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Geological Assessment Report

for the

Old 1-14 Mineral Claims,

Mayo Mining District, Yukon Territory

N.T.S. 105 O/12

- Prepared For-

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

- by -

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

November 14, 1996

093817

This report has been examined by
the Geological Evaluation Unit
under Section 51 (4) Yukon Quartz
Mining Act and is allowed as
representation work in the amount
of $ 1400 .

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

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1.0 Summary and Conclusions

Preliminary exploration work completed on the Old 1-14 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 previous work. Prior to the current program auriferous quartz-arsenopyrite veins were noted within a pyrrhotite hornfels zone adjacent to the Old-Cabin granodiorite pluton. These veins cut across a succession of phyllite and slate, and mafic to intermediate tuff. The volcanic succession contains disseminated pyrrhotite and chalcopyrite and, along minor fault zones, is heavily oxidized. An extensive pyrrhotite hornfels and associated magnetic anomaly in this area infers the presence of a buried pluton which, when considered in an association with the mineralized Old-Cabin granodiorite, suggests a positive exploration environment for auriferous vein systems. An extensive gossan, spatially coincident with a large fault zone cutting across the Old claims, is drained by a creek that returned silt sample results of 805 ppb Au. This gossan zone was the focus of bulk-tonnage gold exploration during the present program.

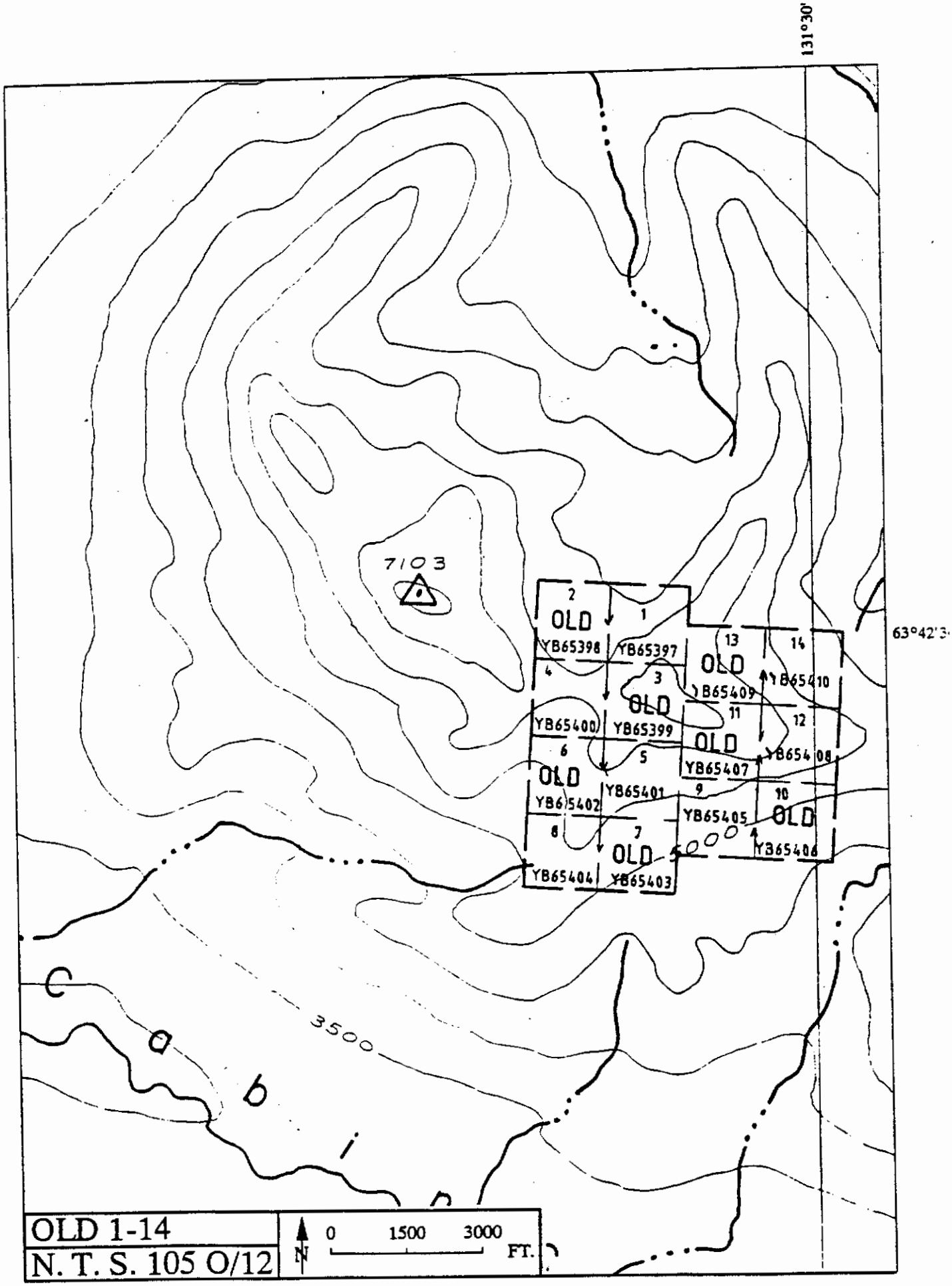
Chip and select grab sample results from across the gossan were uniformly low. Only localized quartz-arsenopyrite veins returned anomalous gold values but these lack the density or continuity to be a viable exploration target. Gold-bearing quartz-arsenopyrite veins tend to be localized within faults cutting across the property. Veins on the property are widely spaced, discontinuous along strike, and return erratic gold results. Gold values from the creek silt samples are interpreted to be the result of localized, auriferous veins within the creek bed.

