Quet 886728

# N O R A N D A Noranda Exploration Company, Limited (No Personal Liability)

May 24/90

PROPERTY EXAMINATION REPORT

N.T.S. : 92G/16W

: 92G/9W

Commodity: Au-Ag-Cu-Pb-Zn Date of Report: Nov. 14/89

Date of Exam :

Examined By : R. Kemp,

L. Erdman

**DIVISION: SOUTHERN CORDILLERA** 

PROPERTY NAME:
Quet Claims (1-12)

1.5 km parimeter clause. on Quet 1 & Z.

2) LOCATION: Located in New Westminster Mining Division, 95 km northeast of Vancouver, 15 km west of the northern end of Harrison Lake. Accessible by logging roads south along Lillooet River from Pemberton or north along Harrison Lake from Harrison Mills.

<u>Province:</u> B.C. <u>District:</u> S.Cord. <u>Mining Division:</u> New Westminster <u>Long.:</u> 122°21'W <u>Lat.:</u> 49°45'N <u>Additional:</u> Elev. 200-1500m <u>Accessibility:</u> Old logging road runs 9 km from Lillooet River west up Sloquet Creek accessing eastern part of property & continues on upgraded roads for 5.5 km to allow 4 wheel drive access to prospect area.

#### 5) SIZE AND LEGAL STATUS OF PROPERTY:

12 contiguous modified grid system mineral claims totalling 184 units held under **Sption** by Aranlee Resources Ltd.

Claim <u>Name</u>	Record #	No.Units	Recording Date	Current Expiry Date
Quet 1 Quet 2 Quet 3 Quet 4 Quet 5 Quet 6 Quet 7 Quet 8 Quet 9 Quet 10 Quet 11 Quet 12 Quet 13	3709 3710	16 16 20 20 12 4 20 20 20 12 20 20	May 22/87 May 22/87 Nov. 5/87 Nov. 5/87 Nov. 4/88 Nov. 4/88 Jul.26/89 Jul.27/89 Jul.27/89 Jul.27/89 Aug. 6/89 Aug.14/89	May 22/91 May 22/91 Nov. 5/91 Nov. 5/91 Nov. 4/91 Nov. 4/91 Jul.26/91 Jul.27/91 Jul.27/91 Aug.27/91 Aug.27/91
Quet 14 Quet 15				

<sup>\*</sup> Quets 13-15 were just recently staked at the time of writing to cover possible open fractions as indicated on Fig. 2. Information relating to these claims will be amended once the data is received.

### STRUCTURE:

The volcano-sedimentary sequence has been metamorphosed to biotite grade with variable development of a tectonic fabric. Where recognizable, bedding is sub-parallel to or shallower than the fabric, dipping at 30-50° to the SSW to SSE. There is no evidence of major fold repetition within the area.

Late-stage faulting is important, probably largely of post-plutonic Tertiary age. A major dextral northeast-trending fault controls the orientation of Sloquet Creek and cuts the nose of the ridge between North Sloquet and Simpson Creeks. Hot springs in Sloquet Creek are related to this fault. Several sub-parallel northeast to north-trending faults may control the line of snow chutes to the west. One such structure exposed by trenching near 225S + 350E is strongly altered and mineralized. Several southwest dipping structures have also been recognized in the area and bear a close relationship to mineralized zones.

#### MINERALIZATION:

Numerous base and precious metal showings have been uncovered through the work of Cominco and Aranlee Resources. Although much reference is made to the presence of base metal enrichment (Cu, Pb, Zn), little analysis for these elements were requested by Aranlee as they appeared most interested in gold and silver mineralization. As indicated by the soil sampling programs (Map 10 to 12), elevated and anomalous base metal results confined to a zone of silicified felsic tuff/lapilli tuff.

The following showings have been identified to date located on a prominent E-W trending ridge between north and south Sloquet Creeks. Figure 5 and 6 illustrates the relative position of the showings with maps 7, 8 and 9 providing a more detailed evaluation. Sample results of Aranlee's work is provided in Appendix I including Norex sample results with locations as indicated on the above two maps.

