

# 824415

Reac -Geology

### REPORT

ON THE

AR AND HN CLAIMS Kamloops Mining Division British Columbia

FOR

REA GOLD CORPORATION Suite 15 - 817 Granville Street Vancouver, B.C. V6Z 1K8

PREPARED BY:

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November 1, 1983

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#### INTRODUCTION

Rea Gold Corporation of Suite 15 - 817 Granville Street, Vancouver, B.C. has purchased and acquired by option twenty contiguous mineral claims in the Kamloops Mining Division, British Columbia. This report, prepared at the request of the directors of Rea Gold Corporation, describes the geologic setting, mineralization and exploration potential of the subject claims. A staged programme of exploration is recommended with a proposed budget.

This report is based on a personal examination of the AR and HN claims by the writer on October 15 and 22, 1983 as well as on data from various published reports.

#### SUMMARY

The AR and HN claim group consists of 20 contiguous twopost, M.G.S. and M.G.S. Fractional mineral claims located in the Kamloops Mining Division of southcentral British Columbia. The claims are situated on the northwestern slopes of Samatosum Mountain, immediately southwest of Johnson Lake, approximately 60 kilometres north-northeast of Kamloops, B.C. Their geographic coordinates are 50°08'N. latitude by 119°50'W. longitude (N.T.S. 82M/4W).

Vehicular access is readily possible via Highway 5 north from Kamloops to Louis Creek; thence east on the paved and gravel Skwaam Bay road to Skwaam Bay. From Skwaam Bay several gravel logging roads provide facile access northwest to the Samatosum Mountain plateau and the subject claims. It is approximately 143 kilometres by road from Kamloops to the property.

The subject claims are owned in part by Mr. A. Hilton of Kamloops, B.C. Rea Gold Corporation has acquired by Letter of Intent to option those claims owned by Mr. Hilton. Rea Gold Corporation is the registered owner of four additional claims which are included in the total claim group.

In late August, 1983 Mr. A. Hilton discovered massive

sulphide mineralization in a recently logged area of the Samatosum Mountain plateau. Although the region has been explored since the 1920's and there are at least three significant occurrences in the area this is a new, untested showing. Initial chip samples cut by Mr. Hilton, two 1.5-metre samples over 3 metres, returned values of: 0.294 and 1.21 oz./T gold, 4.94 and 4.74 oz./T silver, 0.99 and 1.29% copper, 12.7 and 5.37% lead, and 6.76 and 0.82% zinc.

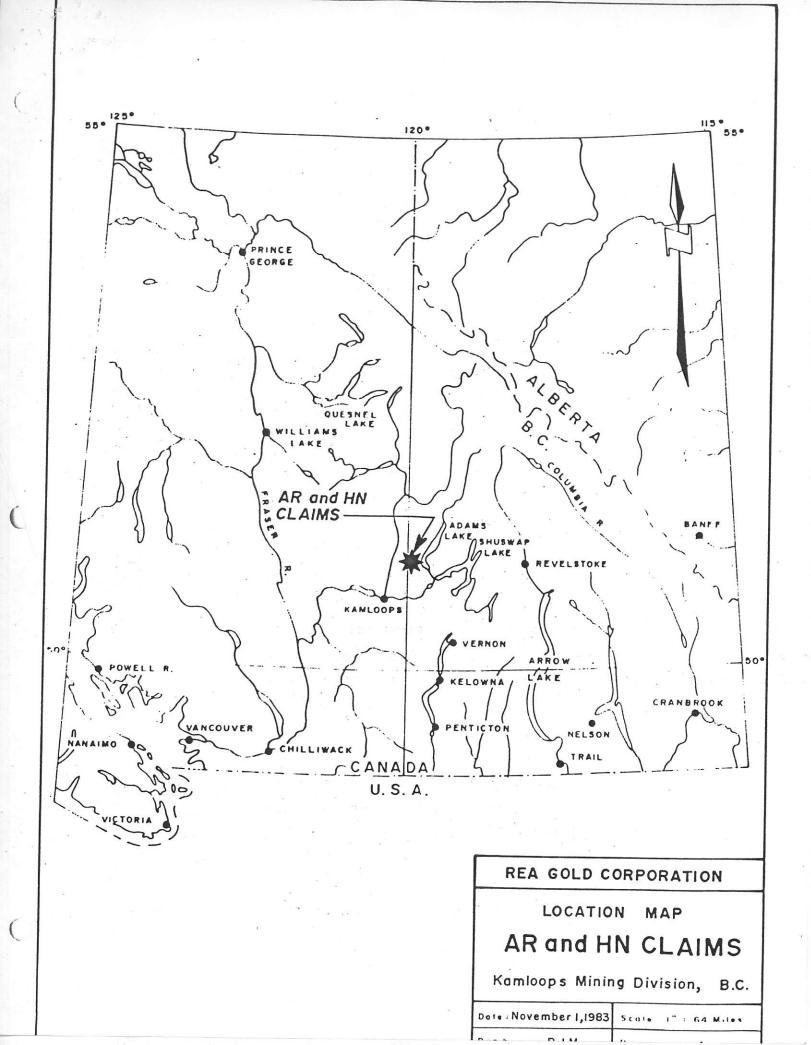
Weakly-metamorphosed volcanic and sedimentary rocks of the Late Devonian to Early Mississippian Eagle Bay Formation underlie the claim group. These strata strike northwesterly and dip -45° to -60° northeasterly. In the vicinity of the showing mafic flows, breccias and tuffs with intercalated sediments are overlain by a thick sequence of felsic breccias and tuffs. Massive sulphide mineralization, with a true width of 3.75 metres, occurs between lithic and siliceous tuff members of the felsic volcanoclastic sequence. The stratigraphic location of the mineralization is very indicative of a volcanogenic exhalative massive sulphide deposit.

Preliminary mapping and sampling results indicate that the massive sulphide mineralization consists of fine-grained pyrite, chalcopyrite, galena and minor sphalerite. Four continuous lmetre chip samples across the apparent width averaged: 1.0 oz./T gold, 4.70 oz./T silver, 3.66% lead, 2.19% zinc and 1.62% copper. A sample of the overlying siliceous tuff unit returned assay values of 0.056 oz./T gold and 0.52 oz./T silver.

