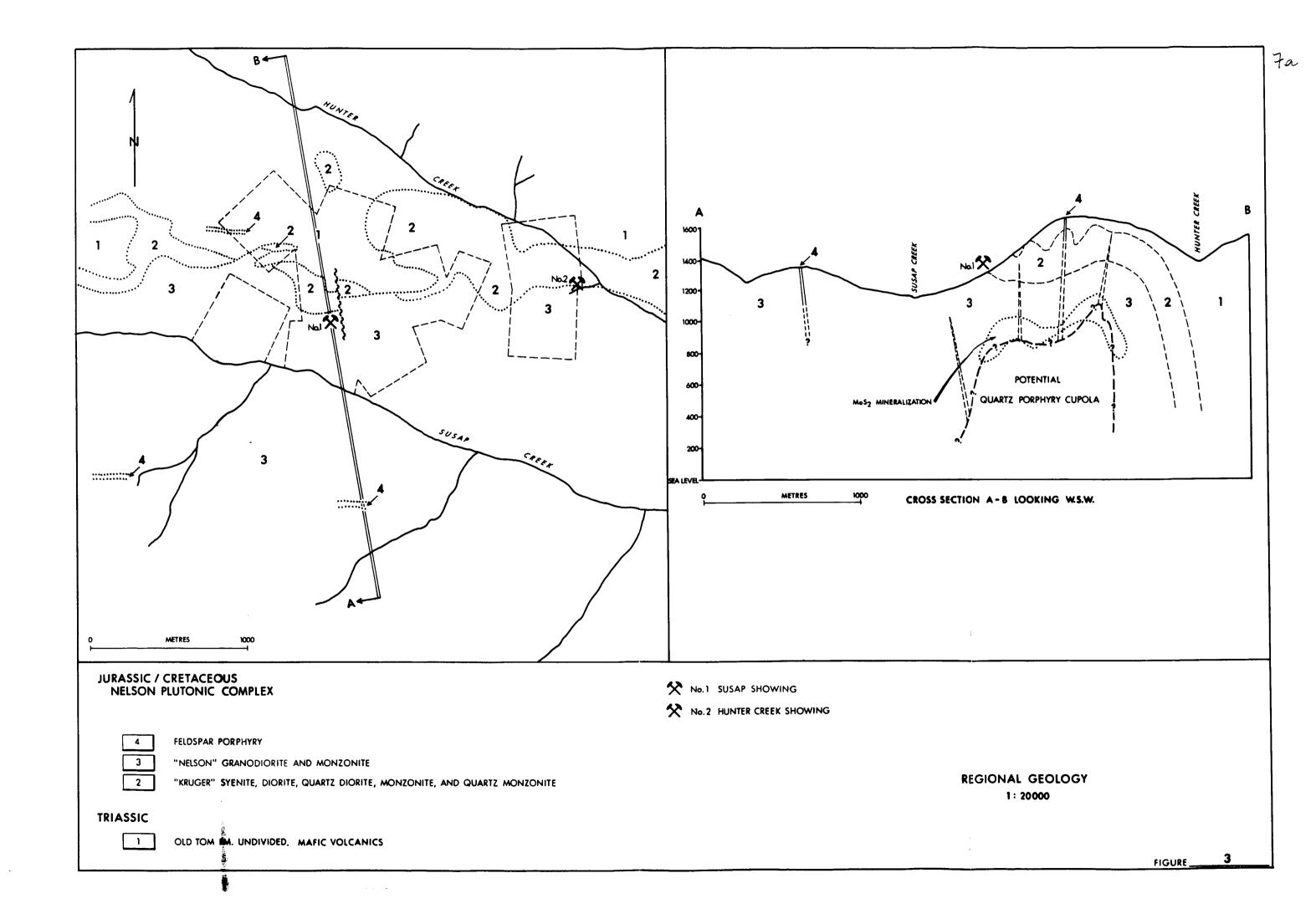
### SUSAP PROPERTY GEOLOGY REPORT

#### KAMAND RESOURCES SERVICES REPORT

### STATEMENT OF COSTS

Senior Geologist Field July 20 - 24; Sept : Office July 25 - July 29	29	\$ 4,400.00
Geologist Field July 19 - July 24		1,750.00
Vehicles		1,330.39
Meals & Accommodation		493.71
Assays		799.50
Reproduction		498.63
Drafting		2,187.50
	Sub-Total 10% G & A	11,459.73 1,145.97
	Total	\$12,605.00





