# Geological Assessment Report

for the

# Alp 1-18 Mineral Claims,

Mayo Mining District, Yukon Territory

N.T.S. 105 O/2

*- Prepared For-*

Eagle Plains Resources Limited (EPL)
*and*
Miner River Resources Limited (MRG)
Joint-Venture Partnership

*- by-*

John R. Dickie, M.Sc.
Consulting Geologist
Whitehorse, Yukon Territory



November 10, 1996

This report has been examined by the Geological Evaluation Unit under Section 53 (4) Yukon Quartz Mining Act and is allowed as representation work in the amount of $ 1200.

[signature]
Regional Manager, Exploration and Geological Services for Commissioner of Yukon Territory.

For

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## 1.0 Summary and Conclusions

Preliminary exploration work completed on the Alp 1-18 claims consisted of geological mapping, minor hand trenching and sampling. The work program was designed to test the mineral potential of the property through following up on anomalous results from a previous soil geochemical survey, a geophysical survey, and a geological mapping and sampling program conducted by *Noranda Exploration Company Limited.* Workers from the previous program outlined quartz-arsenopyrite ladder veins within quartz-phyric, felsic dykes intruded into dark grey phyllite and slate. Quartz-arsenopyrite-scorodite vein samples from the previous work program returned gold values of up to 57.9 g/mt Au.

The focus of the 1996 work program was on several parallel, southeast-striking and steeply south-dipping dykes containing mineralized quartz veins. A strike length of at least 1000 m has been recorded for the largest and best-exposed of the dyke series. It contains multiple quartz-arsenopyrite ladder veins that do not penetrate the slate wall-rocks and, locally, display evidence of tension gash infilling by quartz-arsenopyrite mineralization. Quartz veins are observed to reach a maximum of1.0-1.5 m in thickness but appear to coalesce within a halo of silica-flooded dyke rock, generating quartzose "zones" several metres thick. Arsenopyrite contained within the quartz vein sets occurs as (1) disseminated, coarse (2-5 mm) blebs (typically sub- to euhedral arsenopyrite crystals), (2) 0.5-3.0 cm amorphous clots, and (3) veinlets and stringers 0.5-3.0 cm wide. The spacing of the quartz vein sets is irregular but locally may reach10% within the dyke(s). Owing to lenticularity within the arsenopyrite veinlets, as well as the irregular spacing of arsenopyrite blebs, the density of sulphide mineralization tends to be erratic. Grab samples, collected from the quartz-arsenopyrite veins, yielded values of up to 1.912 oz/mt Au. One 4.5 m chip sample, JDALP15/16/18, taken across multiple quartz-arsenopyrite veins, returned an average grade of 7.99 g/mt Au. JDALP18, a 1.5 m chip sample, returned 0.419 oz/mt Au.

The dyke system containing the quartz ladder veins is open to the south and, given the geochemical results from the current program, suggests additional exploration potential in that direction, at depth. Plots of gold geochemistry versus along-strike distance within the dykes suggest that gold concentration also increases toward the south. The economic potential of this property lies in the potential strike-extension of the known system, closer to an as yet undiscovered plutonic source of both quartz and gold. Subsurface extensions of the known showings, yielding grades equal or superior to those previously recorded, infer potential for a large and, locally, high grade deposit as a down-dip extension of the sampled dykes.

It is recommended that additional exploration work should be conducted on the property in the form of (1) a magnetometer survey over covered areas to identify the covered continuation of the dyke swarm, and/or a source pluton for the dyke system; and (2) a soil geochemistry grid run in conjunction with the geophysical survey to reveal additional information about the quartz-arsenopyrite ladder vein system at depth. Dykes exposed in outcrop should be subjected to a limited, diamond drilling program designed to intersect quartz-arsenopyrite veins in the along-strike direction of the quartz-porphyry dykes. Suitable targets identified at depth should also be drill-tested. An additional block of six to eight claims should be added to the west of the existing claim block in order to secure the down-dip extensions of the known showings.

## 2.0 Introduction

The Alp 1-18 Claim Group is located in the Hess Mountains, east-central Yukon Territory, approximately 160 km northeast of Ross River. The claims lie at approximately 63° 07' N and 130° 32' W on the NTS 105 0/2 1:50 000 map-sheet. Access is by helicopter from Ross River, or from Whitehorse. A 15 km flight is possible from the Jeff Creek pullout on the North Canol Road.

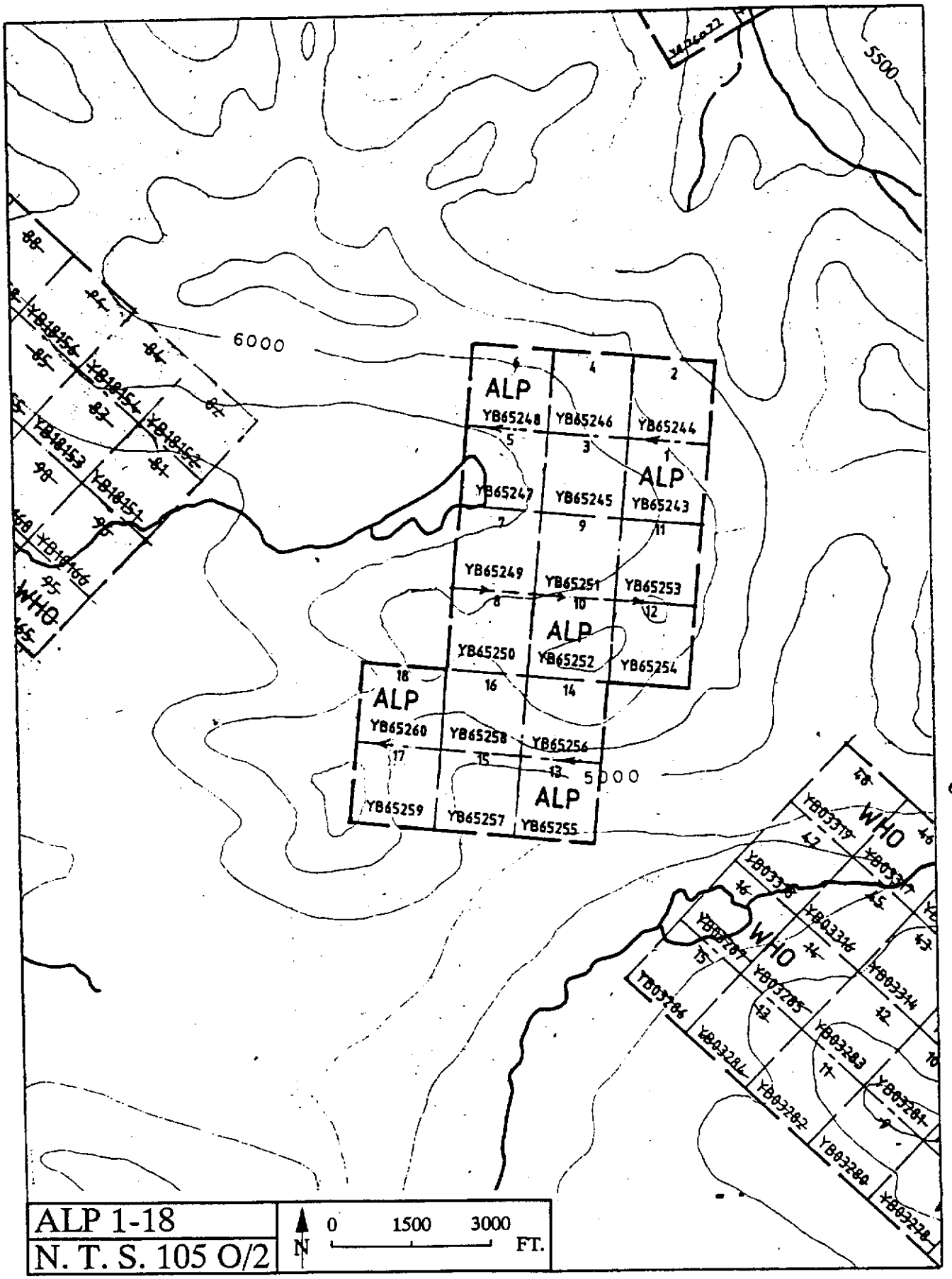
Alp 1-18 were staked on behalf of a 50:50 joint-venture partnership between Eagle Plains Resources Limited (EPL) and Miner River Resources (MRG) who, together, hold a 100% interest in the property, less a 1% NSR. The claims were staked by Mr. B. Kreft of Whitehorse, Yukon Territory, with 100% ownership subsequently transferred to the joint-venture partnership. Claim tag numbers are recorded for the Alp 1-18 claims as, respectively, YB65243 to YB65260, inclusive.

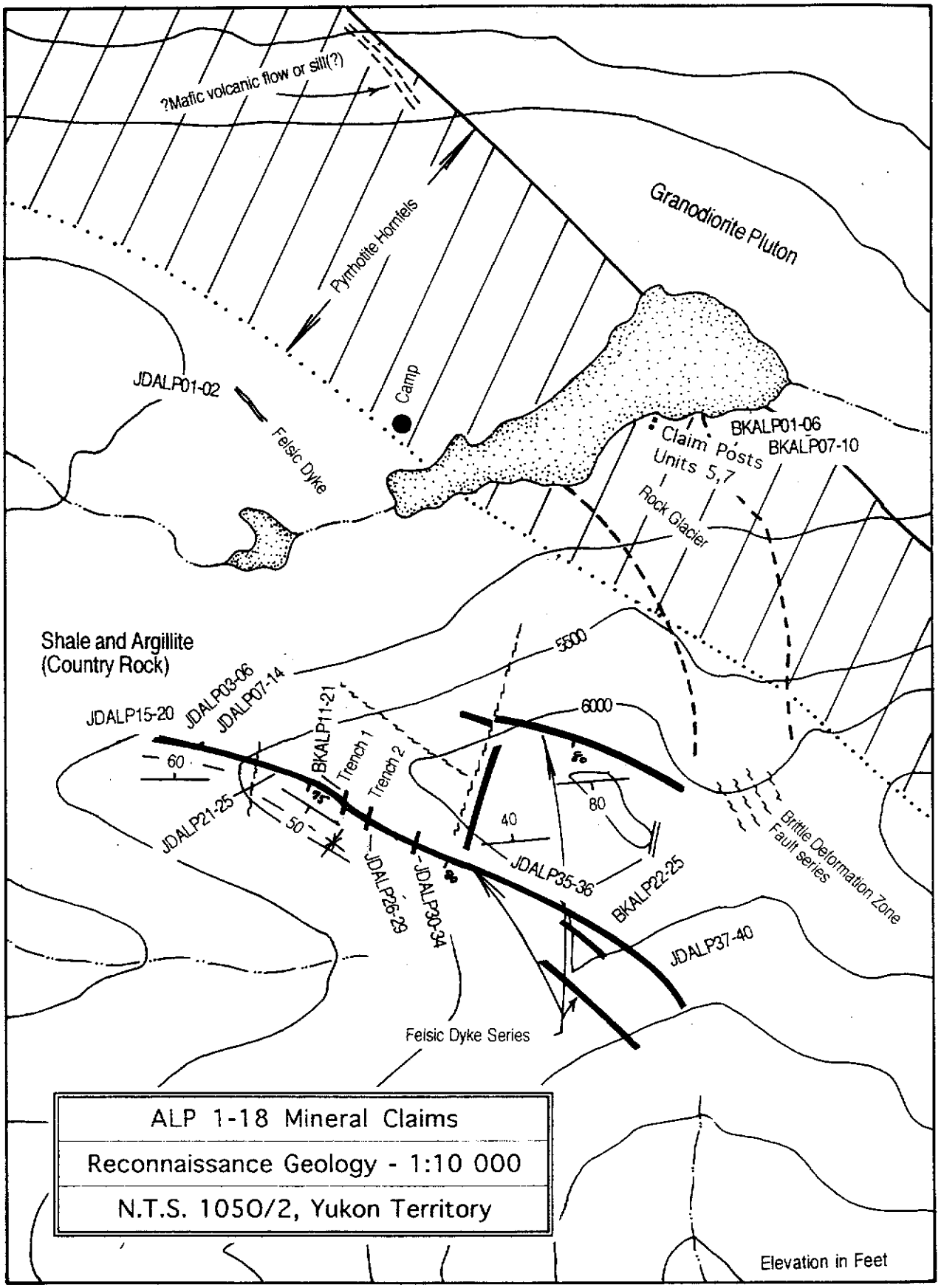
The claims lie in the MacMillan Pass area of the Selwyn Mountains, east-central Yukon Territory. Elevations range between 1220 m and 2105 m with the topography being steep. South-facing slopes are flanked by thick, unstable talus fans, typically at "angle-of-repose" while north-facing slopes tend to be vertical cliffs with thick talus at their bases. Granitic lithologic units form extremely steep to vertical, blocky-weathering faces which tend to be impassable, particularly along cirque headwalls. Weather is extremely changeable, given the location and altitude of the property. Snow and freezing rain can be expected well into July and in late August but, generally, summer months provide pleasant working conditions. Water may be obtained from a lake near the center of the claim group, but this water may contain *Giardia* and, regardless, should be utilized with caution, in consideration of the amount of arsenic contained in the surrounding, mineralized bedrock.