These claims have excellent exploration potential. Although it is difficult to estimate possible dimensions of the massive sulphide mineralization it may have a true stratigraphic thickness of 3.25 metres. Furthermore, the overlying siliceous tuff horizon has indicated low-grade precious-metal potential and this unit is approximately 30 to 40 metres thick.

Based on the very positive results from the examinations exploration is definitely warranted to evaluate the economic potential of these claims. The first two stages of a three-stage exploration and development programme are recommended with cost estimates of \$139,000.

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#### PROPERTY AND OWNERSHIP

The claim group consists of twenty contiguous mineral claims, all located in the Kamloops Mining Division in southcentral British Columbia. The configuration of the claims is shown in Figure 2. Table I summarizes all pertinent mineral claim data.

The AR-1 to 8, 10 and 11FR mineral claims were originally staked by Mr. Roy Nicholl of Kamloops, B.C. On October 21, 1983 Mr. Nicholl formally sold 100% interest in these claims to Mr. A. Hilton of Kamloops, B.C. - Bill of Sale receipt #184758E.

The HN-1, 3, 4, 5, 6 and 7 minerals claims were staked and are owned by Mr. A. Hilton. Thus, Mr. A. Hilton is the registered owner of all of the forementioned claims.

Under the terms of a Letter of Intent signed October 7, 1983 Rea Gold has acquired by option, subject to regulatory approval, all of the above mentioned claims from Mr. A. Hilton.

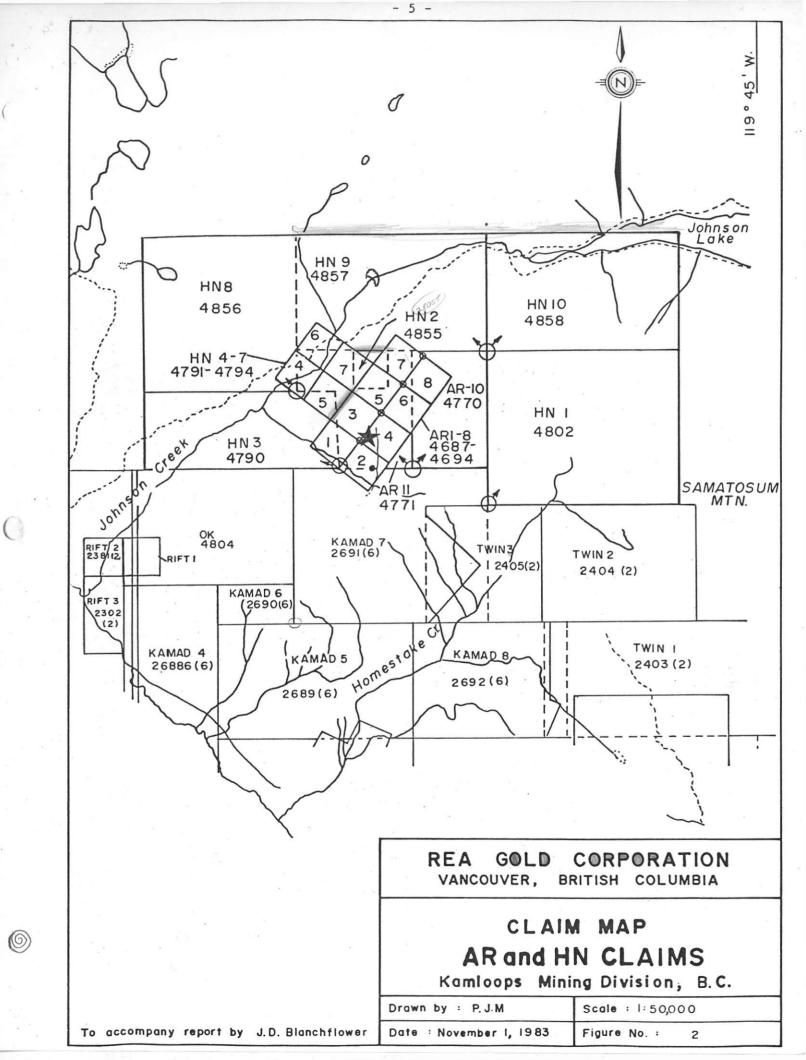
The HN-2, 8, 9 and 10 mineral claims were staked by Mr. R. Shearing of Vancouver, B.C. Rea Gold Corporation has purchased a 100% interest in these claims (Bill of Sale receipt #184770E) and is therefore the registered owner of these claims.

The writer made a brief examination of some of the claim posts located by R. Nicholl, A. Hilton, and R. Shearing. The subject claims appear to have been located in accordance with the Mineral Act Regulations of British Columbia.

A title search of the claim records was undertaken in the Mining Recorder's office in Kamloops, B.C. All the two-post, M.G.S. and M.G.S. Fractional claims appear to have been properly filed and recorded, and they are in good standing until their respective anniversary dates in 1984.

### LOCATION AND ACCESS

The subject claims are situated immediately southwest of



### TABLE I

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### Mineral Claim Data

<u>Claim Name</u>	Record No.	Type	Units	Date Recorded	Registered Owner
AR-1	4687	2-post	1	Sept. 7, 1983	A. Hilton
AR-2	4688	2-post	1	Sept. 7, 1983	A. Hilton
AR-3	4689	2-post	1	Sept. 7, 1983	A. Hilton
AR-4	4690	2-post	1	Sept. 7, 1983	A. Hilton
AR-5	4691	2-post	1	Sept. 7, 1983	A. filton
AR-6	4692	2-post	1	Sept. 7, 1983	A. Hilton
AR-7	4693	2-post	1	Sept. 7, 1983	A. Hilton
AR-8	4694	2-post	1	Sept. 7, 1983	A. Hilton
AR-10	4770	M.G.S.	6	Sept. 30, 1983	A. Hilton
AR-11FR.	4771	M.G.S.(Fr.)	1(Fr.)	Sept. 30, 1983	A. Hilton
HN-1	4802	M.G.S.	20	Oct. 7, 1983	A. Hilton
HN-2	4855	2-post	1	Oct. 24, 1983	Rea Gold Corporation
HN-3	4790	M.G.S.	10	Oct. 3, 1983	A. Hilton
HN-4	4791	2-post	1	Oct. 3, 1983	A. Hilton
HN-5	4792	2-post	1	Oct. 3, 1983	A. Hilton
HN-6	4793	2-post	1	Oct. 3, 1983	A. Hilton
HN-7	4794	2-post	1	Oct. 3, 1983	A. Hilton
HN-8	4856	M.G.S.	16	Oct. 24, 1983	Rea Gold Corporation
HN-9	4857	M.G.S.	15	Oct. 24, 1983	Rea Gold Corporation
HN-10	4858	M.G.S.	15	Oct. 24, 1983	Rea Gold Corporation