#### DAN'S SHOWING:

Five trenches blasted through the showing in 1988 revealed an extensive 15 x 50 m area of disseminated pyrite-sphalerite-galena mineralization. Twenty-eight 1 m chip samples over this area averaged 1.5 g/t Au (0.043 oz/ton) with best sections of 3 m at 4.2 g/t (0.122 oz/ton), 3 m at 2.1 g/t (0.061 oz/ton) and 8 m at 1.8 g/t (0.052 oz/ton) with 4 m at 2.4 g/t (0.069 oz/ton). The host rock is Unit 3a altered rhyolitic tuff cut by intense millimetre scale network quartz veining. Sulphides occur disseminated and within veins, averaging 5-10% but with local zones of up to 40-60% sulphides. Richest mineralization occurs in a shallowly (30-40%) south-dipping 0.2 to 1 m breccia zone.

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The extent of the mineralized area is as yet uncertain. Disseminated sphalerite-galena mineralization occurs in outcrop along strike to the east for 130 m, with grab samples assaying up to 3.37 g/t (0.098 oz/ton). Mineralized float occurs 150 m west of the showing, where outcrop is absent. Exposure is also absent downhill to the north. To the south, the zone passes up into unmineralized andesite.

The evidence to date suggests a primary stratabound metal enrichment concentrated into later structurally controlled zones. The disposition of higher grade samples within the trenched area may reflect a 150-160° ore zone strike related to 140-150° shear zones exposed in the trenches.

	Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
grab	4.5	488	0.05	18.5	16.3
(1 m)	1.57	227.6	_	11.70	16.1
(1 m)	3.39	442.3	-	17.2	9.7
(1 m)	`0.68	100.1	-	1.83	1.76
, ,	6.13	404.6	0.06	15.5	10.5
Norex Grab					
(50573)	3.00	138.5	0.13	3.25	5.43

#### LOWER SHOWING:

The 'Lower Showing' lies 100 m morth-northwest and downhill from Dan's Showing. Abundant pyrite, galena and sphalerite occur disseminated and in irregular massive zones and veins in silicified dacitic tuff. Grab samples assay up to 1.26 g/t Au (0.037 oz/ton). A strike of 160-170° would link the zone with Dan's Showing through intervening soil anomalies (up to 155 ppb Au).

Prospecting along strike to the east from the lower showing has established an extensive stratabound zone (250 x 50 m) of variably silicified tuffs with widespread pyrite-galena-sphalerite mineralization, concentrated in northwest-trending shear zones. Grab samples assay up to 0.7 g/t Au (0.02 oz/ton).

The Lower Zone continues east into the 350 E showing and probably continues along strike through the 600 E, 900 E, 1150 E and 1400 E Showings (below).

## 350 E SHOWING:

Excavator trenching of a northwest-trending Au soil anomaly (max 420 ppb Au) revealed a fault zone of intensely sericitic and argillic altered pyrite tuff at least 13 m across. Maximum gold values in 1 metre channel samples were 0.068 g/t (0.002 oz/ton). This passes east into 9 m of silicified tuff with up to 30% pyrite-chalcopyrite-sphalerite. Maximum 1 metre channel sample assays from the zone were 0.48 g/t Au (0.014 oz/ton), 26.7 g/t Ag (0.78 oz/ton), 1.04% Cu, 1.35% Zn and 0.14% Pb, 4 m at 0.39 oz/ton Au, 18.3 g/t Ag, 0.62% Cu, 0.64% Zn, 0.11% Pb.

A 30 metre section of variably silicified sphalerite-bearing pyritic tuffs was exposed east of this Cu-Zn zone. This mineralization represents the eastward extension of the Lower Zone, with up to 20 metres dextral offset across the fault. Maximum values from 1 metre channel samples were 0.206 g/t Au (0.006 oz/ton) with 22.7 g/t Ag (0.66 oz/ton) and 2.0% Zn.

		Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Norex						
47749	2 m	-	1.1	0.03	0.01	0.06
47742	1.5 m	1.78	21.6	0.87	0.10	0.88
47743	1.5 m	3.0	12.9	0.09	0.10	0.23
47744	2.0 m	-	5.0	0.08	0.03	0.04
47745	6.0 m	-	1.3	0.01	0.01	0.02
47746	1.5 m	-	2.6	0.04	0.03	0.05
47747	1 m	-	4.9	0.05	0.09	0.26
47748	2 m	-	12.4	0.36	0.15	0.72
50571	Grab		60.3	2.57	0.94	4.80
50572	Grab		27.5	1.20	0.21	3.69

## 600 E SHOWING:

This showing occurs on the eastward extension of the Lower Zone and marks the start of richer gold mineralization within the zone. Grab samples of pyrite-galena-sphalerite mineralization in silicified dacitic tuffs assay up to 4.2 g/t Au (0.122 oz/ton). Recent channel sampling across the zone indicated 7 metres assaying 2.4 g/t Au (0.07 oz/ton) with 2 metres at 4.59 g/t (0.134 oz/ton).

#### 900 E SHOWING:

The main mineralized zone at 900 E is 3-5 m across and exposed over 15 m of strike (ca. 145°). It contains abundant (10-40%) pyrite, galena and sphalerite, disseminated and in quartz vein networks in silicified dacitic tuff. Mineralization is also extensive but its continuity is uncertain due to deep oxidation and leaching.

Twelve grab samples from the 15 x 20 metre outcrop area average 2.45 g/t Au (0.071 oz/ton) and 33.16 g/t Ag (0.967 oz/ton). The maximum assay was 6.88 g/t Au (0.201 oz/ton) with 68 g/t Ag (1.983 oz/ton) and more than 1% Pb. Limited channel samples have been taken across the main zone. Best intersections were 1 metre at 6.38 g/t Au (0.186 oz/ton) and 2 metres at 2.76 g/t Au (0.805 oz/ton). Eight samples across the zone average 2.74 g/t Au (0.080 oz/ton) and 60.7 g/t Ag (1.769 oz/ton), excluding samples of an unmineralized 0.5 m andesitic dyke cutting the zone.

Exposure is absent along strike from the main zone. Its projected extension to the northwest is marked by a strong topographic break in craggy outcrops to the southwest. These comprise variably silicified pyritic tuff with common galenasphalerite mineralization, forming part of the stratabound Lower Zone extending west to the 600 E Showing. Preliminary grab samples assay up to 2.9 g/t Au (0.08 oz/ton). Continuity of mineralization is difficult to establish due to deep oxidation and leaching.

#### 1300-1500 E SHOWING:

Mineralization in the eastern grid was discovered as a follow-up to highly anomalous soil geochemistry on the 200S line from 750E to 1500E. Chip samples from sub-outcrop at 1500E assayed 3840 ppb Au. Follow-up prospecting revealed pyritic silicified tuff o/c with extensive sphalerite-galena. Mineralization in the vicinity of 1100 and 1400E with maximum grab samples of 4.35 g/t (0.127 oz/t) and 12.59 g/t (0.367 oz/t) Au. Five grab samples from the 20 x 30 m outcrop area at 1400E averaged 5.71 g/t (0.149 oz/t) Au.

A road was pushed to the ridge top at 1400E by excavator and the area between 1100 E and 1500 E was trenched at this level. In total, 550 m at trenching was completed with channel chip samples taken at 1 m intervals (in most cases). The trenching successfully delineated on apparently northeast trending zone, 40 m x 150 m, of intensely silicified pyritized rhyolitic tuff breccia with pervasive quartz veinlet flooding and alteration and disseminated and veinlet sphalerite-galena.