Late stage aplite, plagioclase porphyry, and quartz - K spar dikes occur throughout the property with the latter variety closely related to the Cu / Mo mineralization at both the Susap and Hunter creek prospects.

Petrologic examination by Canadian Occidental indicates that, while the intrusive rocks are generally fresh, variable propylitization as well as some degree of argillic alteration is present at least locally.

Three prominant fracture and/or joint sets are present on the property (Table II):

<u>Set</u>	<u>Strike</u>	Dip
No.1	North - South	Near vertical
No.2	East - West	30 - 55 S
No.3	Northeast - Southwes	st 20 - 45 S

Other joint and fracture sets also occur but are significantly less prevalent.

Faulting at 352 degrees azimuth has offset the volcanics and intrusives immediately east of the main Susap showing. Similarity, strong shearing or faulting at 080/65 S is clearly defined in the lower adit at that prospect.

#### MINERALIZATION and RESERVES

The Susap main showing has been explored by two adits, a number of surface trenches, and twelve drill holes to date (Figure 4).

Variably thin pyrite, chalcopyrite, and molybdenite mineralization occurs with quartz and quartz - feldspar veins and stringers, silicified zones, and along partially open fractures. The sulphides are hosted by both the "Nelson" and "Kruger" phases near the intrusive contact with the older volcanics. Minor amounts of very fine grained weakly disseminated sulphides have also been reported in drill core and observed in trench samples.

The mineralization and associated quartzofeldspathic assemblage preferentially lie along the shallow dipping northeast trending fracture set (No.3 above) thus giving the impression of extensive mineralization in outcrop. Overall grades are wholly dependant upon fracture / gein density over unit rock volumes as the intervening granodiorite is typically fresh and barren.

Spacing of the most heavily mineralized fractures and veins at the Main Susap prospect varies from 10 cm. through 70+ cm. with an attendant general grade variation.

Weaker sulfides are associated with the east-west trending fractures and secondary malachite and bornite commonly deposited along the northerly semi-vertical fractures (Sets 2 & 1 respectively above).

Although most of the mineralized felsic veins are quite narrow, a 1 metre thick "rolled" argentiferous and auriferous quartz vein occurs in the upper Susap adit.

Although samp generations of chip and channel samples have been taken from the Susap prospect (including this report), representative values are difficult to attain due to the subhorizontal attitude and friability of the mineralization.

Probable escape of finely ground fracture sulphides through lost or unrecovered drilling fluid returns similarly detracts from the previous drilling on the property. It is worthwhile mentioning that reverse circulation drilling has recently been successful in alleviating this problem to drilled depths of 550 metres in both vertical and angled holes at other molybdenum properties.

Assay values from all sampling data currently available for the Susap adits and trenches <u>average</u> (Table III):

<u> Assay</u>	5:	ात द	MoS2 %	Ag oz./T	<u> </u>
Lower	Adit:	0.112	0.153	0.024	ail
Upper	Adit:	1.00	0.179	0.43	0.048
Upper	Trench:	0.184	0.183	0.148	0.005

Compilation of the average sample data and drilling results on the main Susap showing indicates a continuous tabular main mineralized zone at 030/70S discontinuously flanked by at least two smaller en echelon tabular zones (Figure 4). The main zone is open to the West and at depth whereas the smaller bodies are open only to depth. Drill indicated reserves amount to 1.5 million tonnes at 0.158% Cu and 0.075% MoS2 across 8 to 30 metres tough width westerly from the Susap fault.