Johnson Lake, covering the northwestern slopes of Samatosum Mountain and the upper drainages of Johnson and Homestake Creeks. Alternatively, the claims are located approximately 23 kilometres east of the town of Barriere or 60 kilometres north-northeast of the city of Kamldops in southcentral British Columbia. The geographic coordinates of the claim group are 50°08'N. latitude by 119°50'W. longitude; N.T.S. 82M/4W.

The claim group is readily accessible from Kamloops via either Highway 5 north to Louis Creek; thence east to Skwaam Bay on Adams Lake, or east on Highway 1 to Squilax then north to Skwaam Bay. From Skwaam Bay a well maintained logging road (No. 3,000) follows the west side of Adams Lake for 8 kilometres to a secondary logging road junction - the 3,000 - 3,200 road junction. The No. 3,200 gravel logging road leads northwesterly up the western slopes of Samatosum Mountain to the claim group. In total the claim group is 143 kilometres by road from Kamloops.

The southern portions of the claim group are accessible from the No. 3,200 logging road or from various branch logging roads. The northern claims are accessible via the Johnson Creek road, from Silver Spray Falls on the Louis Creek-Skwaam Bay road northwest to Johnson Lake.

A recent clear-cut logging operation in the vicinity of the discovery showing has provided good local access with numerous secondary logging roads and skidding trails.

#### PHYSIOGRAPHY

The claims straddle the Johnson Creek valley and cover the northwestern slopes of Samatosum Mountain. Elevations within the property range from 3,000 to 6,100 feet A.M.S.L.

The climate is moderate with temperatures ranging between -25°C. and +30°C. Precipitation is usually moderate to heavy. The exploration season may extend from May to November.

A portion of the southcentral claims has been clear-cut

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logged, however, elsewhere there is a moderate to thick growth of pine, fir, cedar and aspen.

Bedrock exposures are scarce except in areas with logging roadcuts or high relief.

#### HISTORY

The region between Johnson Lake, Johnson Creek, Sinmax Creek and Adams Lake has received intermittent, sometimes quite aggressive, exploration since the 1920's. Until the discovery of massive sulphide mineralization on the subject claims there were three known occurrences of significant base- and precious-metal mineralization in this area; the Twin (Ag, Pb, Zn, Cu, Au, barite), Homestake (Ag, Pb, Zn, Au, Cu, barite), and Bay (Pb, Zn, Cu, Ag) occurrences. Although various operators have explored and developed these known occurrences over the years, according to the B.C. Ministry of Mines Minfile only the Homestake occurrence has published resource estimates. In 1974 the operators of the Homestake property reported an indicated geological reserve of 796,280 tonnes grading 7 oz./T silver, 28% barite, 4% zinc, 2.5% lead and 0.55% copper (B.C.M.M. Minfile 082M, 025).

The massive sulphide mineralization on the AR and HN claims was discovered by Mr. A. Hilton, the claims' owner, in late August, 1983. The discovery was the result of a two-year prospecting program utilizing recent published geological reports and a field geochemical kit.

The discovery showing is located in a logging roadcut approximately 30 metres from an existing gravel haulage road (see Figure 4). The showing itself was only uncovered after Mr. Hilton hand-trenched through bright-red hematitic soil and exposed oxidized, massive pyrite - chalcopyrite - galena mineralization over an initial 3-metre width. The first two chip samples Mr. Hilton cut, 1.5 metres each over the exposed width, returned check-assayed values of: 0.294 and 1.21 oz./T gold, 4.94 and 4.74 oz./T silver, 0.99 and 1.29%

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copper, 12.7 and 5.37% lead, and 6.76 and 0.82% zinc. Mr. R. Nicholl and Mr. A. Hilton subsequently staked the original AR and HN claims to cover the apparent strike and down-dip extensions of the sulphide mineralization.

#### GEOLOGY

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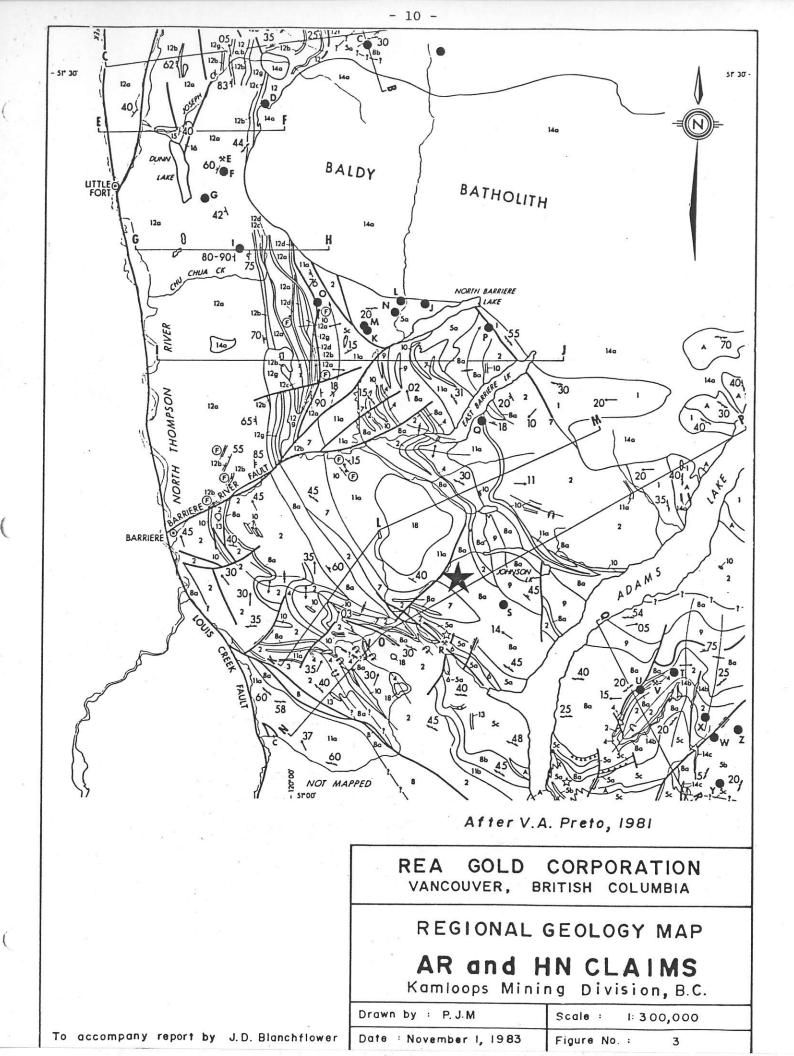
### Regional Geology

