SADIM PROPERTY
SADIM 1-5 CLAIMS RUM 1-8 CLAIMS STEFAN CLAIMS

TRENCHING, GEOLOGICAL MAPPING \& SAMPLING, AND VLF-EM \& MAGNETOMETER SURVEYS

Missezula Mountain Area
Similkameen Mining Division, B.C.
NTS Ref. 92H/10E

Lat 49 44' N; Long $12030^{\prime} \mathrm{W}$
for

HARLOW VENTURES INC 430-580 Hornby Street Vancouver, BC V6C 3B8

FILMED
by
J. J. McDOUGALL, P.ENG.
J. J. McDOUGALL \& ASSOCIATES LTD

7720 surnaytedelrGaGICALBEANCH Richmond, ABS SVEYS ${ }^{1 / 4}{ }^{1}$ M ENT REPORT January 1995


## TABLE OF CONTENTS

Page
INTRODUCTION AND SUMMARY ..... 4
LOCATION AND ACCESS ..... 5
PROPERTY ..... 7
HISTORY AND DEVELOPMENT ..... 8
REGIONAL GEOLOGY ..... 9
LOCAL GEOLOGY ..... 10
(a) Geology of the Sadim and Rum Claims ..... 11
(1) Stratigraphy ..... 10
(2) Structure ..... 12
(3) Alteration ..... 13
(4) Mineralization ..... 14
(b) Geology of the Stefan Claims ..... 14
(1) Stratigraphy ..... 14
(2) Structure ..... 14
(3) Alteration ..... 14
(4) Mineralization ..... 14
GEOTECHNICAL SURVEYS ..... 15
(a) Geophysics ..... 15
(b) Geochemistry ..... 15
PHYSICAL WORK ..... 16
(a) Trenching ..... 16
(b) Sampling ..... 16
(c) Drilling ..... 17
TRENCH SAMPLING COMPILATION ..... 17
(a) Sadim Claims ..... 17
(b) Rum Claims ..... 20
(c) Stefan Claims ..... 21
CONCLUSIONS ..... 21
RECOMMENDATIONS ..... 22
COST ESTIMATES ..... 23
CERTIFICATE ..... 26
LIST OF REFERENCES ..... 27
STATEMENT OF COSTS ..... 29
LIST OF LLLUSTRATIONS ..... Following
Page
Fig 1 Location Map ..... 5
Fig 2 Property (Claim) Map ..... 7
Fig 3 General Geology Map ..... 10
Fig 3a Au-Cu Deposits ..... 10
Fig 4 Local Geology Map-Sadim Claims ..... 15 (Map pocket)
Fig 5 Trench 94-2 ..... 18
Fig 5a Original Trench 19 ..... 18
Fig 6 Original Main Zone (\#1 Trench) ..... 18
Fig $7 \quad$ Vertical Field Magnetic Contours-Sadim 3,4 \& 5 Claims ..... 28
Fig 8 Fraser Filtered In-Phase Contours-Cutler-Sadim ..... 28
Fig 9a Fraser Filtered In-Phase Contours-Seattle-Sadim Seattle-Sadim Claims ..... 28
Fig 9b Fraser Filtered (N-S only) In-Phase Contours-Seattle-Sadim Claims ..... 28
Fig $10 \quad$ Vertical Field Magnetic Contours-Rum 1-8 ..... 28
Fig 11 Fraser Filtered In-Phase Contours-Cutler-Rum Claims ..... 28
Fig 12a Fraser Filtered In-Phase Contours-Seattle-Rum Claims ..... 28
Fig 12b Fraser Filtered (N-S only) In-Phase Contours-Seattle-Rum Claims ..... 28
Fig 13 Sadim 3,4 \& 5 Claims Geophysical Compilation Map ..... 28 (Map pocket)
Fig 14 Rum 1-8 Claims Geophysical Compilation Map ..... 28
TABLES
Table 1 Property Data ..... 7
APPENDICES
A. Geophysics Report ..... 29
B. Table 2 - Sample Results-Trench \#94-1 ..... 32
Table 3 - Sample Results-Trench \#94-2 ..... 33
Table 4 - Sample Results-Trench \#94-3 ..... 34
C. Table 5 - Sadim Drill Results (1987) ..... 35
D. Certificate of Analyses (Check of Significant Assays)
E. Assay Certificates

## INTRODUCTION AND SUMMARY

This report was prepared at the request of Mr. C. Dyakowski(P.Geo), president of Harlow Ventures Inc., 480 - 580 Hornby Street, Vancouver, BC, V6C 3B8, who controls the Sadim claims under option and the Rum and Stefan claims by location.

The Sadim 1-5 claims, the Rum 1-8 claims and the Stefan claims, a contiguous group, are situated in the Missezula Mountain area of southwestern BC. The claims are underlain by rock of the Nicola Belt in a geological environment essentially similar to that hosting the porphyry copper-gold deposits of the Quesnel Trough in the QuesnelCariboo area and the Copper Mtn - Ingerbelle deposits to the south.

This report summarizes the results of the 1994 geochemical, geophysical, geological, and trenching programmes and includes resumes of work earlier performed on the property by the current optionors.

The property has been known to the writer for many years, and was examined more thoroughly at intervals during May, June and October, 1994. Recent geochemical, geophysical, and geological surveys, together with the rehabilitation and deepening of old trenches and excavation of new ones, add to the information available in older records listed in the bibliography. The expenditure involved with the new survey and trenching programs is reported to be at least $\$ 100,000.00$. The property vendors report having spent at least $\$ 260,000$ on the property previously.

Some of the text herein, rather than being rewritten, is copied and referenced from reports based on considerable earlier work listed in the bibliography.

The writer acknowledges the assistance of C. Dyakowski(P.Geo) regarding management of the program, S. Presunka and R. Gibbs regarding geophysics, and K. Christensen regarding prospecting and sampling.

In summary, the preliminary 1994 program embarked upon by Harlow Ventures Inc enlarged upon an earlier 1987 program initiated by Laramide Resources Ltd who had discovered high grade gold quartz mineralization in an area south of Aspen Grove formerly known only for its widespread copper-molybdenum occurrences. A locally unique (?) system of quartz veins assaying up to 4 oz gold/ton was identified in a logging slash and explored by limited trenching and drilling. Geophysical work by Harlow identified several new targets within newly cleared areas not investigated by Laramide. One trench six hundred metres north of the original discoveries earlier investigated exposed some semi-consolidated material assaying $0.4 \mathrm{oz} /$ ton gold while several others were locally anomalous in gold content believed associated with nearby structures not yet revealed. Mineral 'permitting' prevented additional trenching prior to snowfall, especially of one strong electromagnetic zone within commercial timber 600 metres east of the main zone. Deeper trenching of an auriferous vein earlier discovered nearly doubled its exposed length to 54 metres and sampling at 2 metre intervals showed that the quartz sulphide vein contained values of $11 \mathrm{oz} /$ ton gold, 84 oz silver across 0.2 metres of its
average 0.78 m width. All quartz only samples of the vein averaged $1 \mathrm{oz} /$ ton gold, diluted to 0.5 oz assuming interstitial material not sampled assayed zero.

The Rum and Stefan claims containing widespread copper were randomly sampled for low gold content but the limited program results were indeterminate.

## LOCATION AND ACCESS

The Sadim, Rum, and Stefan claims are situated four kilometres east of Highway 5A, 30 km north of Princeton and 45 km south of Merritt, within the Similkameen Mining Division, B.C (Fig.1). The centre of the Sadim property is at $49^{\circ} 43^{\prime} \mathrm{N}, 120^{\circ} 30^{\prime} \mathrm{W}$. The corresponding U.T.M. coordinates are 5509900 N and 677800 E . The Rum claims are located at $49^{\circ} 24^{\prime} \mathrm{N}$ and $120^{\circ} 36^{\prime} \mathrm{W}$ and the Stefan claims are at $49^{\circ} 44^{\prime} \mathrm{N}$ and $120^{\circ}$ 32 'W. The NTS reference is $92 \mathrm{H} / 10 \mathrm{E}$.

Access to the Sadim and Rum claims from Highway 5A is by the Dillard-Ketchan Creek main logging roads which branch east from the highway about 12 km south of the village of Aspen Grove (Fig. 2). The Ketchan Creek road traverses the Sadim 1 and 3 claims in a southeasterly direction. Distance from Highway 5A to the property is approximately 16 km direct line, centering immediately east of the " 18 km " mileage marker on the Ketchan access road.

An alternate access route is by gravel logging road from Highway 5A at a point 2.5 km north of Allison Lake, although the eastern extremity of this road may be blocked off on occasion.

Access to the Stefan claims is by an old logging road immediately east of Highway 5A at Allison Lake, approximately 26 km north of Princeton. A connecting road system serving pipe and powerline also leads to the Sadim claim area.

Within the property boundaries, logging, 'mining' and micro-wave station roads provide good access to all parts of the claim group. The BC Hydro power line crosses the centre of the Sadim 1 and 3 claims.

The property occupies the summit area and the western flank of the broad, north trending ridge separating the deep fault valleys of Summers Creek to the east and Allison Creek to the west. Elevations on the property range from 1615 metres at the summit of Microwave Hill, on the common boundary between Sadim 1 and 2, to 920 metres approximately 200 metres east of Allison Lake, on the southwestern corner of the Stefan claim. The topography is typical of this part of the Thompson Plateau, reflecting the effects of a predominantly northerly structural trend, accentuated by glaciation. Heavily forested, relatively gentle upland slopes are cut by deep, steep-sided, north trending valleys. Bedrock exposure varies and is largely a function of glacial action; generally outcrop is abundant on ridges and along the upper slopes of steep valleys but lower slopes and valley bottoms bear a thick mantle of glacial overburden.


HARLOW VENTURES INC.

## SADIM PROJECT LOCATION MAP

Scale

| HARLOW VENTURES INC. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| SADIM PROJECT LOCATION MAP <br> SIMILKAMEEN M.D., B.C. |  |  |  |  |
| SCALE | DATE | BY | N.T.S. | FIGURE |
| AS SHOWN | OCT 1994 |  | 92H/10E | 1 |

Vegetation is dense on shaded and northerly slopes, but is more open on south facing hillsides; mixed conifers, alder and poplar predominate. About half of the area has been selectively and/or clear cut logged. Snow cover remains at this elevation between late October and April.

The cities of Merritt and Princeton are communities approximately equidistant from the property and connected by Highway 5A. Basic supplies, accommodation and communication services for exploration crews are available in these communities. Local high voltage hydro power lines cross the property. The district has a stable labour reserve which contributes substantially to the mining operations in Princeton and the Highland Valley area. Water for drilling is available on the property. Heavy duty equipment (backhoes) is available in both Princeton and Merritt, and drilling companies are located locally.

## PROPERTY

The Sadim property consists of seven mineral claims containing 96 units, as follows:

Table 1

| $\begin{aligned} & \text { CLAIM } \\ & \text { NAME } \end{aligned}$ | NO. OF UNITS | TYPE | RECORD NO. | REGISTERED OWNER | RECORDING DATE | $\begin{gathered} \text { DUE } \\ \text { ASSESS- } \\ \text { MENT } \\ \text { DATE } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Sadim 1 | 20 | MGS | 2284 | Vanco Explorations Ltd | 10 Oct 84 | 10 Oct/97 |
| Sadim 2 | 8 | MGS | 2285 | Vanco Explorations Ltd | 10 Oct 84 | 10 Oct/97 |
| Sadim 3 | 20 | MGS | 2286 | Vanco Explorations Ltd | 10 Oct 84 | 10 Oct/97 |
| Sadim 4 | 12 | MGS | 2287 | Vanco Explorations Ltd | 10 Oct 84 | $10 \mathrm{Oct} / 97$ |
| Sadim 5 | 8 | MGS | 2518 | Vanco Explorations Ltd | 30 Dec 85 | $30 \mathrm{Dec} / 01$ |
| Stefan | 20 | MGS | 326681 | Harlow Ventures Inc | 22 Jun 94 | 22 Jun/95 |
| Rum | 1-4 | 2 Post | 329990 to 329993 (incl) | Harlow Ventures Inc | 18 Aug 94 | 18 Aug/95 |
| Rum | 5-8 | 2 Post | 330691 to 330694 (incl) | Harlow Ventures Inc | 31 Aug 94 | 31 Aug/95 |

Total acreage approximates 2400 hectares.


## HISTORY AND DEVELOPMENT

The earliest record of work in the Sadim claim area dates back to the early 1960's-the beginning of the porphyry copper exploration boom which persisted until the early 1980's. Most of the work recorded within the Sadim property was concentrated over the Sadim 2 and 4 claims and the Rum 1-8 claims.

The following is a summary of past activity in the property area:
1962 The 40 claim KR group was staked as a copper prospect by Plateau Metals Ltd. Work consisted of a magnetometer survey, bulldozer trenching, and an undisclosed amount of diamond drilling. The claims occupied the area presently covered by the Sadim 2 claim, and the northern part of the Sadim 4 claim.

1966 Adera Mining Ltd. optioned the KR claims and carried out soil sampling and magnetometer surveys followed by diamond drilling. The claims were allowed to lapse.

1968 Blue Gulch Explorations Ltd staked the Pine, Reg and Dy claims. Work consisted of a geochemical survey, bulldozer trenching and a diamond drilling program consisting of 640 metres of NX sized core in 3 holes. The claims occupied the area presently covered by the Stefan claims.

1970 Amax Explorations Inc staked the Rum claims; the southern half of the property lay within the area now covered by the Sadim 2 and 4 claims. The northern half of the property lay within the area now covered by the newly staked Rum 1-8 claims. Work done by Amax consisted of geological mapping, soil sampling, and magnetometer and IP surveys, followed by a nine-hole, 573 metre percussion drilling programme.

1972 Kalco Valley Mines Ltd optioned the Rum claims, then relinquished the property after a programme of mapping and trench sampling.

1973-74 Bronson Mines Ltd staked the Cindy claims, covering ground now lying within the Sadim 1 claim. Mapping and prospecting programmes were carried out.

1974 Ruskin Developments Ltd acquired the Rum claims, and completed geological mapping and soil sampling surveys before allowing the ground to lapse.

1979-81 Cominco Ltd staked 55 claims (Rum 1-55), coincident with the main area of interest covered by the original Rum claims staked by Amax. Cominco refurbished and renumbered the old Amax grid and used it for control of
geological, soil and rock geochemical and magnetometer surveys. Since then, Cominco allowed the claims to lapse.