The methods employed in the field consisted of outcrop mapping, prospecting, rock sampling and minor hand-trenching. Results from the mapping exercise are summarized in a comprehensive geology map included within the text of this report. Chip samples were collected parallel to the strike direction of the dykes in order to properly sample the quartz-arsenopyrite veins trending at high angles to the dykes. Most chip samples were collected across intervals of 1.5 or 2.5 m. Rock sample descriptions are summarized at the end of this report (Appendix A). All sample stations were recorded and flagged in the field. All samples were submitted to *International Plasma Laboratory Limited* , Vancouver, B.C., for 30-element ICP analysis. In addition, all samples were submitted to *Northern Analytical Laboratories Limited*, Whitehorse, Yukon, for gold analysis. Pulps from anomalous samples (ICP) were resubmitted and fire-assayed for gold. Geochemical (ICP and gravimetric fire assay) results are appended (Appendix B) and are discussed later in the text.

## 3.0 Geology

The property contains Paleozoic sedimentary rocks of the Selwyn Basin in close proximity to Precambrian rocks of the MacKenzie Platform western margin. Shale, chert,


130°30'
63°7'30"
5500
6000
5000
ALP
YB65248
YB65246
YB65244
YB65247
YB65245
YB65243
YB65249
YB65251
YB65253
YB65250
YB65252
YB65254
YB65260
YB65258
YB65256
YB65259
YB65257
YB65255
WHO
ALP 1-18
N. T. S. 105 O/2
N
0
1500
3000
FT.


?Mafic volcanic flow or sill(?)
Granodiorite Pluton
Pyrrhotite Hornfels
Camp
JDALP01-02
Felsic Dyke
Claim Posts
Units 5,7
BKALP01-06
BKALP07-10
Rock Glacier
Shale and Argillite
(Country Rock)
5500
6000
JDALP15-20
JDALP03-06
JDALP07-14
BKALP11-21
Trench 1
Trench 2
60
50
40
80
JDALP21-25
JDALP26-29
JDALP30-34
JDALP35-36
BKALP22-25
JDALP37-40
Brittle Deformation Zone
Fault series
Felsic Dyke Series
ALP 1-18 Mineral Claims
Reconnaissance Geology - 1:10 000
N.T.S. 105O/2, Yukon Territory
Elevation in Feet

arenite and conglomerate of the Devono-Mississippian Earn Group are the country rock to multiple, intrusive plugs. Plutons, up to 10 km in diameter, are Cretaceous-age, medium-grained granodiorites and quartz monzonites.

Alp 1-18 claims overlie the southwest intrusive contact between a medium-grained, Cretaceous granodiorite pluton, and black argillites, phyllites, and slates of the Earn Group. The contact zone is represented by a purple-grey, pyrite-pyrrhotite (+ minor arsenopyrite) hornfels, ranging between 200 and 1000 metres thick. Argillites and slates are intruded by a series of 1-6 m thick quartz-porphyry dykes that strike southeasterly and dip steeply to the south. A total of five felsic dykes were recognized on the property. Most outcrops are exposed as steep, north-facing ridges and slopes. South-facing slopes consist of isolated outcrops surrounded by frost-heaved sub-outcrop and extensive talus fans.

In the vicinity of the Alp property, strata of the Earn Group lie within a moderately-dipping monoclinal succession. They are represented by strongly foliated, fissile, black argillite with foliation progressively grading into a well-developed slatey cleavage in a southwest to northeast, across the property. Strata are warped and, locally, tightly folded along the margins of several of the quartz-porphyry dykes. The scale of folding is small, typically on the order of 1-2 m. Deformation appears to be restricted to these dyke margins and, within the dykes, tension fractures trend at high angles to the dyke margins and tend to be very steeply inclined, ranging to vertical. Dyke margins are also strongly altered and/or veined. Strong argillic (kaolinite-sericite) alteration haloes along dyke-wallrock contacts weather to a soft, white-orange groundmass. Rarely, dyke contacts contain quartz-arsenopyrite-scorodite veins. Altered dyke margins, folded country rock at dyke contacts, and quartz-arsenopyrite-filled tension fractures within dykes suggest that faulting was localized at mechanically weak lithologic contacts and occurred after the intrusion of the dykes. Several of the dykes have been offset by as much as 25 m along a series of steeply dipping, subparallel faults which appear to cross-cut both the regional foliation and the dykes. The largest fault zone coincides with a large topographic "saddle" and was the target of past trenching and sampling by *Noranda Exploration Company Limited.*

## 4.0 Mineralization and Geochemical Results

Traverses conducted across the granodiorite pluton revealed no mineralization in place. One talus sample was seen to contain chrysocolla, but this mineralization was not found in outcrop nor was it observed in any other hand specimens. The hornfels zone contains minor amounts (1-2%) of very fine-grained, disseminated arsenopyrite and 1-2 mm arsenopyrite stringers. Typically, the latter are rare, and they do not form a significant proportion of the rock by volume. Similar arsenopyrite and quartz-arsenopyrite stringers occur within slates lying at the margins of the hornfels zone but are, likewise, rare.

The notable mineralization observed on the property occurs within the quartz-porphyry dyke swarm. Five, subparallel, felsic dykes have been mapped and all appear to be of similar composition. Dykes trend approximately one hundred twenty degrees and dip roughly eighty degrees to the south. Dyke porphyries contain up to 1-2% disseminated arsenopyrite. Where sulphide mineralization is most abundant, dyke rocks are stained green due to scorodite

alteration. Geochemical results from selected rock samples are summarized in Table 1 with ICP results appended. Auriferous arsenopyrite-scorodite-bearing quartz rubble serves as an excellent prospecting guide to *in situ* mineralization up-slope and helped to locate mineralized dykes in outcrop.

Arsenopyrite mineralization occurs in the form of fine disseminations, large 'clots' and blebs, and large, euhedral crystals within milky quartz intruded into highly altered dyke porphyry. The dykes themselves may, locally, exhibit finely disseminated arsenopyrite and are commonly anomalous in arsenic and gold. Correlation diagrams for gold, arsenic, bismuth and antimony are presented in the following and discussed in the next section of this report.

Table 1
*Gold Assays (Alp Claims 'over-limit' results)*

| Sample | Au (oz/mt) | Sample | Au (oz/mt) |
|---|---|---|---|
| ALPBK02 | 0.034 | JDALP16 | 0.157 |
| ALPBK06 | 0.034 | JDALP17 | 1.912 |
| ALPBK11 | 0.041 | JDALP18 | 0.419 |
| ALPBK13 | 0.074 | JDALP19 | 0.408 |
| ALPBK14 | 0.090 | JDALP20 | 0.032 |
| ALPBK22 | 0.065 | JDALP21 | 0.494 |
| JDALP07 | 0.051 | JDALP22 | 0.310 |
| JDALP08 | 0.171 | JDALP23 | 1.771 |
| JDALP09 | 0.056 | JDALP24 | 0.050 |
| JDALP12 | 0.989 | JDALP35 | 0.256 |
| JDALP14 | 0.064 | JDALP37 | 0.095 |
| JDALP15 | 0.137 | - - | - - |

## 5.0 Discussion

The preliminary mapping and sampling program summarized by this report revealed strong positive exploration potential for the Alp 1-18 claims. Gold mineralization appears to be strongest within the quartz-arsenopyrite ladder veins contained within felsic, quartz-porphyry dykes. The strength of gold enrichment increases toward the center of the claim block, in the down-dip direction of the dyke set. That is, higher gold values toward the south may

indicate a high-grade, gold-bearing sulphide body in that direction. The dyke yielding the strongest gold mineralization also appears to be the one which has been most extensively exhumed, inferring that the corresponding (and higher-grade) portions of the other dykes may, as yet, remain covered by overburden along the ridge-flank.

The source of gold mineralization is uncertain, however, the quartz ladder veins post-date a regional tensional phase and appear to infill tension fractures developed within dyke host rocks. Tension fractures formed in response to inhomogenous strain, refracted across slate-dyke contacts. As a regional expression of strain, this is a positive (i.e., regional) feature and might be expected closer to a "source" pluton where more extensive (greater volume) and higher grade mineralization could be encountered. Similar, albeit minor, fractures occur within the country rock along the pluton margins and are also infilled by quartz-arsenopyrite stringers. These latter zones are typically small (1-2 mm wide), and are irregular in their distribution. All fracture-fill, quartz vein networks may be related to the emplacement of the granodiorite pluton seen on the property or, perhaps, a buried pluton representing a secondary lobe of the main intrusive.

If the quartz-phyric dyke set is related to the granodiorite pluton, and the quartz-arsenopyrite vein system is also part of an evolving system, then this polyphase intrusive style, with associated tensional strain forming gold-bearing veins, bears a broad similarity to "Fort Knox" style mineralization. Bismuth is a key elemental indicator of gold mineralization within the Fort Knox geochemical suite. Anomalous, albeit somewhat erratic, bismuth values were also returned from Alp claim rock samples, reaching a maximum of 854 ppm Bi. Molybdenum, an element also associated with the Fort Knox gold deposit, does not occur in anomalous concentrations in the rocks sampled.