Given the lack of favourable geochemical results, and the uniformity of low gold values, the gossan zone cannot be regarded as a prospective bulk tonnage exploration target. Auriferous quartz-arsenopyrite veins on the property returned anomalous results, but the vein spacing is erratic and gold values within said veins are, likewise, erratic. The possibility exists for locally improved exploration targets, but the first-pass sampling program did not return results significant enough to merit a second-phase program at this time. A small reconnaissance mapping and sampling program might better identify mineralization within the hornfels. It is possible that more abundant, auriferous quartz-arsenopyrite veins might exist closer to the pluton. Unfortunately, no results form the current program were of a sufficient grade to warrant additional work. A secondary sampling program might be carried out in conjunction with other regional exploration work conducted in the vicinity of the Old 1-14 claims, but it is not warranted, on its own merit, at this time.

2.0 Introduction

The Old 1-14 claims lie in the Hess Mountains, east of the junction of Old Cabin Creek with the Rogue River, in the MacMillan Pass area of southeastern Yukon Territory. Access to the property is by helicopter, based at Ross River, 210 km to the southwest, or from Whitehorse. The airstrip at Inca-Plata may be accessed by fixed-wing aircraft and utilized as a staging point for field programs, but the Old property must be accessed by helicopter from the airstrip.

The Old 1-14 claims were staked on behalf of *Eagle Plains Resources Limited* (EPL) and *Miner River Resources Limited* (MRG) who, in a 50:50 joint-venture partnership, hold a