Peter Peto staked the Coke 1 to 8, now covered by the Rum 1-8 claims. A programme of soil sampling and VLF-EM16 was conducted on the property. Since then Mr. Peto allowed the claims to lapse.

1984-91 The Sadim claims were staked in October 1984 by I. M. Watson and, following the discovery of gold-silver bearing quartz veins, were optioned to Laramide Resources in November 1985. Ownership was subsequently transferred to Vanco Explorations Ltd, a subsidiary of Laramide Resources. Between 1985 and 1987 the claims were explored by geological mapping, geochemical soil/rock sampling, excavator trenching, VLF-EM and magnetometer surveys, and by a total of 15 diamond drill holes totalling 1,235 metres. Further trenching and sampling was carried out in 1991, the most recent work recorded.

In the same lithology immediately south of the Sadim group drilling during the copper rush resulted in a reported inventory on the Axe claims of 115 million tons of $0.36 \%$ copper, $0.012 \%$ Mo, including 55 million tons grading about $0.5 \%$ copper.

The only currently active mine nearby is that of "Fairfield Minerals" about 20 km to the northeast where small quartz veins averaging 1 to $1.5 \mathrm{oz} /$ ton gold are being exploited.

1994- The Sadim Claims were obtained persuant to an option agreement from Vanco Explorations Ltd which was assigned to Harlow Ventures Inc from Richard Van Vloten. Additional claims were staked - the "Rum" and "Stefan" groups - and actively explored during 1994. The work included considerable additional geophysical coverage (Magnetics and Electro-Magnetics) which resulted in several well defined anomalies not previously known some of which were investigated during a necessarily short trenching program late in the season. What appears to be a weakly mineralized northwestern extremity of a major shear zone was revealed near forest cover in the southeast quadrant and a second but distinctly auriferous shear was similarly detected and unearthed 300 meters to the northwest of the "main" mineralized area discovered earlier. A large backhoe was used to widen an earlier (main zone) trench and to extend it westerly, proving continuity of the 1 metre $( \pm)$ wide auriferous vein beyond a series of short offset faults earlier believed to have terminated it. The partially oxidized vein was panel sampled with one enriched (?) portion assaying 11 oz gold/ton, 84 oz silver/ton.

In addition to the above, an earlier discovered but poorly exposed "ladder" or en echelon gold vein system 150 m in width was resampled with particular attention being directed to weakly mineralized small stringers, and gouge,
which may not have been sampled earlier and which could help define a possible open pit mining scenario.

The 1994 work was suspended with early snowfall, leaving further proposed investigations for 1995.

## REGIONAL GEOLOGY (Fig. 3)

(Summarized by I. M. Watson from V. A. Preto's "Geology of the Nicola Group between Missezula Lake and Allison Lake".)

The Upper Triassic Nicola Group rocks, the most important from an economic standpoint, extend from the 49th parallel north to Kamloops Lake, and continue beneath Tertiary cover to emerge in the Quesnel area as the Quesnel Belt (Preto, 1979).

The volcanics of the Quesnel and Nicola Belts form a mixed alkaline and calc-alkaline sequence of basalts and derived breccias, tuffs, and minor sediments.

The volcanic rocks are intruded by comagmatic alkaline plutons, ranging in composition from syenogabbro to alkali syenite. The intrusions appear to be structure related and occur in belts along major lineaments and faults. They vary in size from large to small stocks or batholiths, and have been emplaced into the volcanic centres which produced the abundance of volcanic material (Barr et al, 1976).

In the Allison Lake-Missezula area, Preto has delineated three assemblages-a Western Belt of easterly dipping calc-alkaline flows, pyroclastics and sediments; a Central Belt of alkaline and calc-alkaline volcanics and intrusions, and minor sediments; and an Eastern Belt of westerly dipping volcanic sediments, tuffs and alkaline flows associated with small monzonite porphyry stocks. The belts are separated by major north-striking faults.

Preto believes that the Central Belt of dominantly volcanic rocks originates from eruptive centres along the major fault system, and points out the greater concentrations of mineral deposits along this belt.

The Sadim property lies immediately west of the Summers Creek fault, which marks the eastern boundary of Preto's Central Belt (Fig 2).

The property is underlain by northerly striking intermediate to basic flows, green monolithic and polylithic volcanic breccias, tuffs, and less abundant argillites and limestones. These rocks have been intruded by irregular bodies of gabbroic to dioritic composition. Volcanics and sediments marginal to the intrusions have been variably propylitized (epidote-pyrite-chlorite-carbonate) and locally host erratically distributed copper-pyrite zones.



## LOCAL GEOLOGY (Fig. 4)

## (a) Geology of the Sadim and Rum Claims

## (1) Stratigraphy

For the sake of uniformity, Preto's classification of rock types for the Central Belt has been adopted and amended as necessary. Little information on the geology of the Rum claims is availabie

## Andesites (Unit 1a)

Green to grey-green, fine to medium grained pyroxene andesites, intercalated with tuffs, breccias and sediments, underlie the south and central parts of the Sadim 4 claim. Locally, adjacent to the dioritic intrusions, the andesites are variably altered, with development of chlorite, carbonate, and epidote. The marginal, fine grained altered phases of the diorites are difficult to distinguish in the field.

## Breccia (Unit 1d)

The breccias in the Sadim area are predominantly green in colour. Andesite fragments of variable size occur in a tuffaceous nature. Breccias containing limestone fragments (Unit 1df) are developed locally adjacent to limestone units; presumably these breccias overlie the limestones and are in part derived from them.

## Tuffs (Unit 1e)

Intimately associated with the breccias and flow rocks are tuffs of green-grey hue and an andesitic appearance. The tuffs which weather a tan color are less abundant than the breccias and andesites and their occurrence appears to be lenticular, but this may be a function of structural disruption by cross faulting, more than depositional discontinuity as they re-occur along several kilometres of strike length. Possibly significant varieties of the tuffaceous unit were noted in the south central part of the Sadim 2 and 4 claims; here a fairly distinctive purplish grey tuff (Unit let) containing small andesitic fragments, is intercalated with rusty-buff weathering, fine to medium grained rock containing orange hematite along numerous fracture planes (Unit 1eth). This latter unit is highly fractured and contains narrow ( $2-30 \mathrm{~cm}$ ) sulphide bearing quartz veins, which trend generally east-west and dip at varying degrees to the south. The fractures/quartz veins appear to have developed as a result of late stage east-west cross faulting. The quartz veins tend to be craggy
along their margins and centres, and contain patchy and weakly disseminated pyrite, chalcopyrite, and rare galena. The wall rocks are finely pyritised. The host tuffs are not well exposed, occurring as small outcrops and distinctive float over a total distance on the claims of nearly $1,000 \mathrm{~m}$, but more continuously over 300 m apparent strike length. Sampling of the tuff and quartz veins revealed anomalous gold content. The tuffs are the most important rock units locally as they host the gold veins of interest.

## Limestone (Unit 1f)

Dominantly pale grey, fine grained limestones occur as apparently lenticular bodies within the tuffaceous/breccia sequence. Several narrow beds have been identified in the south and central part of the claim group. ie. immediately east of, and faulted partly within, \#2 trench.

## Argillite (Unit 1g)

Dark grey, fine grained and finely bedded argillites also occur within the pyroclastic rock. (Bedded argillites were noted in trenches 94-8 and 9 in the south eastern part of the claim group).

## Diorite (Unit 5)

Grey, pale grey, fine to medium grained crystalline pyroxene diorite underlies the Rum claims and the eastern part of the Sadim claims.

## (2) Structure

Watson (1994) reports that exploration on the Sadim 3 and 4 claims has revealed shear related quartz vein stockworks in a northerly striking, easterly dipping sequence of carbonatized and pyritized andesitic tuffs. Watson's "Main Zone" occurs above a major north striking, east dipping shear zone, possibly a thrust fault. The tuffs in the hanging wall of the shear have been intensely fractured, leading to the development of the quartz vein stock work. Veins strike easterly, approximately normal to the major shear, and dip moderately to steeply south; they range in size from hair width to greater than one metre. A few tens of metres east of Watson's Main Zone a series of parallel shear-related alteration zones is exposed. Generally the shearing and alteration is less intense than in the Main Zone and the quartz vein stock work is not as strongly developed. However, several larger quartz veins have been exposed by trenching; in trench $94-2$, a well mineralized quartz vein ranging up to 1 metre wide strikes easterly and dips vertically to steeply south. Numerous
lineaments on the Rum (copper) claims suggest numerous faults present also.
(4) Mineralization

Watson (1994) reports that the quartz stock work veins contain erratically and generally weakly disseminated sulphides, mainly pyrite, with minor chalcopyrite, sphalerite and, less commonly, galena. Sulphide and gold-silver concentration is related to vein size and density of fracturing. The presence of galena is a good indication of elevated gold and silver content. Native gold has not been identified although up to $11 \mathrm{oz} /$ ton gold does occur. Polished sections reveal the presence of lead and silver tellurides (altaite and hessite) and it may be possible that gold is also present as a telluride. The gold to silver ratio averages a consistent 1:8.

The geological environment on the Rum claims is similar to that of the Sadim claims. The main difference is that a micro diorite stock, which is in contact with the Nicola Group along the regional Missezula fault, has intruded the Nicola rocks. This has resulted in weakly mineralized 'cupolas' (?) within the Nicola rocks shown to contain at least $0.2 \%(+)$ copper as chalcopyrite across widths of 200 feet. Several soil samples have also shown anomalous 300 and 400 ppb gold contents.

The Rum claims, which are largely forested, were explored by VLF geophysics but insufficient time prevented Harlows' investigation of all anomalous results recorded.

Watson suggests, as do the current workers, that the nature and setting of the alteration and mineralized veins suggest a mesothermal type deposit emplaced via major shears and related fracture zones, and originating from an acid intrusion at depth.

## (b) Geology of the Stefan Claims

## (1) Stratigraphy

The Stefan claim has not been investigated thoroughly, but several of the same rock units appear present as at the Sadim property. Memoir 243, G. S. C. by H. M. A. Rice, 1946, describes Jurassic Coast Intrusive granites and granodiorites, contacting Triassic Nicola Group volcanic and sedimentary rocks, as occurring in the area of the claims.

In the weakly mineralized zone the intrusive rock is best described as a pinkish weathering medium to coarse grained fractured granodiorite and the most common Nicola unit as a massive greenish andesite.

## (2) Structure

F. R. Poloni (1973) reports that the Allison Lake fault zone, consisting of an echelon arrangement of closely related faults, occurs immediately east of Allison Lake. This zone (over 30 metres wide) of gossan-like material, is exposed in a road cut near the south end of Allison Lake. A splay fault branching from the Allison Lake Fault is believed to extend easterly to and beyond the Stefan copper prospect.
(3) Alteration

Pyritization and some epidotization are present in volcanic rocks exposed near the Stefan prospect. Near surface the pyrite has oxidized to limonite and, mixed with the overburden present prevents a clear portrayal of geological features.

## (4) Mineralization

Weakly disseminated chalcopyrite and pyrite within Nicola host rocksmostly massive green andesites and a 'wedge' of intrusive rockassociated with an easterly splay (?) of the Allison Lake faultconstitute the poorly exposed geological environment of the oxidized prospect. Copper values seldom exceed $0.2 \%$. Minor "porphyry type" copper mineralization is present in the granodiorite (?) wedge or cupola but gold values are not anomalous.

Except for 3 drill holes totalling 640 metres (records not available) additional exploration appears not to have progressed much beyond the soil sampling stage although about a dozen trenches are present none of which offer good exposures.


## GEOTECHNICAL SURVEYS (Figs 7 to Fig 14)

(a) Geophysics

Geotechnical work completed in 1994 consisted mostly of geophysical (magnetic and EM 16 (VLF) surveys) conducted by Presunka Geophysical Explorations Ltd. over a portion of the Sadim 3,4, and 5 claims and most of the Rum claims. Earlier VLF surveys were oriented east-west designed to cross north-south geological trends, and were limited largely to the central logged-off area of the claims. Unfortunately the veins and shears of interest also trended approximately east-west, nullifying results of much of the early work.(Complications possible are highlighted in Figures 8 and 9a.)

During the current survey, north-south lines were spaced 50 meters apart and readings, generally both EM and Mag, taken every 20 m along them. On the Sadim 3,4, and 5 and the Rum claims 56 kms of $\mathrm{N}-\mathrm{S}$ line and 3.1 kms of EW line were established resulting in a total of approximately 1000 recording points. Within this area 'Fraser filtered' plotting revealed a number of E-W trending EM anomalies. One large northwesterly trending magnetic anomaly plus numerous moderate 'spot' ones were also recorded. Computer plotted geophysical results are shown on Figs 7 to 13 (inclusive) attached, and the report is included in Appendix A. Several well defined east-west anomalies remain to be tested on the Sadim Claims as do several randomly oriented ones, including magnetics, on the Rum claims which may be related to copper-gold (?) mineralization related to microdiorite intrusions.

Readily identifiable VLF-EM anomalies are plotted on Figs 13 and 14, and discussed in appendix A.

## (b) Geochemistry

Geochemical surveys conducted in 1994 were restricted to a few spot tests on the Stefan claims where copper was shown to be anomalous in soils on occasion (to $1,968 \mathrm{ppm}$ ) but no meaningful anomalous gold was noticed.

Earlier soil sampling carried out by Watson (1985) revealed a maximum 65 ppb gold in the northeastern corner of Sadim \# 4 claim and 85 ppb on the boundary between Sadim \# 3 and \# 4 claims. The surveys were not considered a useful tool due to the lack of sufficient sulphide in the quartz vein lodes being searched for. Numerous " 32 element" ICP analyses by Harlow of mineralized quartz veins revealed no usefully anomalous antimony, arsenic, or mercury present but did suggest that lead, copper, zinc, cadmium and occasionally molybdenum and even gold itself could be useful geochemical indicators of sulphide-bearing systems over both the Sadim and Rum claims.

## PHYSICAL WORK

With the exception of a large geophysical program involving over 1000 ribboned data points on a grid totalling nearly 3 square kilometres, physical work in 1994 was restricted to trenching and sampling of both old and new discoveries. Road access to most of the property had been installed by earlier logging operations.

