

MAP NO:
1150/14,15
116B/2,3

ASSESSMENT REPORT
PROSPECTUS
CONFIDENTIAL X
OPEN FILE

DOCUMENT NO: 093201
MINING DISTRICT: DAWSON
TYPE OF WORK: SOIL SAMPLING/PROSPECTING

REPORT FILED UNDER: KENNECOTT

DATE PERFORMED: 9-10 JUNE/93

DATE FILED: MAY 3, 1994

LOCATION: LAT.: 64°00'

AREA: BEAR CREEK

LONG.: 139°10'

VALUE \$: 3,100

CLAIM NAME & NO.: PENIBE 1-31 (YA84296-326)

WORK DONE BY: R. CRANSWICK, A. DOYLE

WORK DONE FOR: KENNECOTT CANADA INCORPORATED

| DATE TO GOOD STANDING: | |
|------------------------|--|
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REMARKS: SOIL SAMPLING, PROSPECTING AND REPROCESSING OF AIRBORNE GEOPHYSICAL DATA.

093201

**ASSESSMENT REPORT ON
A 1993 PROGRAM OF
PROSPECTING, MAPPING, SOIL SAMPLING
AND REPROCESSING OF
HELICOPTER GEOPHYSICS.**

Penibe 1-31 (YA84296-YA84326)

DAWSON MINING DISTRICT

NTS: 115 O/14, 15 & 116 B/2,3

LATITUDE 64° 00' North
LONGITUDE 139° 10' West

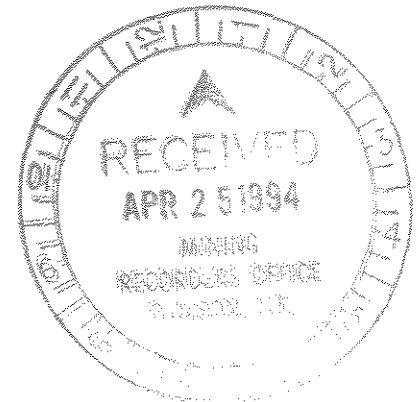
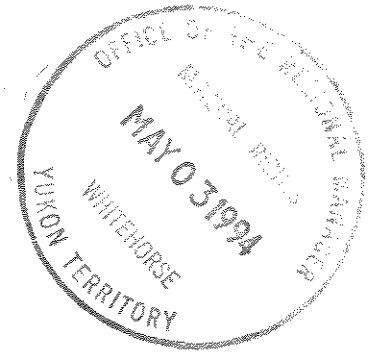
Work Conducted: June 9 & 10, 1993

OWNERS:

Arbor Resources Inc. (50%)
Emperor Gold Corp. (50%)
1000 - 675 West Hastings Street
Vancouver, B.C. V6B 1N6

OPERATOR:

KENNECOTT CANADA INC.
354 - 200 Granville Street
Vancouver, B.C.
V6C 1S4



Prepared by: R. Cranswick
A. Doyle

April 22, 1994

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1.0 INTRODUCTION

The Penibe property is situated in the headwaters of Henry Gulch on the drainage divide between Bear and Last Chance creeks. Kennecott Canada Inc. has an option to earn an interest in the claims and commenced work on the property in 1993. The 1993 exploration program consisted of ridge and spur soil sampling, prospecting, mapping, and reprocessing of airborne geophysical data. Fieldwork was conducted on June 9 and June 10, 1993.

2.0 LOCATION, ACCESS AND TOPOGRAPHY

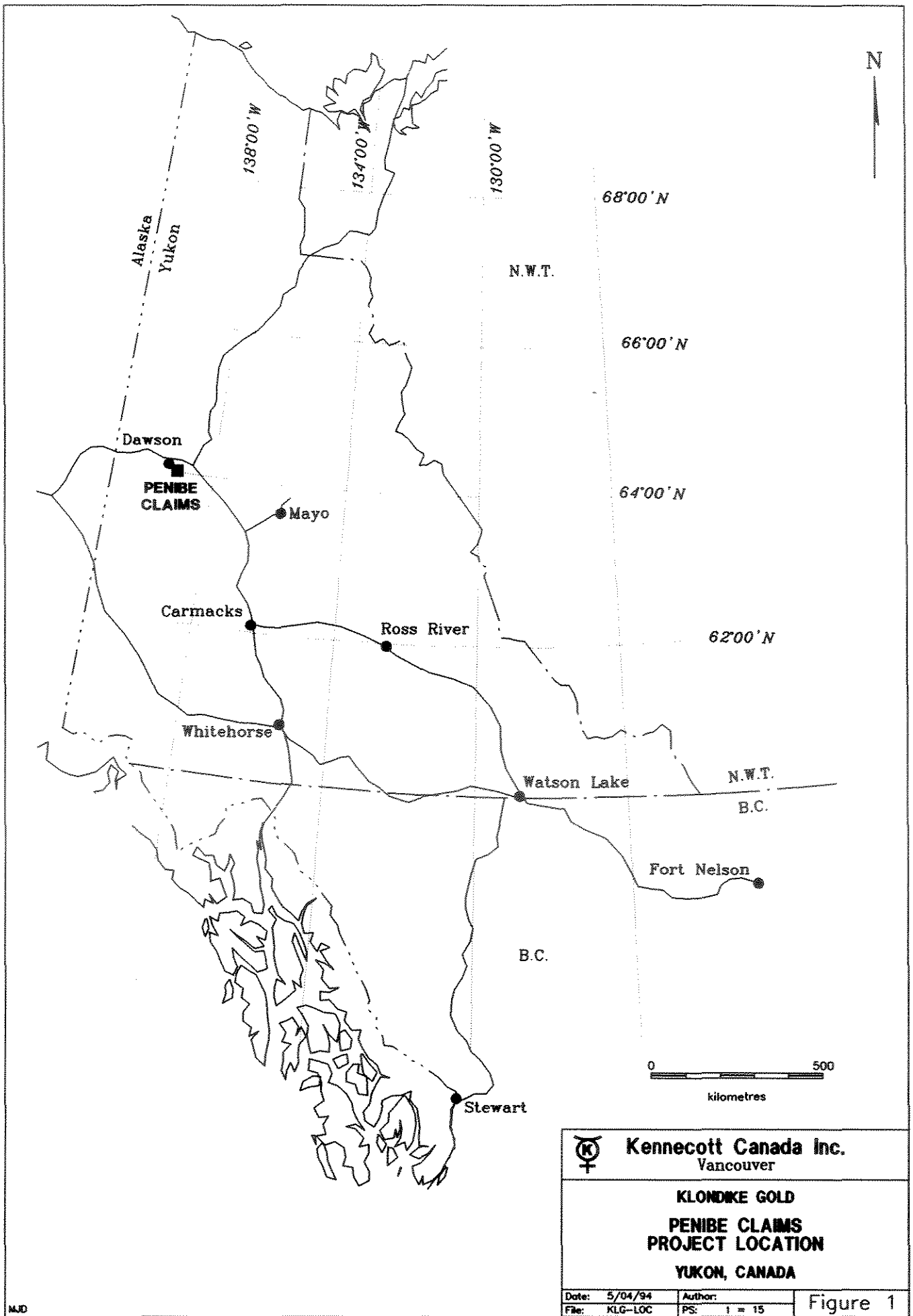
The Penibe property is located, approximately 14km east of Dawson City of west-central Yukon within the Klondike placer gold district (Figure 1). The claims cover the divide between the headwaters of Henry Gulch, Last Chance Creek and Bear Creek. The property is centred at 64°00' N latitude and 139°10' W longitude within NTS map areas 115 O/14,15 and 116 B/2,3.

The property area is accessed by a three season gravel road up Hunker Creek from the Klondike Highway. From the Hunker Creek road, a dirt road up Last Chance Creek forks west to access the eastern side of the claims. Dawson City serves as the service and supply centre for the area.

The Penibe property is situated within the Klondike Plateau. Gentle rolling hills predominate and elevation changes are moderate, ranging from 700m in creek bottoms to 900m on the drainage divide. The district was not subjected to Pleistocene glaciation and is draped with deeply weathered rubble. True outcrop is uncommon and is confined to ridges and exposures from mechanical trenching. Due to frost heaving, subcrop is abundant on north facing slopes.

3.0 PROPERTY STATUS

The Penibe property is located in the Dawson Mining District of the Yukon Territory. The property consists of 31 Quartz claims covering 543 hectares (Figure 2). Table 1 is a list of Penibe claims with updated expiry dates. Through a 1993 agreement with Arbor Resources Inc. and Emperor Gold Corp. Kennecott has the option to earn an interest in the property and is the recorded owner of the claims.