Grab samples from the area west of 1300 E have assayed up to 12.07 g/t (0.352 oz/t) Au with broad coincident soil geochemical anomalies.

A trench was dug further west on the ridge between 750 E and 920 E south of the main mineralized zone (900 E Showing), along a soil anomaly on the 300 S line (max 750 ppb Au). This exposed a continuous zone of silicified pyritized tuffs with local minor sphalerite-galena. Grab samples assay up to 0.82 g/t (0.024 oz/t) Au with chip samples up to 0.48 g/t (0.014 oz/t) Au over 3 metres. Aranlee's chip sample results are illustrated on map 9.

			Au (g/t)	Ag (g/t)	Cu (%)	Pb (%)	Zn (%)
Norex T-9	47750 23849 50569	(Grab)	1.71 2.0 11.0	87.4 82.5 364.8	0.05 0.02 0.09	0.21 0.26 1.48	0.27 0.35 1.26
т-6	50564 50565	(Grab) (Grab) (Grab) (Grab)	1.51 1.98 2.56 1.62	104.0 49.6 47.0 40.2	0.17 0.06 0.09 0.06	0.20 0.23 0.38 0.08	1.06 0.28 0.95 0.17
T-3		(Grab) (Grab)	1.35 1.95	29.2 94.7	0.18	0.02 0.18	0.01 0.45
COMINCO 'GOSSAN A' SHOWING:  0.18 38.5							

## COMINCO 'GOSSAN B' SHOWING:

0.86 17.6 - 0.12 0.06

## CONTROLS ON MINERALIZATION

Exploration to date has established a stratabound zone of gold and base metal mineralization in intensely altered volcanic rocks south of North Sloquet Creek. North to northwest-trending structures within the zone are associated with higher grade mineralization. Some of these structures are obviously late, such as the fault zone at 350 E, but some may be significantly earlier and could be synvolcanic.

The mineralization observed to date is not volcanogenic-exhalative but is of replacive stockwork type. If the mineralization is related to submarine volcanism, the observed enrichment may be peripheral to higher grade massive sulphide zones which may be amenable to geophysical detection. Recent soil and lithogeochemistry show increasing gold enrichment east of the 900 E Showing, indicating a higher grade section of the stratabound zone.

It is also possible that all the observed mineralization is late and epigenetic with respect to the volcanic hosts. The stratabound character could be controlled by favourable permeable and reactive tuffaceous hosts with overlying crystalline andesite providing a cap to the system. The silicified zones extending northwest from the stratabound horizon could be feeder systems. However, the lack of any As-Sb-Hg association does not suggest a typical epithermal system. The absence of alteration and mineralization within the andesitic and granitic rocks to the south does not favour a granite related (?Late Cretaceous) or post-granitic (Tertiary) structurally controlled mineralizing system.

## 6) OWNERSHIP:

Aranlee Resources Ltd. 548 Beatty Street Vancouver, B.C. V6B 2L3

Phone: (604) 684-4039 Contact: Kieran Hardiman,

Fax: (604) 684-3854 Director

# 8) HISTORY OF DEVELOPMENT AND PRODUCTION:

1944: \*Cominco prospectors panned traces of gold from Simpson Creek. Follow up prospecting led to discovery of gossanous outcrops on cliffs with Pb, Zn mineralization. Spring claims staked and lapsed in 1945.

1979 -

1981: Cominco conducted regional silt surveys resulting in the staking of SLO claims. Mapping, geological and geochemical surveys performed along Simpson Creek Valley. Several gossanous o/c areas located within felsic volcanic rocks anomalous in Cu, Pb, Zn mineralization. Soil sampling defined several anomalous Cu, Pb, Zn, Au, Ag trends in Simpson Creek Valley.

1985: Cominco commissioned technical climbers to assess and sample gossanous cliff faces. With fimited success, SLO claims allowed to lapse in 1986.