## (a) Trenching (Fig 5)

Earlier trenching by a small backhoe in 1991 included a north-south trench (Trench 94-1) some 200 meters in length which investigated an en echelon or 'ladder vein' auriferous quartz vein system centrally located near the access road on Sadim \# 4 claim. Seven cross trenches 50 meters in length extended east-west from the main trench. The 'Main gold bearing Vein' was partially uncovered by Trench 94-2 (located uphill easterly from the lower Trench 94-1) and directed east-west for a distance of about 35 meters. In addition, at least 6 other trenches were completed in the central area. All trenches were filled-in with the exception of Trench 94-1 and Trench 94-2.

During 1994, Trench 94-2 (the 'vein' trench) was extended using a larger backhoe to a total cumulative length of 55 meters, resulting in the discovery of the veins' westerly continuation to a point at which the backhoe would have trouble continuing steeply downhill. Trench 94-2 was left open for sampling purposes.

A large several hundred metre-long EM anomaly located in the southeast portion of the claims, but 'on strike' with the main workings, was trenched (Trench 94-7) to 4 metre depths near its western extension in an area where damage to standing trees would be negligible. Two other similarly short exploratory trenches, Trench 94-8 and 9, tested the logged-off area to the immediate west. Shallow spot trenches \# 13, 14, and 15 tested anomalies near the valley bottom northwest of Trench 94-13, while Trenches 94-4, 5, and 6 tested uphill north of the latter. Water prevented the completion of Trench 94-13.

Trench 94-3, about 300 metres northwest of Trench 94-2 investigated a float occurrence and projected EM anomaly with positive results. Several other attempts at trenching were abandoned.

## (b) Sampling

All exploratory trenches completed in 1994 were sampled, albeit across very narrow and restricted rock exposures in most cases. The main "ladder vein" trench (Trench 94-1) was sampled more thoroughly than previously, with respect to some interstitial altered (pyritic) and gouge material between the numerous auriferous quartz cross veins, as a possibility still exists that an open pit scenario could be generated.

The 'main vein' Trench 94-2 exposed the eastern portion of the high grade vein far better than previously, allowing much better controlled channel sampling across it for its exposed length now measuring nearly 55 metres.

Several other localities, including a malachite stained bluff on the upper logging road, and some character samples on the Rum and Stefan claims (for gold in preference to copper) were also tested.
(c) Drilling

Table 5 (Appendix C) summarizes assay results from vertical Diamond Drill Holes 87-1 to 87-14 conducted within the Sadim claims by Vanco Explorations (Fig. 4). Diamond Drill Hole 87-15, an inclined hole, tested for an easterly extension of vein \#2. Of interest is that all holes near exposed vein systems did intersect anomalous gold, although the only appreciable intersection (in DDH 87-6 about 200 metres south of trench 94-2) reportedly contained 8.3 metres averaging of $0.11 \mathrm{oz} / \mathrm{ton}$ gold.

It is unclear as to why, given steep dipping veins, most of the Vanco holes were not inclined unless they were intended to continue deeper. In the Trench 94-1 area, only one or possibly two holes were able to penetrate a shear zone encountered.

## TRENCH SAMPLING COMPILATION RESULTS

## a) Sadim Claims (1986-1991)

Trenching and drilling carried out on the Sadim claims (Watson 1985,1994) by Vanco Explorations resulted in numerous assays, a summary of which is included followed by recent work results on the same prospects:

## TRENCH 94-1

(1) Trench sampling by Vanco in the Main Zone Trench 94-1) largely of numerous cross-cutting quartz veins in a lode-like arrangement, but containing some interstitial gouge material, returned assays ranging from 50 ppb to 6,390 ppb gold (. $019 \mathrm{oz} / \mathrm{t}$ ). Six vertical NQ diamond drill holes spaced across the indicated 200 metres of zone returned gold assays ranging to $19,800 \mathrm{ppb}(0.58$ oz) gold, 159 ppm silver--the latter across 1 metre in Diamond Drill Hole 87-6. This was included within a 8.3 m section assaying $0.11 \mathrm{oz} /$ ton gold. However due to problems in a wide easterly dipping shear zone only two of the holes reached proposed depth.
(1b) Harlow Ventures (1994) re-sampled selectively along the 180 metres of the 200 metre Trench 94-1 ( 31 chip and channel samples - Table 2, Appendix B). Assay results ranged up to 0.33 oz gold and 2.3 oz silver, generally across the
better exposed $2-20 \mathrm{~cm}$ wide (including gouge) quartz veins. The total 180 metres of trench, of which only 11.27 meters of readily identifiable mineralization was sampled at intervals along it, returned a calculated average grade of 0.004 oz ( 130 ppb ) gold with interstitial material assigned a grade of zero) while the sampled intervals totalling 11.27 metres averaged $0.067 \mathrm{oz} /$ ton. The best section shown, 10 m to 39 m , averaged $0.073 \mathrm{oz} /$ ton gold over the picked 7.13 metres of sample for an average 29 metre calculated grade of $0.018 \mathrm{oz} / \mathrm{ton}$.

In this sampling program it was assumed (probably incorrectly) that material (mostly weakly pyritic tuff, and some oxide and gouge) interstitial to the numerous quartz veins contained no gold content of interest - at least not enough to influence the overall low grade of the investigated bulk tonnage scenario. However it did indicate that the generation of quartz veins encountered was distinctly anomalous in gold and should be the object of further search in this overburdened area where float indicated that the favourable tuff host rock was widespread.

## TRENCH 94-2

(2) Uphill to the east of the north end of Trench 94-1 a more sulphide-rich but surface oxidized, much faulted quartz vein up to 1 metre wide was later discovered by Vanco which returned gold assays of up to $4.3 \mathrm{oz} /$ ton gold over widths of from 0.3-1.0 metres (Fig. 5a). The vein was trenched by a small backhoe revealing a length of about 15.5 metres averaging 2.44 oz gold across 0.57 meters. A northerly inclined drill hole (DDH 87-15) indicated that the vein did not extend easterly toward an obvious North-South lineament probably marking a strike-slip fault (?) or erosion depression at or near the contact of a limestone bed. A second but vertical drill hole (\#13) a short distance south of the vein, reportedly failed to intersect it but given the steep ( $-70^{\circ} \mathrm{S}$ ) to near vertical dip, plus fault complexity revealed by the trenching, an inclined hole would have been far more informative. However it did intersect 2 metres at 26 metres of depth assaying 0.067 oz gold/ton.
(2b) Investigation by Harlow using a heavier duty back hoe (Trench 94-2) showed that the sinuous vein was fault controlled and internally complexly faulted itself. It did not appear to dip southerly shallow enough for DDH 87-13 to have intersected it. The fault contacts are steep but in several locations a southerly dip component is present, but it seldom is shallower than $-70^{\circ}$. In addition, the vein was shown not to terminate at it's western "assumed extremity" but to slip northerly, thence westerly, thence southerly and to continue westerly along its initial course. The exposed length was now increased to 52 metres, approximately double its earlier exposure. Although diminishing somewhat in width, the vein continues westerly but local steepening terrain prevented further excavation at this time. The total vein exposure was sampled more thoroughly by Harlow in 1994 as detailed in Table 3 (Appendix B) and Fig. 5, a map of Trench 94-2.




Forty four channel samples restricted to a quartz component and associated gouge only, and several "grabs", were taken along the full exposure of the Trench 94-2 vein. Surface oxidized material was avoided as much as possible but greater depth of sample would be required to involve fresher mineralization only. Some secondary enrichment is presumably involved as is some possible leaching. Fault gouge is common. Due to increasing thickness of overburden the full width of the southerly portion of the irregularly trending vein was not totally uncovered.

Grades encountered ranged to 11 oz gold/ton and 84 oz silver/ton, the latter over narrow 20 cm widths. No free gold was seen and is believed to occupy small fractures in the pyrite or to be present as a telluride. Calculations involving the wider portion of the vein -13 m W to $32 \mathrm{~m} \mathrm{~W}(19 \mathrm{~m})$ which averaged 0.78 m wide, returned (1) a 1.09 opt weighted average (uncut) for the quartz component only, or (2) a calculated average of 0.5 opt assigning a zero gold content to the $50 \%$ unsampled interstitial vein material. Grades over the east and west extensions not calculated ranged to $1.15 \mathrm{oz} / \mathrm{t}$ gold across narrow $(10-20 \mathrm{~cm})$ widths of exposed quartz although the unsampled alteration widths were several times greater.

## TRENCH 94-3

(3a) This exploratory prospect trench was put in during 1994 to test in the general vicinity of some quartz float and weak projected geophysical (EM) response along the trend of the favourable tuff horizon about 600 metres northwest of Trench 942 (Fig 5). It is about 30 metres in length, 3-4 metres deep, and oriented northwesterly. No distinct mineralized structure was encountered although alteration, gouge, and fragmental quartz within highly surface altered tuffaceous rock suggests proximity to a better defined better mineralized (?) zone below depth of weathering. It is probably related to a major structural feature, possibly a shear or thrust fault. Assays of grabs of gouge and broken tuffaceous and limey tuff ranged to 0.47 oz gold, 3.33 oz silver per ton. Due to backhoe commitments elsewhere and lack of permit application, no follow-up work was carried out in 1994.

Table 4 (Appendix B) notes a grab sample taken of 'quartz and gouge' at 8 metres South assaying $0.470 \mathrm{oz} /$ ton gold, $3.33 \mathrm{oz} /$ ton silver, followed by a second grab in the same vicinity (north end of the trench) containing gouge and some "grey rock" assaying $0.17 \mathrm{oz} / \mathrm{ton}$ gold, 1.15 oz silver/ton. Further south (12-16 m ) along the trench some "quartz, gouge, and limey tuff fragments" assayed $0.046,0.053$, and $0.012 \mathrm{oz} /$ ton gold but no defined vein structure was noticed at this shallow depth.

The \#3 occurrence in this unexplored and largely drift-covered area is an obvious drill target for a proposed 1995 program.

## Additional Sampling, Sadim Area

Additional trenching completed by Vanco appears to have been limited to the main zone area. Numerous samples were taken and low but erratic, weakly anomalous results were reported. All but the 2 main trenches were filled in.

Harlow personnel collected samples from 15 additional new trenches (Fig 4) without significant results, one problem being that most centred on geophysical anomalies whose exact target locations could not be isolated in the time available. One trench, 94-7, tested near the westerly extremity of a large EM anomaly which extended easterly into forested ground, access to which would require additional permitting not readily available. Quartz fragments contained visible but weak sulphide mineralization, including galena, whose source remains to be better defined.

Additional trenches located on Fig. 4 were sampled only if they appeared to reach bedrock. Those exhibiting anomalous gold ( $50 \mathrm{ppb}+$ ) in large "grab" or 1 metre 'channels' included:
(a) Trench 94-6
(b) Trench 94-7
(c) Trench 94-12
(d) Trench 94-16
$110,110,120,120 \mathrm{ppb}$ assoc with anomalous $\mathrm{Zn} \& \mathrm{Cu}$ 55 ppb
$69,77 \mathrm{ppb}$ assoc with weakly anomalous $\mathrm{Zn} \& \mathrm{Cd}$ $128,138 \mathrm{ppb}$

The weakly anomalous higher gold-silver values in other trenches were associated with copper, lead, zinc, cadmium and very occassionally antimony as noted on the ICP analyses.

All assay determinations were done by Acme Analytical Laboratories Ltd. Check sample assays by IPL of Vancouver of the more significant selected pulps confirmed Acme results (Appendix D). It is interesting to note that all ICP gold assays greater than 2 grams/ton (at least 30 in number) were confirmed by fire assay within normal check assay limits, indicating that no singular 'nugget effect' influenced the higher assays. Complete 1994 project assays with locations are shown in appendix E.

## b) Rum Claims

Trench sampling was carried out by Peter Peto (1985) with results as summarized below:

11 rock samples were taken in 1985. Samples R-1, R-2, S-1, S-2 and S-3 were taken from a trench resulting in a grade of $0.10 \% \mathrm{Cu}$ across 450 feet, samples R-8 and S-10 from a trench that ran $0.20 \% \mathrm{Cu}$ across 170 feet and samples R-10 and R-11 from a trench that ran $0.27 \%$ Cu over 180 feet.

Soil sampling by Peto in 1985, 1986 and 1987 indicated several zones anomalous in gold ( +100 ppb ).

Harlow prospectors collected samples from a number of old trenches and mineralized outcrop on the re-staked Rum Claims as little information was available on the gold content. Copper values ranged to $7,666 \mathrm{ppm}$ and gold values ranged to 75 ppb .
c) Stefan Claims

Harlow prospectors sampled an old trench that returned a copper assay of $0.36 \%$ and investigated an earlier geochemical anomaly, but, in the short time available, could not identify any controlling structure. Gold assays were very low.

## CONCLUSIONS

The large area covered by the Sadim Group claims in the Aspen Grove area of B.C. contains a large expanse of favorable Upper Triassic Nicola-type tuffaceous host rock, bordered by calcareous units and intrusions, and known to contain numerous veins of gold-bearing quartz. The geological environment is such that additional veins, singulariy or as lodes, should be present, in a 'crosscutting' mode relative to stratigraphy, concealed by forest and light but extensive overburden. Structure is, however, more complicated than is apparent on surface and may involve major thrust faults in addition to numerous local faults such as evident in the trenches.

The Rum claims cover large but low grade copper-molybdenum deposits to the north which have been partially explored in the past, and the Sadim claims border a large 'inventoried' porphyry type copper deposit to the south-all within the same favourable geological environment including proximity to the tuffaceous unit. To date, gold appears limited to the Sadim ground, however, where an east-west fracture system of local prominence crosses the north-south lithologies and a large easterly dipping fault or shear zone is suspected. To date, all gold bearing occurrences have been discovered within a relatively small logged-off area, where short roads were already present, and the adjoining heavy timbered terrain has been largely avoided. During 1986 and 1987 Vanco Explorations Ltd uncovered a tension fracture controlled east-west lode or 'ladder vein' system nearly 200 metres in width in which the numerous quartz veins present were all shown to be auriferous with maximum grades reaching $1.18 \mathrm{oz} /$ ton gold but weighted averages of all veins (as resampled by Harlow (1994) and totalling 11.27 m in total) was $0.067 \mathrm{oz} /$ ton gold. The length of the east-west veins, tested by minimal drilling, was apparently short and vein spacing too wide to support the open pit scenario envisioned, but the sampling showed gold to be distributed throughout the east-west vein system. However four of the six holes were lost at relatively shallow depths due to an underlying easterly dipping shear which they could not penetrate. Also the steep southerly dipping veins were tested by vertical drill holes which may not have sampled them adequately, within the short depth involved.