Drill Hole No.73-2 is located 700 metres northeast of and 147 metres higher than the Main Showing but similarly indicates a steeply dipping mineralized zone of 0.132% Cu and 0.010% MoS2 across 9 metres true width.

The three composite drill sections of the main prospect and Drill Hole No.73-2 align anomolously well along a longitudinal reference line at 080/70S - essentially parallel to well defined faulting in the lower Susap adit. Significant lateral continuity and probable structural control is thereby implied for at least 700 metres of strike extent.

The old Hunter Creek prospect located 1500 metres east of the main Susap prospect has been explored by an adit and nearby shaft. Base metal sulphides with gold and silver mineralization are reported to be accompanied by 6 cm. thick quartz veins in a set of north northwest trending fractures which dip shallowly to the east at 23 to 34. The author was unable to visit this prospect in the limited alloted time frame, but previously reported sampling averages 1.11% Cu., 0.933% MoS2, 0.663 oz./T. Ag., and 0.01 oz./T. Au.

#### **GEOPHYSICS**

Subsurface conductivity is reported to have been located between the Susap and Hunter Creek prospects by the 1962 Afmag survey.

A single reconnaissance VLF-em line over the Drill Hole 73-2 location, completed during the current evaluation (Figure 4), also appears to indicate a possible conductive axis over the mineralized intersection.

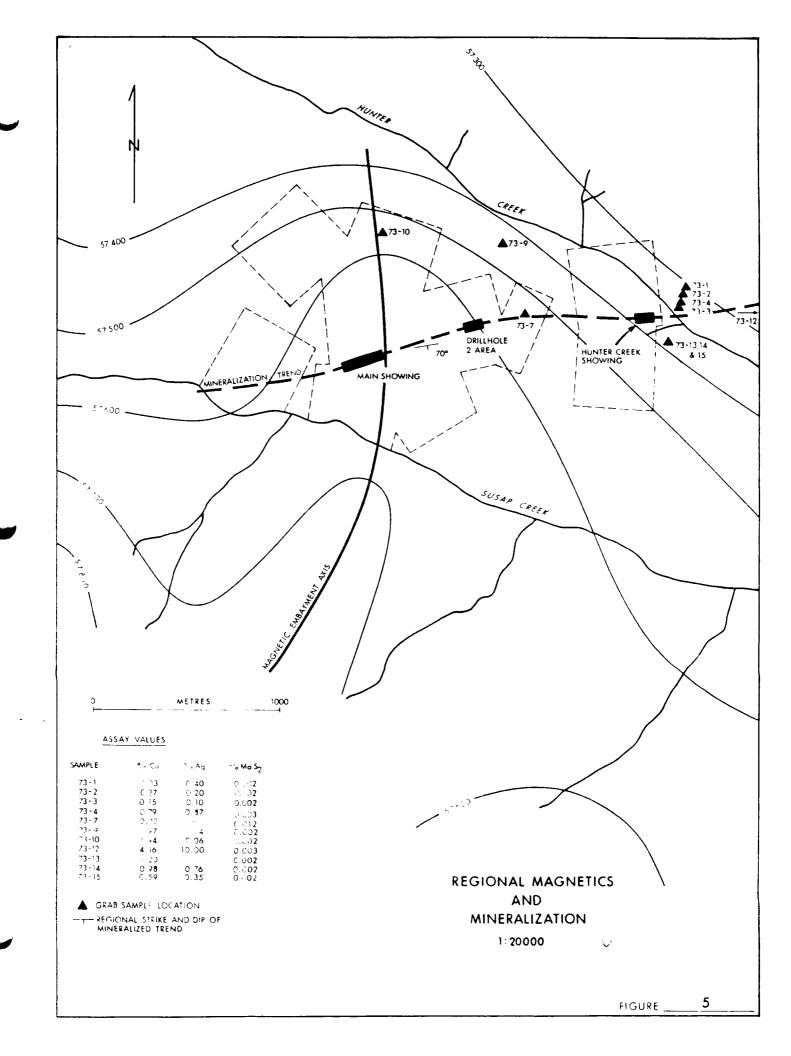
Fublished Federal aeromagnetic data (Keromeos map sheet No.3519G) and the Canadian Occidental ground magnetic survey cover the property and are currently available. The surface survey was not corrected for topography resulting in regional magnetic features being more evident on the aeromag map.