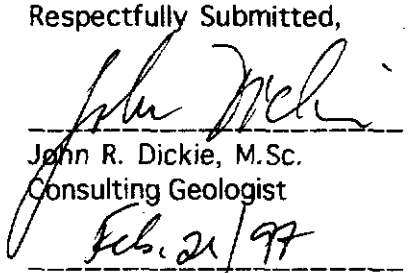
A correlation between arsenic, bismuth, and antimony can be depicted (Appendix C). In general, high values of arsenic can be seen to be accompanied by high bismuth (as bismuthinite?) and high antimony (as stibnite?) values. Stibnite and bismuthinite are isostructural, possibly representing a phase series between the two minerals associated with arsenopyrite. Geochemical plots between the various elements occurring in anomalous concentrations (Appendix C) indicate a general tendency for samples highly enriched in arsenic (as arsenopyrite) to be enriched in gold, bismuth, and antimony. Best-fit algorithms were plotted for the scatter-grams. Overall, the variance in these plots is high. Some mineral phases may have preferentially included more bismuth than antimony during crystallization, the observed variance an artifact of any given sulphide sample containing more bismuthinite than stibnite, or *vice versa*. Petrologic work has not been completed on these rocks in order to confirm or disprove this.

The model proposed for the Alp 1-18 claims is based on preliminary data, however, the relationship between gold, arsenic, bismuth and antimony suggests a geochemical suite similar to that of the Fort Knox gold deposit. A second similarity is that tensional strain localized late-stage, gold-bearing fluids to dilitational zones developed as tension fractures across the felsic dykes. The concentration of less-compatible elements within the vein sets possibly indicates a progressive partitioning of metals from an evolving plutonic melt.

Potential exists for the quartz veins seen in the dykes to increase in both volume (size and abundance) and grade, at depth, given the scenario described above. Geophysical methods should assist in tracking the dykes, at depth, through the pyrrhotite hornfels zone. A soil geochemical grid survey, run across the surface projection of the dykes, should help to delineate favourable targets in the subsurface which may be linked to coincident geophysical targets.

A second-phase exploration program is highly recommended, as follows: (1) veins within the dykes are the main targets and should be mapped, in detail, so that the plane geometry of the veins (rather than that of the dykes) is accurately intersected by drilling; (2) a geophysical survey across the valley floor, down-dip from the surface expression of the dykes, should be used to extend and map-out the geometry of the dykes in the subsurface; (3) a limited diamond-drilling program should be implemented to test the known (outcrop) occurrences, and the down-dip extensions thereof. In stage (3) drilling, two collars sited from the same drill-pad, near the ridge-top, would facilitate drilling within the dyke in a down-dip direction (targeting mineralized veins versus dyke rock). A two-hole "fan" geometry would test the quartz-arsenopyrite veins lying within the plane of the dyke from the ridge top. This geometry would also test any variability in mineralization between two holes. Due to the distribution of arsenopyrite mineralization, it is recommended that the drilling operation utilize HQ or NTW core. At least one other step-out hole should be collared in the valley to test a "blind" target, that being the down-dip extension of the dyke tested by the first two drill-holes, outlined by a magnetometer survey. Overall, the high-grade gold results combined with the property geology infer that excellent potential exists for a sizeable, high-grade gold target on the property.

Respectfully Submitted,



John R. Dickie, M.Sc.
Consulting Geologist



November 10, 1996

# Geologist's Certificate

This is to certify that I, John R. Dickie, of 118-40 Knightsridge Drive in Halifax, Nova Scotia, am a consulting geologist with offices in Halifax, and at 1409 Fir Street, Whitehorse, Yukon, and that:

(1) I hold B.Sc. (Honours in Geology), B.Ed. (Chemistry/Environment), and M.Sc. (Geology) degrees from Dalhousie University and University of Toronto;

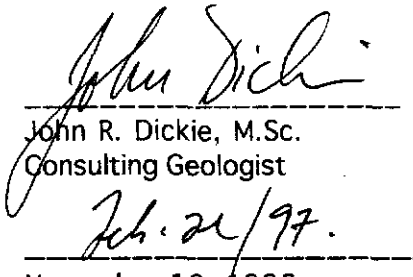
(2) I have over twelve (12) years' experience with various research institutions and mining companies on projects in Canada (Nova Scotia, New Brunswick, Ontario, British Columbia, Yukon), United States, and Mexico, with over ten years' experience on Yukon projects;

(3) I do not hold any interest in Eagle Plains Resources Limited (EPL), nor do I hold any interest in Miner River Resources Limited (MRG). I do not expect to receive securities or related remuneration from either of the aforementioned companies.

(4) This report and the conclusions and recommendations contained herein are based on fieldwork conducted by myself, or personally witnessed, on the Alp 1-18 claims during August, 1996;

(5) I am regarded as a Professional Geoscientist, eligible for registration with APENS, in the Province of Nova Scotia, where formal registration of Geoscientists is pending.

Respectfully Submitted,



John R. Dickie, M.Sc.
Consulting Geologist



November 10, 1996

Appendix A
Rock Sample Descriptions

| Sample | Chip(C)/Grab(G) | Description |
|---|---|---|
| BKALP01 | G | 20 cm qz-aspy vein float |
| BKALP02 | C | 0.6 m chip; scorodite stained fractured siltstone |
| BKALP03 | G | 4 cm sample across 1 cm qz-aspy vein (incl. selvages) |
| BKALP04 | G | 15 cm sample across 10 cm vein (as above) |
| BKALP05 | G | 6 cm sample across 2 cm vein (as above) |
| BKALP06 | G | 4 cm sample across 3 cm vein (as above) |
| BKALP07 | C | 2.0 m chip (hornfelsed siltstone between #3 and #6) |
| BKALP08 | C | 1.0 m chip (" " #3 and #4) |
| BKALP09 | C | 1.0 m chip (" " #4 and #5) |
| BKALP10 | G | 10 cm wide qz-aspy vein |
| BKALP11 | G | corroded/altered vein with aspy blebs (est. 2-3%) |
| BKALP12 | C | 0.6 m chip across #11 (above) and 0.3 m qz-aspy veins |
| BKALP13 | G | 15 cm qz-aspy vein talus sample |
| BKALP14 | C | 0.3 m chip across vein in dyke exposed in Trench 1 |
| BKALP15 | G | grab of shale adjacent to #14 (above) |
| BKALP16 | C | 0.8 m chip across felsic dyke (Trench 1) |
| BKALP17 | C | 2.5 m chip across 3 qz-aspy veins in dyke (i) |
| BKALP18 | C | 2.5 m chip across 2 qz-aspy veins in dyke (ii) |
| BKALP19 | C | 2.5 m chip across 3 qz-aspy veins in dyke (iii) |
| BKALP20 | C | 3.0 m chip across felsic dyke |
| BKALP21 | - | Lost |
| BKALP22 | C | 2.5 m chip across felsic dyke (i) |
| BKALP23 | C | 2.5 m chip across felsic dyke (ii) |
| BKALP24 | C | 2.5 m chip across felsic dyke (iii) |
| BKALP25 | C | 2.5 m chip across felsic dyke (iv) |
| JDALP01 | G | minor dykelet (2 cm) with Tr py |
| JDALP02 | G | 20% pyrr in hornfelsed siltstone |
| JDALP03 | G | Qz-aspy vein 1 cm in felsic dyke |
| JDALP04 | C | 0.5 cm qz-aspy veinlet crossing felsic dyke |
| JDALP05 | C | 1.0 m chip of silicified dyke margin |
| JDALP06 | G | oxidized vein(?) at dyke/wallrock contact |
| JDALP07 | C | 1.5 m chip across multiple 1-3 cm veins in dyke (i) |
| JDALP08 | C | 1.5 m chip (from JDALP07), incr. Qz/aspy (ii) |
| JDALP09 | C | 1.5 m chip (from JDALP08) (iii) |
| JDALP10 | G | 12-15 cm qz-aspy vein, 3-5 mm aspy blebs 6-7% |
| JDALP11 | G | 10-15 cm qz-aspy vein. 1 cm aspy veinlets |
| JDALP12 | G | (as per JDALP11) 5 m along-strike |
| JDALP13 | G | silicified dyke margin, tr aspy |
| JDALP14 | G | Rep. Grab across 3 m at 30 cm int.; 12 cm qz-aspy vein across dyke axis |
| JDALP15 | C | 1.5 m chip across qz-aspy vein in silicified dyke (i) |
| JDALP16 | C | 1.5 m chip (from JDALP15) (ii) |
| JDALP17 | G | Select grab from JDALP16 |
| JDALP18 | C | 1.5 m chip (continues from JDALP15) (iii) |
| JDALP19 | G | Select grab of 40 cm thick qz-aspy vein |

| Sample | Chip (C)/Grab (G) | Description |
|---|---|---|
| JDALP20 | G | Dyke margin, clay-altered and silicified |
| JDALP21 | G | up-slope, large dyke, qz-aspy veins |
| JDALP22 | G | qz-aspy vein (2 m silicified vein zone) |
| JDALP23 | G | qz-aspy vein (as above) |
| JDALP24 | G | qz-aspy vein (as above) |
| JDALP25 | C | 1.5 m chip across qz-aspy vein 25 m from ridge top |
| JDALP26 | C | 1.5 m chip, qz-aspy vein in Trench 2 |
| JDALP27 | G | grab of JDALP26 |
| JDALP28 | G | " " |
| JDALP29 | C | 1.0 m chip across qz-aspy vein in dyke |
| JDALP30 | G | qz-aspy vein in minor trench |
| JDALP31 | G | sugary, silica-altered dyke, Tr dissem. Aspy |
| JDALP32 | C | 2.5 m chip, Trench 3, silicified dyke, qz veinlets |
| JDALP33 | G | grab of scorodite-stained silicified dyke |
| JDALP34 | C | 0.8 m chip, as per JDALP33 |
| JDALP35 | C | 2.0 m chip, rusty, corroded dyke rock, Tr scorodite |
| JDALP36 | G | relatively fresh felsic dyke |
| JDALP37 | G | 1 m wide qz-aspy vein within felsic dyke (#36) |
| JDALP38 | C | 1.5 m chip across silicified and veined dyke |
| JDALP39 | G | grab of qz-aspy vein mineralization |
| JDALP40 | G | grab of qz-aspy vein mineralization |

Appendix B
Geochemistry Results (ICP/Assay)

Northern Analytical Laboratories ltd.

105 Copper Road
Whitehorse, Yukon
Y1A 2Z7
Ph: (403) 668-4968
Fax: (403) 668-4890

26/08/96

# Assay Certificate



Bernie Kreft

WO# 07035

| Sample # | Au ppb |
|---|---|
| BKDR 1 | 133 |
| BKDR 2 | 93 |
| BKDR 3 | 49 |
| BKDR 4 | 89 |
| BKDR 5 | 203 |
| BKDR 6 | 2374 |
| BKDR 7 | 6116 |
| JDDL 1 | 365 |
| JDDL 2 | 1312 |
| JDDL 3 | 843 |
| JDDL 4 | 1550 |
| JDDL 5 | 215 |
| JDDL 6 | 128 |
| JDDL 7 | 1988 |
| ALP BK 1 | 84 |
| ALP BK 2 | 1130 |
| ALP BK 3 | 799 |
| ALP BK 4 | 163 |
| ALP BK 5 | 209 |
| ALP BK 6 | 1241 |
| ALP BK 7 | 664 |
| ALP BK 8 | 631 |
| ALP BK 9 | 55 |
| ALP BK 10 | 152 |
| ALP BK 11 | 1262 |
| ALP BK 12 | 380 |
| ALP BK 13 | 2537 |
| ALP BK 14 | 2994 |
| ALP BK 15 | 671 |
| ALP BK 16 | 49 |

Certified by

Northern Analytical Laboratories ltd.