Vanco's later discovery of at least one single unexposed EW quartz vein uphill 100 m east of the north end of the 'lode trench' was followed by sampling which reportedly averaged $2.44 \mathrm{oz} \mathrm{gold} / \mathrm{ton}$ across 1.91 ft of the vein as then exposed for 50.91 feet. Harlow then extended the vein easterly for a total length of about 170 feet and, by sampling only quartz and gouge within it, established an uncut target grade of about 1 $\mathrm{oz} /$ ton gold across an average width of 2.56 feet along 62 feet of the freshest vein exposure. If interstitial material was evaluated at $0 \mathrm{oz} /$ ton, the average grade of the whole vein was about $0.5 \mathrm{oz} /$ ton gold, again a good target grade. Vanco's sampling (Fig.5a) of approximately the same section included all interstitial material.

Harlow's program concentrated on locating more EW veins by orienting their geophysical EM grid across the trend of the veins rather than with it as Vanco had done. They were successful in detecting large (to 30 ft wide) shear zones containing weakly mineralized quartz fragments several hundred meters to the south. Unfortunately the better zones indicated were within a forested area which required additional access permitting too late in the year to be implemented. One anomalous zone trenched (Trench 94-3) 200 metres north of the main zone (adjacent to the access road) returned grab samples of quartz and gouge assaying over $0.4 \mathrm{oz} /$ ton gold but no defined system could be determined at this shallow depth with no excavator time remaining. Other trenches returned only low values in gold or failed to reach the target depth.

It is concluded that at least $70 \%$ of the geologically favourable portion of the Sadim claims has yet to be investigated, particularly where evidence of cross structures exist. A study of airphotos suggested several lineaments which have not been investigated, and geophysics will be required to delineate potentially auriferous shear zones which may have some bearing on configuration at depth-ie. below the postulated thrust fault in the main zone area. Fracture vein systems, which may not react to geophysical methods, may be weakly but distinctively prone to selected geochemical methods.

Given copper price stability, some of the known copper-molybdenum occurrences on the Rum and Stefan claims could be further mapped and tested, particularly within areas known to contain anomalous gold in soils.

## RECOMMENDATIONS

It is recommended that exploration for gold-bearing zones of consequence continues in the Sadim area, either with or without a copper associate.

It has been shown that most (all to date) auriferous veins crosscut the regional trend of the favorable Nicola rocks within or near the tuff units well exposed along several miles of strike length. Thus a detailed lineament map should be prepared from stereo airphotos (excellent recent color photos are available) depicting even the faintest crosscutting feature in addition to obvious creek occupied lineaments known to have been untested to date. Where identifiable on the ground, and extending north and south from known auriferous areas first, and possibly supported by backhoe trenching with or without geophysical-geochemical back-up, short drill holes should be employed to test for such
crosscutting vein systems which regionally to date appear restricted to the Sadim holdings.

It was shown based on Harlow's 1994 work that crosscutting shear zones are readilly detected and may be mineralized on occassion. The EM 16 work clearly displayed at least 6 major crosscutting ( $\mathrm{E}-\mathrm{W}$ ) conductors in the Sadim Claim area which should be at least tested by short drill holes, or by trenching, where they intersect favorable tuff host rocks. Some of the suggested EM 16 targets are in fairly heavilly timbered areas and access permitting will be required.

In the main known Sadim gold area, the effect of the proposed shear zone or thrust fault as a contributor to mineralization is not known. Several northerly directed angle holes from a ground anchored drill designed to probe vein continuity below the bottom thrust fault (?) 'plate' of the known auriferous zone in the vicinity of the \#1 zone is suggested, assuming such a drill arrangement can penetrate without the problems faced by Vanco. Several short drill holes should determine continuity at depth of the \#2 vein.

The several anomalous gold-in-soil locations in the cupriferous Rum claim area should be trenched in an attempt to localize or expand any target prior to drill testing.

The Stefan property contains no perceived targets and work should be deferred until some valid target suggestions are forthcoming.

## COST ESTIMATES

Cost estimates are based on progressive stages depending on field results. The 1994 work program has already defined several qualified drill targets, and a continuation of more of the same basic work is in order, particularly in the untested forested sections. Exploratory drilling will be followed up by definitive drilling as conditions permit.

## STAGE I

This stage will involve backhoe and shallow drill testing of existing targets and some
ground exploration for new ones.
Diamond Drilling (Exploratory)
700 m in $10-15$ shallow holes @ $\$ 70 / \mathrm{m}$ (contract) ..... $\$ 49,000$
Overburden and Rock Trenching ..... 15,000
Mapping and Surveying
Geological ..... 4,000
General ..... 1,000
Salaries and Wages (sampling and core logging, etc) 28 man days @ \$200/day average ..... 5,600
Lodging @ \$50/man/day ..... 1,400
Transportation ..... 2,000
Field Supplies ..... 2,000
Assaying ..... 5,000
Supervision ..... 5,000
Overhead (Reports, Office Costs, etc) ..... 5,000
Permitting and Rehabilitation ..... 4,000
Assessment Filing ..... 1,000
Sub Total ..... 100,000
Contingency ( $10 \%$ ) ..... 10,000
TOTAL ..... \$110,000

## Stage II

This stage is dependent on positive Stage I results which should indicate meaningful continuity of newly discovered mineralization or important extension to known deposits.

Definitive and exploratory diamond drilling (contract)
Fill-in and deeper drilling, $1,500 \mathrm{~m} @ \$ 70$ per m
$\$ 105,000$

## Surveys

Topo, geological and local geophysics (contract) 10,000

Rock and surface trenching
Backhoe and cobra drill 10,000

Assaying and metallurgical testing $\quad 10,000$

Wages
100 man days @ $\$ 200$ per day $\quad 20,000$
$\begin{array}{ll}\text { Transportation } & 4,000\end{array}$

Lodging
100 man days @ $\$ 50$ per day $\quad 5,000$
$\begin{array}{ll}\text { Field supplies } & 4,000\end{array}$
$\begin{array}{ll}\text { Supervision } & 10,000\end{array}$

Overhead
Office, communication, environmental, etc. $\quad 7,000$

SUBTOTAL $\quad 185,000$
Contingency $\quad 25,000$

TOTAL $\underline{210,000}$
TOTAL. STAGES I AND II $\quad \mathbf{3 2 0 , 0 0 0}$

## CERTIFICATE

## I, James J. McDougall, Do Hereby Certify:

1. That I am a consulting geologist with a business office at 7720 Sunnydene Road, Richmond, BC, V6Y 1H1 and President of J.J. McDougall \& Associates Ltd., Consulting Geologists.
2. That $I$ am a graduate in geology of the University of British Columbia (M.Sc. 1954).
3. That I am a Registered Professional Engineer (Geological) in good standing with the Association of Professional Engineers and Geoscientists of the Province of British Columbia.
4. That I have practised my profession as a geologist for the past forty two years.
5. That the information, opinions and recommendations in the attached report are based on studies of the available literature on the area occupied by the Harlow Ventures Inc. mineral claims, and on several ground observations, the most recent being October 4 th and 5th, 1994.
6. That $I$ own no interest in the securities or property holdings of Harlow Ventures Inc., nor do I expect to obtain any such interest.
7. This report may be used for a prospectus pertaining to the current exploration program of Harlow Ventures Inc.
 19 q4.

## REFERENCES

Barr, D. A., Fox, P. E., Northcote, K. E., and Preto, V. A., 1976. "The Alkaline Porphyry Deposits-A Summary"; in CIMM Special Vol. No. 15.

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Watson, I. M., (1985). "Reconnaissance Geological and Geochemical Surveys of the Sadim Group", for Laramide Resources Ltd.

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\#1857-1969 Geochemical Report on the Allison Lake Claims by A. C. Skerl for Blue Gulch Exploration Ltd.
\#3363-1971 Geological, Geochemical and Geophysical Report on the Ketchan Creek Property by J. Christofferson, G. De Paoli, and C. Hodgson for Amax Exploration Inc.
\#4464-1973 Report on Geochemical and Geological Surveys by John R. Poloni for Blue Gulch Explorations Ltd.
\#5044-1973 Geological and Prospecting Reports on the Cindy Group by D. C. Malcolm and E. Sleeman.

| \#5034-1974 | Report on Geochemistry and Geology of Pine Claims by J. R. Poloni <br> for Pacific Resources Development Ltd. |
| :--- | :--- |
| \#6036-1976 | Geochemical Report on Rum Claim Group by D. G. Mark for Ruskin <br> Developments Ltd. |
| \#8352-1980 | Ground Magnetic and Soil Geochemical Survey over Part of the Rum <br> Property by D. T. Mehner for Cominco Ltd. |
| \#9407-1981 | Soil Geochemical Survey over Part of the Rum Property by D.T. <br> Mehner for Cominco Ltd. |
| \#14304-1985 | Geochemical Report on the Coke 1-8 Claims by P. Peto. |
| \#15007-1986 | Geophysical Survey on the Coke 1-8 Claims by P. Peto. |
| \#15969-1987 | Trenching, Geological Mapping and Sampling and Diamond Drilling <br> Programmes on the Sadim Property Sadim 1 - 6 Claims by I. M. <br> Watson \& Associates Ltd. for Laramide Resources Ltd. |
| \#16206-1987 | Report on the 1987 Geochemical Sampling on the Coke Property by <br> E. W. Yarrow for P. Peto. |
| \#16889-1988 Reconnaissance Geochemical Rock Sampling, VLF-EM |  |
| Magnetometer Surveys, Trenching, Geological Mapping and Sampling |  |
| and Diamond Drilling Programmes by I. M. Watson \& Associates |  |

## STATEMENT OF COSTS

PERSONNEL
C.I. Dyakowski, P.Geo
Project Management, Geology, Mob, Demob \& Supervision 36 days @ \$350/day ..... \$12,600
S. Presunka, Geophysicist
Survey Coordination, Equipment Rental (2- Rhonka VLF-EM's, 1 Proton Magnetometer, 1-Fluxgate Magnetometer),Interpretation \& Report Writing 38 days @ \$350/day ..... 13,300
R. Gibbs, Prospector
VLF-EM Operator, Drafting, Sampling 42 days @ \$250/day ..... 10,500
K. Christensen, Prospector
Prospecting, Mapping, Sampling \& Mag Operator 52 days @ \$250/day ..... 13,000
H. Fitch, Helper
35 days @ \$200/day ..... 7,000
Subtotal 1 ..... $\mathbf{\$ 5 6 , 4 0 0}$
EQUIPMENT RENTAL
Cat 325L Excavator
Trenching 51.5 hrs @ \$128.5 ..... \$6,617.75
Mob, Demob \& Fuel ..... 1,093.53
Equipment Repair ..... 48.97
TRANSPORTATION ..... 30
Vehicles
Ford F250 Supercab 4x4
36 days @ \$60/day ..... $2,160.00$
Dodge Van
16 days @ \$50/day ..... 800.00
Fuel ..... 1,645.12
Tolls ..... 90.00
Bus Fares ..... 54.90
Air Fares ..... 106.00
Cab Fares ..... 19.75
EXPLORATION FIELD SUPPLIES ..... 680.38
MEALS \& ACCOMODATION ..... 10,732.31
WORKER'S COMPENSATION BOARD
Assessment ..... 2,805.00
TELEPHONE
Charges ..... 328.91
ASSAYS
Acme Analytical Labs ..... 3912.65
International Plasma Laboratory Ltd ..... 64.00
OFFICE WORK
S J Geophysics Ltd ..... 3940.00
Geophysical \& Geological Drafting
J.J. Mc Dougall, P.Eng
Report Preparation \& Property Examination ..... 3152.25
Reproductions and Photocopies ..... 589.93
Word Processing ..... 499.65
Maps ..... 8.56
Subtotal 2 ..... 39,349.66
Overhead applied to subtotal 2 @ 15\% ..... 5,902.44
Subtotal 1 and subtotal 2 including overhead ..... 101,652.10
GST ..... 7115.64
GRAND TOTAL ..... 108,767.74

SADIM 3, 4 \& 5 CLAIMS $\quad$| 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 0 | 0 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| $\forall$ | $n$ | $n$ | 0 | 6 | $\wedge$ | $\wedge$ | $\infty$ | $\infty$ | 0 |

Aspen Grove Area Similkameen M.D., B.C.

October, 1994<br>N.T.S. : $92 \mathrm{H} / 10 \mathrm{e}$

Presunka Geophysical Explorations Ltd.

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## HARLOW VENTURES INC.

SADIM 3, 4 \& 5 CLAIMS
Aspen Grove Area Similkameen M.D., B.C.
October, 1994 N.T.S.: $92 \mathrm{H} / 10 \mathrm{e}$
Presunka Geophysical Explorations Ltd





## HARLOW VENTURES INC.

SADIM 3, 4 \& 5 CLAIMS
Aspen Grove Area
Similkameen M.D., B.C.
October, 1994
N.T.S. : $92 \mathrm{H} / 10 \mathrm{e}$

Presunka Geophysical Explorations Ltd.


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1000. N
800. N
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400. N
200.
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Figure







## APPENDIX A

# APPENDIX A <br> GEOPHYSICAL SURVEY 

on the
SADIM AND RUM CLAIMS 1994

S. Presunka<br>Presunka Geophysical Explorations Ltd

## INTRODUCTION

Geophysical surveying was carried out on the Sadim and Rum claims on the behalf of Harlow Ventures Inc., during September and October 1994, under the supervision of Steve Presunka assisted by Ron Gibbs, K. Christenson, Howard Fitch and Chris Dyakowski,P.Geo. Surveying consisted of VLF-EM, magnetometer and a short test survey with a horizontal loop EM-17 system. A total of 64.5 kilometres was surveyed at 20 metre flagged intervals along 50 metre spaced north-south lines, established using hip chain and compass.