The Barriere Lakes - Adams Plateau region, including the Samatosum Mountain area, has been geologically mapped by a number of government workers; the most definitive and recent published works have been by V.A. Preto, G.P. McLaren and P.A. Schiarizza (1980) and V.A. Preto (1981). Much of the following text is based on the results of these recent works.

This region is dominantly underlain by a weakly to moderately-metamorphosed assemblage of sedimentary and volcanics belonging to the Late Devonian to Early Mississippian-age Eagle Bay Formation. Regionally the Eagle Bay Formation appears to stratigraphically overlie the dominantly volcanic rocks of the Late Devonian Fennell Formation. Both of these major formations have been intruded by granodiorite orthogneiss to biotite quartz monzonite ranging in age from Late Devonian to Cretaceous. Locally the metamorphosed strata and intrusions are overlain by olivine basalt flows of Pleistocene to Recent age.

Structural features of the region include at least two periods of folding and faulting (Preto et al, 1979). An early period of folding, west to northwest trending with axes plunging north to northwest, has deformed the volcanic and sedimentary strata prior to later folding with fold axes plunging gently north.

There are numerous base-metal occurrences, many of which clearly are stratabound massive sulphide deposits syngenetic with their host rocks, known in the region. Such polymetallic deposits, commonly with associated barite and precious-metal values, are most



### LEGEND

PLEISTOCENE AND/OR EARLIER

18 OLIVINE BASALT, MUDSTONE

MIOCENE AND /OR PLIOCENE

17 PLATEAU BASALT

EOCENE AND LATER (?)

16	SKULL	HILL	FORMATION -	VESICULAR	ANDESITE
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15 CHU CHUA FORMATION - CONGLOMERATE, SANDSTONE, SHALE

CRETACEOUS

14 a GRANITE, QUARTZ MONZONITE

**b** QUARTZ FELDSPAR PORPHYRY

JURASSIC AND TRIASSIC

13 DIORITE

UPPER TRIASSIC (?)

C AUGITE PORPHYRY BRECCIA

AGE UNKNOWN

**B** SERPENTINITE

UPPER MISSISSIPPIAN AND (?) OLDER TO LATEST PERMIAN AND (?) YOUNGER

12 FENNELL FORMATION

a MASSIVE AND PILLOW BASALT

b CHERT

c QUARTZ FELDSPAR PORPHYRY

- d CONGLOMERATE
- PELITE, SANDSTONE
- f MARBLE
- g GABBRO AND DIORITE

LATE DEVONIAN

A GRANODIORITE ORTHOGNEISS

LATE DEVONIAN AND (?) OLDER TO LATE MISSISSIPPIAN AND (?) YOUNGER

1-11 EAGLE BAY FORMATION

11	a	BLACK	PHYLLITE;	INTERBEDDED	GRIT,	SANDSTONE,	SILTSTONE,	AND
	<u> </u>	LIMEST	ONE					

**b** CALCAREOUS BLACK PHYLLITE WITH CALCITE AND LIMESTONE LENSES

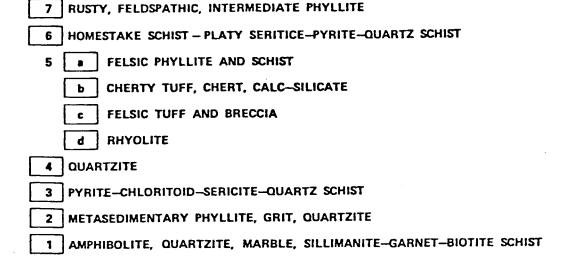
10 LIMESTONE, DOLOMITE

9 TSHINAKIN LIMESTONE AND DOLOMITE

8 a GREENSCHIST

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**b** TUFF, CHLORITE-PHYLLITE, STRIPED AMPHIBOLE, SKARN



### SYMBOLS

BEDDING: TOPS KNOWN, UNKNOWN	У,У
EARLY SCHISTOSITY	····· معظمه ····
FOLD AXES: EARLY, LATE	/ /
EARLY AXIAL TRACE: SYNFORM: UPRIGHT, OVERTURNED	X.X
ANTIFORM: UPRIGHT, OVERTURNED	X,X
LATE AXIAL TRACE: SYNFORM: UPRIGHT, OVERTURNED	X,X
ANTIFORM: UPRIGHT, OVERTURNED	X,X
RADIOMETRIC AGE LOCALITY	X
FOSSIL LOCALITY	
PROSPECT; MINE	•, 🛠

#### MINERAL DEPOSITS

- A REXSPAR (U, F)
- B FOGHORN (Ag, Pb, Zn, Cu)
- C LYDIA (Pb, Zn)
- D JUDY (Mo, Cu)

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- E WINDPASS (Au, Cu, Bi, Ag)
- F SWEET HOME (Au, Cu, Bi)
- G GOLD HILL (Au, Pb, Cu, Zn, Ag)
- H QUEEN BESS (Pb, Zn, Ag)
- I C.C. (Cu, Zn)
- J HARPER (Cu, Pb, Zn)
- K RAINBOW (Cu, Pb, Zn)
- L BROKEN RIDGE (Cu, Zn)
- M COPPER CLIFF (Pb, Zn, Cu)
- N MAY (Cu, Zn)