Adrian Resources Ltd., Danbus Resources Inc. staked ground to the east and south of Cominco's SLO claims. Work consisted of 7.3 km VLF, 10.8 km Mag orientation surveys, contour soil surveys, mapping, and outcrop sampling. Results outlined ahomalous Au, Ag, As and Sb zones in soils. Claims lapsed in 1987.

1987 -

Present: Quet 1 and 2 claims staked and optioned to Aranlee Resources. Aranlee Resources subsequently staked Quet claims 3 to 12 covering Cominco's SLO claims and Adrian Resources ground.

## 9) REGIONAL GEOLOGY:

Claim underlain by submarine volcanic and sedimentary rocks of the Fire Lake Group intruded in the south by dioritic to granitic rocks of the Coast Plutonic Complex. The Fire Lake Group occupies a linear belt from Pemberton in the northwest to Harrison Hot Springs in the S.E. bounded to the east by the Marrison Lake The Fire Lake Group largely comprises basaltic to shear zone. andesitic lavas and tuffs with lesser amounts of dacitic-rhyolitic volcanics, chert, greywacke, argillite and limestone. The property is situated in stratigraphy similar to the Seneca deposit located to the south, east of Harrison Lake. The Seneca deposit is a Kuroko type stratiform, syngenetic massive sulphide deposit associated with felsic volcanic rocks underlain by tuff-coarse pyroclastics sequence and overlain by andesitic-dacitic volcanic flows. The deposit contains 1.5 M.T. in the possible and inferred category grading 0.63% Cu, 0.15% Pb, 3.57% Zn, 0.82 gm Au and 41.1 qm Aq.

## 10) GEOLOGY OF THE DEPOSIT:

#### STRATIGRAPHY:

The claims are underlain by predominantly andesitic to rhyolitic volcanics with subordinate sediments. The strata generally dip shallowly to the south or east and appear to be right way up.

The following units have been distinguished:

- Unit 1: Basaltic to andesitic flows and dykes

  These are fine to medium grained dark green lithologies
  mostly forming dykes or sills. Pyrite content is
  commonly up to 1-2%.
- Unit 2: Andesitic-dacitic tuffs
  These lithologies underlie the bulk of the property and may include resedimented tuffs or wackes. Coarse lapilli tuffs predominate. There is an upward progression from andesitic to dacitic-rhyolitic compositions. Pyrite is ubiquitous and often abundant, averaging 2-5% and ranging to 20-40% in altered mineralized zones which may also contain abundant sphalerite and galena.
- Unit 3a: Rhyolitic tuffs
  Highly silicic tuffs crop out on the ridge south of North
  Sloquet Creek. Primary tuff textures may be preserved
  but more often the lithology is structureless with a
  saccharoidal texture. Millimetre scale network quartz
  veining and silicification is extensive. Pyrite is
  ubiquitous and often abundant (5-30%), especially in
  sphalerite-galena mineralized zones.
- Unit 3b: Rhyolitic cherty tuffite

  This unit was mapped by Cominco geologists on the ridge crest between North Sloquet and Simpson Creeks, and may be equivalent to Unit 3a on the southern ridge. The unit was described as finely bedded to laminated, grey, red and green cherty tuffite with ubiquitous disseminated or laminated pyrite (3-15%).
- Unit 4: Argillaceous sediments and dacitic tuffs
  This unit was mapped by Cominco geologists overlying Unit
  3b on the ridge between North Sloquet and Simpson Creeks.
  It comprises well-bedded argillites and siltstones with
  minor interbedded dacitic tuffs.

A broadly conformable sequence from andesitic to rhyolitic volcanics is indicated, overlain by a cap of cherty argillaceous sediments. Sharp (1981) further mapped an overlying andesitic flow on the ridge between North Sloquet and Simpson Creeks. The Unit 3a rhyolitic tuffs on the ridge south of North Sloquet Creek also pass up into minor andesitic tuffs and massive crystalline andesite which may mark the base of a new volcanic cycle.