The equipment consisted of two VLF-EM 16 units using frequencies Cutler ( 24.0 kHz ) and Seattle ( 24.8 kHz ), a Scintrex proton precession magnetometer, a Scintrex MFI fluxgate magnetometer and a HLEM EM-17 system. The vertical field magnetometer survey was loop corrected using control stations located on the base line from 500 W to 950 E and on the 2000 N tie line. A datum of $56,000 \mathrm{nT}$ was subtracted from all the corrected magnetometer readings.

The data has been plotted at a scale of $1: 2500$. VLF-EM data that was collected along the north-south lines using the Seattle frequency has been filtered and plotted in both the north-south and east-west directions. This is because the Seattle transmitter is poorly situated for surveying on north-south lines and it was hoped that the east-west presentation of the data would yield additional information.

## SADIM CLAIMS RESULTS

The Sadim Claim results are presented on the compilation map Figure 13, 14 and individual maps Figs 7, 8, 9a, 9b, 10, 11, 12a, 12b. Only the more prominent anomalies will be discussed. The remaining anomalies should definitely be correlated with the geological and geochemical data to determine follow-up possibilities.

Anomaly A (Fig 13) is a two part VLF conductor of approximately 250 metres strike length. This anomaly is most likely due to sheared quartz gouge material. Trenching on line 700 E did uncover quartz with gouge. Anomaly B (Fig 13) is another two part VLF conductor, apparently faulted. There is a good magnetic correlation with the eastern portion. VLF anomaly $\mathbf{C}$ is a strong conductor across two trenches, has no magnetic correlation and is likely due to shearing. Anomaly D, which may be a faulted continuation of $B$ is a strong conductor with a strike length of at least 300 metres. There is good magnetic correlation with this conductor and it may be mineralized. VLF anomaly $\mathbf{E}$ is approximately 150 metres in length and the conductor is likely the result of sheared gouge material. Anomaly F strikes NW-SE for approximately 350 metres with some magnetic correlation. Sheared gouge material should be present. Anomaly G is a VLF anomaly with a coincident magnetic response at line 450 W , station 220 N , but no further correlation exists along the remainder of this anomaly. The in-phase profiles are opposite in polarity to the quadrature, usually an indication of a good conductor, and is possibly due to sulphide mineralization. This anomaly should be drilled or trenched. Drilling is recommended as the overburden may be quite thick.

## RUM CLAIMS RESULTS (Fig.14)

Anomaly $\mathbf{A}$ is a good VLF anomaly that extends across the southern section of the Rum claims. It strikes approximately east-west for approximately 450 metres and may dip to the south. This conductor may be due to a geological contact and is possibly weakly mineralized. Anomaly B is a VLF conductor striking easterly for 300 metres. It is likely due to a limestone-andesite contact. Anomaly C strikes southeast for approximately 200 metres. The area of intersection of anomalies $\mathbf{C}$ and $\mathbf{D}$ may be mineralized. Anomaly D dips to the south.

## SUMMARY

Horizontal loop EM-17 surveys should be conducted on both the Rum and Sadim claims, particularly on the better EM-16 conductors to better define drilling and trenching targets. The lines involved will have to be brushed out and re-chained.

Large isolated magnetometer anomalies could be due to skarn zones in the limestones. The magnetic relief on the claims is 9000 nT . There is only minor correlation of magnetic trends to the VLF-EM 16 anomalies. The magnetic readings in the 300 nT range may represent quartz zones. No magnetic material was recognized on surface outcrops

A self-potential survey may be useful for locating the gold quartz veins which contain a small percentage of sulphides which oxidize.

APPENDIX B

## APPENDIX B

TABLE 2

TRENCH 94-1
(Sample compilation, see location Fig. 4)

| SAMPLE NO. | DIST. <br> ALONG <br> TRENCH <br> N.TO S. <br> (metres) | SAMPLE <br> LENGTH <br> (metrea) | REMARKS <br> (ALL SAMPLING EAST SIDE TRENCH) | $\begin{gathered} \text { PPM } \\ \text { Ag } \end{gathered}$ | $\begin{gathered} \text { PPB } \\ \text { Au } \end{gathered}$ | $\begin{gathered} \text { OZ } \\ \text { PER } \\ \text { TON } \\ \text { Ag } \end{gathered}$ | $\begin{gathered} \text { OZ } \\ \text { PER } \\ \text { TON } \\ \text { Au } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| JC-1-94 | 10 | 2.00 | 7 veins, $2-6 \mathrm{~cm}$ |  |  | . 23 | . 033 |
| JC-2-94 | 12 | 2.00 | 6 veins, $4-20 \mathrm{~cm}$ |  |  | 1.22 | . 132 |
| JC-3-94 | 14 | 2.00 | 7 veine, 2-8 cm |  |  | . 27 | . 030 |
| JC-4-94 | 27 | . 52 | 12 cm vein \& 40 cm weathered qtz and vein |  |  | . 70 | . 079 |
| JC-5-94 | 28 | . 08 | $2 \mathrm{~cm}{ }^{\text {\& }} 6 \mathrm{~cm}$ veins |  |  | 2.36 | . 333 |
| JC-6-94 | 29 | . 07 | $2 \mathrm{~cm} \& 5 \mathrm{~cm}$ parallel veins |  |  | . 78 | . 094 |
| JC-7-94 | 32 | . 03 | 3 cm broken qtz vein |  |  | . 37 | . 047 |
| JC-8-94 | 34 | . 08 | gach vein |  |  | . 42 | . 094 |
| JC-9-94 | 39 | . 35 | qtz vein |  |  | 1.29 | . 143 |
| JC-10-94 | 42 | . 03 | 3 cm vein cutuing dyke |  |  | . 23 | . 026 |
| JC-11-94 | 58 | . 80 | qtz veinlets |  |  | . 28 | . 033 |
| JC-12-94 | 62 | . 40 | solid vein |  |  | 1.02 | . 135 |
| JC-13-94 | 83 | . 40 | qtz eye swarms to 6 cm in buff; massive tuff |  |  | . 96 | . 111 |
| JC-14-94 | 85 | . 05 | raty vein |  |  | . 28 | . 027 |
| JC-15-94 | 90 | . 10 | 2 veins, 3 \& 7 cm |  |  | . 03 | . 008 |
| JC-16-94 | 93 | . 09 | vein, ruet streaked |  |  | . 75 | . 092 |
| JC-17-94 | 111 | . 40 | ruaty qtz/gossan |  |  | . 50 | . 062 |
| JC-18-94 | 127 | . 20 | clay gouge with quz gravel |  |  | 1.86 | . 192 |
| JC-19-94 | 138 | . 12 | broken qut vein |  |  | . 20 | . 020 |
| JC-20-94 | 142 | . 30 | broken qtz vein |  |  | . 21 | . 030 |
| JC-21-94 | 148 | . 10 | 2 qta veine on hard calcarous tuff;trench ridge $6 \& 3 \mathrm{~cm}-1 / 2 \mathrm{~m}$ apart | 3.8 | 450 |  | . 010 |
| JC-22-94 | 152 | . 06 | vein, rusty soft wall rock | 12.3 | 2,240 |  | . 054 |
| JC-23-94 | 158 | . 04 | 3 cm qtz vein on trench ridge, calcarous tuff | 4.0 | 1,180 |  |  |
| JC-24-94 | 165 | . 05 | 3 cm qtz vein adhering to resty wall rock | 4.4 | 810 |  |  |
| JC-26-94 | 183 | . 30 | broken qts vein 20 cm in clay gouge | 4.6 | 790 |  |  |
| JC-28-94 | 192 | . 30 | clay gouge with qtz sand | 7.4 | 380 |  |  |
| JC-29-94 | 195 | . 20 | broken qtz vein, rusty | 12.2 | 1,190 |  |  |
| JC-30-94 | 202 | . 20 | dark brown, broken qtz | 7.0 | 1,010 |  |  |
| JC-31-94 | 205 | . 20 | light brown, broken qtz rock | 1.5 | 160 |  |  |
| JC-32-94 | 209 | . 50 | rusty weathered tuff, no vis. qtz | . 2 | 38 |  |  |
| JC-33-94 | 213 | . 20 | h . weathered fuff, minor qtz | 1.0 | 180 |  |  |

TABLE 3
TRENCH 94-2
(Sample Compilation, see location Fig. 4)

| SAMPLE NO. <br> \& DISTANCE ALONG TRENCH (motres) | SAMPLE WIDTH ACROSS TRENCH (metros) | REMARKS | $\begin{array}{r} \text { PPM } \\ \mathrm{Ag} \\ \hline \end{array}$ | PPB Au | $\begin{array}{r} \mathrm{OZ} . \\ \text { PER } \\ \text { TON } \\ \mathbf{A g} \\ \hline \end{array}$ | OZ. <br> PER <br> TON <br> Au |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1A | . 60 | . 25 - . 4 N gouge - tuff qtz fragments | 0.9 | 120 |  |  |
| 3A | . 30 | 0-. 35 rsty gouge \& tuff | 1.0 | 170 |  |  |
| 3B | 1.00 | 0-1 N 10\% brkn qtz in tuff | 0.8 | 160 |  |  |
| 3 C | . 40 | 1-1.4 N 20\% qtz in tuff | 0.8 | 140 |  |  |
| 5A | . 70 | 0-. 7 S minor qtz in tuff \& gouge | 7.4 | 1,130 |  |  |
| 5B | . 30 | 0-. 3 N atz in tuff | 11.0 | 1,540 |  |  |
| 5 C | . 23 | sampled E - W direction, 3 cm qtz vein $w$. 20 cm gouge | 0.2 | 42 |  |  |
| 7A | . 30 | $1.3-1.6 \mathrm{~S}$ wall | 16.3 | 2,100 |  |  |
| 78 | . 90 | .3-1.2 Brkn qtz | 10.9 | 1,480 |  |  |
| 7 C | . 80 | . 3 S - .5 N wall | 5.6 | 1,040 |  |  |
| 9A | . 50 | . 3 S - . 2 N brkn qtz in tuff | 6.2 | 1,010 |  |  |
| 11A | . 80 | . $5 \mathrm{~S}-.3 \mathrm{~N}$ gouge w minor qtz | 1.1 | 260 |  |  |
| 13A | . 20 | 1.3 S-1.5 S footwall gouge | 455.5 | 67,400 |  | 2.075 |
| 13B | . 30 | $1.5 \mathrm{~S}-1.8 \mathrm{qtz}$ vein | 353.2 | 49,800 |  | 1.459 |
| 13 C | . 20 | 1.8 S-2.0 S hanging wall gouge | 18.4 | 1,940 |  | . 056 |
| 14 | GRAB | 4 m N . of base line qtz in gouge | 7.9 | 1,120 |  | . 032 |
| 15 | GRAB | brkn atz in tuff | 18.2 | 1,970 |  | . 067 |
| 15A | 1.30 | 0.5 N to 0.85 qtz vein | 28.3 | 3,730 |  | . 113 |
| 15B | . 50 | 0.8 S to 1.3 S wall gouge in qtz stringers | 475.4 | 78,800 |  | 2.221 |
| 17A | . 50 | $0.3 \mathrm{~S}-0.8 \mathrm{~S}$ qtz vein | 585.7 | 99,700 |  | 2.853 |
| 17B | . 40 | 0.3 S to 0.1 N footwall | 128.2 | 15,700 |  | . 383 |
| 19A | . 60 | 0.6-0 S qtz vein | 263.5 | 30,800 |  | . 878 |
| 19B | . 40 | 0.0-0.4 N footwall gouge | 18.0 | 2,010 |  | . 065 |
| 21A | . 50 | $0.1-0.6 \mathrm{Sqtz}$ vein | 516.9 | 100,000 |  | 3.306 |
| 218 | . 40 | 1.3-1.7 N qtz vains to 5 cm | 7.9 | 1,380 |  | . 033 |
| 23A | . 10 | 0.6-0.7 N qtz vein w gouge | 341.8 | 41,200 |  | 1.312 |
| 23B | . 70 | $0.3-1.0 \mathrm{~S} .3 \mathrm{~m}$ qtz vein w/qtz breccia | 94.3 | 12,730 |  | . 450 |
| 25A | . 20 | . $4-.6 \mathrm{~S}$ qtz vein brkn |  |  | 84.69 | 11.080 |
| 26A | . 40 | . 2 s - .2 N rsty brkn qtz vein |  |  | 12.65 | 1.570 |
| 28A | . 20 | 0-. 2 Sqtz vein |  |  | 1.34 | . 180 |
| 28B | . 50 | . $2 \mathrm{~S}-.7 \mathrm{~S}$ wall w/tuff |  |  | 0.55 | . 070 |
| 28 C | . 15 | .7-.85 S qtz voin |  |  | 2.41 | . 290 |
| 30A | . 10 | 1-1.1 S brkn qtz vein w/gouge |  |  | 3.81 | . 570 |
| 32A | . 15 | 1.4-1.55 S brkn qtz vain, gouge |  |  | 1.52 | . 200 |
| 34A | . 15 | 1.1-1.25 S brkn qtz vein, gouge |  |  | 0.62 | . 100 |
| 36A | . 40 | . $2 \mathrm{~S}-.2 \mathrm{~N}$ brkn qtz in gouge |  |  | 0.58 | . 049 |
| 38A | . 20 | 1-1.2 S tuff wall, qtz brkn malachite |  |  | 0.13 | . 020 |
| 40A | . 15 | . $4-.55 \mathrm{~S} \mathrm{qtz} \&$ gouge ( 4 cm vein) |  |  | 0.68 | . 110 |
| 42A | . 15 | . 2 - . 35 gouge in vein, minor brkn qtz |  |  | 0.44 | . 080 |
| 44A | . 10 | 0-. 1 N qtz vein |  |  | 1.15 | . 019 |
| 46A | . 20 | 0-. 2 N wall rock groy tuff |  |  | 0.04 | . 010 |
| 46B | . 20 | . $2-.4 \mathrm{~N}$ atz voin broken |  |  | 0.38 | . 060 |
| 46C | . 20 | . 4 - . 6 N clay gouge |  |  | 0.07 | . 010 |
| 48A | . 10 | 0-. 1 N atz vain |  |  | 0.48 | . 070 |
| 50A | . 20 | . 1 - . 3 N brkn qtz vein |  |  | 0.40 | . 060 |
| 52A | . 10 | . 4 - . 5 N narrow wall gouge, minor qtz stringer |  |  | 0.28 | . 050 |

## TABLE 4

TRENCH 94-3

## (Sample Compilation 94-3, location Fig. 4)

| $\begin{gathered} \text { SAMPLE } \\ \text { NO. } \end{gathered}$ | DIST. ALONG TRENCH N. TO S. (metres) | SAMPLE LENGTH (metres) | REMARKS <br> (NOTE: qtz vein at $\mathbf{S} \mathrm{E}$ end wall of trench) | 02. <br> PER <br> TON <br> Ag | $\begin{gathered} \text { OZ. } \\ \text { PER } \\ \text { TON } \\ \text { AU } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| JC702 | 10 | GRAB | 2 m depth qtz veinlets in foliated tuff | 0.05 | 0.020 |
| JC703 | 8 | GRAB | 2 m depth qtz \& gouge to 6 cm | 3.33 | 0.470 |
| JC705 | 8 | GRAB | pale grey gouge with qtz | 1.15 | 0.170 |
| JC710 | 0 | 2 | broken rsty gouge minor qtz | $<.01$ | 0.001 |
| JC711 | 2 | 2 | cherty limestone | 0.03 | 0.005 |
| JC712 | 4 | 2 | rsty \& buff gouge w/minor qtz | $<.01$ | 0.001 |
| JC713 | 6 | 2 | grey gouge w/broken quartz | $<.01$ | 0.001 |
| JC714 | 8 | 2 | sheared white gouge | 0.02 | 0.001 |
| JC715 | 10 | 2 | grey \& brown clay gouge w/atz | 0.01 | 0.006 |
| JC716 | 12 | 2 | grey \& brown clay gouge w/qtz, limy tuff fragments | 0.24 | 0.046 |
| JC717 | 14 | 2 | grey \& brown clay gouge w/qtz, limy tuff fragments | 0.41 | 0.053 |
| JC718 | 16 | 2 | grey \& brown clay gouge w/qtz, limy tuff fragments | 0.09 | 0.012 |



## APPENDIX C

## APPENDIX C

Some early data is available regarding 15 diamond drill holes that were drilled by Vanco Explorations in 1987 on the Sadim claims. Hole locations are shown on the accompanying maps, and the better assays are shown in Table 5 . The best mineralized sample of significance showed 9.3 metres @ 0.1 opt gold. Of interest is that all the holes encountered anomalous gold.