- O ENARGITE (Pb, Zn)
- P EBL (Cu)
- Q KAJUN (JUNE) (Ag, Pb, Zn, Cu)
- R HOMESTAKE (Ag, Pb, Zn, Au, Cu, Barite)
- S TWIN MOUNTAIN (Ag, Pb, Zn, Au, Cu, Barite)
- T KING TUT (Ag, Pb, Zn, Au)
- U ELSIE (Pb, Zn, Ag, Au)
- V LUCKY COON (Pb, Zn, Ag, Au, As)
- W PET (Pb, Zn)
- X SPAR (Pb, Au, Ag, Cu)
- Y BC (Cu, Pb, Zn)
- Z MOSQUITO KING (Pb, Zn, Ag)

abundant in the Birk Creek - North Barriere Lake, Johnson Lake -Sinmax Creek and Adams Plateau areas (Preto, 1979). See Figure 3 for a map of the regional geology and locations of the known mineral occurrences.

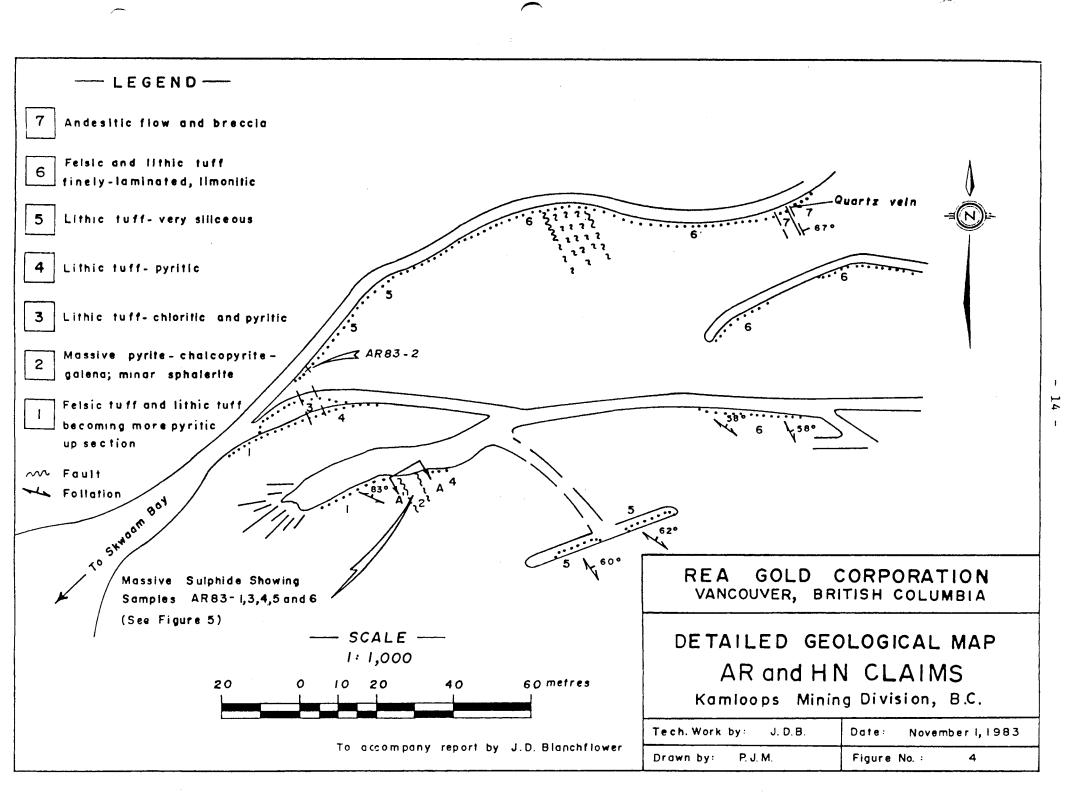
### Local Geology

The subject claims are underlain by a thick intercalated sequence of volcanic and sedimentary rocks belonging to the Late Devonian to Early Mississippian-age Eagle Bay Formation. These strata strike northwesterly and dip northeasterly. According to Preto (1981) there is a northeasterly-striking fault structure subparalleling the Johnson Creek valley which separates the dominantly volcanic strata on the southeast from fine-grained sedimentary strata to the northwest.

Within the better exposed, southern portions of the claim group, the claims are underlain by interbedded andesitic to rhyodacitic flows, breccias and tuffs with minor intercalated sedimentary strata. Assuming that the observed strata has not been overturned by regional folding the thick, dominantly volcanic sequence to the west is stratigraphically overlain to the east, within the HN-1 and 10 claims, by metamorphosed quartzitic and calcareous sedimentary strata. Such a geologic setting indicates an ancient island-arc environment, an excellent setting for syngenetic massive sulphide deposition.

Locally within the area of the discovery showing (see Figure 4) logging roadcuts have exposed a sequence of volcanic and intercalated sedimentary rocks indicating repetitive mafic to felsic volcanism with submarine sedimentation between repetitive volcanic events. From west to east the strata commonly strike 120° to 155° and dip -45° to -60° northeastward. Just west of the area shown in Figure 4 andesitic flows, breccia and tuffs are interbedded with, at least, one quartz-feldspar porphyry flow. Eastward and upsection the andesitic volcanics become more thinly bedded, often

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separated by metamorphosed argillite, siltstone, and chert-pebble conglomerate units. Such a sequence is indicative of episodic volcanism with periods of quiescence and seafloor sedimentation.

Approximately 20 metres west of the massive sulphide showing bedrock exposures consist of dacitic to rhyodacitic tuffaceous units suggesting renewed felsic volcanism. Lithic and lapilli tuffs dominate this section and they become pyrite-rich within 5 metres of the stratabound massive sulphide mineralization.

The massive sulphide mineralization is bounded on the hangingwall and footwall by fault structures subparalleling the schistocity of the tuffaceous host rocks. On inspection these structures appear to be related to late stage folding. However, their location may indicate possible displacement of the massive sulphide mineralization along its strike length.

A thick section of siliceous lithic and lapilli tuffs overlie the massive sulphide mineralization. These tuffs grade upward and eastward into a thick section of limonitic, thinly laminated felsic tuffs.