105 Copper Road
Whitehorse, Yukon
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Ph: (403) 668-4968
Fax: (403) 668-4890



Bernie Kreft

WO# 07035

| Sample # | Au ppb |
|---|---|
| ALP BK 17 | 152 |
| ALP BK 18 | 407 |
| ALP BK 19 | 67 |
| ALP BK 20 | 907 |
| ALP BK 22 | 2140 |
| ALP BK 23 | 559 |
| ALP BK 24 | 266 |
| ALP BK 25 | 715 |
| JD ALP 1 | 13 |
| JD ALP 2 | 11 |
| JD ALP 3 | 376 |
| JD ALP 4 | 874 |
| JD ALP 5 | 70 |
| JD ALP 6 | 44 |
| JD ALP 7 | 1834 |
| JD ALP 8 | 6613 |
| JD ALP 9 | 1450 |
| JD ALP 10 | 413 |
| JD ALP 11 | 46 |
| JD ALP 12 | >7000 30758 |
| JD ALP 13 | 506 |
| JD ALP 14 | 2340 |
| JD ALP 15 | 4926 |
| JD ALP 16 | 6055 |
| JD ALP 17 | >7000 |
| JD ALP 18 | >7000 |
| JD ALP 19 | >7000 12489 |
| JD ALP 20 | 1028 |
| JD ALP 21 | >7000 15363 |
| JD ALP 22 | >7000 |

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Whitehorse, Yukon
Y1A 2Z7
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Fax: (403) 668-4890



Bernie Kreft WO# 07035

| Sample # | Au ppb |
|---|---|
| JD ALP 23 | >7000 |
| JD ALP 24 | 1702 |
| JD ALP 25 | >7000 |
| JD ALP 26 | 311 |
| JD ALP 27 | 506 |
| JD ALP 28 | 295 |
| JD ALP 29 | 461 |
| JD ALP 30 | 288 |
| JD ALP 31 | 88 |
| JD ALP 32 | 83 |
| JD ALP 33 | 176 |
| JD ALP 34 | 208 |
| JD ALP 35 | 47 |
| JD ALP 36 | 35 |
| JD ALP 37 | 3248 |
| JD ALP 38 | 182 |
| JD ALP 39 | 599 |
| JD ALP 40 | 187 |

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09/09/96

Assay Certificate



Bernie Kreft

WO# 07035a

| Sample # | Au oz/ton |
|---|---|
| BKDR 6 | 0.081 |
| BKDR 7 | 0.147 |
| JDDL 2 | 0.053 |
| JDDL 4 | 0.044 |
| JDDL 7 | 0.058 |
| ALP BK 2 | 0.034 |
| ALP BK 6 | 0.034 |
| ALP BK 11 | 0.041 |
| ALP BK 13 | 0.074 |
| ALP BK 14 | 0.090 |
| ALP BK 22 | 0.065 |
| JD ALP 7 | 0.051 |
| JD ALP 8 | 0.171 |
| JD ALP 9 | 0.056 |
| JD ALP 12 | 0.989 |
| JD ALP 14 | 0.064 |
| JD ALP 15 | 0.137 |
| JD ALP 16 | 0.157 |
| JD ALP 17 | 1.912 |
| JD ALP 18 | 0.419 |
| JD ALP 19 | 0.408 |
| JD ALP 20 | 0.032 |
| JD ALP 21 | 0.494 |
| JD ALP 22 | 0.310 |
| JD ALP 23 | 1.771 |
| JD ALP 24 | 0.050 |
| JD ALP 25 | 0.256 |
| JD ALP 37 | 0.095 |

Note: Gravimetric Fire Assays.

Certified by

# CERTIFICATE OF ANALYSIS
## iPL 96H0810

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Fax (604) 879-7898

Bernie Kreft
Northern Analytical Laboratories

78 Samples | 0= Rock | 0= Soil | 0= Core | 0=RC Ct | 78= Pulp | 0=Other | [081009:10:22:69090596]

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Raw Storage: | -- | -- | -- | -- | 12Mon/Dis | -- | Mon=Month Dis=Discard |
| Pulp Storage: | -- | -- | -- | -- | 12Mon/Dis | -- | Rtn=Return Arc=Archive |

Out: Sep 05, 1996 Project: W.O. 07035
In : Aug 29, 1996 Shipper: Norm Smith
PO#: 054620 Shipment: ID=C030901
Msg: ICP(AqR)30
Msg:

### Document Distribution

1 Northern Analytical Laboratories
105 Copper Road
Whitehorse
YT Y1A 2Z7

ATT: Norm Smith

| EN | RT | CC | IN | FX |
|---|---|---|---|---|
| 1 | 2 | 2 | 2 | 1 |
| DL | 3D | 5D | BT | BL |
| 0 | 0 | 0 | 1 | 0 |

Ph:403/668-4968
Fx:403/668-4890

### Analytical Summary

| ## | Code | Method | Title | Low Limit | High Limit | Units | Description | Element | ## |
|---|---|---|---|---|---|---|---|---|---|
| 01 | 721P | ICP | Ag | 0.1 | 100 | ppm | Ag ICP | Silver | 01 |
| 02 | 711P | ICP | Cu | 1 | 20000 | ppm | Cu ICP | Copper | 02 |
| 03 | 714P | ICP | Pb | 2 | 20000 | ppm | Pb ICP | Lead | 03 |
| 04 | 730P | ICP | Zn | 1 | 20000 | ppm | Zn ICP | Zinc | 04 |
| 05 | 703P | ICP | As | 5 | 9999 | ppm | As ICP 5 ppm | Arsenic | 05 |
| 06 | 702P | ICP | Sb | 5 | 9999 | ppm | Sb ICP | Antimony | 06 |
| 07 | 732P | ICP | Hg | 3 | 9999 | ppm | Hg ICP | Mercury | 07 |
| 08 | 717P | ICP | Mo | 1 | 9999 | ppm | Mo ICP | Molydenum | 08 |
| 09 | 747P | ICP | Tl | 10 | 999 | ppm | Tl ICP 10 ppm (Incomplete | Thallium | 09 |
| 10 | 705P | ICP | Bi | 2 | 999 | ppm | Bi ICP | Bismuth | 10 |
| 11 | 707P | ICP | Cd | 0.1 | 100 | ppm | Cd ICP | Cadmium | 11 |
| 12 | 710P | ICP | Co | 1 | 999 | ppm | Co ICP | Cobalt | 12 |
| 13 | 718P | ICP | Ni | 1 | 999 | ppm | Ni ICP | Nickel | 13 |
| 14 | 704P | ICP | Ba | 2 | 9999 | ppm | Ba ICP (Incomplete Digest | Barium | 14 |
| 15 | 727P | ICP | W | 5 | 999 | ppm | W ICP (Incomplete Digest | Tungsten | 15 |
| 16 | 709P | ICP | Cr | 1 | 9999 | ppm | Cr ICP (Incomplete Digest | Chromium | 16 |
| 17 | 729P | ICP | V | 2 | 999 | ppm | V ICP | Vanadium | 17 |
| 18 | 716P | ICP | Mn | 1 | 9999 | ppm | Mn ICP | Manganese | 18 |
| 19 | 713P | ICP | La | 2 | 9999 | ppm | La ICP (Incomplete Digest | Lanthanum | 19 |
| 20 | 723P | ICP | Sr | 1 | 9999 | ppm | Sr ICP (Incomplete Digest | Strontium | 20 |
| 21 | 731P | ICP | Zr | 1 | 999 | ppm | Zr ICP | Zirconium | 21 |
| 22 | 736P | ICP | Sc | 1 | 99 | ppm | Sc ICP | Scandium | 22 |
| 23 | 726P | ICP | Ti | 0.01 | 1.00 | % | Ti ICP (Incomplete Digest | Titanium | 23 |
| 24 | 701P | ICP | Al | 0.01 | 9.99 | % | Al ICP (Incomplete Digest | Aluminum | 24 |
| 25 | 708P | ICP | Ca | 0.01 | 9.99 | % | Ca ICP (Incomplete Digest | Calcium | 25 |
| 26 | 712P | ICP | Fe | 0.01 | 9.99 | % | Fe ICP | Iron | 26 |
| 27 | 715P | ICP | Mg | 0.01 | 9.99 | % | Mg ICP (Incomplete Digest | Magnesium | 27 |
| 28 | 720P | ICP | K | 0.01 | 9.99 | % | K ICP (Incomplete Digest | Potassium | 28 |
| 29 | 722P | ICP | Na | 0.01 | 5.00 | % | Na ICP (Incomplete Digest | Sodium | 29 |
| 30 | 719P | ICP | P | 0.01 | 5.00 | % | P ICP | Phosphorus | 30 |

EN=Envelope # RT=Report Style CC=Copies IN=Invoices FX=Fax(1=Yes 0=No)
DL=DownLoad 3D=3-1/2 Disk 5D=5-1/4 Disk BT=BBS Type BL=BBS(1=Yes 0=No)