TABLE 5
Sadim Drill Results, 1987

| HOLE | DEPTH (m) | DIP | $\begin{aligned} & \text { GOLD } \\ & \text { (pm) } \end{aligned}$ | WIDT <br> H(m) | AVG ASSAY INTERVALS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | FROM | TO |
| 87-1 | 51.5 | -90 | 3.26 | 1 | 9.0 | 10.0 |
|  |  |  | 2.51 | 1 | 21.0 | 22.0 |
|  | 42.6 | -90 | 0.83 | 1 | 16.0 | 17.0 |
| $\begin{aligned} & 87-2 \\ & 87-3 \end{aligned}$ | 93.6 | -90 | 3.62 | 1 | 15.0 | 16.0 |
|  |  |  | 3.69 | 3 | 40.0 | 43.0 |
| 87-4 | 33.5 | -90 | 1.31 | 1 | 21.0 | 22.0 |
| 87-5 | 39.9 | -90 | 0.09 | 1 | 9.0 | 10.0 |
| 87-6 | 30.8 | -90 | 3.56 | 9.3 | 21.5 | 30.8 |
| 87-7 | $89.0$ | -90 | 0.85 | 2 | 17.5 | $19.5$ |
| 87-8 |  | -90 | 2.19 | 3 | 44.0 | 47.0 |
| $\begin{gathered} 87-9 \\ 87-10 \end{gathered}$ | $\begin{gathered} 98.45 \\ 112.78 \end{gathered}$ | $\begin{array}{r} -90 \\ -90 \end{array}$ | $3.65$ | 1 | 70.0 | 71.0 |
|  | $\begin{aligned} & 112.78 \\ & 150.72 \end{aligned}$ |  |  | 3 | 85.0 | 88.0 |
| $\begin{aligned} & 87-10 \\ & 87-11 \end{aligned}$ | $\begin{aligned} & 150.72 \\ & 148.44 \end{aligned}$ | $\begin{array}{r} -90 \\ -90 \end{array}$ | $\begin{aligned} & 4.60 \\ & 1.01 \end{aligned}$ | 2 | 48.3 | 50.3 |
|  |  |  |  | 7 | 56.3 | 63.3 |
|  |  |  | $\begin{aligned} & 1.01 \\ & 1.86 \end{aligned}$ | 2 | 61.3 | $\begin{gathered} 63.3 \\ 111.3 \end{gathered}$ |
|  |  |  | 1.39 | 4 | 107.3 |  |
| 87-12 | 108.51 | -90 | $\begin{aligned} & 1.84 \\ & 1.96 \\ & 2.87 \\ & 1.90 \end{aligned}$ | 3 | 18.0 | 21.0 |
|  |  |  |  | 4 | 26.0 | 30.0 |
|  |  |  |  | 2 | 28.0 | 30.0 |
|  |  |  |  | 2 | 37.0 | 39.0 |
| 87-13 | 70.22 | -90 | 2.26 | 2 | 26.5 | 28.5 |
| 87-14 | 99.67 | -90 | 1.54 | 4 | 50.5 | 54.5 |
| 87-15 | 65.23 | -45 | 0.25 | 1 | 43.0 | 44.0 |

## APPENDIX D

INTERNATIONAL PLASMA LABORATORY ITD.
Client: C Dyakowski
Droject: None Given
8 Pulp
Out: Nov 03, 1994
In: Nov 01, 1994
[060913:45:5] 94