MJD


| | |
|---|------------|
|  Kennecott Canada Inc. Vancouver | |
| KLONDIKE GOLD PENIBE CLAIMS PROJECT LOCATION YUKON, CANADA | |
| Date: 5/04/94 | Author: |
| File: KLG-LOC | PS: 1 = 15 |
| Figure 1 | |

Table 1 List of Claims.

| Claim Name | Claim Number | Expiry Date |
|------------|--------------|---------------|
| PENIBE 1 | YA84296 | June 24, 1994 |
| PENIBE 2 | YA84297 | June 24, 1994 |
| PENIBE 3 | YA84298 | June 24, 1994 |
| PENIBE 4 | YA84299 | June 24, 1994 |
| PENIBE 5 | YA84300 | June 24, 1994 |
| PENIBE 6 | YA84301 | June 24, 1994 |
| PENIBE 7 | YA84302 | June 24, 1994 |
| PENIBE 8 | YA84303 | June 24, 1994 |
| PENIBE 9 | YA84304 | June 24, 1994 |
| PENIBE 10 | YA84305 | June 24, 1994 |
| PENIBE 11 | YA84306 | June 24, 1994 |
| PENIBE 12 | YA84307 | June 24, 1994 |
| PENIBE 13 | YA84308 | June 24, 1994 |
| PENIBE 14 | YA84309 | June 24, 1994 |
| PENIBE 15 | YA84310 | June 24, 1994 |
| PENIBE 16 | YA84311 | June 24, 1994 |
| PENIBE 17 | YA84312 | June 24, 1994 |
| PENIBE 18 | YA84313 | June 24, 1994 |
| PENIBE 19 | YA84314 | June 24, 1994 |
| PENIBE 20 | YA84315 | June 24, 1994 |
| PENIBE 21 | YA84316 | June 24, 1994 |
| PENIBE 22 | YA84317 | June 24, 1994 |
| PENIBE 23 | YA84318 | June 24, 1994 |
| PENIBE 24 | YA84319 | June 24, 1994 |
| PENIBE 25 | YA84320 | June 24, 1994 |
| PENIBE 26 | YA84321 | June 24, 1994 |
| PENIBE 27 | YA84322 | June 24, 1994 |
| PENIBE 28 | YA84323 | June 24, 1994 |
| PENIBE 29 | YA84324 | June 24, 1994 |
| PENIBE 30 | YA84325 | June 24, 1994 |
| PENIBE 31 | YA84326 | June 24, 1994 |

4.0 REGIONAL GEOLOGY

4.1 Tectonic Environment

The Klondike district is located on the northeastern edge of the Paleozoic Yukon-Tanana tectonostratigraphic terrane (Mortensen, 1990; Figure 3). This allochthonous terrane is separated from thrust-stacked parautochthonous rocks of the North American miogeocline by the Tintina Fault Zone, a major suture which has accommodated relative movement between the two crustal blocks. Initial docking of the Yukon-Tanana terrane with the North American continental margin probably occurred in Early to Middle Jurassic times (Mortensen, pers. comm., 1994). Docking was accompanied by obduction of interposed oceanic lithosphere, now represented by ophiolitic rocks of the Slide Mountain terrane.

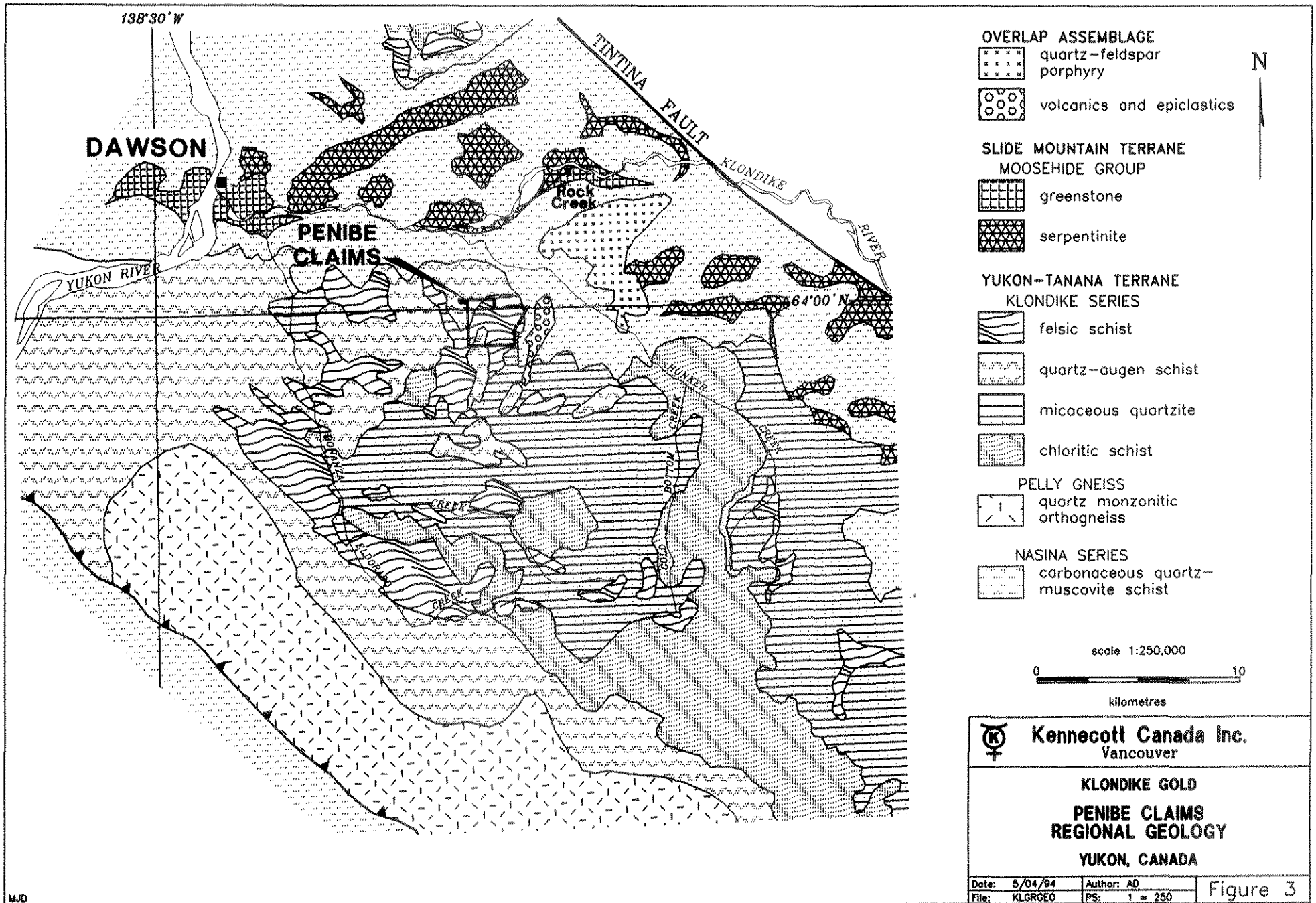
Major relative movement between the Yukon-Tanana terrane and the North American continental margin occurred in Late Paleogene and Neogene times (Mortensen, pers. comm., 1994). A net dextral strike-slip displacement of 450km was originally suggested by Templeman-Kluit (1974) and this estimate is still endorsed by most workers. Strike-slip movement along Tintina Fault Zone appears to have been immediately preceded by an episode of bimodal basalt and topaz rhyolite volcanism. Products of this Paleocene - Eocene magmatic event are present in both the Klondike district and the Grew Creek area 400km to the southeast.

4.2 Stratigraphy

Brief descriptions of rock units found in the vicinity of the Penibe claims are provided below, using the tectonostratigraphic nomenclature of Mortensen (1990) and the original stratigraphic nomenclature of McConnell (1905). Units are grouped into the Yukon-Tanana terrane, the Slide Mountain terrane and a post-amalgamation overlap assemblage (Figure 3). Units within each group have been described in what is believed to be the order of diminishing age.

4.2.1 Yukon-Tanana terrane

The Yukon-Tanana terrane is an assemblage of tectonically interleaved Paleozoic rock units. Mortensen (1990) has outlined three thrust-stacked assemblages within the terrane, two of which occur in the vicinity of the Penibe claims. One of these assemblages equates to the Nasina Series of McConnell (1905), the other to McConnell's (ibid.) Pelly Gneiss and Klondike Series.