Totals: 2=Copy 2=Invoice 0=3-1/2 Disk 0=5-1/4 Disk

# CERTIFICATE OF ANALYSIS

## iPL 96H0810

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Client: Northern Analytical Laboratories  iPL: 96H0810  Out: Sep 05, 1996  Page 1 of 2  Section 1 of 1
Project: W.O. 07035  78 Pulp  In: Aug 29, 1996  [081009:10:27:69090596]  Certified BC Assayer: David Chiu

| Sample Name | | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm | Sb ppm | Hg ppm | Mo ppm | Tl ppm | Bi ppm | Cd ppm | Co ppm | Ni ppm | Ba ppm | W ppm | Cr ppm | V ppm | Mn ppm | La ppm | Sr ppm | Zr ppm | Sc ppm | Ti % | Al % | Ca % | Fe % | Mg % | K % | Na % | P % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ALP BK 1 | P | 0.3 | 35 | 16 | 13 | 3.3% | 34 | < | 3 | < | 7 | 0.3 | 20 | 18 | < | < | 105 | 3 | 24 | 2 | 1 | 3 | 1 | < | 0.06 | 0.02 | 2.60 | < | < | 0.01 | 0.01 |
| ALP BK 2 | P | 1.5 | 116 | 15 | 16 | 3.0% | 21 | < | 5 | < | 6 | 0.3 | 38 | 38 | 97 | < | 29 | 5 | 14 | 5 | 12 | 9 | 2 | < | 0.18 | 0.02 | 2.60 | 0.01 | 0.09 | 0.01 | 0.03 |
| ALP BK 3 | P | 0.8 | 62 | 13 | 17 | 1.7% | 18 | < | 9 | < | 4 | 0.4 | 55 | 88 | 112 | < | 78 | 13 | 17 | 11 | 22 | 4 | 2 | < | 0.52 | 0.01 | 2.88 | 0.05 | 0.11 | 0.01 | 0.06 |
| ALP BK 4 | P | 0.4 | 38 | 7 | 9 | 5543 | 9 | < | 3 | < | < | 0.1 | 11 | 15 | 138 | < | 95 | 7 | 18 | 10 | 20 | 6 | 1 | < | 0.44 | 0.01 | 1.21 | 0.05 | 0.11 | 0.02 | 0.03 |
| ALP BK 5 | P | 0.4 | 109 | 10 | 21 | 1.5% | 10 | < | 12 | < | 4 | 0.2 | 36 | 56 | 143 | < | 86 | 14 | 25 | 9 | 21 | 6 | 1 | 0.01 | 1.14 | 0.01 | 2.58 | 0.17 | 0.16 | 0.02 | 0.06 |
| ALP BK 6 | P | 0.4 | 129 | 13 | 20 | 2.4% | 25 | < | 7 | < | 7 | < | 169 | 271 | 69 | 20 | 124 | 8 | 19 | 7 | 12 | 6 | 1 | < | 0.40 | 0.01 | 3.35 | 0.03 | 0.08 | 0.02 | 0.05 |
| ALP BK 7 | P | 1.0 | 157 | 9 | 47 | 3881 | 14 | < | 4 | < | < | 0.4 | 5 | 15 | 225 | < | 36 | 17 | 17 | 20 | 31 | 13 | 1 | 0.01 | 0.66 | 0.01 | 2.99 | 0.11 | 0.25 | 0.02 | 0.05 |
| ALP BK 8 | P | 0.7 | 79 | 7 | 9 | 2998 | 14 | < | 3 | < | < | < | 1 | 6 | 272 | < | 29 | 11 | 13 | 23 | 35 | 11 | 1 | < | 0.48 | 0.01 | 1.90 | 0.06 | 0.19 | 0.02 | 0.04 |
| ALP BK 9 | P | 0.4 | 84 | 8 | 43 | 1344 | 5 | < | 4 | < | < | < | 4 | 18 | 333 | < | 27 | 21 | 33 | 28 | 26 | 17 | 1 | 0.01 | 1.36 | 0.01 | 1.72 | 0.30 | 0.36 | 0.02 | 0.03 |
| ALP BK 10 | P | 0.5 | 50 | 10 | 18 | 2.7% | 12 | < | 3 | < | 12 | 0.3 | 52 | 23 | < | < | 110 | 3 | 19 | < | 2 | 1 | 1 | < | 0.15 | < | 2.47 | 0.01 | 0.02 | 0.02 | 0.04 |
| ALP BK 11 | P | 1.6 | 173 | 12 | 60 | 5.9% | 66 | < | 5 | < | 33 | < | 5 | 4 | < | < | 12 | 13 | 8 | 4 | 2 | 4 | 3 | < | 0.15 | 0.01 | 11% | 0.01 | < | 0.01 | 0.10 |
| ALP BK 12 | P | < | 118 | 24 | 38 | 6.1% | 36 | < | 4 | < | 25 | < | 25 | 22 | < | < | 54 | 10 | 11 | 10 | 9 | 6 | 1 | < | 0.14 | < | 11% | < | 0.01 | 0.01 | 0.08 |
| ALP BK 13 | P | 1.6 | 29 | 49 | 22 | 10% | 71 | < | 4 | < | 202 | < | 411 | 195 | < | < | 63 | 5 | 15 | < | 5 | 2 | < | < | 0.10 | 0.01 | 8.63 | 0.01 | < | 0.01 | 0.01 |
| ALP BK 14 | P | 4.2 | 37 | 37 | 20 | 2.9% | 41 | < | 2 | < | 51 | 0.4 | 8 | 6 | 14 | < | 47 | 2 | 10 | 2 | 3 | 9 | 1 | < | 0.31 | 0.01 | 2.32 | 0.01 | 0.14 | 0.01 | 0.02 |
| ALP BK 15 | P | 0.8 | 136 | 13 | 14 | 5357 | 100 | < | 6 | < | 6 | 2.6 | 4 | 6 | 117 | < | 46 | 10 | 15 | 14 | 4 | 11 | 1 | < | 0.25 | < | 1.77 | 0.01 | 0.14 | 0.02 | 0.02 |
| ALP BK 16 | P | 0.6 | 8 | 7 | 6 | 2900 | 11 | < | 1 | < | 4 | 0.2 | 1 | 3 | 23 | < | 41 | 2 | 15 | 2 | 3 | 5 | < | < | 0.38 | < | 0.88 | 0.03 | 0.15 | 0.02 | 0.02 |
| ALP BK 17 | P | 0.4 | 14 | 8 | 9 | 6335 | 18 | < | 1 | < | 5 | 0.1 | 1 | 2 | 19 | < | 30 | < | 8 | < | 3 | 6 | < | < | 0.36 | 0.01 | 0.62 | 0.02 | 0.12 | 0.01 | 0.01 |
| ALP BK 18 | P | 1.2 | 9 | 29 | 19 | 5390 | 18 | < | 1 | < | 7 | 0.1 | 1 | 7 | 31 | < | 28 | < | 11 | 2 | 5 | 7 | < | < | 0.57 | 0.01 | 0.86 | 0.03 | 0.12 | 0.02 | 0.01 |
| ALP BK 19 | P | 4.9 | 17 | 142 | 14 | 4568 | 16 | < | 1 | < | 35 | 0.1 | 1 | 19 | 54 | < | 45 | 2 | 13 | 3 | 7 | 5 | 1 | < | 0.91 | 0.01 | 0.86 | 0.04 | 0.13 | 0.02 | 0.01 |
| ALP BK 20 | P | 0.5 | 6 | 10 | 21 | 1532 | 12 | < | 1 | < | 44 | < | 1 | 3 | 27 | < | 55 | < | 29 | 2 | 2 | 11 | < | < | 0.36 | 0.02 | 1.29 | 0.04 | 0.11 | 0.03 | 0.01 |
| ALP BK 22 | P | 0.7 | 13 | 70 | 12 | 1.4% | 21 | < | 1 | < | 17 | 0.1 | 1 | 6 | 6 | < | 34 | 2 | 8 | 2 | 4 | 9 | 1 | < | 0.43 | 0.01 | 1.35 | 0.02 | 0.10 | 0.02 | 0.02 |
| ALP BK 23 | P | 1.7 | 14 | 155 | 15 | 7774 | 19 | < | 1 | < | 11 | < | 1 | 10 | 16 | < | 41 | < | 10 | 2 | 5 | 11 | < | < | 0.48 | < | 0.94 | 0.03 | 0.11 | 0.02 | 0.02 |
| ALP BK 24 | P | 0.6 | 21 | 31 | 19 | 9296 | 30 | < | 1 | < | 6 | 0.1 | < | 5 | 11 | < | 33 | < | 9 | 2 | 4 | 10 | 1 | < | 0.53 | < | 1.02 | 0.03 | 0.11 | 0.02 | 0.02 |
| ALP BK 25 | P | 0.4 | 9 | 9 | 8 | 6810 | 10 | < | 1 | < | 11 | < | < | 2 | 11 | < | 55 | < | 11 | < | 3 | 7 | < | < | 0.35 | < | 0.69 | 0.03 | 0.11 | 0.01 | 0.01 |
| BK DR 1 | P | < | 339 | 9 | 32 | 38 | < | < | 3 | < | 50 | < | 4 | 2 | 4 | < | 31 | 14 | 730 | < | 13 | 6 | 1 | 0.03 | 1.23 | 2.25 | 7.19 | 0.05 | 0.01 | 0.01 | 0.04 |
| BK DR 2 | P | < | 274 | 5 | 18 | 120 | < | < | 3 | < | 25 | < | 2 | 3 | 2 | < | 29 | 16 | 501 | < | 3 | 7 | 1 | 0.04 | 1.22 | 2.27 | 7.37 | 0.04 | 0.01 | 0.01 | 0.01 |
| BK DR 3 | P | < | 289 | 9 | 136 | 11 | < | < | 2 | < | 5 | < | 6 | 4 | < | < | 28 | 10 | 1084 | < | 4 | 5 | 1 | 0.02 | 1.26 | 2.70 | 5.40 | 0.08 | < | 0.01 | 0.01 |
| BK DR 4 | P | < | 202 | 8 | 23 | 30 | < | < | 2 | < | 9 | < | 2 | 2 | < | < | 26 | 15 | 638 | 2 | 9 | 7 | 1 | 0.04 | 1.46 | 2.49 | 5.18 | 0.06 | 0.01 | 0.01 | < |
| BK DR 5 | P | < | 379 | 8 | 30 | < | < | < | 2 | < | 38 | < | 6 | 3 | 2 | < | 21 | 14 | 593 | < | 27 | 6 | 1 | 0.03 | 1.76 | 2.04 | 6.49 | 0.07 | 0.01 | 0.03 | < |
| BK DR 6 | P | < | 817 | 4 | 25 | < | < | < | 2 | < | 15 | < | 17 | 6 | 32 | < | 12 | 11 | 339 | 7 | 11 | 6 | 1 | 0.03 | 0.88 | 1.39 | 7.84 | 0.33 | 0.01 | 0.01 | 0.03 |
| BK DR 7 | P | 0.3 | 856 | < | 17 | < | < | < | 4 | < | 109 | < | 15 | 4 | 28 | < | 20 | 16 | 368 | < | 2 | 16 | 1 | 0.04 | 0.78 | 5.08 | 12% | 0.09 | < | 0.01 | 0.03 |
| JD ALP 1 | P | 0.5 | 11 | 44 | 92 | 683 | 21 | < | 1 | < | < | 0.4 | 2 | 5 | 103 | < | 46 | < | 35 | 11 | 12 | 14 | < | < | 0.37 | 0.11 | 1.38 | 0.07 | 0.09 | 0.03 | 0.02 |
| JD ALP 2 | P | 0.5 | 67 | 6 | 116 | 168 | < | < | 2 | < | < | 0.5 | 8 | 39 | 64 | < | 39 | 19 | 32 | 14 | 28 | 12 | 1 | < | 1.10 | 0.05 | 2.19 | 0.60 | 0.09 | 0.03 | 0.03 |
| JD ALP 3 | P | 2.9 | 44 | 137 | 82 | 3.0% | 108 | < | 2 | < | 18 | 0.6 | 1 | 3 | 35 | < | 50 | < | 12 | 4 | 7 | 7 | 2 | < | 0.35 | 0.01 | 2.42 | 0.02 | 0.12 | 0.02 | 0.01 |
| JD ALP 4 | P | 1.8 | 72 | 84 | 136 | 9.1% | 212 | < | 2 | < | 19 | < | 1 | 1 | < | < | 26 | 3 | 9 | 5 | 58 | 10 | 5 | < | 0.45 | 0.01 | 7.36 | 0.02 | 0.08 | 0.02 | 0.04 |
| JD ALP 5 | P | 1.0 | 118 | 265 | 62 | 2036 | 8 | < | 4 | < | < | < | < | 2 | 36 | < | 30 | 29 | 15 | 2 | 13 | 4 | < | < | 0.55 | < | 10% | 0.04 | 0.08 | 0.02 | 0.03 |
| JD ALP 6 | P | 0.3 | 321 | 156 | 154 | 761 | 20 | < | 7 | < | < | < | 3 | 3 | 25 | < | 29 | 90 | 4 | < | 5 | 7 | < | < | 0.36 | < | 22% | 0.01 | 0.02 | < | 0.05 |
| JD ALP 7 | P | 3.7 | 17 | 98 | 59 | 1.0% | 60 | < | 1 | < | 59 | 0.2 | < | 2 | 16 | < | 44 | < | 9 | < | 3 | 8 | < | < | 0.27 | < | 1.37 | 0.01 | 0.15 | 0.02 | 0.01 |
| JD ALP 8 | P | 18.5 | 30 | 222 | 43 | 4.2% | 283 | < | 2 | < | 148 | < | < | 3 | < | < | 50 | 2 | 11 | < | 4 | 10 | 1 | < | 0.28 | < | 3.51 | 0.01 | 0.10 | 0.01 | 0.01 |
| Min Limit | | 0.1 | 1 | 2 | 1 | 5 | 5 | 3 | 1 | 10 | 2 | 0.1 | 1 | 1 | 2 | 5 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Max Reported* | | 99.9 | 20000 | 20000 | 20000 | 9999 | 9999 | 9999 | 9999 | 999 | 999 | 99.9 | 999 | 999 | 9999 | 999 | 9999 | 999 | 9999 | 9999 | 9999 | 999 | 99 | 1.00 | 9.99 | 9.99 | 9.99 | 9.99 | 9.99 | 5.00 | 5.00 |
| Method | | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP |

--=No Test  ins=Insufficient Sample  S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined  m=Estimate/1000  %=Estimate %  Max=No Estimate

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# CERTIFICATE OF ANALYSIS

## iPL 96H0810

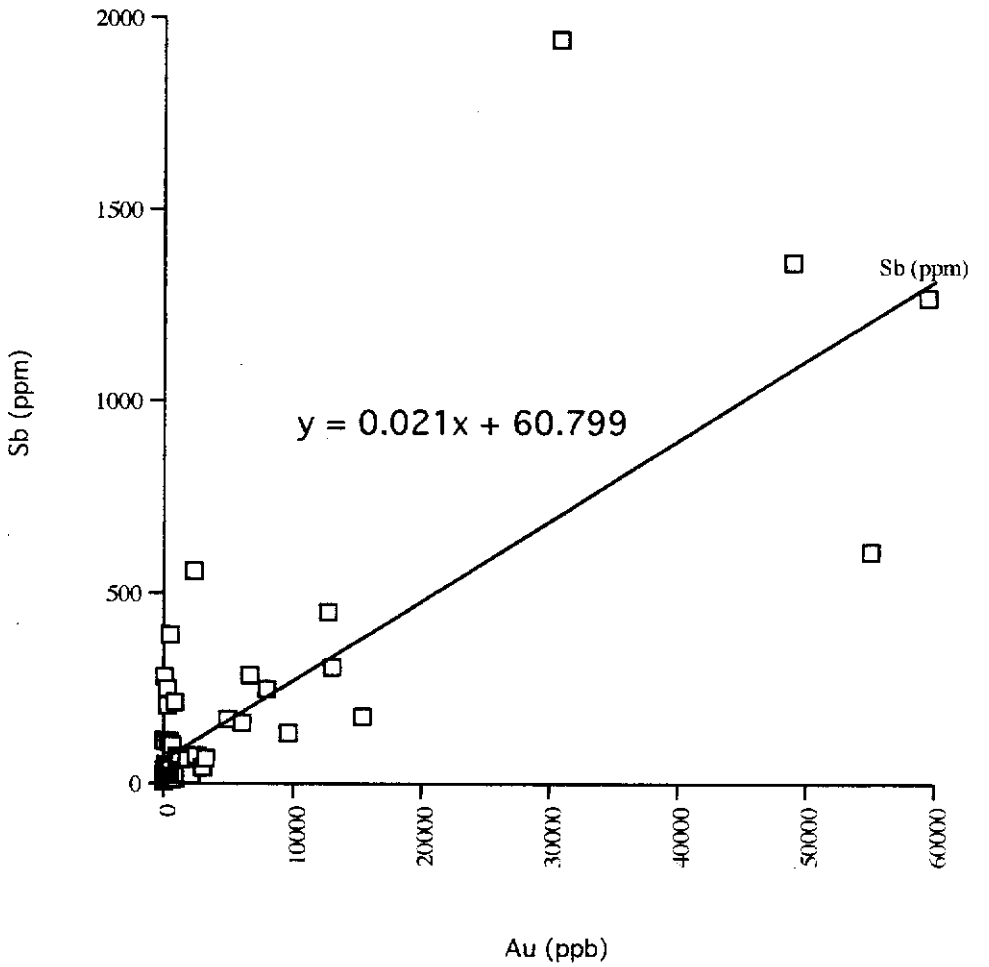
Client: Northern Analytical Laboratories  iPL: 96H0810  Out: Sep 05, 1996  Page 2 of 2  Section 1 of 1
Project: W.O. 07035  78 Pulp  In: Aug 29, 1996  [081009:10:40:69090596]  Certified BC Assayer: David Chiu