131°30'
63°42'3
7103
OLD
YB65398
YB65397
YB65410
YB65409
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YB65399
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YB65407
YB65402
YB65401
YB65405
YB65406
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YB65403
3500
OLD 1-14
N. T. S. 105 O/12
N
0
1500
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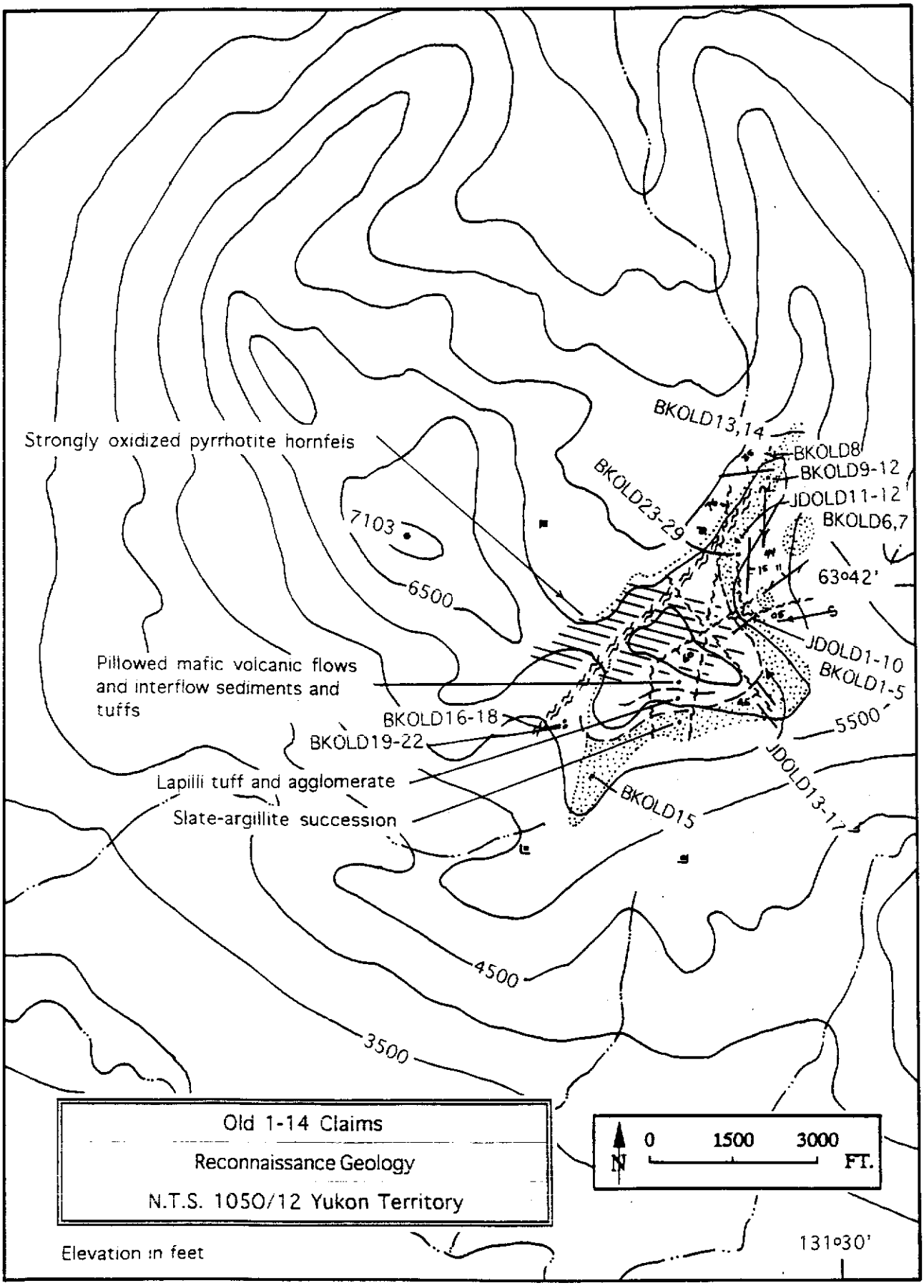
FT.


Strongly oxidized pyrrhotite hornfels
Pillowed mafic volcanic flows and interflow sediments and tuffs
Lapilli tuff and agglomerate
Slate-argillite succession
BKOLD13,14
BKOLD8
BKOLD9-12
JDOLD11-12
BKOLD6,7
BKOLD23-29
7103
6500
63°42'
JDOLD1-10
BKOLD1-5
BKOLD16-18
BKOLD19-22
5500
JDOLD13-17
BKOLD15
4500
3500
Old 1-14 Claims
Reconnaissance Geology
N.T.S. 105O/12 Yukon Territory
N
0
1500
3000
FT.
Elevation in feet
131°30'

100% interest in the property, less a 1% NSR. Old 1-14 claims are recorded, respectively, with tag numbers YB65397 to YB65410, inclusive.

The physiography of the property is rugged. The study area ranges in elevation from valley bottoms at 900 m to mountain peaks up to 2260 m. Exposure is good but icefields, scree slopes and extremely steep terrain preclude access to outcrop in some areas. Argillite, phyllite and slate weather into steep outcrops flanked by thick talus slopes. Slate and argillite exposed on north-facing weathers into steep to vertical faces flanked by extensive talus fans. South-facing slopes tend to be gentler and allow greater access across the property.

3.0 Geology

Old 1-14 claims lie within the Selwyn Basin, a large, essentially easterly-trending depocenter dominated by Cambro-Ordovician platform carbonates to deep-water argillite, turbidite sandstones and siltstones, and chert. The basin continued to act as a major basin system into the Mississippian, accumulating a strtatigraphic succession in excess of 5000 metres' thickness. The Old Cabin Creek Massif lies within the Selwyn Fold and Thrust Belt. Precambrian and Paleozoic rocks demonstrate northeast-directed shortening, resulting in northwest-trending, upright and overturned, open to isoclinal folds, and thrust faults. Steeply dipping strike-slip faults cut across the stratigraphy, presumably repesenting tear-faults within an overall thrust-dominated strain regime.