Nasina Series

This unit is comprised largely of medium to dark grey carbonaceous quartz-muscovite schist and carbonaceous metaquartzite. Thin horizons of medium to dark grey marble occur locally. Recent U-Pb zircon dating indicates a Devono-Mississippian age for the unit (Mortensen, pers. comm., 1994). Protoliths were predominantly carbonaceous siliciclastic sedimentary rocks.

Pelly Gneiss

This unit is comprised of biotite-bearing quartz monzonitic orthogneiss. The rock probably represents a deformed granitic intrusion. Recent U-Pb zircon dating by Mortensen (1990) indicates a Mid-Permian age for the Pelly Gneiss.

Klondike Series

Several lithostratigraphic units have been identified within the Klondike Series. The lowest stratigraphic unit is comprised of quartz-chlorite-actinolite schist and associated metadiabase. Protoliths were probably mafic to intermediate volcanics and consanguineous sub-volcanic intrusions. This unit grades upward into micaceous and chloritic metaquartzite, which represents a terrigenous clastic sequence containing a minor component of mafic to intermediate volcanic lithogenous material. Cross-cutting these two units is a quartz-feldspar augen schist (Mortensen, 1990). Work by McConnell (1905), Metcalfe (1981) and Mortensen (1990) suggests that this rock type constitutes a deformed quartz-feldspar porphyry. Felsic schist overlies the quartz-feldspar augen schist and may be its extrusive equivalent (Mortensen, 1990). The felsic schist unit, which is thin and recessively weathering, includes a minor component of carbonaceous quartz-muscovite schist and contains small occurrences of possible volcanogenic massive sulphide mineralisation. The protolith may have been a felsic tuff (Mortensen, 1990). Recent U-Pb zircon dating by Mortensen (ibid.) indicates a Mid- Permian age for the Klondike Series, identical to the age deduced for the Pelly Gneiss.

4.2.2. Slide Mountain terrane

The rocks of the Slide Mountain terrane are Paleozoic in age and comprise greenstone and serpentinite. They occur as tectonic slices caught up in regional structures and form discontinuous lenses and slabs ranging from less than 1m to 150m thick (Mortensen, 1990). These rocks equate to the Moosehide Group of McConnell (1905).

The greenstones consist of seafloor-altered pyroxene-phyric basalt, fine grained mafic tuff, diabase and minor gabbro. These rocks form substantial tectonic bodies which are well exposed along the Klondike highway immediately east of Dawson. Serpentinite is found as smaller, sheared and carbonate-altered tectonic slivers, sometimes wholly enclosed within Nasina Series rocks.

4.2.3 Overlap assemblage

The younger, post-amalgamation rock units include volcanics, volcanogenic sediments and intrusions of Late Cretaceous to Paleogene age. As the volcanics and volcanogenic sediments occur only locally, they may be preserved within down-dropped fault blocks or in subsidence structures related to volcanism and intrusion.

Massive andesite flows and sills are interbedded with thinly-bedded epiclastics and tuffs along Last Chance Creek (Mortensen, 1990; Debicki, 1984). A Late Cretaceous age for these rocks has been suggested by Mortensen (1990) on the basis of regional lithostratigraphic correlation with Carmacks Group volcanics in the Sixty Mile area.

A fine to medium grained equigranular hornblende-biotite granodiorite crops out in Hunker Creek 1km upstream of the mouth of Gold Bottom Creek. Debicki (pers. comm. to J.K. Mortensen, 1985) reports a Palaeocene K-Ar age for this intrusion, which may therefore be genetically related to the Last Chance Creek volcanics.

Well-bedded felsic lapilli tuff and coarse volcanic breccia containing quartz-feldspar porphyry and country rock lithic fragments are mapped along Germaine Creek, immediately adjacent to the Tintina Fault Zone (Mortensen, 1990). These rocks are correlated lithostratigraphically with Eocene volcanics found in the Grew Creek area 400 km to the southeast.

Quartz-feldspar porphyry occurs as a large intrusive body north of Hunker Creek. Debicki (pers. comm. to J.K. Mortensen, 1985) reports an Eocene K-Ar age for this intrusion. The rock is presumably the intrusive equivalent of the felsic lapilli tuff. Small bodies of brown-weathering plagioclase, hornblende and/or pyroxene-phyric mafic porphyry, diabase and rare olivine gabbro are closely associated with the quartz-feldspar porphyry (Mortensen, 1990).

A bimodal suite of dykes occurs throughout the Klondike district as thin composite or single phase intrusions. Field relations suggest that the composite dykes formed by initial intrusion of a mafic phase and subsequent intrusion of a felsic phase. Felsic dykes "split" earlier mafic ones, suggesting incomplete cooling of the mafic dykes at the time of felsic dyke intrusion. The relationship between the bimodal dyke suite and the quartz-feldspar porphyry intrusion is uncertain, though both have returned Eocene K-Ar ages (Mortensen, pers. comm., 1994).

5.0 PREVIOUS EXPLORATION

A regional stream sediment program was conducted in the Klondike area in 1984. Anomalous gold values were reported from tributaries of Bear Creek draining to the west of the present Penibe claims.

In 1986 magnetic, electromagnetic, and induced polarization (IP) surveys were conducted over the Penibe and adjacent Alpha claims. The IP survey identified four anomalies that Walcott (1987) infers to be graphitic horizons emplaced by thrusting. In December 1986, three NQ diamond drill holes, totaling 365m, were drilled on the Penibe 9, 10, and 14 claims. These holes were drilled to test coincident soil and IP anomalies (Grunenberg, 1987).

6.0 1993 EXPLORATION PROGRAM

During 1993, a program of airborne geophysical reprocessing, prospecting, mapping, and ridge and spur soil sampling was conducted on the Penibe and adjacent claims. A total of 79 soil samples and three rock samples were collected on the Penibe claims. An additional 12 soil samples and one rock sample collected on adjacent claims are also reported.

7.0 PROPERTY GEOLOGY, ALTERATION AND MINERALIZATION

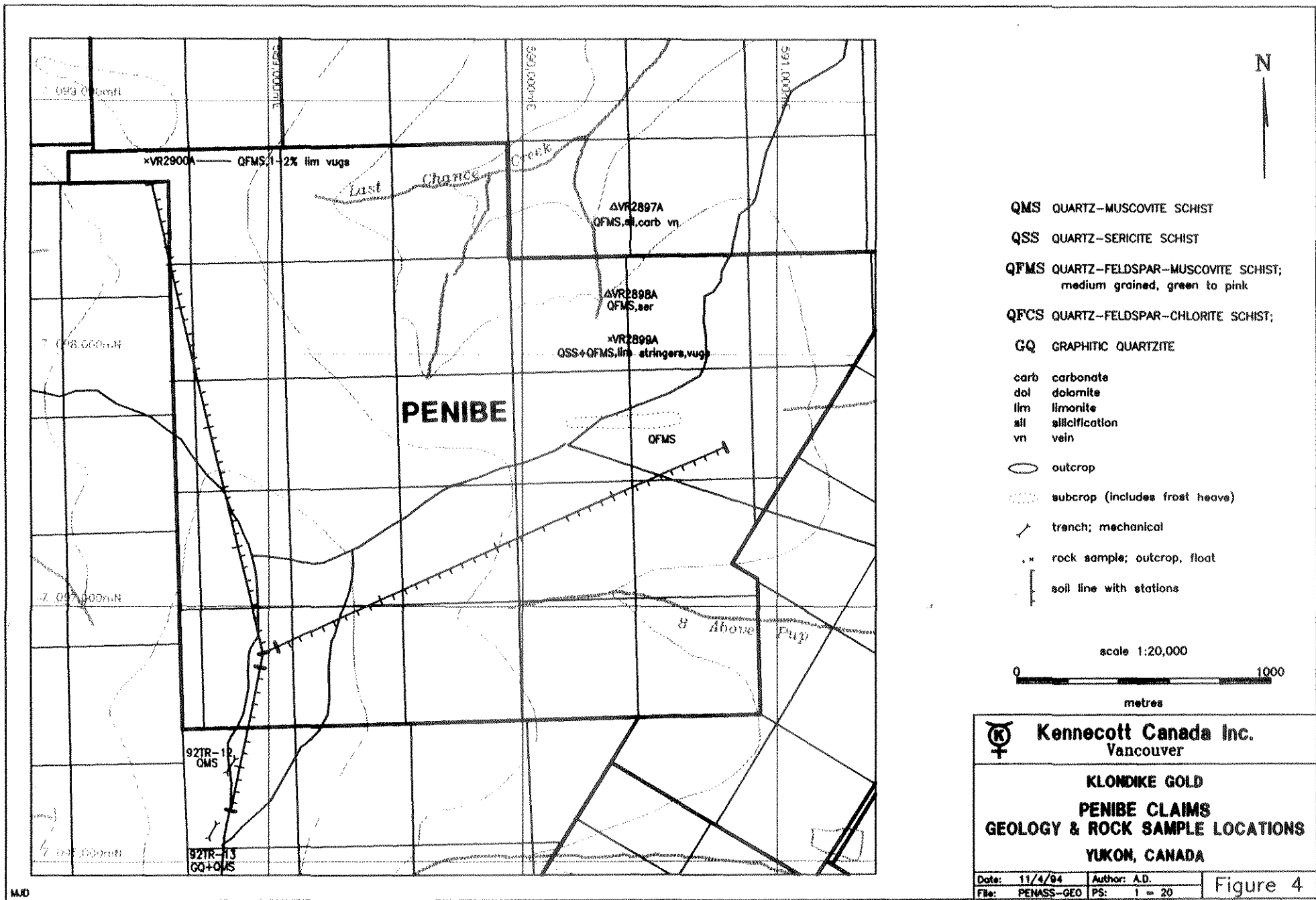
Outcrop exposure on the Penibe property is limited, therefore lithologies observed during the 1993 program may not be representative of the lithologies on the property as a whole. The few rock samples collected are of frost heaved material on north facing slopes.