The large "Nelson" intrusion is clearly evident on the Federal survey which also shows an anomolous curvate magnetic high protruding from the main batholithic mass northwards into the immediate vicinity of the main Susap prospect (Figure 5).

Diamond drill hole 73-1 was collared in the volcanics to test an IP chargeability high. No significant mineralization was intersected over the 202 metre drilled interval which, apart from minor intrusive dikes and sills, remained within the Old Tom lithologies.

#### GEOCHEMISTRY

Regional soil sampling by Canadian Occidental successfully defined the general base metal and silver trends present on and in the vicinity of the property.



For general purposes, anomolous levels were established as (Table IV):

Copper: > 180 ppm.
Molybdenum: > 10 ppm.
Silver: > 2 ppm.

Copper vs. molybdenum and copper vs. silver plans (Figures 6 & 7) clearly indicate coincident copper and silver anomolies parallel to and defining both the known mineralization and the proposed mineralized trend primarily within the intrusive contact area.

The copper/molybdemum plot shows an almost total lack of coincidence except in the immediate vicinity of the Susap and Hunter Creek showings. Instead, molybdenum anomolies are elongate east to west and are primarily restricted to the "Nelson" phase of batholithic emplacement.

#### CONCLUSIONS

The Susap property consists of 24 contiguous mineral claims located near excellent infrastructure approximately 12 kilometres south of Keromeos in southern British Columbia.

At least ten mining companies have operated or seriously examined two significant base and precious metal prospects on the property since the initial discovery and first recorded work in 1903.

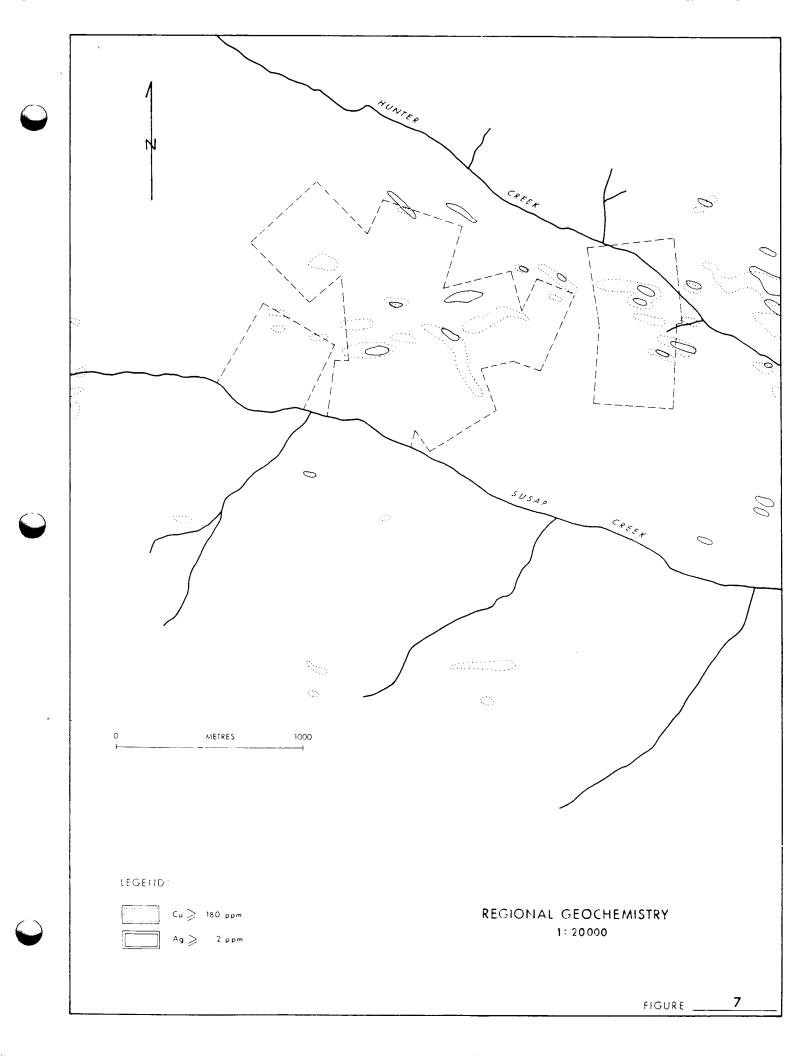
The property is largely underlain by Jurassic and/or Cretaceous aged "Kruger" and "Nelson" plutonics of syenitic through quartz monzonitic composition intrusive into the Triassic Old Tom Formation volcano-sedimentary package.