APPENDIX E

|  | $\begin{gathered} \text { Mo } \\ \text { pppm } \end{gathered}$ | LABORATORIES |  |  |  | ITD |  | 852 E．HASTINGS ST．VANCOUVER B，C．V6A 1R6 GEOCHEMICAL ANALYSIS CERIIFICATE <br> C．．Dyakowski．File \＃ $94-3537$ Page 1 3750 W．49th Ave，Vancouver BC VGN 3A7 |  |  |  |  |  |  |  |  |  |  |  |  | PHONE (604) 253-3158 |  |  |  |  |  | $\begin{array}{r} \operatorname{Fax}(604) 253-1716 \\ \Delta \Lambda \end{array}$ |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{r} \mathrm{Cu} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \mathrm{Pb} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \mathbf{2 n} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \mathrm{Ag} \\ \mathrm{ppm} \end{array}$ | $\begin{gathered} \mathrm{Ni} \\ \mathrm{ppm} \end{gathered}$ | $\begin{array}{r} \text { Co } \\ \text { ppm } \end{array}$ | $\begin{array}{r} \mathrm{Mn} \\ \mathrm{ppm} \end{array}$ | $\begin{gathered} \mathrm{Fe} \\ \% \end{gathered}$ | $\begin{array}{r} \text { As } \\ \text { ppm } \end{array}$ | $\begin{array}{r} \mathrm{U} \\ \mathrm{ppm} \end{array}$ | Au ppm | $\begin{array}{r} \text { Th } \\ \text { ppm } \end{array}$ | $\begin{array}{r} \mathrm{Sr} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \text { Cd } \\ \text { ppm } \end{array}$ | $\begin{array}{r} \text { Sb } \\ \text { ppm } \end{array}$ | $\begin{array}{r} \mathbf{B i} \\ \mathbf{p p m} \\ \hline \end{array}$ | $\begin{array}{r} v \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \mathrm{Ca} \\ \mathbf{Z} \end{array}$ | $\begin{aligned} & \text { P } \\ & \% \end{aligned}$ | $\begin{array}{r} \text { La } \\ \text { ppon } \end{array}$ | $\begin{gathered} \mathrm{Cr} \\ \mathrm{ppm} \end{gathered}$ | $\begin{gathered} \mathrm{Mg} \\ \mathbf{x} \end{gathered}$ | $\begin{array}{r} \mathrm{Ba} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \mathrm{Ti} \\ \% \end{array}$ | $\begin{array}{r} B \\ \text { ppm } \end{array}$ | $\begin{gathered} \text { A! } \\ \text { X } \end{gathered}$ | $\begin{array}{r} \mathrm{Na} \\ \boldsymbol{x} \end{array}$ | $\begin{aligned} & K \\ & \mathbf{\chi} \end{aligned}$ | $\begin{array}{r} W \\ \text { Ppmin } \end{array}$ | $A u^{*}$ <br> ppb |
| JC－21－94 | 2 | 162 | 26 | 92 | 3.8 | 14 | 17 | 495 | 3.50 | 5 | $<5$ | $<2$ | $<2$ | 27 | 2.2 | $<2$ | $<2$ | 14 | 2.03 | ． 086 | 3 | 8 | ． 21 | 360 | ＜ 01 | 3 | ． 78 | ． 02 | ． 13 | －1 | 450 |
| JC－22－94 | 2 | 77 | 14 | 31 | 12.3 | 10 | 7 | 479 | 2.17 | 6 | $<5$ | 2 | ＜2 | 25 | ． 3 | $<2$ | $<2$ | 12 | ． 99 | ． 031 | 4 | 8 | ． 06 | 198 | ． 01 | 3 | ． 47 | ． 01 | ． 12 |  | 2240 |
| JC－23－94－ | 3 | 39 | 17 | 22 | 4.0 | 11 | 5 | 960 | 1.30 | 4 | $<5$ | ＜2 | $<2$ | 74 | ． 5 | $<2$ | $<2$ |  | 5.28 | ． 025 | 7 | 8 | ． 08 | 235 | ＜． 01 | 2 | ． 27 | ． 02 | ． 09 |  | 1180 |
| JC－24－94 | 2 | 44 | 12 | 21 | 4.4 | 8 | 5 | 363 | 1.63 | 7 | $<5$ | $<2$ | $<2$ | 25 | ． 4 | $<2$ | $<2$ |  | 2.70 | ． 031 | 6 | 7 | ． 05 | 278 | ＜． 01 | 3 | ． 27 | ． 01 | ． 10 | ， | 810 |
| JC－26－94 | 2 | 44 | 44 | 15 | 4.6 | 8 | 5 | 426 | 1.37 | 5 | ＜5 | ＜2 | $<2$ | 13 | ． 5 | 2 | $<2$ | 8 | 1.28 | ． 029 | 2 | 7 | ． 04 | 103 | ＜． 01 | 2 | ． 23 | ． 01 | ． 09 | 1 | 790 |
| JC－28－94 | 12 | 198 | 64 | 115 | 7.4 | 10 | 8 | 477 | 3.53 | 30 | $<5$ | $<2$ | ＜2 | 12 | 1.0 | 56 | 2 | 22 | ． 33 | ． 067 | $<2$ | 6 | ． 03 | 65 | ＜． 01 | 4 | ． 34 | ． 01 | ． 18 | $<1$ | 380 |
| JC－29－94 | 28 | 64 | 199 | 85 | 12.2 | 9 | 5 | 834 | 2.34 | 14 | $<5$ | $<2$ | $<2$ | 11 | ． 9 | 21 | $<2$ | 9 | ． 75 | ． 027 | $<2$ | 7 | ． 03 | 51 | ＜． 01 | 4 | ． 18 | ． 01 | ． 10 | 1 | 1190 |
| JC－30－94 L | 4 | 100 | 54 | 75 | 7.0 | 29 | 21 | 1203 | 4.33 | 3 | $<5$ | $<2$ | $<2$ | 69 | 1.5 | ＜2 | $<2$ | 20 | 3.39 | ． 043 | 2 | 7 | 1.13 | 148 | ＜． 01 | 2 | ． 25 | ． 01 | ． 15 | 2 | 1010 |
| JC－31－94 ${ }^{\text {J }}$ | 16 | 32 | 44 | 46 | 1.5 | 10 | $5$ | 283 | 1.54 | 8 | $<5$ | ＜2 | $<2$ | 26 | ． 6 | 6 | ＜2 | 8 | 1.52 | ． 041 | 4 | 6 | ． 12 | 72 | ＜． 01 | 4 | ． 26 | ． 01 | ． 15 | $<1$ | 160 |
| $\text { JC }-32.94$ | 2 | 378 | 28 | 106 | ． 2 | 11 | 9 | 1266 | 4.04 | 2 | $<5$ | $<2$ | 2 | 52 | 1.6 | $<2$ | ＜2 | 12 | 4.12 | ． 082 | 2 | 3 | .31 | 163 | ＜． 01 | 4 | ． 54 | ． 01 | ． 20 | $<1$ | 38 |
| JC－33－94 | 1 | 37 | 5 | 37 | 1.0 | 5 | 5 | 308 | 1.77 | 4 | $<5$ | $<2$ | $<2$ | 18 | ． 6 | 3 | ＜2 | 6 | 1.21 | ． 023 | $<2$ | 3 | ． 07 | 90 | ＜． 01 | 2 | ． 36 | ． 01 | ． 16 | ， | 180 |
| RG－94－1 | 4 | 72 | 29 | 95 | ． 5 | 37 | 15 | 1271 | 4.44 | 64 | $<5$ | $<2$ | 3 | 215 | 1.7 | 2 | ＜2 | 16 | 7.15 | ． 112 | 19 | 8 | ． 15 | 66 | ＜． 01 | 4 | ． 60 | ． 01 | ． 15 | $<1$ | 55 |
| RG－94－2 人 | 5 | 60 | 33 | 108 | ． 5 | 22 | 12 | 832 | 3.70 | 45 | $<5$ | $<2$ | 4 | 337 | 2.0 | $<2$ | 2 | 14 | 7.64 | ． 067 | 9 | 5 | ． 21 | 51 | ＜． 01 | 3 | ． 62 | ． 01 | ． 12 | $<1$ | 29 |
| RG－94－3 J | 2 | 25 | 10 | 55 | ＜． 1 | 14 | 10 | 566 | 3.28 | 30 | 5 | $<2$ | $<2$ | 284 | ． 3.6 | $<2$ | $<2$ | 10 | 2.90 | ． 065 | 14 | 4 | ． 13 | 111 | ＜． 01 | $<2$ | ． 65 | ． 03 | ． 07 | $<1$ | 15 |
| RG－94－4 | 7 | 36 | 96 | 107 | ． 1 | 21 | 8 | 791 | 2.73 | 31 | $<5$ | ＜2 | 3 | 284 | 3.6 | ＜2 | $<2$ | 14 | 6.80 | ． 062 | 12 | 7 | ． 17 | 40 | ＜． 01 | 2 | ． 52 | ． 02 | ． 10 | 1 | 15 |
| RG－94－5 | 6 | 28 | 8 | 77 | ． 3 | 28 | 11 | 864 | 3.58 | 89 | $<5$ | $<2$ | 3 | 293 | 1.1 | $<2$ | $<2$ | 14 | 7.71 | ． 092 | 11 | 6 | ． 17 | 55 | ＜． 01 | 3 | ． 55 | ． 01 | ． 13 | 2 | 14 |
| RG－94－6 上 | 4 | 26 | 4 | 58 | .1 | 21 | 11 | 904 | 3.55 | 46 | $<5$ | $<2$ | 4 | 191 | ． 9 | $<2$ | ＜2 | 12 | 7.10 | ． 093 | 11 | 7 | ． 16 | 50 | ＜． 01 | 3 | ． 50 | ． 01 | ． 15 | $<1$ | 15 |
| RG－94－7 | 3 | 21 | 7 | 42 | .1 | 18 | 7 | 737 | 2.82 | 26 | $<5$ | $<2$ | 4 | 371 | ． 7 | 2 | 3 | 10 | 7.89 | ． 051 | 11 | 6 | ． 13 | 39 | ＜． 01 | 3 | ． 32 | ． 02 | ． 12 | $<1$ | 13 |
| RG-94-8 | 4 | 27 | 6 | 69 | ． 2 | 15 | 9 | 840 | 3.79 | 40 | $<5$ | $<2$ | 3 | 306 | 1.1 | $<2$ | ＜2 | 12 | 7.39 | ． 074 | 12 | 6 | ． 24 | 81 | ＜． 01 | 2 | ． 73 | ． 02 | ． 16 | $<1$ | 6 |
| RG－94－9 | 3 | 35 | 4 | 64 | ． 2 | 19 | 9 | 765 | 3.33 | 23 | ＜ 5 | $<2$ | 2 | 251 | ． 8 | $<2$ | 2 | 13 | 4.93 | ． 064 | 10 | 7 | ． 16 | 65 | ＜． 01 | 2 | ． 52 | ． 02 | ． 14 | $<1$ | 4 |
|  | 5 | 14 | 6 | 85 | ＜． 1 | 11 | 4 | 466 | 2.25 | 10 | $<5$ | ＜2 | ＜2 | 66 | ． 8 | 2 | ＜2 |  | 1.15 | ． 049 | 21 | 4 | ． 11 | 74 | ＜． 01 | 3 | ． 75 | ． 03 | ． 22 | $<1$ | 2 |
| RG－94－11 | 16 | 31 | 5 | 82 | ． 4 | 19 | 9 | 1062 | 3.26 | 26 | $<5$ | $<2$ | 2 | 423 | 1.2 | 4 | ＜2 | 13 | 6.56 | ． 076 | 14 | 5 | ． 09 | 72 | ＜． 01 | 3 | ． 45 | ． 02 | ． 15 | $<1$ | 7 |
| RE RG－94－11 | 16 | 30 | 4 | 82 | .3 | 19 | 9 | 1070 | 3.26 | 26 | $<5$ | $<2$ | 2 | 425 | 1.1 | 2 | ＜2 | 13 | 6.59 | ． 077 | 13 | 5 | ． 09 | 72 | ＜． 01 | 3 | ． 45 | ． 02 | ． 14 | $<1$ | 5 |
| RG－94－12 | 5 | 20 | 7 | 82 | .1 | 13 | 6 | 613 | 2.59 | 21 | $<5$ | $<2$ | $<2$ | 107 | ． 8 | 2 | $<2$ |  | 2.90 | ． 062 | 18 | 3 | ． 08 | 63 | ＜． 01 | 3 | ． 51 | ． 02 | ． 18 | $<1$ | 4 |
| RG－94－13 | 7 | 40 | 4 | 120 | .4 | 35 | 10 | 911 | 3.70 | 34 | ＜5 | ＜2 | 2 | 182 | 2.3 | 8 | $<2$ | 36 | 4.61 | ． 077 | 12 | 12 | ． 07 | 59 | ＜． 01 | 4 | ． 40 | ． 02 | ． 15 | $<1$ | 5 |
| RG－94－14 | 2 | 34 | 9 | 117 | ． 3 | 12 | 9 | 916 | 3.94 | 22 | $<5$ | $<2$ | ＜2 | 105 | ． 7 | ＜2 | ＜2 |  | 1.40 | ． 067 | 6 | 4 | ． 07 | 76 | ＜． 01 | 4 | ． 58 | ． 02 | ． 18 | $<1$ | 3 |
| RG－94－15 | 3 | 26 | 5 | 93 | ＜． 1 | 10 | 7 | 673 | 3.12 | 38 | $<5$ | $<2$ | $<2$ | 162 | ． 5 | 3 | $<2$ |  | 2.74 | ． 054 | 5 | 3 | ． 09 | 51 | ＜． 01 | 3 | ． 52 | ． 03 | ． 09 | $<1$ | 5 |
| RG－94－16 | 9 | 45 | 6 | 105 | ． 5 | 34 | 11 | 1049 | 4.21 | 51 | $<5$ | $<2$ | 3 | 255 | 1.4 | 3 | 2 | 27 | 6.41 | ． 153 | 12 | 11 | ． 18 | 62 | ＜． 01 | 4 | ． 76 | ． 01 | ． 15 | $<1$ | 8 |
| RG－94－17 | 3 | 53 | 8 | 112 | ． 3 | 61 | 20 | 1153 | 4.66 | 147 | $<5$ | $<2$ | 3 | 183 | 2.0 | ＜2 | ＜2 | 74 | 4.92 | ． 117 | 21 | 59 | 1.94 | 68 | ＜． 01 | 4 | 1.85 | ． 01 | ． 22 | $<1$ | 2 |
| RG－94－18 ， | 4 | 31 | 4 | 82 | ． 4 | 27 | 13 | 1305 | 4.76 | 1318 | ＜5 | $<2$ | 5 | 220 | 1.5 | 2 | ＜2 | 24 | 7.38 | ． 078 | 13 | 8 | ． 15 | 46 | ＜． 01 | 3 | ． 39 | ． 02 | ． 11 | $<1$ | 3 |
| RG－94－19 ふ | 12 | 46 | 8 | 120 | ． 4 | 26 | 14 | 1107 | 4.25 | 93 | 8 | $<2$ | 3 | 154 | 2.3 | ＜2 | $<2$ | 34 | 5.39 | ． 082 | 13 | 7 | ． 15 | 54 | ＜． 01 | 5 | ． 61 | ． 02 | ． 17 | ＜1 | 3 |
| RG－94－20 \} | 3 | 35 | 4 | 96 | ． 3 | 17 | 12 | 1088 | 4.13 | 63 | $<5$ | $<2$ | $<2$ | 176 | 1.1 | ＜2 | $<2$ | 15 | 2.65 | ． 101 | 12 | 5 | ． 09 | 59 | ＜． 01 | 4 | ． 65 | ． 02 | ． 22 | $<1$ | 3 |
| RG－94－21 | 5 | 43 | 4 | 92 | .4 | 37 | 12 | 1215 | 4.26 | 52 | $<5$ | $<2$ | 4 | 236 | 1.3 | 3 | $<2$ | 24 | 7.40 | ． 112 | 10 | 9 | ． 11 |  | ＜． 01 | 3 | ． 47 | ． 02 | ． 14 | $<1$ | 2 |
| RG－94－22 E | 11 | 41 | 7 | 100 | .1 | 19 | 9 | 982 | 3.76 | 47 | $<5$ | $<2$ | 2 | 222 | 1.5 | 6 | ＜2 | 21 | 2.90 | ． 089 | 6 | 9 | ． 10 | 115 | ＜． 01 | 3 | ． 53 | ． 03 | ． 09 | ＜1 | 6 |
| RG－94－23 | 8 | 25 | $<2$ | 83 | ． 3 | 17 | 7 | 824 | 3.03 | 90 | $<5$ | $<2$ | 3 | 289 | 1.2 | 3 | $<2$ | 15 | 6.80 | ． 059 | 9 | 7 | ． 12 | 40 | ＜． 01 | 5 | .47 | ． 01 | ． 11 | $<1$ | 6 |
| RG－94－24 | 6 | 29 | 5 | 87 | ． 3 | 24 | 8 | 865 | 2.76 | 74 | $<5$ | $<2$ | 4 | 598 | 1.5 | 5 | $<2$ | 16 | 7.81 | ． 065 | 12 | 6 | ． 09 | 44 | ＜ 01 | 3 | ． 37 | ． 01 | ． 12 | $<1$ | 3 |
| STANDARD C／AU－R | 19 | 62 | 36 | 129 | 6.8 | 75 | 31 | 1055 | 3.96 | 43 | 18 | 6 | 35 | 54 | 19.0 | 19 | 22 | 62 | ． 50 | ． 090 | 40 | 59 | ． 93 | 177 | ． 09 | 34 | 1.88 | ． 06 | ． 15 | 9 | 540 |

ICP－． 500 GRAM SAMPLE IS DIGESTED WITH 3ML 3－1－2 HCL－hNO3－H2O AT 95 DEG．C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER． THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI 8 W AND LIMIYED FOR NA K AND AL ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB 2N AS＞1\％，AG＞ 30 PPM \＆AU＞ 1000 PPB －SAMPLE TYPE：ROCK AU＊ANALYSIS BY ACID LEACH／AA FROM 10 GM SAMPLE．Samplosjbecinning＇RE＇are duplicate samples．



Sample type: ROCK. Samples besinning 'RE' are duplicate samples.



星
C. Dyakowski

FILE \# 94-3537
Page 2


Sample type: ROCK. Samples beginning 'RE' are duplicate samples.

- Fire assay gold recommended for gold $>1000 \mathrm{ppb}$.


Sample type: ROCK. Samples beginning 'RE' are duplicate samples. AG** + AU ${ }^{\star *}$ BY FIRE ASSAY FROM 1 A.T. SAMPLE.