The Penibe claims are underlain by a quartz-feldspar muscovite schist (Figure 4). Up to 5% quartz eyes were observed in an outcrop of this unit west of the Penibe claims. Carbonate bands and cross-cutting carbonate veins occur intermittently throughout the schist. Rare limonite stringers and vugs were observed.

8.0 GEOCHEMISTRY

8.1 Rock Geochemistry

A total of 4 rock samples were collected on the Penibe and surrounding claims. Sample locations are plotted on Figure 4 and sample descriptions are provided in Appendix A.



- QMS QUARTZ-MUSCOVITE SCHIST
- QSS QUARTZ-SERICITE SCHIST
- QFMS QUARTZ-FELDSPAR-MUSCOVITE SCHIST;
medium grained, green to pink
- QFCS QUARTZ-FELDSPAR-CHLORITE SCHIST;
- GQ GRAPHITIC QUARTZITE
- carb carbonate
- dol dolomite
- lim limonite
- sil silicification
- vn vein
- outcrop
- ⋯ subcrop (includes frost heave)
- ⊥ trench; mechanical
- ⋆ rock sample; outcrop, float
- ⊥ soil line with stations

scale 1:20,000



Kennecott Canada Inc.
Vancouver

KLONDIKE GOLD
PENIBE CLAIMS
GEOLOGY & ROCK SAMPLE LOCATIONS
YUKON, CANADA

| | | |
|------------------|--------------|----------|
| Date: 11/4/94 | Author: A.D. | Figure 4 |
| File: PENASS-GEO | PS: 1 = 20 | |

Samples were sent to Chemex Labs and were analysed for gold using a 30g fire assay preparation with an AA finish, and for an additional 32 elements by ICP-ES. Analytical certificates are provided in Appendix C.

With the exception of sample VR2897A, none of the rock samples collected from the Penibe area returned anomalous values. The anomalous sample, collected from quartz-feldspar-muscovite schist on the Moon 15 claim, assayed 25ppb gold.

8.2 Soil Geochemistry

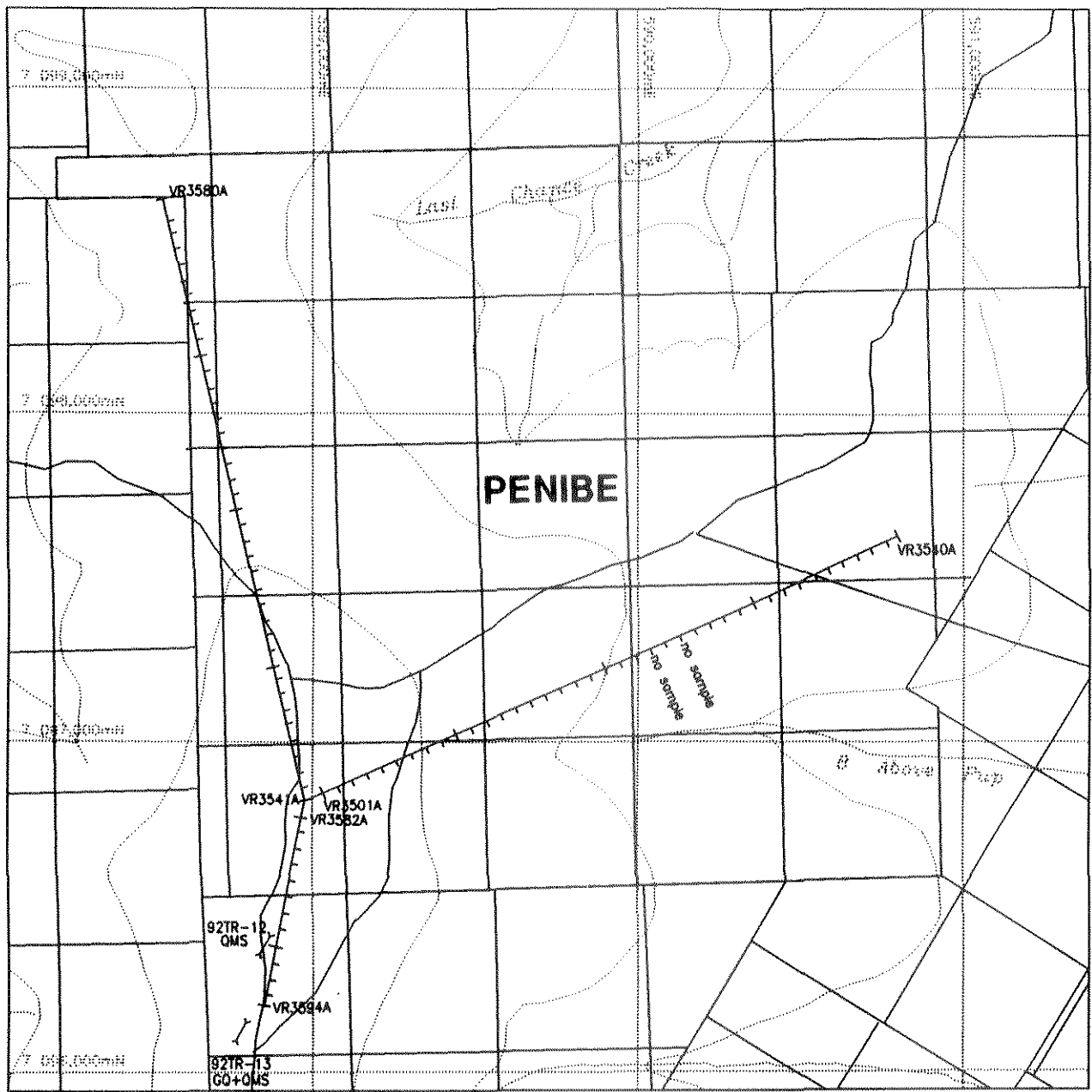
A total of 91 samples were collected at 50m intervals along the north-south trending ridge and the eastern spur of this ridge on the Penibe claims (Figure 5). Soils were collected from B-horizon soils which are, in general, well developed and within 30cm of surface.

Samples were shipped to Chemex Labs in Vancouver and were analyzed for gold by 30g fire assay with an AA finish, and for an additional 32 elements by ICP-ES. Sample descriptions can be found in Appendix C, analytical procedures and results are provided in Appendix D and bubble plots of results are depicted on Figures 6 to 12.

None of the soil samples collected during the program contain gold above detection. However, areas of anomalous lead-zinc \pm copper and/or silver were identified along eastern boundaries of the Penibe claims. The southern anomaly contains anomalous lead and/or zinc over 300m at the end of one soil line. The most anomalous sample, VR3593A, contains 1.8 ppm Ag, 480 ppm Cu, 2,880ppm Pb, and 364ppm Zn. The sample at the north end of this anomaly, VR3587A, contains 5.4 ppm silver.