Batholithic evolution both on and south of the Susap property is manifest through the earliest "Kruger" marginal phases to the main "Nelson" granodiorite followed by the youngest felsic dike emplacement.

The Brenda mine (160 million tons @ 0.18% Cu, 0.083% MoS2, 0.63 oz./ton Ag, and 0.013 oz./T. Au.), located 82 kilometres north of the Susap property, is similarly hosted by a late stage "Brenda Stock" within another "Nelson" batholithic complex.

The Susap prospect and nearby Hunter Creek showing consist of pyrite, chalcopyrite, and molybdenite mineralization in quartz and quartzofeldspathic veins, silicified zones, and relatively open fracture coatings. The sulphides are most prevalent along sub-horizontal fracture sets within the northern edge of the main "Nelson" grancdistrict phase of the batholith near the "Kruger" marginal intrusive complex.

<::> METRES 1000 LEGEND: REGIONAL GEOCHEMISTRY Cu≥ 180 ppm 1:20000 FIGURE



Diamond drilling with surface and underground sampling has so far delineated a steeply dipping, apparently continuous, tabular main mineralized zone of 1.5 million tonnes @ 0.158% Cu and 0.075% MoS2 over true widths of 0 to 30 metres at the main Susap prospect area. Highly variable silver and gold values accompany the base metal assays but remain to be thoroughly assessed.

Drilling at the 73-2 location 700 metres northeast and 147 metres above the main Susap zone intersected the probable continuation of the Susap mineralization with 9 metres true width @ 0.132% Cu and 0.010% MoS2.

Alignment of the Susap and Drill Hole 73-2 intersections suggests a degree of planar structural control @ 080/70S. The Hunter Creek showings 1500 metres east of the Susap prospect appear to lie along this same trend.

Subsurface conductivity may support the existance of the proposed trend and could therefore be used to define it.

Surface and underground sampling at the Hunter Creek location is reported to average: 1.11% Cu, 0.933% MoS2, 0.633 oz./T. Ag. and 0.01 oz./T. Au.

Frior operators have typically become discouraged with the property because of the low indicated grade of the known mineralization. However poor mineralization recovery in some samples and the flat geometry of the mineralized fractures in outcrop may have detracted from the previous sampling.

Positively controlled conclusive drill hole sampling to test the known mineralization would readily be achieved by reverse circulation air percussion and/or rotary drilling at the Susap prospect.

Soil sampling indicates coincident sopper and silver anomolies even both the known showings and proposed mineralized trend. Molybdenum anomolies predominate within the "Melson" batholith and display an elongate east-west orientation parallel to both the proposed trend and the mapped felsic dikes.

A magnetic extension of the main "Melson" batholith protrudes onto the property. In the absence of a surficial geological cause, the possibility of a buried - perhaps suppolitio - later stage plutonic development must be considered.

Very significant "granitic stockwork type" molybdenum mineralization (potentially 5200 million beanes) could potentially be associated with late stage felsic plutonism. Such mineralization would be consistent with the known mineralization and discordant quartzofeldspathic veins, fractures and zones on the property.

Commercial development of a large buried deposit of this type in the Susap area might readily involve adit or decline access portalled in the west flank of the Similkameen valley.