The claims are underlain by black argillite, siltstone, phyllite and slate, capped by a volcanic succession consisting of fine intermediate tuff, lapilli tuff and breccia, amygdaloidal flows, pillow lavas of probable andesitic composition, and inter-pillow hyaloclastite breccias. Where large faults cut across the stratigraphic succession, significant gossanous zones occur, largely due to disseminations and blebs of pyrrhotite with or without trace amounts of pyrite and chalcopyrite. A geology map for the property has been included as Figure 2.

4.0 Mineralization and Geochemical Results

Two types of mineralization were recognized on the Old 1-14 claims. The first type was the target of much of the sampling during the current program and consists of a pyrrhotite hornfels. Pyrrhotite may account for 3-4% of host rocks, typically amygdaloidal to scoriaceous volcanic flows. Pyrrhotite appears to have selectively infilled vesicles within said flows. Chalcopyrite is a minor accessory mineral. Copper results reach 4646 ppm, 3400 ppm, and 2990 ppm but are typically low, although most of the samples returned anomalous copper values. As these are associated with very high iron results (up to 20%), the gossan samples probably reflect oxidized pyrrhotite-chalcopyrite hornfels in volcanic host rocks. Nowhere are the copper results of a grade sufficient to be considered economic. These samples also returned low gold results.

A second mineralization style was noted across the property and was the target of past exploration programs. Quartz-arsenopyrite veins were noted, in past programs, to be gold-bearing, returning results of 2-3 g/mt Au. These veins tend to be narrow (up to 2-6 cm) but are continuous along-strike. During the course of this program, mapping and prospecting failed to identify more than sporadic vein occurrences. That is, vein densities were estimated at 5-6%

across small swarms of 2-10 cm veins but surrounding rocks tended to be barren of mineralization for tens of metres. The geochemistry results also show that both arsenopyrite and gold results are low.

5.0 Discussion

Mineralization occurring as (1) disseminated chalcopyrite with pyrrhotite hornfels, and as (2) quartz-arsenopyrite veins failed to return significant gold results. Virtually all samples returned subeconomic to uneconomic gold grades. Copper values were significantly elevated within the pyrrhotite hornfels samples but were neither consistent nor sufficiently high to warrant further examination.

It was expected that two exploration targets would yield significant gold results. The first is an extensive gossan developed within a fault zone cutting a predominantly volcanic succession of tuffs, flows and pillowed andesites. One creek draining this gossan returned highly anomalous gold results from silt samples (805 ppb Au). This, in combination with recorded auriferous quartz-arsenopyrite veins from past work programs, suggested a positive exploration target.

A second target is the quartz-arsenopyrite vein network which, according to reports from past exploration programs, returned significant gold results. Within the sedimentary and volcanic stratigraphic package surrounding the Old-Cabin granodiorite, these veins are of significant strike length but they are also narrow and of insufficient abundance to present viable exploration targets. It is suspected that similar veins could exist, in greater abundance and mineralization, closer to the margins of the Old-Cabin pluton. So far, however, no such conclusion may be reached from the geochemical results returned to date. Some samples returned elevated bismuth values. Taken within the context of similar Cretaceous plutons in the region yielding "Fort Knox" style gold mineralization, it is plausible that gold-bismuth mineralization could exist closer to the margin of the granodiorite body, yet no results from the current geochemical suite provide any indication that this is likely.

Respectfully submitted,

John R. Dickie, M.Sc.
Consulting Geologist

November 14, 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;

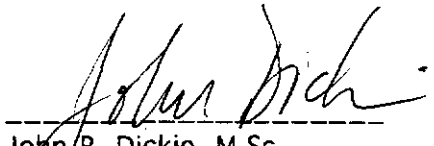
(2) I have over twelve (12) years' experience with various research institutions and mining companies on projects in Canada, United States, and Mexico, with over ten years experience on Yukon projects;

(3) I do not hold any interest in Eagle Plains Resources Limited or in Miner River Resources Limited, nor do I expect to receive securities or related remuneration from Eagle Plains Resources Limited or Miner River Resources Limited;

(4) This report and the conclusions and recommendations contained herein are based on fieldwork conducted by myself or personally witnessed, on the Old 1-14 claims, between August 6-10, 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,