The eastern anomaly consists of two consecutive samples at the extreme east end of one soil line. Anomalous values in samples VR3539A and VR3540A include 1.4ppm Ag, 103 & 108 ppm Cu, 348 & 330ppm Pb and 436 & 334ppm Zn.

Numerous single sample anomalies were also outlined during the survey. Samples containing 102 and 134ppm zinc occur along the west side of the Penibe claim block. The sample containing 134ppm zinc also contains 2.4 ppm Silver and 192ppm Copper. Isolated samples with anomalous arsenic occur in the northwest and eastern portions of the Penibe claims. A sample containing 1.2ppm Ag and 198ppm Pb was collected in the middle of the Penibe claim block.




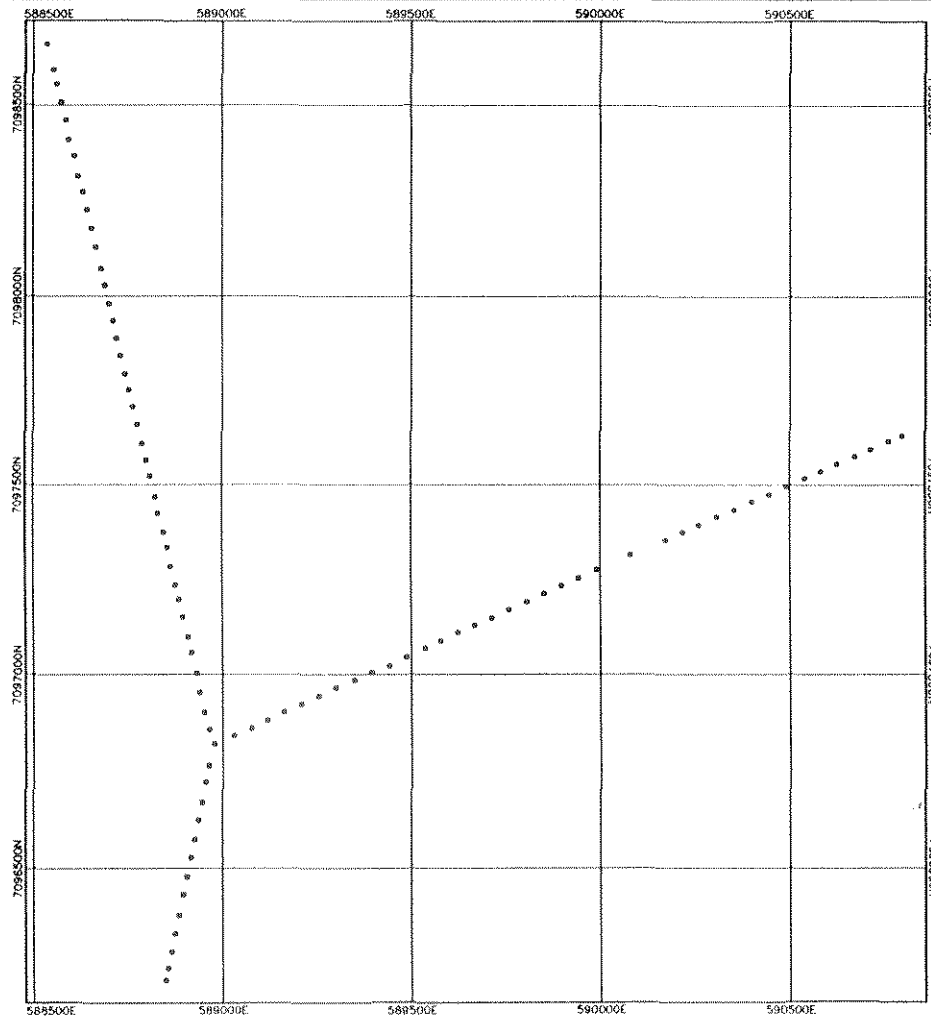
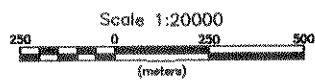
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|---|--------------|
|  Kennecott Canada Inc. Vancouver | |
| KLONDIKE GOLD PENIBE CLAIMS SOIL SAMPLE LOCATIONS YUKON, CANADA | |
| Date: 11/4/94 | Author: A.D. |
| File: PENASS-GC | PS: 1 = 20 |

Figure 5



- 0 - 5 ppb Au
- 6 - 20 ppb Au
- 21 - 40 ppb Au
- > 41 ppb Au



Kennecott Canada Inc.
Vancouver

PENIBE CLAIMS

SOIL GEOCHEMISTRY GOLD PPB

YUKON, CANADA

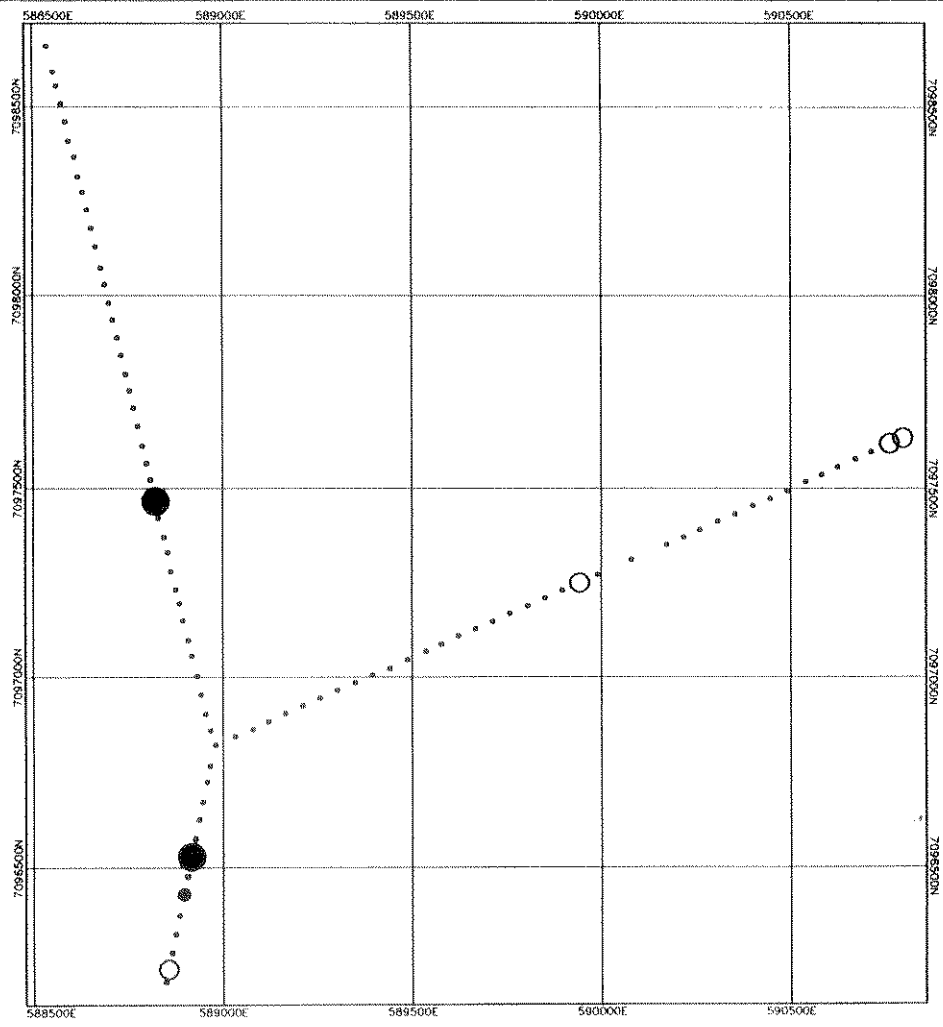
Date: 07/06/93

Author:

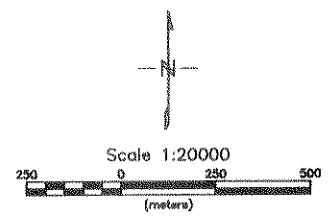
File: PENAU-F


PS:

Figure 6



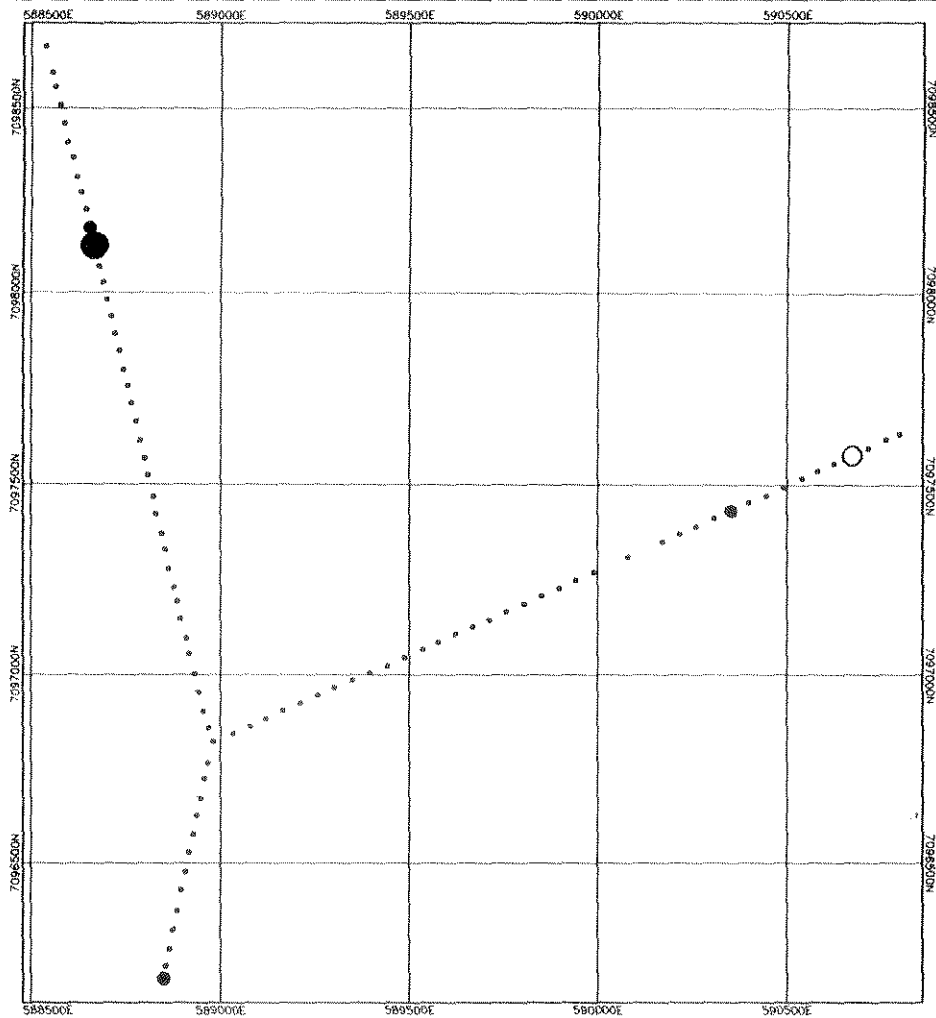
- 0 - 0.4 ppm Ag
- 0.5 - 1.0 ppm Ag
- 1.1 - 1.9 ppm Ag
- > 2.0 ppm Pb



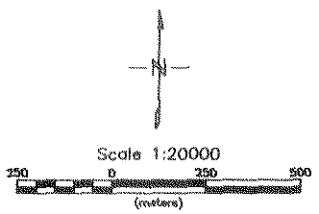

Kennecott Canada Inc.
 Vancouver
PENIBE CLAIMS
SOIL GEOCHEMISTRY SILVER PPM
YUKON, CANADA


| | |
|----------------|---------|
| Date: 07/05/93 | Author: |
| File: PENAG-F | PS: |

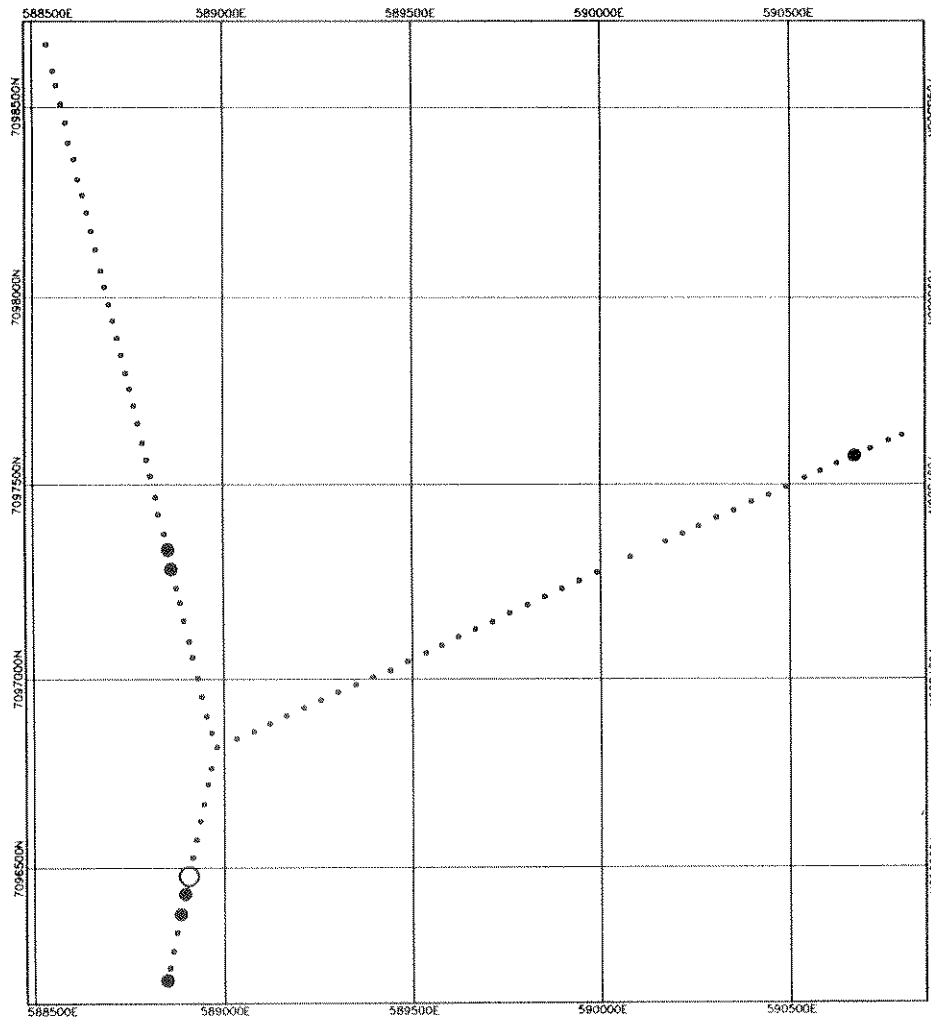
Figure 7



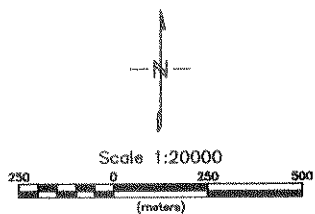
- 0 - 30 ppm As
- 31 - 100 ppm As
- 101 - 150 ppm As
- > 151 ppm Pb



| | |
|---|---------|
|  Kennecott Canada Inc. Vancouver | |
| PENIBE CLAIMS SOIL GEOCHEMISTRY ARSENIC PPM YUKON, CANADA | |
| Date: 07/05/93 | Author: |
| File: PEN5-F | PS: |
| Figure 8 | |