Approximately 120 metres northeast of the massive sulphide showing the felsic tuffs are stratigraphically overlain by andesitic flows and lapilli tuffs similar to those west of the showing and downsection. Such a relationship may indicate that the claims are underlain by several periods of mafic to felsic volcanism.

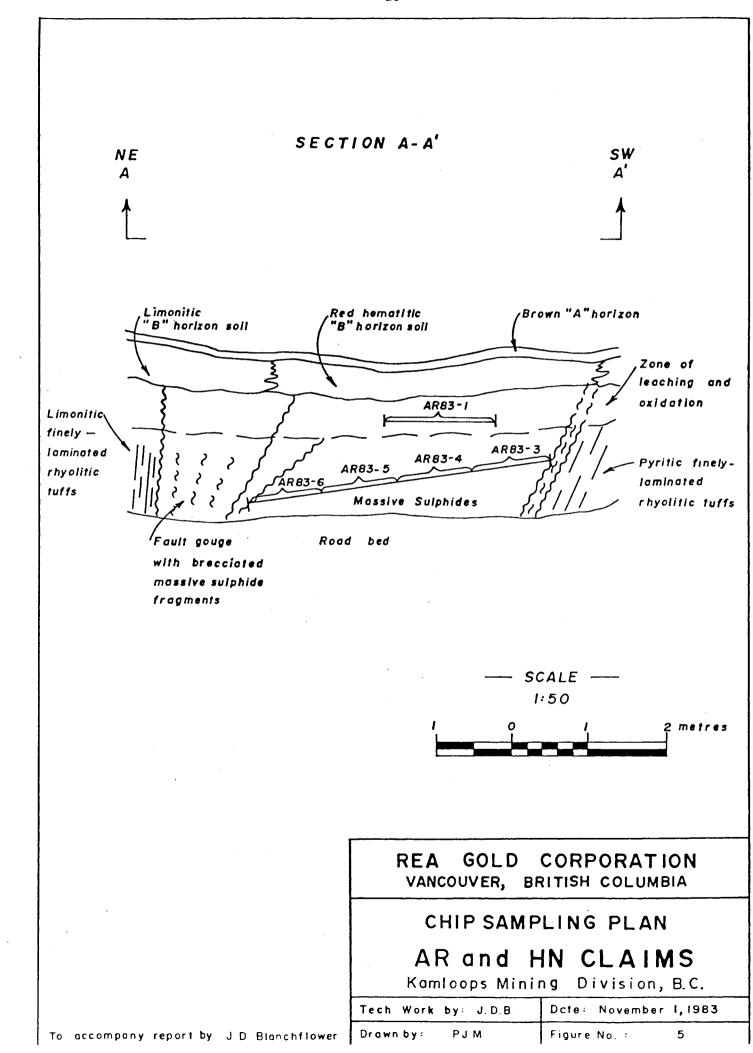
Fault structures measured during the examination parallel the schistocity of the weakly-metamorphosed volcanic and sedimentary strata. Locally these structures displace the volcanic rocks and host white quartz veins. Due to the paucity of outcrops displacements along these structures are uncertain at this time.

### MINERALIZATION

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During the writer's examination a D6-C bulldozer was used to better expose the massive sulphide showing (see History). The

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### TABLE II

### Sample Descriptions and Assay Summaries

Sample No.	Description		<u>A</u>	ssay Val	ue	
		Au oz./T	Ag oz./T	Pb %	Zn %	Cu %
AR83-1	Chip sample across 1.5 m. of massive sulphide mineralization (Py, Cp, Ga and Sp) within oxidized zone.	1.32	7.42	6.08	.62	1.81
AR83-2	Chip sample across 1 m. of siliceous lapilli and lithic tuff in the hanging wall section.	.056	. 52	.17	.03	.02
AR83-3	Chip sample across 1 m. of freshly exposed massive sulphide mineralization (Py, Cp, Ga and Sp). Sample cut from western, footwall fault east for 1 m.	1.2	11.5	11.0	4.57	2.24
AR83-4	Chip sample across 1 m. of freshly exposed massive sulphide mineralization (Py, Cp, Ga and Sp). Sample cut 1 to 2 m. east of footwall fault.	1.08	5.54	1.34	2.72	3.65
AR83-5	Chip sample across 1 m. of freshly exposed massive sulphide mineralization (Py, Cp, Ga and Sp). Sample cut 2 to 3 m. east of footwall fault.	.96	1.16	1.05	.80	.40

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AR83-6

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3-6 Chip sample across 1 m. of freshly exposed massive sulphide mineralization (Py, Cp, Ga and Sp). Sample cut 3 to 4 m. east .76 .61 1.26 .66 .20 of footwall fault, immediately west of hangingwall fault. Some sampled material is fractured and oxidized.

Average of AR83-3, 4, 5 and 6 across 1.0 4.70 3.66 2.19 4 m. or a true width of 3.75 m. bulldozer removed the sampled, oxidized section of the outcrop and exposed fresh massive sulphide mineralization over 3.75 metres, between the footwall and hangingwall fault structures (see Figures 4 and 5).

The massive sulphide mineralization is dark grey to black in colour and predominantly fine-grained. Using a binocular microscope one can see that the most obvious mineralization consists of a fine-grained mass of pyrite, chalcopyrite, galena and minor sphalerite. Field observations indicate that the sulphide mineralization is non-magnetic. However, additional studies will be required to fully identify all mineralogical constituents.

The writer cut four one-metre chip samples (AR83-3, 4, 5 and 6) across the exposed apparent width of the massive sulphide These samples were collected from freshly exposed bedrock, body. after bulldozing, directly beneath a preliminary chip sample (AR83-1) across 1.5 metres of the oxidized massive sulphide mineralization. Sample AR83-2 was collected from the siliceous lithic tuff unit stratigraphically overlying the sulphide mineralization. See Figures 4 and 5 for sample locations. See Table II for Sample Descriptions and Assay Summaries, and Appendix I for the Certificate of Assavs.