| Sample Name | | Ag ppm | Cu ppm | Pb ppm | Zn ppm | As ppm | Sb ppm | Hg ppm | Mo ppm | Tl ppm | Bi ppm | Cd ppm | Co ppm | Ni ppm | Ba ppm | W ppm | Cr ppm | V ppm | Mn ppm | La ppm | Sr ppm | Zr ppm | Sc ppm | Ti % | Al % | Ca % | Fe % | Mg % | K % | Na % | P % |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| JD ALP 9 | P | 1.5 | 10 | 41 | 25 | 1.1% | 33 | < | 2 | < | 17 | 0.2 | 1 | 3 | 11 | < | 43 | 3 | 10 | 2 | 4 | 7 | 1 | < | 0.28 | 0.01 | 1.31 | 0.02 | 0.11 | 0.01 | 0.01 |
| JD ALP 10 | P | 1.3 | 8 | 25 | 19 | 1.3% | 42 | < | 2 | < | 4 | < | 1 | 4 | 7 | < | 90 | < | 16 | < | 3 | 6 | < | < | 0.27 | < | 1.22 | 0.01 | 0.09 | 0.02 | 0.01 |
| JD ALP 11 | P | 0.1m | 88 | 15911 | 2138 | 1.2% | 111 | < | 1 | < | 11 | 11.4 | 1 | 6 | < | < | 48 | 2 | 30 | 3 | 7 | 7 | < | < | 0.57 | < | 1.21 | 0.02 | 0.18 | 0.02 | 0.02 |
| JD ALP 12 | P | 9.8 | 79 | 340 | 93 | 17% | 1939 | < | 4 | < | 350 | < | 3 | 1 | < | < | 37 | 5 | 9 | < | 2 | 9 | < | < | 0.17 | < | 14% | < | 0.05 | 0.01 | < |
| JD ALP 13 | P | 1.5 | 18 | 162 | 60 | 8680 | 41 | < | 3 | < | 5 | 0.5 | 3 | 22 | 53 | < | 24 | 4 | 13 | 10 | 5 | 13 | 1 | < | 0.71 | 0.01 | 1.91 | 0.05 | 0.14 | 0.02 | 0.01 |
| JD ALP 14 | P | 3.0 | 95 | 129 | 47 | 6.9% | 557 | < | 3 | < | 43 | < | 1 | 2 | < | < | 67 | 2 | 13 | 4 | 5 | 9 | 4 | < | 0.18 | < | 5.28 | 0.01 | 0.06 | 0.01 | 0.02 |
| JD ALP 15 | P | 1.4 | 89 | 55 | 17 | 4.2% | 167 | < | 2 | < | 49 | < | 1 | 2 | < | < | 48 | < | 8 | < | 2 | 9 | 4 | < | 0.21 | < | 3.32 | 0.01 | 0.12 | 0.01 | 0.04 |
| JD ALP 16 | P | 2.8 | 98 | 43 | 18 | 4.3% | 157 | < | 2 | < | 55 | < | 1 | 1 | < | < | 44 | 2 | 10 | < | 2 | 6 | 4 | < | 0.19 | < | 3.48 | 0.01 | 0.09 | 0.01 | 0.06 |
| JD ALP 17 | P | 13.5 | 638 | 138 | 39 | 21% | 1267 | < | 5 | < | 552 | < | 6 | 7 | < | < | 34 | 7 | 10 | < | 1 | 11 | 13 | < | 0.13 | < | 17% | < | 0.01 | 0.01 | 0.17 |
| JD ALP 18 | P | 9.4 | 116 | 142 | 28 | 6.0% | 304 | < | 2 | < | 199 | < | 1 | 3 | < | < | 77 | 2 | 16 | < | 3 | 7 | 4 | < | 0.12 | < | 4.61 | < | 0.05 | 0.01 | 0.03 |
| JD ALP 19 | P | 5.2 | 111 | 68 | 12 | 7.9% | 449 | < | 3 | < | 134 | < | 3 | 7 | < | < | 84 | 2 | 12 | < | 1 | 5 | 3 | < | 0.06 | < | 5.58 | < | 0.02 | 0.01 | 0.02 |
| JD ALP 20 | P | 1.5 | 204 | 41 | 43 | 9.9% | 70 | < | 3 | < | 28 | < | 6 | 15 | < | < | 44 | 5 | 15 | 2 | 11 | 12 | 5 | < | 0.33 | 0.01 | 8.07 | 0.02 | 0.10 | 0.01 | 0.05 |
| JD ALP 21 | P | 2.9 | 116 | 33 | 29 | 8.3% | 175 | < | 3 | < | 95 | < | 1 | 1 | < | < | 34 | 4 | 9 | < | 3 | 11 | 7 | < | 0.28 | < | 7.25 | 0.01 | 0.10 | 0.01 | 0.08 |
| JD ALP 22 | P | 6.9 | 181 | 79 | 22 | 5.6% | 131 | < | 2 | < | 68 | < | 1 | 1 | < | < | 56 | 2 | 11 | < | 2 | 10 | 2 | < | 0.28 | < | 4.42 | 0.01 | 0.14 | 0.01 | 0.03 |
| JD ALP 23 | P | 13.0 | 20 | 69 | 33 | 17% | 607 | < | 2 | < | 854 | < | 3 | 4 | < | < | 51 | 4 | 31 | < | 1 | 5 | < | < | 0.16 | < | 13% | 0.01 | 0.03 | 0.01 | 0.01 |
| JD ALP 24 | P | 1.0 | 39 | 20 | 15 | 2.0% | 25 | < | 2 | < | 18 | 0.4 | 1 | 2 | 8 | < | 58 | 4 | 12 | 3 | 5 | 1 | 3 | < | 0.34 | < | 2.12 | 0.03 | 0.13 | 0.02 | 0.05 |
| JD ALP 25 | P | 0.5 | 17 | 16 | 14 | 1.7% | 246 | < | 2 | < | 6 | 0.3 | 1 | 2 | 341 | < | 84 | 3 | 9 | 2 | 5 | 6 | 2 | < | 0.22 | < | 1.66 | < | 0.12 | 0.01 | 0.04 |
| JD ALP 26 | P | 0.4 | 16 | 16 | 14 | 1.7% | 246 | < | 2 | < | < | 0.4 | 1 | 1 | 337 | < | 81 | 3 | 9 | 2 | 5 | 6 | 2 | < | 0.21 | < | 1.63 | < | 0.11 | 0.01 | 0.04 |
| JD ALP 27 | P | 0.5 | 13 | 16 | 16 | 1.7% | 390 | < | 1 | < | < | 0.4 | 1 | 1 | 732 | < | 66 | 3 | 9 | 3 | 6 | 8 | 2 | < | 0.24 | < | 1.80 | < | 0.11 | 0.01 | 0.04 |
| JD ALP 28 | P | 2.8 | 35 | 763 | 23 | 3.0% | 202 | < | 3 | < | 12 | 1.6 | 1 | 2 | 499 | < | 92 | 5 | 13 | 16 | 39 | 3 | 2 | < | 0.27 | 0.01 | 3.43 | < | 0.09 | 0.01 | 0.07 |
| JD ALP 29 | P | 0.8 | 24 | 563 | 18 | 2.0% | 109 | < | 2 | < | 10 | 1.2 | 1 | 2 | 296 | < | 103 | 3 | 14 | 12 | 38 | 2 | 2 | < | 0.27 | 0.01 | 2.30 | 0.01 | 0.14 | 0.01 | 0.06 |
| JD ALP 30 | P | 0.7 | 41 | 24 | 17 | 2.9% | 35 | < | 2 | < | 9 | 0.4 | 1 | 2 | < | < | 90 | 2 | 10 | < | 3 | 2 | 2 | < | 0.20 | < | 2.20 | < | 0.07 | 0.01 | 0.05 |
| JD ALP 31 | P | 0.2 | 6 | 22 | 5 | 5408 | 278 | < | 1 | < | 3 | 0.1 | < | 1 | 69 | < | 63 | < | 10 | < | 3 | 6 | 1 | < | 0.25 | < | 0.61 | < | 0.17 | 0.02 | 0.01 |
| JD ALP 32 | P | 0.6 | 7 | 18 | 15 | 3441 | 11 | < | 1 | < | 3 | 0.1 | < | 3 | 32 | < | 62 | < | 16 | < | 5 | 4 | < | < | 0.46 | 0.01 | 0.63 | 0.03 | 0.16 | 0.02 | 0.01 |
| JD ALP 33 | P | 0.5 | 17 | 26 | 8 | 1.6% | 48 | < | 1 | < | 4 | < | < | 1 | 10 | < | 52 | < | 9 | < | 2 | 5 | < | < | 0.24 | < | 1.30 | < | 0.16 | 0.01 | 0.01 |
| JD ALP 34 | P | 1.5 | 13 | 38 | 10 | 9968 | 33 | < | 1 | < | 5 | 0.2 | < | 1 | 18 | < | 53 | < | 8 | 2 | 3 | 6 | < | < | 0.27 | < | 0.87 | 0.01 | 0.15 | 0.01 | 0.01 |
| JD ALP 35 | P | 0.7 | 6 | 12 | 8 | 1744 | 7 | < | 1 | < | < | < | < | 1 | 49 | < | 28 | 2 | 9 | 2 | 9 | 3 | < | < | 0.58 | 0.01 | 0.75 | 0.07 | 0.11 | 0.01 | 0.02 |
| JD ALP 36 | P | 0.5 | 3 | 20 | 32 | 870 | 9 | < | 1 | < | 9 | 0.1 | 1 | 5 | 66 | < | 32 | < | 21 | < | 3 | 11 | < | < | 0.80 | 0.01 | 0.29 | 0.08 | 0.09 | 0.02 | 0.01 |
| JD ALP 37 | P | 0.5 | 66 | 10 | 14 | 5.2% | 64 | < | 2 | < | 82 | < | 2 | 3 | < | < | 81 | 2 | 11 | < | 1 | 5 | 1 | < | 0.13 | < | 3.71 | < | 0.03 | 0.01 | 0.01 |
| JD ALP 38 | P | 1.0 | 11 | 19 | 9 | 6486 | 10 | < | 1 | < | 11 | 0.2 | 1 | 2 | 16 | < | 62 | 2 | 9 | < | 3 | 5 | 1 | < | 0.24 | < | 0.56 | 0.01 | 0.12 | 0.02 | 0.01 |
| JD ALP 39 | P | 0.5 | 410 | 12 | 27 | 4.5% | 34 | < | 1 | < | 10 | < | 2 | 2 | < | < | 46 | 3 | 11 | < | 2 | 5 | 4 | < | 0.37 | < | 3.15 | 0.01 | 0.10 | 0.01 | 0.02 |
| JD ALP 40 | P | 0.5 | 55 | 19 | 8 | 9229 | 14 | < | 2 | < | 4 | < | 1 | 3 | 13 | < | 92 | < | 11 | < | 2 | 7 | 1 | < | 0.23 | < | 0.75 | < | 0.13 | 0.02 | 0.01 |
| JD DL 1 | P | < | 459 | 6 | 21 | 67 | < | < | < | < | 79 | < | 3 | 3 | 3 | < | 22 | 15 | 289 | 2 | 15 | 3 | 1 | 0.03 | 1.51 | 1.40 | 6.99 | 0.08 | 0.01 | 0.01 | 0.07 |
| JD DL 2 | P | 0.6 | 408 | 2 | 12 | < | < | < | < | < | 97 | < | 2 | 2 | 2 | < | 26 | 9 | 172 | < | 8 | 2 | 1 | 0.02 | 0.54 | 0.55 | 5.98 | 0.07 | < | 0.01 | 0.06 |
| JD DL 3 | P | 0.3 | 363 | 5 | 14 | 11 | < | < | 1 | < | 107 | < | 2 | 1 | 3 | < | 17 | 10 | 217 | < | 14 | 2 | 1 | 0.02 | 0.89 | 0.77 | 5.16 | 0.05 | 0.01 | 0.01 | 0.05 |
| JD DL 4 | P | 0.5 | 468 | 4 | 17 | < | < | < | 2 | < | 117 | < | 3 | 2 | 2 | < | 19 | 13 | 324 | < | 5 | 2 | 1 | 0.02 | 0.89 | 0.76 | 8.00 | 0.04 | < | 0.01 | 0.03 |
| JD DL 5 | P | < | 373 | 7 | 24 | < | < | < | 2 | < | 59 | < | 7 | 2 | 3 | < | 28 | 24 | 637 | 2 | 8 | 5 | 1 | 0.04 | 2.21 | 2.58 | 6.86 | 0.06 | 0.01 | 0.01 | < |
| JD DL 6 | P | < | 170 | 14 | 15 | < | < | < | 1 | < | 10 | < | 1 | 1 | < | < | 17 | 7 | 284 | 2 | 3 | 5 | 1 | 0.03 | 0.59 | 1.30 | 3.55 | 0.02 | < | 0.01 | 0.03 |
| JD DL 7 | P | 0.3 | 458 | 3 | 24 | < | < | < | 2 | < | 48 | < | 8 | 6 | 2 | < | 30 | 18 | 627 | < | 9 | 4 | 2 | 0.04 | 1.91 | 1.20 | 8.60 | 0.16 | < | 0.01 | < |
| Min Limit | | 0.1 | 1 | 2 | 1 | 5 | 5 | 3 | 1 | 10 | 2 | 0.1 | 1 | 1 | 2 | 5 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 | 0.01 |
| Max Reported* | | 99.9 | 20000 | 20000 | 20000 | 9999 | 9999 | 9999 | 9999 | 999 | 999 | 99.9 | 999 | 999 | 9999 | 999 | 9999 | 999 | 9999 | 9999 | 9999 | 999 | 99 | 1.00 | 9.99 | 9.99 | 9.99 | 9.99 | 9.99 | 5.00 | 5.00 |
| Method | | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP | ICP |

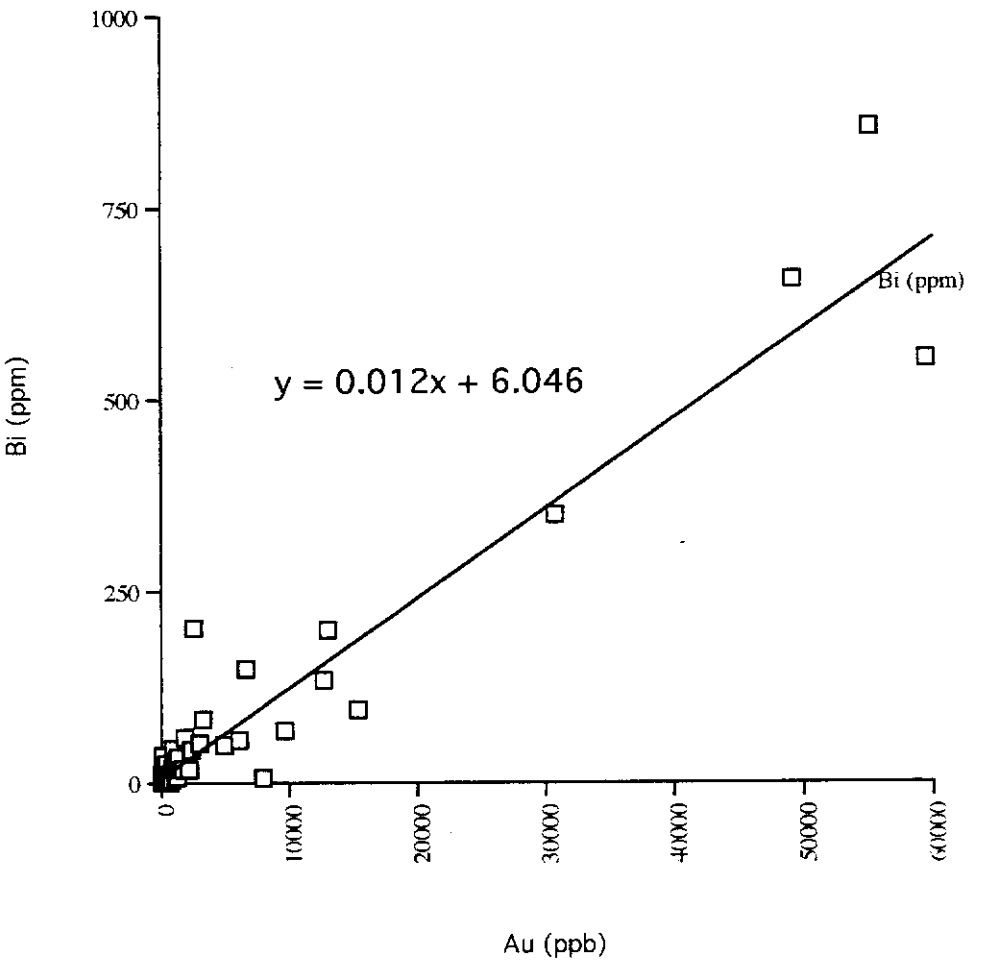
---=No Test  ins=Insufficient Sample  S=Soil R=Rock C=Core L=Silt P=Pulp U=Undefined  m=Estimate/1000  %=Estimate %  Max=No Estimate