- 0 - 45 ppm Cr
- 46 - 100 ppm Cr
- 101 - 250 ppm Cr
- (large) > 251 ppm Cr



Kennecott Canada Inc.
Vancouver

PENIBE CLAIMS

SOIL GEOCHEMISTRY CHROMIUM PPM

YUKON, CANADA

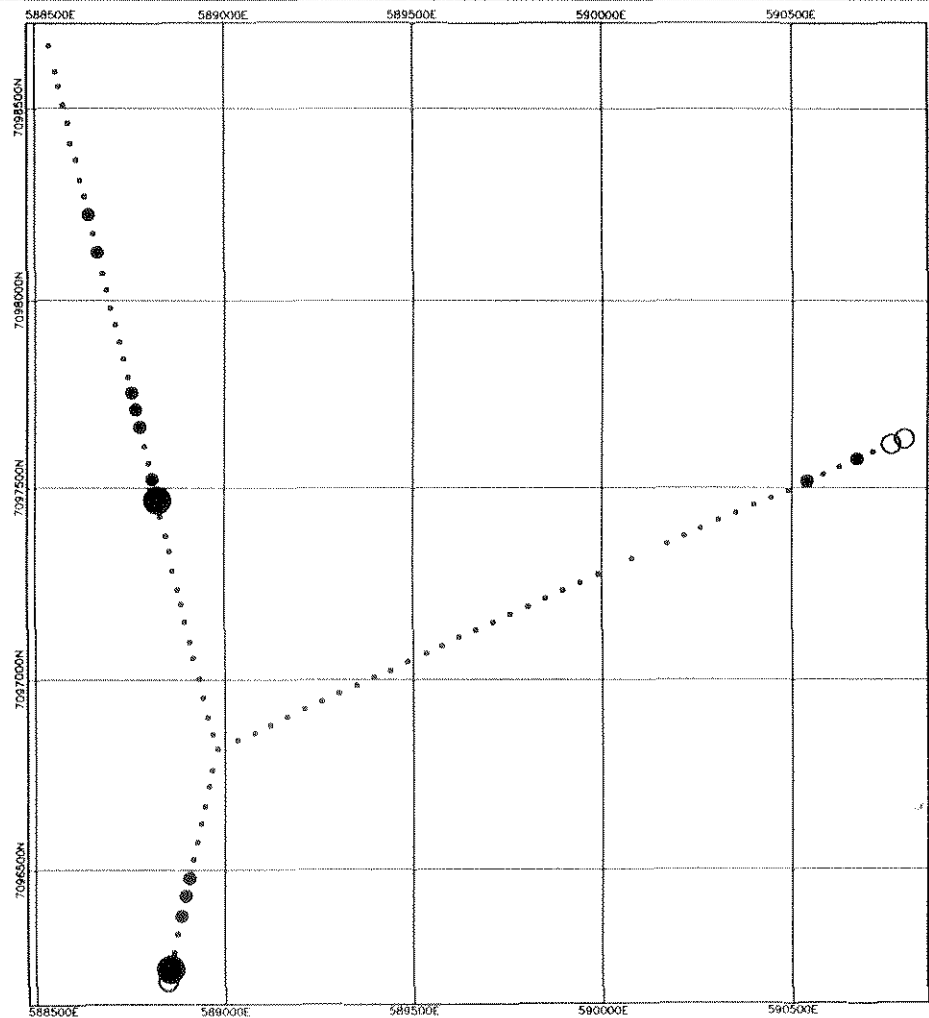
Date: 07/05/93

Author:

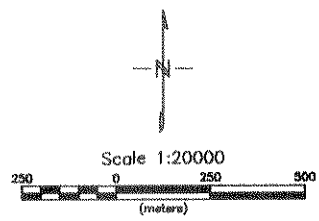
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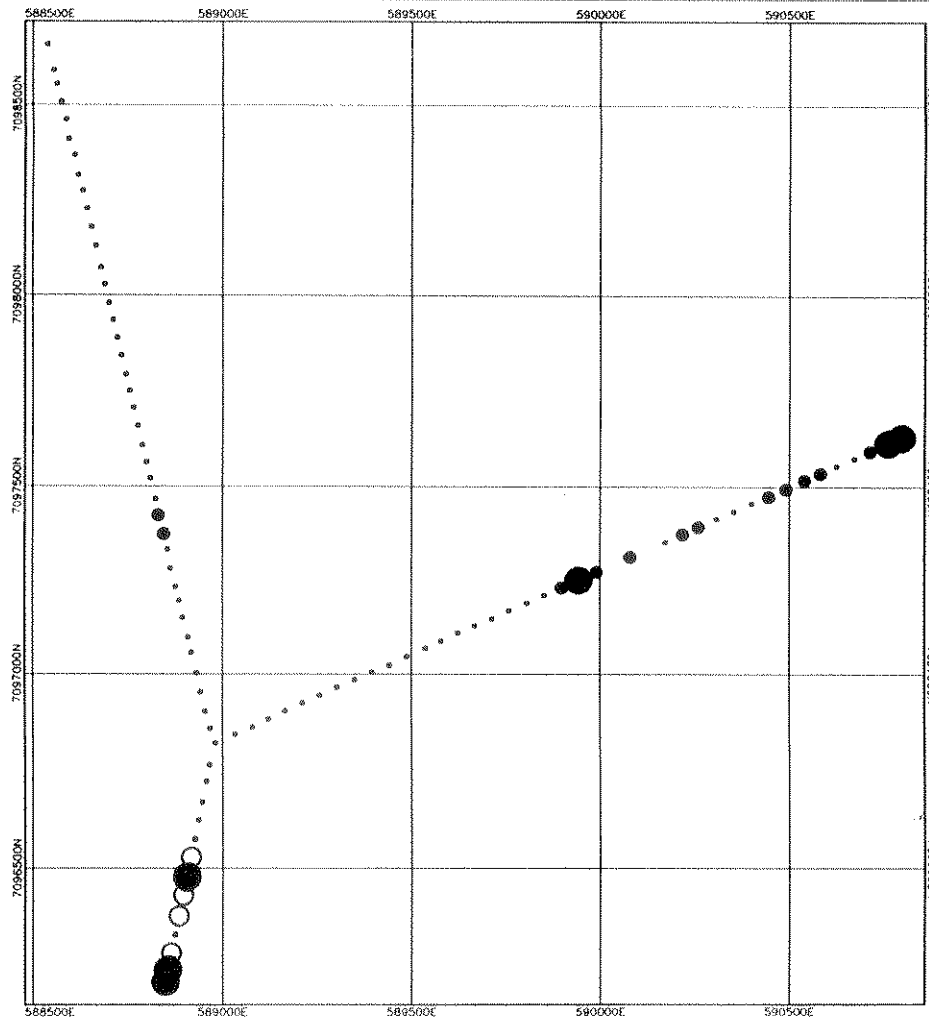
Figure 9



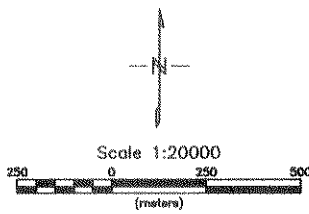
- 0 - 30 ppm Cu
- 31 - 100 ppm Cu
- 101 - 150 ppm Cu
- (large) > 151 ppm Cu



| | |
|---|---------|
|  Kennecott Canada Inc. Vancouver | |
| PENIBE CLAIMS SOIL GEOCHEMISTRY COPPER PPM YUKON, CANADA | |
| Date: 07/05/93 | Author: |
| File: PENCU-F | PS: |
| Figure 10 | |



- 0 - 30 ppm Pb
- 31 - 60 ppm Pb
- 61 - 150 ppm Pb
- (large filled) > 151 ppm Pb




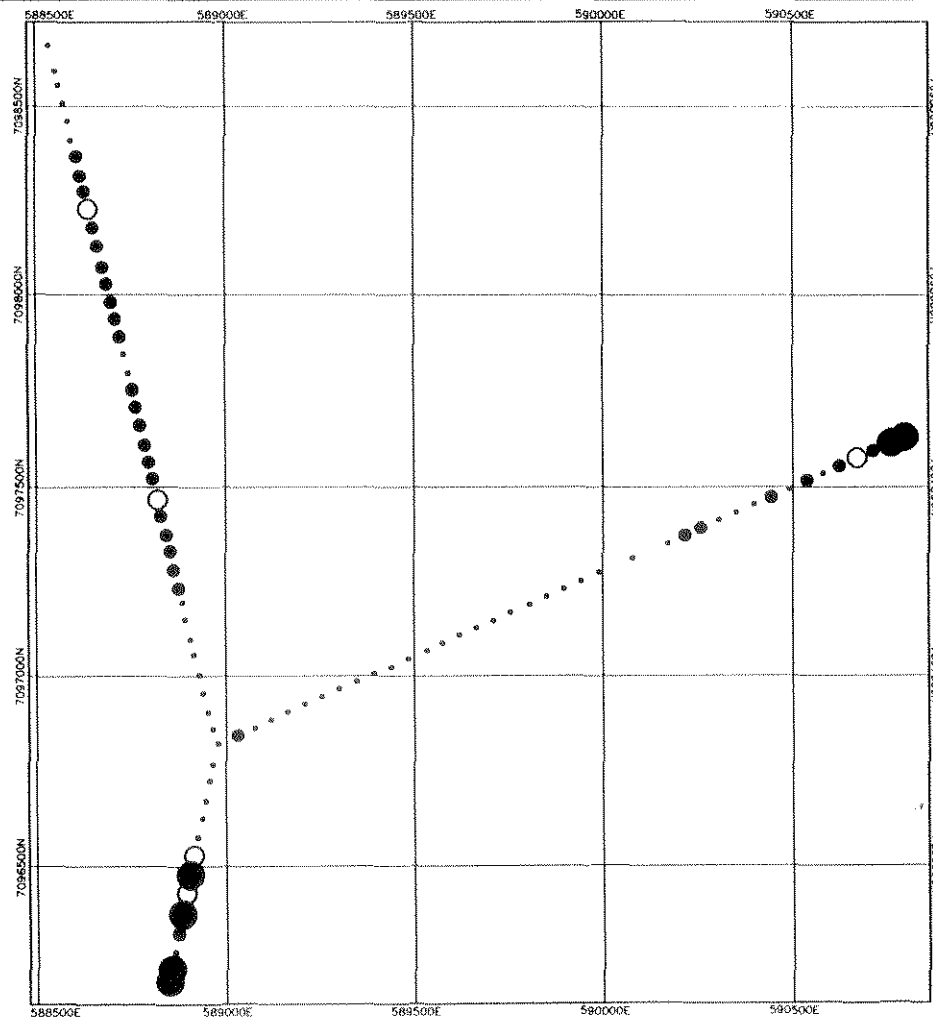
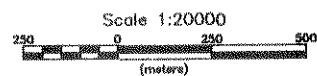
| | |
|---|---------|
|  Kennecott Canada Inc. Vancouver | |
| PENIBE CLAIMS SOIL GEOCHEMISTRY LEAD PPM YUKON, CANADA | |
| Date: 07/05/93 | Author: |
| File: PENP8-F | PS: |