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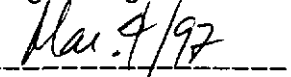

November 14, 1996

Appendix A
Rock Sample Descriptions

Sample	Description
BKOLD-1	Pyrrhotite veined gossanous andesite (subcrop)
BKOLD-2	1.0 m chip across gossanous andesite, po altered to hematite
BKOLD-3	1.5 m chip 2.0 m from and same as BKOLD-2
BKOLD-4	3 mm wide qz, aspy(?), po, py stringer
BKOLD-5	2 cm qz py-po vein (grab)
BKOLD-6	talus; andesite with po-py veins and disseminations
BKOLD-7	brecciated siltstone with po, py in fractures
BKOLD-8	rusty-weathering volcanic rock with qz-filled amygdules
BKOLD-9	2.5 m chip sample; rusty weathering and bleached-looking volcanic rock cut by numerous pyrrhotite and pyrite veinlets; veinlets form a stringer-stockwork; minor qz in some veinlets
BKOLD-10	2.5 m chip sample; same as above and adjacent
BKOLD-11	2.5 m chip sample; same as above and adjacent
BKOLD-12	2.5 m chip sample; same as above and adjacent
BKOLD-13	3 cm qz vein; trace sulphide (py?)
BKOLD-14	black, aphanitic volcanic rock cut by pyrrhotite veinlets and disseminations
BKOLD-15	grab of rusty volcanic(?) with vuggy quartz
BKOLD-16	1.0 m chip sample; from gully immediately east of 805 ppb Au creek; andesite(?)
BKOLD-17	grab of grey volcanic 10.0 m above -16
BKOLD-18	1.5 m chip sample: rusty, fine-grained volcanic/sedimentary??
BKOLD-19	1.8 m chip sample; rusty-weathering volcanic (andesite?) cut by pyrrhotite veinlets and stringers
BKOLD-20	grab, same as -19

Sample	Description
BKOLD-21	limonite-clay altered plagioclase phenocrysts in andesite porphyry; trace pyrrhotite
BKOLD-22	0.3 m chip sample; rusty-weathering volcanic (?)
BKOLD-23	1.5 m chip sample; fractured, silicified siltstone cut by pyrrhotite veinlets
BKOLD-24	similar to above cut by qz vein (grab)
BKOLD-25	limonite altered volcanic cut by po veinlets
BKOLD-26	4.0 cm qz-py vein (grab)
BKOLD-27	1.5 m chip across limonite-altered volcanic
BKOLD-28	bleached volcanic (andesite?)
BKOLD-29	as above with qz-po veinlets
JDOLD-01	rusty-weathering andesite
JDOLD-02	1.5 cm qz-aspy veinlet (grab)
JDOLD-03	0.5 m chip sample across 2 x 1.5 cm qz-aspy veins
JDOLD-04	1.0 m chip across aspy-qz veinlets, irregular orientations
JDOLD-05	1.0 chip; continues from -04
JDOLD-06	representative grab across 2.0 m; minor (1 cm) qz-aspy veinlets
JDOLD-07	scoria; hematite-altered and silicified
JDOLD-08	scoria; hematite-altered and silicified
JDOLD-09	1.0 m chip across fractured and oxidized volcanic
JDOLD-10	grab; rusty vesicular andesite?; limonite/clay altered
JDOLD-11	qz-aspy vein (grab)
JDOLD-12	0.5 m chip sample across 2 veins (JDOLD-11)
JDOLD-13	grab of scoria; strong gossanous alteration

Sample	Description
JDOLD-14	6 cm py-po vein; strongly oxidized (grab)
JDOLD-15	1.0 m chip; strong pyrrhotite alteration/hornfels adjacent to fault zone
JDOLD-16	0.8 cm qz-aspy veinlet; in fault zone near ridge crest
JDOLD-17	4.0 cm qz-aspy vein in altered andesite (grab)

Appendix B
Geochemical Results

Appendix C
Summary of Expenses

Appendix C
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	3432.98
Camp Supplies	67.37
Geochemistry	988.68
Food	56.00
Wages	5250.00

(J. Dickie; Senior Geologist 9 days @375.00/day)
(B. Kreft; Camp Manager 5 days @ 375.00/day)

Total Expenses	$11,575.33
	Less Cash Advanced $11,575.33
	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).