Appendix C
Geochemical Cross-Plots

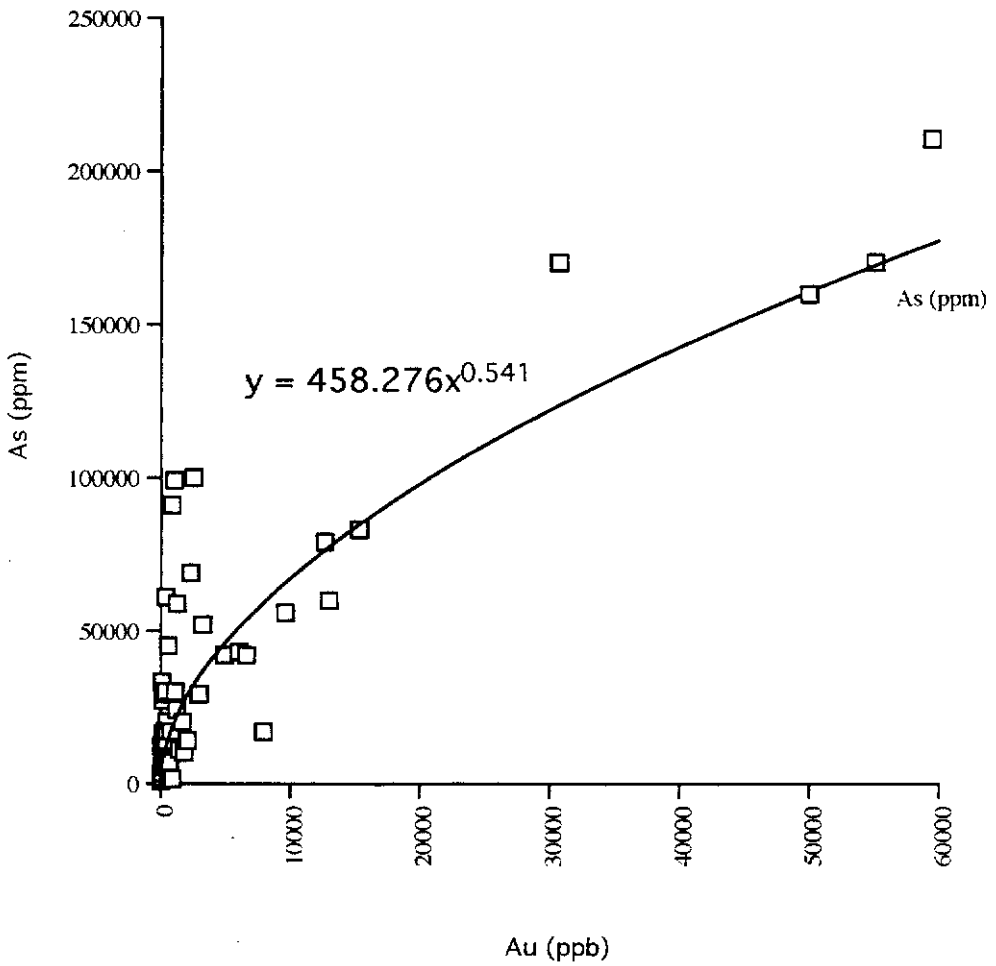
Geochemical Plot: Au (ppb) vs Sb (ppm)



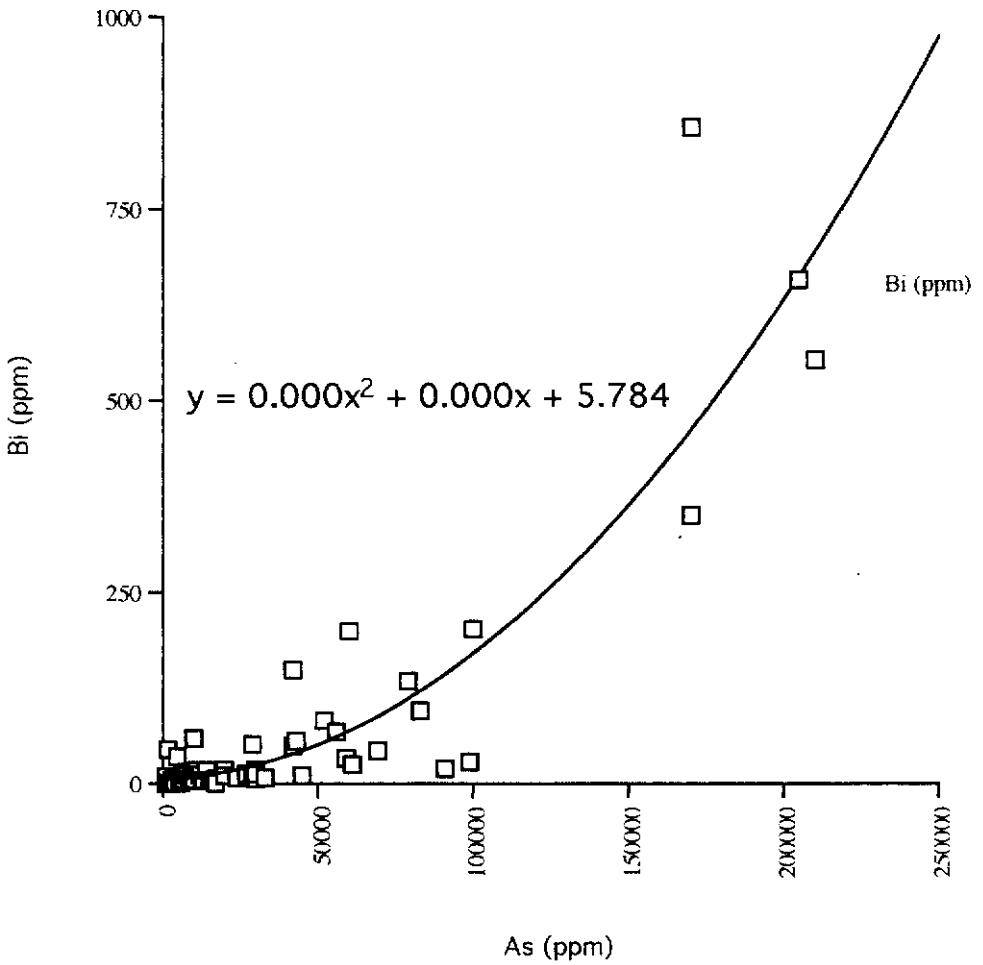
Geochemical Plot: Au (ppb) vs Bi (ppm)



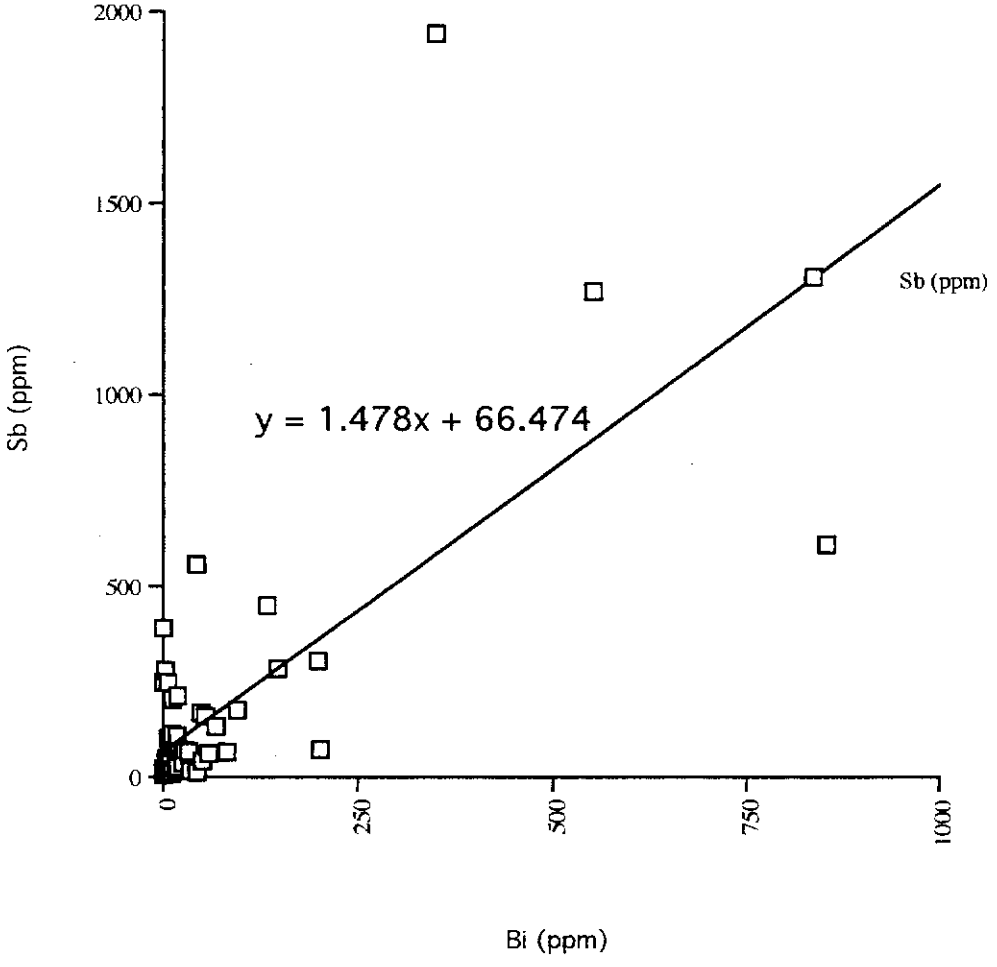
Geochemical Plot: Au (ppb) vs As (ppm)



Geochemical Plot: As (ppm) vs Bi (ppm)



Geochemical Plot: Sb (ppm) vs Bi (ppm)



Appendix D
Expense Summary

First Pass

| | |
|---|---|
| Supplies | 124.44 |
| Posts/Flagging | 51.71 |
| Wages (B.Kreft) | 234.38 |
| Helicopter | 1045.98 |
| Reprographics (Topographic Base-Maps) | 44.56 |
| Office/Fax-Phone Charges | 77.13 |
| Geochemistry | 202.10 |
| | Subtotal: $1780.30 |

Program: Phase 1

| | |
|---|---|
| Helicopter | 2589.79 |
| Geochemistry | 1442.06 |
| Overlimit Assays | 359.52 |
| Camp Supplies | 67.37 |
| Food | 88.78 |
| Wages | 6000.00 |

(J. Dickie; Senior Geologist 9 days @375.00/day)
(B. Kreft; Camp Manager 6 days @ 375.00/day)

| | |
|---|---|
| Total Expenses | $12,327.82 |
| | Less Cash Advanced $12,327.82 |
| | Amount Owing: $0.00 |

N.B. Expenses drawn from cash advanced to Mr. B. Kreft, Whitehorse, by Eagle Plains Resources Limited and Miner River Resources Limited (ASE listed exploration companies).