It is very apparent from the assay results that the massive sulphide mineralization at the discovery showing has excellent baseand precious-metal potential. The average grade of the mineralization across a true width of 3.75 metres is: 1.0 oz./T gold, 4.70 oz./T silver, 3.66% lead, 2.19% zinc and 1.62% copper.

The sample of the hangingwall siliceous tuffs returned assay values of 0.56 oz./T gold and 0.52 oz./T silver plus minor base-metal values. This assay result is particularly interesting since the writer observed a thick section of these volcanoclastics that could have excellent precious-metal potential given their stratigraphic setting.

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#### EXPLORATION POTENTIAL

The subject claims have undoubtedly excellent exploration potential. Preliminary results indicate that the claims cover weakly-metamorphosed mafic to felsic volcanics and intercalated sediments of the Eagle Bay Formation that host exhalative, stratabound massive sulphide mineralization.

At the discovery showing the massive sulphide mineralization is exposed over a true width of 3.75 metres. This width measurement is based on the attitudes of the bounding footwall and hangingwall fault structures (i.e. 154° to 157°/-60° N.E.). Since the mineralization is only exposed in the bank of a roadcut it is difficult at this time to make any assumption as to its true However, if the two fault structures subparallel the dimensions. schistocity of the host rocks it would appear that the mineralization may have a true stratigraphic thickness of approximately 3.25 This thickness could vary, of course, along strike given metres. the volcanogenic setting and possible displacements along the fault structures.

The positive assay result from the hangingwall siliceous host rocks is very encouraging since preliminary mapping has indicated a potential thickness of this unit in the order of 30 to 40 metres. Although more detailed sampling is required to assess its economic potential the stratigraphic dimensions of such a volcanogenic member could be very significant.

In summary, not only do these claims cover newly discovered massive sulphide mineralization with very significant preciousand base-metal values, but they also cover a tuffaceous horizon with indicated low-grade precious-metal potential.

#### CONCLUSIONS

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Based on the very positive results from the two property examinations these claims have excellent exploration potential.

Detailed exploration is definitely warranted to delineate and evaluate the indicated base-and precious-metal potential. A staged exploration programme is therefore recommended to test their economic potential.

#### RECOMMENDATIONS

A three-stage exploration programme following the outline given below is recommended.

#### Stage I

- (1) Given that the present exploration season is limited a detailed topographic plan using enlargements of available topographic and forestry maps should be prepared at a scale of 1:5,000. A more detailed topographic plan using available aerial photographs should also be prepared at a scale of 1:1,000 with 3-metre contours.
- (2) All claim posts, roads and other physical features should be surveyed.
- (3) A detailed picketed and flagged grid should be established over the area of interest. Such a grid should be oriented with a baseline at 135° and grid lines at 045°. The initial grid should have grid lines spaced 25 metres apart with 20metre station intervals, for 200 metres either side of the baseline. The grid should extend, at least, 500 metres southeast and northwest of the discovery showing. With possible fill-in lines and line extensions the detailed grid should be approximately 18 kilometres.
- (4) Detailed geological mapping should be undertaken immediately over the entire grid. Given a longer than average exploration season the geologic survey should be extended over the entire property.

- (5) Rock geochemical samples should be collected during the geological survey. All samples should be analyzed for gold, silver, copper, lead and zinc. All sample pulps should be retained pending further analyses at a later stage.
- (6) Coincident VLF-EM and magnetometer surveys should be carried out immediately over the established detailed grid. These surveys should be extended over all geologically favourable areas, and in 1984 the entire property should be surveyed.
- "B" (7) Soil geochemical samples of horizon soils should be collected over the detailed grid. Soil geochemical surveying should be extended over all favourable geological and geophysical targets. Soil samples should be analysed for gold, silver, copper, lead and zinc.
- (8) All geological, geophysical and/or geochemical anomalies should be investigated by surface trenching to define the source. A crawler backhoe would be best suited for this work. All mineralized zones should be properly mapped, sampled and samples should be assayed for gold, silver, copper, lead and zinc. All sample pulps should be retained pending further analyses.

#### Stage II

(1)Contingent on the success of Stage I a programme of diamond drilling should be undertaken to test the extent of the 600 metres of "BQ" drilling mineralization. An initial is proposed for this stage. The sites of this drilling will be determined by the results of Stage I.

### Stage III

Contingent on the success of Stage II the drilling programme

#### (1)

would be extended to fully delineate and evaluate the mineralization. Bulk sampling should be undertaken for metallurgical testing.

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### COST ESTIMATES

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### <u>Stage I</u>

Claim survey - possible staking	\$ 3,000.
Preparation of preliminary topographic base map	500.
Preparation of base map from detailed	
aerial photography	3,500.
Geological survey - mapping field supervision	8,000.
Sampling	750.
Analyses, 50 samples @ \$14./sample	700.
Line picketing and flagging -	
18 km. @ \$275/km.	4,950.
* Possible extension to detailed grid -	
20 km. @ \$275/km.	5,500.
Geophysical surveying -	
Magnetometer - 18 km. @ \$65./km.	1,170.
VLF-EM - 18 km. @ \$75./km.	1,350.
* Possible extension of 20 km. (VLF-EM and Mag)	2,800.
Geochemical surveying -	
Sampling -	2,000.
Analyses, 800 samples @ \$11.30/sample (Au, Ag,	
Cu, Pb, Zn)	9,040.
Trenching -	
Crawler backhoe and operator, 30 hrs. @ \$125./hr.	3,750.
Sampling and surveying	1,500.
Assaying - 50 samples @ \$33./sample (Au, Ag,	
Cu, Pb, Zn)	1,650.
Vehicle support - \$30./day plus \$.30/km.	2,500
Accommodation - 160 man days @ \$16./man day	2,560
(at Johnson Lake cabins and trailer)	
Food - 160 man days @ \$15./ man day	2,400
Expendable field supplies, instrument rental, etc.	400.
	<u>.</u>

Sub Total \$58,020.