#### RECOMMENDATIONS

Continued exploration is warranted on this property in order to:

- 1) Conclusively evaluate the presently defined Susap mineralization.
- 2) Confirm the presence of the proposed structurally controlled mineralization trend.
- 3) Increase the current drill indicated reserves by additional lateral drilling between the Susap zone and the Hunter Creek deposit.
- 4) Explore for a possible very large buried "granitic stockwork type" molybdenum deposit on or in the immediate vicinity of the property.

The potential mineralization clearly extends beyond the present property. Additional ground should therefore be aquired immediately to completely cover the old Crown Grants as well as to the annex more of the "Melson" batholith. Negotiations should also be initiated with the local Indian Band to acquire access rights and mineral title to adjoining portions of the Indian Reserve.

The four exploration objectives outlined above could be achieved through implementation of a two phased exploration program on the property.

The initial work would include 150 metres of reverse circulation air drilling in two holes at the presently defined main Susap prospect to conclusively determine the mineralization grade.

Concurrent grid controlled VLF electromagnetic surveying would be completed to delineate the potential mineralized trend and define viable diamond drill targets.

Approximately 450 metres of reconnaissance air drilling at three locations between the Susap and the Hunter Creek showings would be contingent upon favourable results of the foregoing reevaluation and surveying.

One 150 metre percussion reverse circulation hole would similarily be drilled beneath the Hunter Creek showing to fully define that prospect.

Continuous drill cutting samples collected at 5 metre intervals on each of the proposed holes would be geochemically analysed for copper, molybdenum, and silver values with anomolous zones definitively assayed.

The initial phase would include a cost of \$60,000 to \$80,000 and would be require a 10 - 12 day field program.

The second part of the program will provide two 500 metre angled precussion and rotary reverse circulation drill holes to explore the deeper projections of the known Susap mineralization. This "wildcat" drilling would be steeply angled in a north northeast direction from existing roads below the Susap prospect to co-intersect the dip extension of the known mineralization and the magnetic embayment axis at an elevation of 750 metres.

The purpose of the proposed deep exploratory drilling is to locate either a possible buried molybdenum deposit or a genetically related silicate alteration halo and petrochemical signature.

A series of 15 equispaced 3 metre cores would be cut in each hole to provide a structural and petrological database in conjuction with continuous 5 metre sampling of the drill cuttings.

Drill cutting samples would be routinely geochemically analysed for copper, molybdenum, silver, flourine, and him content with anomolous samples returned for definitive assaying.

Thin section petrological analyses of potential silicate alteration patterns sould be contracted to external experts in that field.

Cased hold spectral gamma logging through the drill rods would likely be worth serious consideration to identify varying lithologies and pervasive K-spar alteration.

An estimated budget of 21 days and \$120,000 to \$140,000 would be required to complete the second exploration phase to give a project grand total AFE of approximately \$200,000.

#### CERTIFICATE and SIGNATURE

- I, William A. MacLeod do hereby certify that:
- I am a practicing consultant Geologist and President of Kamand Resource Services Limited; 144 Parkview Place S.E., Calgary, Alberta, T2J 4W5.
- 2) I am a graduate of the University of Manitoba, B.Sc.(1970) and have been practicing my profession continuously since graduation.
- 3) I am a member of The Association of Professional Engineers, Geologists, and Geophysicists of Alberta.
- 4) I have no interest, nor do I expect to receive an interest, either directly or indirectly in Aurora Gold Ltd.
- 5) This report with the conclusions and recommendations therein contained is based upon my review of a number of previous geotechnical reports by previous operators and upon data derived from my work on the property during July of this year.
- 6) I personally supervised and carried out the evaluation work completed on the property over the period of July 20 through 24, 1989.
- 7) I hereby consent to the use of this report or portions of this report by Aurora Gold Ltd. for the purpose of a financial propectus, provided that no part be used out of context in a manner as to convey a meaning differing materially from that set out in the whole.

DATED at Calgary this 11th. day of September, 1989

W.A.