|  <br> C. Dyakowski FILE \# 94-3784 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| SAMPLE* | $\begin{gathered} \text { Mo } \\ \text { ppm } \end{gathered}$ | $\begin{array}{r} \mathrm{Cu} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \mathrm{Pb} \\ \mathrm{ppm} \mathrm{P} \\ \hline \end{array}$ | $\begin{array}{r} 2 n \\ \text { ppm } \end{array}$ | $\begin{array}{r} \mathrm{Ag} \\ \mathrm{ppm} \\ \hline \end{array}$ |  |  | $\begin{array}{r} \mathrm{Mn} \\ \mathrm{ppm} \end{array}$ |  | $\begin{aligned} & \mathrm{As} \\ & \mathrm{ppm} \end{aligned}$ | $\begin{array}{r} \mathrm{U} \\ \text { ppm } \end{array}$ | $\begin{array}{r} \mathrm{Au} \\ \text { ppmin } \\ \hline \end{array}$ | $\begin{array}{r} \text { Th } \\ \text { ppm } \end{array}$ | $\begin{array}{r} \mathbf{S r} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \text { Cd } \\ \text { pppm } \end{array}$ | $\begin{array}{r} \mathrm{sb} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} B i \\ \text { ppm } \\ \hline \end{array}$ | $\begin{array}{r} \mathbf{v} \\ \text { ppm } \end{array}$ | $\begin{gathered} \mathrm{Ca} \\ \boldsymbol{z} \\ \hline \end{gathered}$ |  | $\begin{array}{r} \text { La } \\ \text { ppm } \end{array}$ | $\begin{array}{r} \mathrm{Cr} \\ \mathrm{ppm} \end{array}$ | $\begin{gathered} \mathrm{Mg} \\ \mathrm{z} \\ \hline \end{gathered}$ | $\begin{array}{cc} \mathrm{Ba} & \mathrm{Ti} \\ \mathrm{ppm} & \% \end{array}$ | $\begin{array}{r} \mathrm{B} \\ \mathrm{ppm} \\ \hline \end{array}$ | $\mathrm{Al}$ | $\begin{gathered} \mathrm{NB} \\ \mathrm{z} \end{gathered}$ | $\begin{aligned} & k_{\mathbf{p}} \\ & \mathbf{z}_{\mathbf{p}} \\ & \hline \end{aligned}$ | $\begin{array}{r} \mathrm{H} \\ \text { ppon } \end{array}$ | $\begin{aligned} & \mathrm{Ag}^{* *} \\ & \mathrm{oz} / \mathrm{t} \end{aligned}$ | $\begin{aligned} & A u^{* *} \\ & \mathrm{oz} / \mathrm{t} \end{aligned}$ |
| Jc-702 | 3 | 170 | 4 | 66 | 2.4 | 32 | 27 | 1530 | 5.10 | 5 | <5 | <2 | $<2$ | 33 | . 8 | $<2$ | 2 | 28 | 3.07 | . 095 | 6 | 11 | . 13 | 290<. 01 | 2 | . 36 | . 01 | . 20 | 2 | . 05 | . 018 |
| Jc-703 | 2 | 311 | 206 | 621 | 115.3 | 12 | 15 | 1072 | 3.16 | 6 | <5 | 16 | <2 | 87 | . 6 | 12 | 4 | 17 | 3.74 | . 068 | 2 | 7 | 1.05 | 222<. 01 | 3 | . 43 | . 01 | . 18 |  | 3.33 | . 475 |
| jc-705 | 2 | 241 |  | 58 | 38.5 | 13 | 17 | 753 | 3.00 | 6 | $<5$ | 5 | <2 | 70 | . 7 | 8 | 4 | 12 | 3.09 | . 068 | <2 | 41 | 1.42 | 58<. 01 | 2 | . 52 | . 01 | . 19 | 1 | 1.15 | . 167 |
| Jc-710 | 1 | 490 | 4 | 50 | . 3 | 18 | 18 | 883 | 4.00 | 11 | <5 | <2 | <2 | 327 | <. 2 | <2 |  | 75 | 13.32 | . 103 | 7 | 29 | . 43 | 106.02 | 2 | . 73 | . 01 | . 13 | 1 | $<.01$ | . 001 |
| Jc-711 | $<1$ | 489 | 4 | 57 | 1.2 | 28 | 21 | 855 | 4.08 | 8 | $<5$ | <2 | <2 | 220 | <. 2 | 3 | 2 | 48 | 13.51 | . 083 | 4 | 222 | 2.64 | 129<. 01 | $<2$ | . 35 | . 03 | . 09 | 1 | . 03 | . 005 |
| Jc-712 | 2 | 162 | 3 | 50 | . 4 | 21 | 18 | 621 | 3.48 | 5 | < 5 | <2 |  | 238 | . 3 | 3 | <2 | 37 | 17.12 | . 078 | 4 | 12 | . 35 | 530<. 01 | <2 | . 43 | . 02 | . 09 | <1 | <. 01 | . 001 |
| JC-713 | 2 | 636 | 3 | 58 | . 3 | 11 | 26 | 1006 | 4.84 | 9 | <5 | <2 | <2 | 80 | . 2 | 13 | 4 | 59 | 6.76 | . 137 | 11 | 6 | . 24 | 307.02 | 3 | . 53 | . 02 | . 20 | <1 | . 01 | . 001 |
| Jc-714 Trench | 1 | 480 | 3 | 70 | . 5 | 10 | 23 | 950 | 4.94 | 7 | $<5$ | <2 | <2 | 59 | <. 2 | 6 | <2 | 54 | 5.79 | . 120 | 8 | 4 | . 41 | 161.01 | <2 | . 54 | . 02 | . 17 | <1 | . 02 | . 001 |
| Jc-715 94-3 | 1 | 221 | 3 | 72 | 1.0 | 15 | 23 | 1147 | 4.63 | 9 | $<5$ | <2 | <2 | 89 | . 3 | 9 | 2 | 33 | 4.75 | . 093 | 3 | 4 | 1.16 | 182<. 01 | 2 | . 46 | . 02 | . 17 | <1 | <. 01 | . 006 |
| JC-716 | 1 | 125 | 3 | 63 | 8.8 | 16 | 18 | 1190 | 3.93 | 4 | <5 | <2 | $<2$ | 56 | . 3 | 3 | <2 | 28 | 4.26 | . 064 | 3 | 4 | . 78 | 273<. 01 | <2 | . 29 | . 01 | . 14 | <1 | . 26 | . 044 |
| RE JC-716 | 1 | 121 |  | 62 | 8.8 | 16 | 18 | 1190 | 3.92 | 5 | < 5 | $<2$ | $<2$ | 55 | . 5 | 7 | <2 | 27 | 4.26 | . 063 | 3 | 6 | . 79 | 269<.01 | <2 | . 29 | . 01 | . 15 | <1 | . 24 | . 046 |
| JC-717 | 1 | 141 | 3 | 69 | 15.0 | 12 | 16 | 855 | 3.57 | 4 | < 5 | <2 | <2 | 95 | . 5 | 7 | <2 | 21 | 4.44 | . 087 | 3 |  | 1.88 | 232<. 01 | 2 | . 53 | . 02 | . 22 | < | . 41 | . 053 |
| Jc-718 | $<1$ | 126 | 16 | 60 | 3.8 | 12 | 18 |  | 4.06 | 4 | < | <2 | <2 | 87 | . 6 | 4 | <2 | 21 | 4.04 | . 093 | 2 | 3 | 1.73 | 109<. 01 | 2 | . 48 | . 02 | . 22 | <1 | . 09 | . 012 |
| sc-730 | 3 | 158 |  | 79 | 4.6 | 8 | 15 | 3552 | 4.93 | 8 | <5 | <2 | <2 | 94 | . 9 | 4 | <2 | 23 | 5.86 | . 057 | 3 | 2 | . 82 | 429<. 01 | $<2$ | . 18 | . 03 | . 06 | <1 | . 11 | . 028 |
| JC-731 | $<1$ | 11 |  | 263 | . 5 | 8 |  | 2652 | 8.81 | 5 | < | <2 | <2 | 177 | . 9 | <2 | <2 | 27 | 13.28 | . 011 | 2 |  | 5.68 | 1250<. 01 | <2 | . 16 | . 01 | . 08 | $<1$ | $<.01$ | . 001 |
| 25A | 6 | 1429 | 248014 | 472 | 220.4 | 9 | 3 | 163 | 4.07 | 14 | < | 379 | $<2$ | 12 | 26.2 | 13 | 10 | 10 | . 16 | . 017 | 2 | 10 | . 07 | 134.01 | 2 | . 19 | . 01 | . 07 | $<1$ | 84.69 | 11.079 |
| 26A |  | 2263 | 61312 | 249 | 410.0 | 4 | 2 | 194 | 1.78 | 7 | < | 55 | <2 | 8 | 16.5 | 15 | 5 | 4 | . 17 | . 010 | $<2$ | 7 | . 04 | 89<. 01 | 2 | . 07 | . 01 | . 04 | <1 | 12.65 | 1.568 |
| 28A | 4 | 220 | 87 | 52 | 47.3 | 9 | 3 | 278 | 1.01 | 4 | < | 7 | <2 | 11 | 3.4 | 6 | 2 | 4 | . 51 | . 007 | <2 | 11 | . 09 | 220<. 01 | 2 | . 08 | . 01 | . 05 | 3 | 1.34 | . 179 |
| 28B | 2 | 53 | 151 | 120 | 20.1 | 7 | 22 | 1363 | 4.47 | 3 | < 5 | 2 | <2 | 48 | 4.8 | <2 | <2 | 23 | 5.86 | . 118 | 4 | 1 | . 38 | 103<. 01 | 2 | . 47 | . 01 | . 32 | $<1$ | . 55 | . 073 |
| 28 C | 2 | 839 | 526 | 134 | 89.1 | 6 | 6 |  | 1.81 | 6 | < 5 | 12 | <2 | 14 | 9.7 | 4 | 3 | 7 | . 70 | . 022 | 2 | 6 | . 06 | 282<.01 | 3 | . 13 | . 01 | . 09 | $<1$ | 2.41 | . 293 |
| 30 A | 7 | 944 | 84 | 64 | 137.2 | 11 | 16 | 790 | 3.59 | 5 | $<5$ | 20 | $<2$ | 36 | 1.7 | 4 | $<2$ | 16 | 1.63 | . 042 | 3 3 | 8 | .11 | 188<. 01 | 2 | . 27 | . 01 | . 15 | 1 | 3.85 | . 559 |
| RE 30A | 7 | 936 | 82 | 63 | 136.1 | 19 | 16 | 780 | 3.55 | 3 | < | 20 | $<2$ | 36 | 1.9 | 3 | $<2$ | 16 | 1.61 | . 042 | 3 | 9 | . 10 | 201<.01 | 3 | . 27 | . 01 | . 15 | 1 | 3.81 | . 569 |
|  | <1 | 124 | 18 | 87 | 2.8 | 26 | 20 | 984 | 4.07 | 4 | < | <2 | <2 | 187 | . 2 | 3 | <2 | 99 | 6.33 | . 090 | 3 | 29 | 2.69 | 33.08 | 15 | 1.98 | . 02 | . 08 | <1 | . 05 | . 011 |
| 32 A | 5 | 1330 | 38 | 77 | 54.4 | 9 | 17 | 1201 | 4.12 | 4 | < | 7 | <2 | 31 | 2.1 | <2 | <2 | 15 | . 99 | . 058 | 3 | 4 | . 12 | 152<.01 | 2 | . 25 | . 01 | . 14 | 1 | 1.52 | . 208 |
| 33 | $<1$ | 86 |  | 105 | . 9 | 26 |  | 1112 | 4.68 | 7 | < | <2 | <2 | 127 | <. 2 | 4 |  | 120 | 1.98 | . 107 | 6 | 32 | 2.48 | 59.07 | 3 | 2.57 | . 02 | . 08 | <1 | . 02 | . 003 |
| 34.3 Trench | <1 | 998 |  | 127 | 1.2 | 22 |  | $1138$ | 5.05 | 5 | $<5$ | <2 | $<2$ | 119 | . 5 | 3 | $<2$ | 119 | 2.21 | . 105 | 5 | 29 | 2.76 | 30 . 04 | 2 | 2.56 | . 02 | . 05 | <1 | . 01 | . 008 |
| $\left.\begin{array}{l}348 \\ 36\end{array}\right\} \begin{array}{r}\text { Trench } \\ 94-2\end{array}$ | 3 $<1$ | 200 | 77 | 41 | 21.5 | ${ }_{6}^{7}$ | 8 25 | $669$ | 2.02 | 5 | <5 | <2 | $<2$ | 25 | 1.5 | 2 | $<2$ | 14 | 2.71 | . 050 | <2 | 198 | . 24 | 2264.01 | 3 | 1.27 | . 01 | . 17 | 1 | . 62 | . 096 |
| 36 <br> 368 <br> 38 | <1 | 137 188 | 3 20 | 77 44 | 19.7 | 63 | 25 10 | 776 |  | 3 | <5 | <2 | <2 | 74 22 | . 2 | <2 | <2 | 115 | 2.53 | . 126 | 5 2 | 198 | 2.89 | 24.15 242.01 | <2 | 1.74 | . 06 | . 03 | <1 | . 02 | .001 .049 |
| 38A |  | 3738 | 15 | 62 | 4.4 | 7 | 18 | 1175 | 3.54 | 10 | < | <2 | $<2$ | 32 | . 9 | 6 | 3 | 21 | 1.25 | . 108 | 10 | 3 | . 10 | 726<. 01 | 2 | . 44 | . 01 | . 21 | <1 | . 13 | . 016 |
| 40A | 7 | 655 | 14 | 64 | 24.6 | 14 | 20 | 960 | 3.54 | 9 | < 5 | 4 | $<2$ | 33 | . 9 | 4 | $<2$ | 30 | .41 | . 066 | 6 | 14 | . 20 | 313.01 | 3 | . 58 | . 01 | . 19 | 1 | . 68 | . 109 |
| 42A | 12 | 193 | 19 | 76 | 15.6 | 13 | 25 | 1441 | 4.16 | 6 | < | 3 | $<2$ | 36 | 1.4 | 3 | <2 | 21 | . 74 | . 067 | 6 | 9 | . 12 | 226<. 01 | 2 | . 56 | . 01 | . 20 | 1 | . 44 | . 082 |
| RE 42A | 12 | 198 | 18 | 78 | 16.3 | 14 | 26 | 1475 | 4.28 | 4 | <5 | 3 | <2 | 37 | 1.3 | 2 | <2 | 22 | . 76 | . 069 | 5 | 8 | . 12 | 218<. 01 | 4 | . 57 | . 01 | . 21 | <1 | . 44 | . 081 |
| 44A | 6 | 521 | 29 | 37 | 40.6 | 8 | 12 | 885 | 2.68 | 7 | < | 7 | $<2$ | 32 | . 9 | 4 | <2 | 14 | . 09 | . 022 | 5 | 6 | . 05 | 195<. 01 | 3 | . 34 | . 01 | . 12 | 1 | 1.15 | . 193 |
| 46A | 2 | 234 | 6 | 87 | 2.2 | 10 | 29 | 1265 | 5.70 | 2 | < | <2 | 2 | 23 | 1.4 | $<2$ | <2 | 26 | . 34 | . 128 | 19 | 3 | . 12 | 165<. 01 | <2 | . 84 | . 01 | . 24 | <1 | . 04 | . 012 |
| 46B |  |  | 30 | 32 | 14.2 | 10 |  |  |  | 3 | <5 | 2 | <2 | 13 | . 4 | 4 | <2 | 20 |  | . 028 | 3 | 11 | . 11 | 114.02 | 2 | . 34 | . 01 |  |  |  | . 064 |
| 46 C | 1 | 385 |  | 82 | 2.5 | 12 |  | 1520 |  | 2 | < 5 | <2 | 2 | 18 | 1.5 | <2 | <2 | 27 | . 26 | . 100 | 20 | 7 | . 14 | 184.01 | <2 | . 83 | . 01 | . 24 | <1 | . 07 | . 013 |
| Standard C/AG-1/AU-1 | 20 | 62 | 41 | 130 | 7.2 | 72 | 32 | 1026 | 3.96 | 42 | 21 | 7 | 37 | 52 | 19.0 | 14 | 19 | 61 | . 50 | . 095 | 41 | 61 | . 90 | 183.09 | 34 | 1.88 | . 06 | . 15 | 11 | . 98 | . 102 |
| Sample type: ROCK. Samples beginning 'RE' are duplicate samples. $\mathrm{AG}^{\star \star}+\mathrm{AU}{ }^{* *}$ BY FIRE ASSAY FROM 1 A.T. SAMPLE. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |




AG** \& AU** BY FIRE ASSAY FROM 1 ATT. SAMPLE.

- SAMPLE TYPE: ROCK

Samples beginning 'RE' are duplicate samples.
DATE RECEIVED: SEP 19 1994 DATE REPORT MATIED: Sept $23 / 94$ SIGNED BY (


AU** BY FIRE ASSAY FROM 1 A.T. SAMPLE.

- SAMPLE TYPE: ROCK PULP

Samples beginning 'RE' are duplicate samples 6
DATE RECEIVED: OCT 191994 DATE REPORT MAILED: Od $25 / 94$ signed by. .......o.toye, c.leong, j. hang; certified bic. assayers

SAMPLE\# $\left.\begin{array}{r|rrrr}\text { Ag } \\ \text { ppm }\end{array} \begin{array}{c}\text { Au* } \\ \text { pb }\end{array}\right]$

CP - . 500 GRAM SAMPLE IS DIGESTED WITH 3ML 3-1-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR AND IS DILUTED TO 10 ML WITH WATER.
this leach is partial for mn fe sR ca p La Cr mg ba ti b w and limited for na k and al.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1\%, AG > 30 PPM \& AU > 1000 PP - SAMPLE TYPE: ROCK AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.
date received: nov 1 1994 date report mailed: $\operatorname{NoV} 3 / 94$.
signed by.............toye, c.leong, j.hang; certified b.c. assayers

icp - . 500 Gram Sample is digested hith 3ml 3-1-2 hcl-hno3-hzo at 95 deg. c for one hour and is diluted to 10 ml with water.
THIS LEACH IS PARTIAL FOR MN FE SR CA P LA CR MG BA TI B $W$ AND LIMITED FOR NA K AND AL. ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS $>1 \%$, AG $>30$ PPN \& AU $>1000$ PPB

- SAMPLE TYPE: ROCK

AU* ANALYSIS BY ACID LEACH/AA FROM 10 GM SAMPLE.



Sanple type: ROCK.