### Stage II

Diamond drilling - 600 metres @ \$60./m.		
of BQ wireline drilling		\$ 36,000
Logging, supervision, surveying		6,000
Sampling, core splitting, core storage		5,500
Assaying - 200 samples @ \$33./sample		6,600
Vehicle support - \$30./day plus \$.30/km.		1,200
Accommodation - 60 man days @ \$16./man day		960
Food - 60 man days @ \$15./man day		900
Miscellaneous field supplies, etc.		200
	Sub Total	57,360
Consulting, reporting, supervision		7,000
Report and map preparation		3,500
Contingency (~10%)		13,120
Total Estimated Cost of Stages I and II		\$139,000

Respectfully submitted, MINOREX CONSULTING LTD.

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J.D. Blanchflower, F.G.A.C. Consulting Geologist

November 1, 1983 Kamloops, B.C.

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#### CERTIFICATE

I, J. DOUGLAS BLANCHFLOWER, DO HEREBY CERTIFY THAT:

- (1) I am a consulting geologist with business office at 2391 Bossert Avenue, Kamloops, B.C. V2B 4V6
- (2) I am a graduate of the University of British Columbia with a degree of B.Sc. (Honours Geology, 1971).
- (3) I am a Fellow of the Geological Association of Canada (#F0046).
- (4) I have practised my profession as a geologist for the past twelve years.
- (5) I own no direct, indirect or contingent interest in any of the subject claims, nor shares in or securities of REA GOLD CORPORATION, nor do I expect to receive any interest.
- (6) This report is based on a personal examination of the property on October 15 and 22, 1983; and on available reports and maps, and published geological reports for the areas.
- (7) I consent to the use of this report in a Prospectus or Statement of Material Facts.

land forest

J.D. Blanchflower, F.G.A.C.

Campbell, R.B. (1963):	Adams Lake, G.S.C. Map 48-163.
Preto, V.A. (1979):	Barriere Lakes - Adams Plateau Area,
	B.C. Ministry of Energy, Mines &
	Pet. Res., Geological Fieldwork,
	1978, Paper 1979-1, pp. 31-37.
et al (1980):	Barriere Lakes - Adams Plateau Area,
	B.C. Ministry of Energy, Mines &
	Pet. Res., Geological Fieldwork,
	1979, Paper 1980-1, pp. 28-36.
(1981):	Barriere Lakes - Adams Plateau Area,
	B.C. Ministry of Energy, Mines &
	Pet. Res., Geological Fieldwork,
	1980, Paper 1981-1, pp. 15-23.
B.C. Ministry of	Minfile, 082M, 025.
Energy, Mines &	
Pet. Res.	
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Personal Communications: Mr. A. Hilton, Kamloops, B.C.

### APPENDIX I

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Kamloops Research & Assay Laboratory Ltd. Certificate of Assay



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# KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

912 - 1 LAVAL CRESCENT — KAMLOOPS, B.C. V2C 5P5 PHONE: (604) 372-2784 — TELEX: 048-8320 CERTIFICATE OF ASSAY

### B.C. LICENSED ASSAYERS GEOCHEMICAL ANALYSTS METALLURGISTS

Certificate No.	K_5991
Genindale NO.	

Date \_\_\_\_\_ October 24, 1983

Kamloops, B.C. V2B 4V6

2391 Bossert Ave.,

Minorex Consulting Ltd.

Kral No.	Marked	Au	Ag	РЬ	Zn	Cu	·		
		ozs/ton	ozs/ton	percent	percent	percent			
1 2	AR-83-1 AR-83-2	1.32 .056	7.42 .52	6.08 .17	.62 .03	1.81 .02			

Rejects retained three weeks. Pulps retained three months unless otherwise arranged.

Registeled Assayer, Province of British Columbia



## KAMLOOPS RESEARCH & ASSAY LABORATORY LTD.

912 - 1 LAVAL CRESCENT - KAMLOOPS, B.C. V2C 5P5 PHONE: (604) 372-2784 - TELEX: 048-8320 **CERTIFICATE OF ASSAY** 

### **B.C. LICENSED ASSAYERS** GEOCHEMICAL ANALYSTS METALLURGISTS

October 24, 1983

ΤO	Minorex	Consul	ting	Ltd.

2391 Bossert Ave..

Kamloops, B.C. V2B 4V6

I hereby certify that the following are the results of assays made by us upon the herein described\_ samples

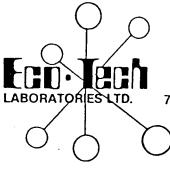
							 	1	
Kral No.	Marked	Au	Ag	РЬ	Zn	Cu			
		ozs/ton	ozs/ton	percent	percent	percent	 		
1 2 3 4	AR-83-3 AR-83-4 AR-83-5 AR-83-6	1.2 1.08 .96 .76	11.5 5.54 1.16 .61	11.0 1.34 1.05 1.26	4.57 2.72 .80 .66	2.24 3.65 .40 .20			

NOTE: Rejects retained three weeks. Pulps retained three months unless otherwise arranged.

Registered Assayer, Province of British Columbia

Certificate No. \_K 6002

Date \_



ENVIRONMENTAL TESTING GEOCHEMISTRY ANALYTICAL CHEMISTRY ASSAYING

783 Notre Dame Drive, Kamloops, B.C. V2C 5N8 - Telephone (604) 372-9700 Telex: 048-8393

September 26, 1983

### ANALYTICAL RESULTS

CLIENT: Hiltec Exploration 34 - 750 Fortune Drive KAMLOOPS, B. C. V2B 2L2

ATTENTION: Mr. A. Hilton

SAMPLE IDENTIFICATION: 2 rock samples received August 30, 1983

GEOCHEMICAL ANALYSES:

Description	<u>Au (ppb)</u>	Ag (ppm)	<u>Cu (ppm)</u>	Fe (ppm)	Pb (ppm)	Zn (ppm)
AR1 83	10,600	235	10,000	165,000	132,000	71,000
AR2 83	47,300	193	14,000	208,000	58,000	7,000
FIRE ASSAYS:						
Description	<u>Au (oz/T)</u>	Ag (oz/T)	<u>Cu (%)</u>	<u>Pb (%)</u>	Zn (%)	
AR1 83	0.294	4.94	0.99	12.7	6.76	
AR2 83	1.21	4.74	1.29	5.37	0.82	

ECO-TECH LABORATORIES LTD. Frank J. Pezzotti, C.E.T. Laboratory Manager

FJP/CK/mil

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### KAMLOOPS - CALGARY - BURNABY