#### REFERENCES

- Bostock, H.S. (1940): Keromeos Similkameen District, British Columbia; Geological Survey of Canada; Map 341A.
- British Columbia Minister of Mines Annual Reports for 1903, 1921, 1962, and 1967.
- Brynelsen, B.O. and Knauer, J.D. (1967): Geochemical Soil Survey, Sup, Susap, and Tom Mineral Claims, Osoyoos Mining Division, British Columbia; Noranda Exploration Company, Limited; Open File Assessment Report. # 1576
- Geology, Exploration and Mining in British Columbia 1971, 1972, and 1973; British Columbia Department of Mines and Petroleum Resources.
- Henrick, M.P. and Wallis, R.H. (1973): Diamond Drilling on the Susap Property, Keromeos, British Columbia, Osoyoos Mining District; Canadian Occidental Petroleum Ltd., Minerals Division; Company Report.
- Leonard, G.E. (1963): Review of an Exploration Program on the King Edward Property of Friday Mines Ltd. May to August, 1962; Private Report.
- Little, H.W. (1961): Geology Kettle River (West Half), British Columbia; Geological Survey of Canada; Map 15-1961.
- Mutschler, F.E., Wright, E.G., Ludington S., and Abbott, J.T. (1981): Granite Molybdenum Systems: Economic Geology, Volume 76, pp 874 897.
- Noel, G.A. (1979): Report on the King Edward Property, Susap Creek, Keromeos Area, Osoyoos Mining Division, British Columbia; United Hearne Resources Ltd.; Open File Assessment Report. # 7535
- Pilcher, S.H. and Mc Dougall, J.J. (1976): Characteristics of Some Canadian Cordilleran Porphyry Prospects, in The Canadian Institute of Mining and Metallurgy, Special Volume 15, pp 79 82.
- Sinclair, A.J., Drummond, A.D., Carter, N.C., and Dawson, K.M. (1982): A Preliminary Analysis of Gold and Silver Grades of Porphyry-type Deposits in Western Canada, in Precious Metals in the Northern Cordillera; The Association of Exploration Geochemists; Special Publication No. 10., pp 157 172.
- Smitheringale, Wm.V. (1971): Brief Report on the Old Crown Grants Located on Susap Creek, British Columbia; Cro-Mur Mining Exploration Co. Ltd.; Private Letter.

## APPENDIX "A"

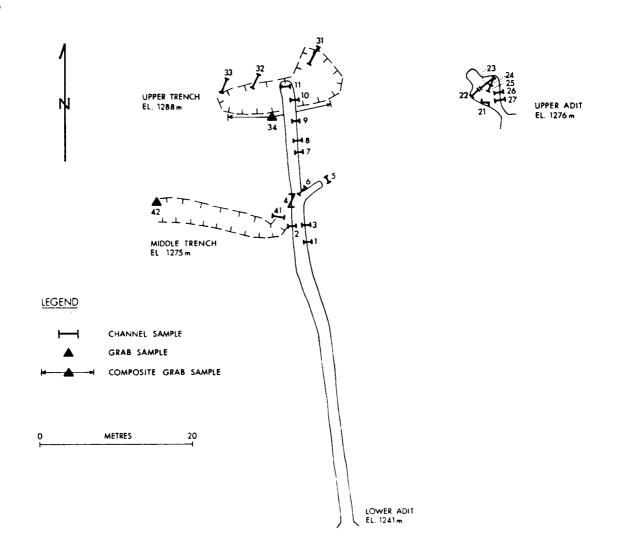
## 1989 SAMPLING PROGRAM

(Sample Locations and Assay Certificate)

#### 1989 SAMPLING PROGRAM

Twenty six channel, grab, and composite samples were collected at the Susap prospect and subsequently forwarded to Barringer Laboratories for copper, molybdenum, and precious metal assaying.

The samples were generally taken as perpendicular possible to the sub-horizontal mineralized fracture planes (Figure 8). Samples AG 13 and AG 14/15 which were taken as horizontal chip samples between AG 8 and 9 & AG 6 and 8 respectively to provide a check on the vertical sampling results and have not been plotted on the accompanying sample plan.



#### ASSAY RESULTS

SAMPLE	LOCATION	% Cu	<u>% Mo S</u> 2	oz Ag	oz Au		
1	)	0.052	0.005	0.01	< 0.001		
2		0.006	0.052	< 0.01	0.002		
3		0.134	0.030	0.03	< 0.001		
4		0.019	0.108	0.01	< 0.001		
5		0.084	0.008	0.04	< 0.001		
6	LOWER ADIT	0.050	0.533	0.05	< 0.001		
7		0.020	0.040	< 0.01	< 0.001		
8		0.058	0.050	0.02	< 0.001		
9		0.148	0.417	< 0.01	< 0.001		
10		0.008	0.108	0.01	< 0.001		
11	)	0.005	0.012	0.20	< 0.001		
21	)	0.020	0.023	0.01	0.001		
22		0.410	0.058	0.20	0.003		
23		0.650	0.115	0.20	0.003	•	
24	UPPER ADIT	0.270	0.333	0.22	0.005		
25		0.250	0.025	0.19	0.005		
26		0.660	0.060	0.28	0.001	1000	S CAMBUNIC BROCEAN
27	)	2.070	0.078	0.37	0.002	1989	SAMPLING PROGRAM
31	]	0.138	0.250	0.24	0.017		
32	UPPER TRENCH	0.101	0.142	0.08	0.003		
33	UPPER INCH	0.035	6.122	0.01	< 0.001		
34	}	0.460	C.217	0.26	0.004		
41		0.145	6.010	0.01	< 0.001		
42	MIDDLE TRENCH	0.740	0.005	0.03	< 0.001		
	•						FIGURE

8

# BARRINGER Laboratories (Alberta) Ltd.

4200B - 10 STREET N.E., CALGARY, ALBERTA, CANADA T2E 6K3 PHONE: (403) 250-1901

AUTHORITY:S. MCLEOD

AURORA GOLD INC.

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#### GEOCHEMICAL LABORATORY REPORT

SAMPLE TYPE: ROC	FIRE ASSAY	FIRE ASSAY		
	AU	AG	CU	МО
SAMPLE NUMBI	<del>-</del>	OZ/ION	z	z
AG-:1	<0.001	0.01	0.052	0.003
AG-:2	<0.001	<0.01	0.006	0.031
AG-:3	<0.001	0.03	0.134	0.018
AG-:4	0.002	0.01	0.019	0.065
AG-:5	<0.001	0.04	0.084	0.005
AG-:6	<0.001	0.05	0.05	0.32
AG-:7	<0.001	<0.01	0.02	0.024
AG-:8	<0.001	0.02	0.058	0.03
AG-:9	<0.001	0.04	0.148	0.25
AG-:10	<0.001	<0.01	0.008	0.065
AG-:11	<0.001	<0.01	0.005	0.007
AG-:13	<0.001	0.02	0.076	0.12
AG-:14/15	<0.001	<0.01	0.012	0.008
AG-:21	<0.001	0.01	0.02	0.014
AG-:22	0.003	0.2	0.41	0.035
AG-:23	0.003	0.2	0.65	0.069
AG-:24	0.005	0.22	0.27	0.2
AG-:25	0.005	0.19	0.25	0.015
AG-:26	0.001	0.28	0.66	0.036
AG-:27	0.002	0.37	2.07	0.047
AG-:31	0.017	0.24	0.138	0.15
AG-:32	0.003	0.08	0.101	0.085
AG-:33	<0.001	0.01	0.035	0.073
AG-:34	0.004	0.26	0.46	0.13
AG-:41	<0.001	0.01	0.145	0.006
AG-:42	<0.001	0.03	0.74	0.003

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GEOCHEMICAL LABORATORY REPORT

SIGNED:

C. Douglas Read, LABORATORY MANAGER

FOOTNOTES:
P=QUESTIONABLE PRECISION; \*\*INTERFERENCE; TR=TRACE; ND=NOT DETECTED;
IS=INSUFFICIENT SAMPLE; NA=NOT ANALYZED; MS=MISSING SAMPLE