Figure 11



- 0 - 50 ppm Zn
- 51 - 100 ppm Zn
- 101 - 150 ppm Zn
- (large) > 151 ppm Zn



Kennecott Canada Inc.
Vancouver

PENIBE CLAIMS

SOIL GEOCHEMISTRY ZINC PPM

YUKON, CANADA

Date: 07/05/93

Author:

File: PENZN-F

PS:

Figure 12

9.0 REPROCESSING OF HELICOPTER GEOPHYSICS

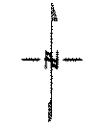
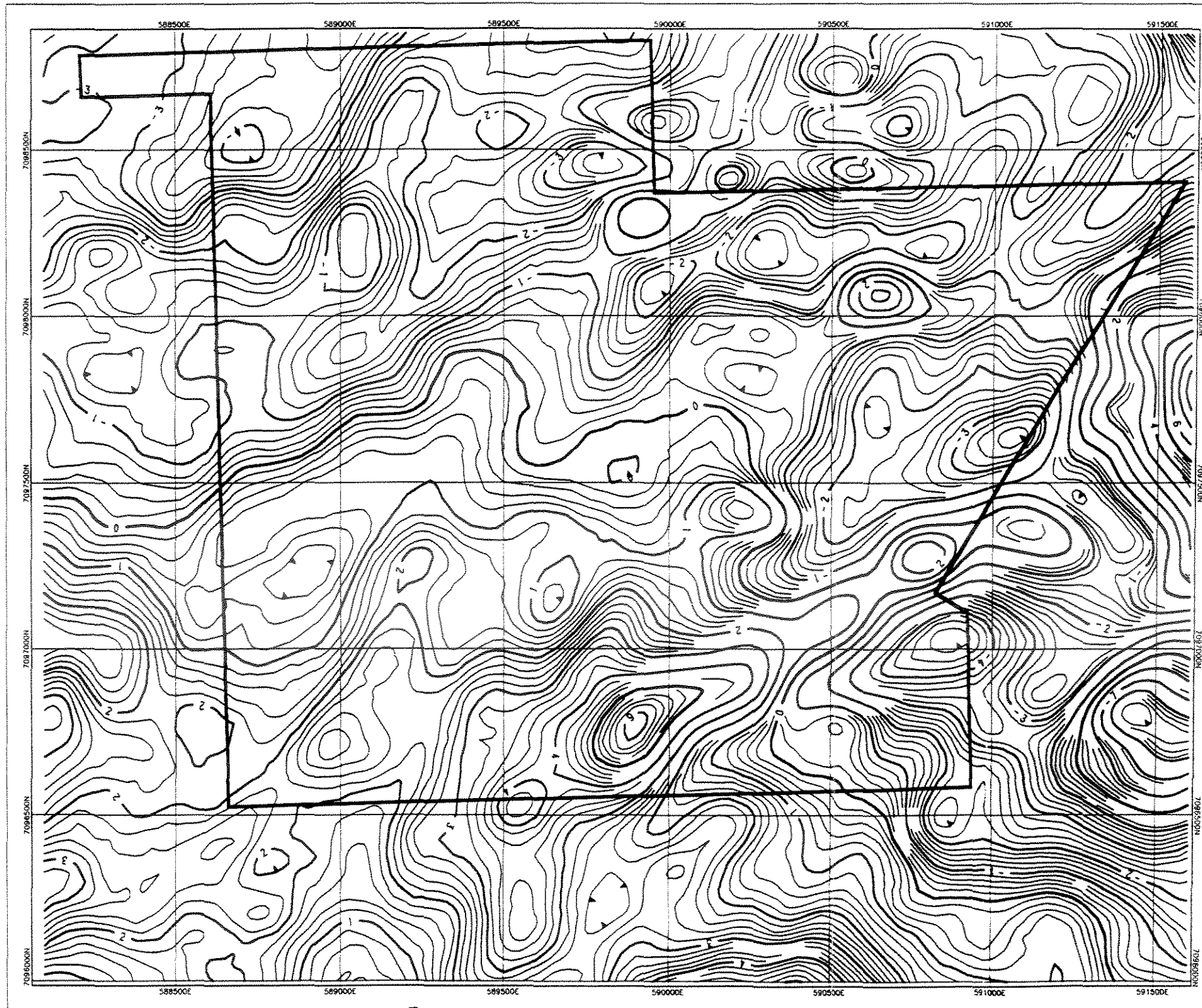
Three helicopter magnetic and electromagnetic surveys have been commissioned over areas of the Klondike district by Arbor Resources Inc. and their associates. All three were flown by Geonex Aerodat Limited of Mississauga, Ontario (Table II; Figures 13 & 14). Survey specifications are detailed in interpretive reports prepared for Arbor by Aerodat (Geonex Aerodat Limited, 1987a.,b.,c.). Parameters measured during the survey included terrain clearance, total magnetic field, in-phase and quadrature responses for four frequencies of EM(32,000Hz coplanar, 4,600Hz coaxial, 4,175Hz coplanar, 935Hz coaxial) and total field and quadrature components for two frequencies of VLF-EM (24,800Hz, 24,000Hz).

Table 2
Klondike Helicopter Geophysical Surveys

| Job No. | Acquisition Dates | Line km | Line Spacing | Line Azimuth | Terrain Clearance |
|---------|---------------------|---------|--------------|--------------|-------------------|
| J8646 | Jan.16, 1987 | 139 | 100 m | 015° (195°) | 60 m |
| J8642 | Jan.17-Jan.25, 1987 | 1,335 | 100 m | 015° (225°) | 60 m |
| J8661 | Jan.25-Feb.1, 1987 | 1,920 | 100 m | 030° (210°) | 60 m |

Navigation was facilitated by deployment of a MiniRanger radar transponder system and flight path recovery was accomplished by using video tracking, an uncontrolled photomosaic base map and published 1:50,000 NAD27 topographic maps. Inexplicable however, line data for the survey No.8642 were not located in UTM space following the survey but were left co-ordinated to the local Mini-Ranger grid. The UTM co-ordinates for the Mini-Ranger transponder stations have not been recorded.

Digital tapes for these surveys were recovered from Aerodat's archives in first quarter of 1993. Corresponding video tracking tapes were not found, nor have they been located elsewhere. Preliminary imaging of a magnetic grid prepared from line data for survey No.8642 revealed the stripping characteristic of a poorly levelled survey. Aerodat was therefore commissioned to prepare properly levelled grids for each of the three surveys for total magnetic intensity, calculated vertical magnetic gradient and calculated apparent resistivity for each of the four EM frequencies. A 25m grid cell size was employed. Survey No.8642 was also located in UTM space by georeferencing stations picked from the photomosaic flight path map using the published 1:50,000 NAD27 topographic map. Positioning accuracy for the newly "located" data was estimated by Aerodat as ± 20 m.



Airborne Magnetics
(1986 Aerodot Survey)

The magnetic grid is a combination of three separate grids spaced together by RTZ Newbury. RTZ Newbury authorized the original data by performing a 100m upward continuation and subtracting the resultant grid from the original data set.

Scale 1:15000

(meters)


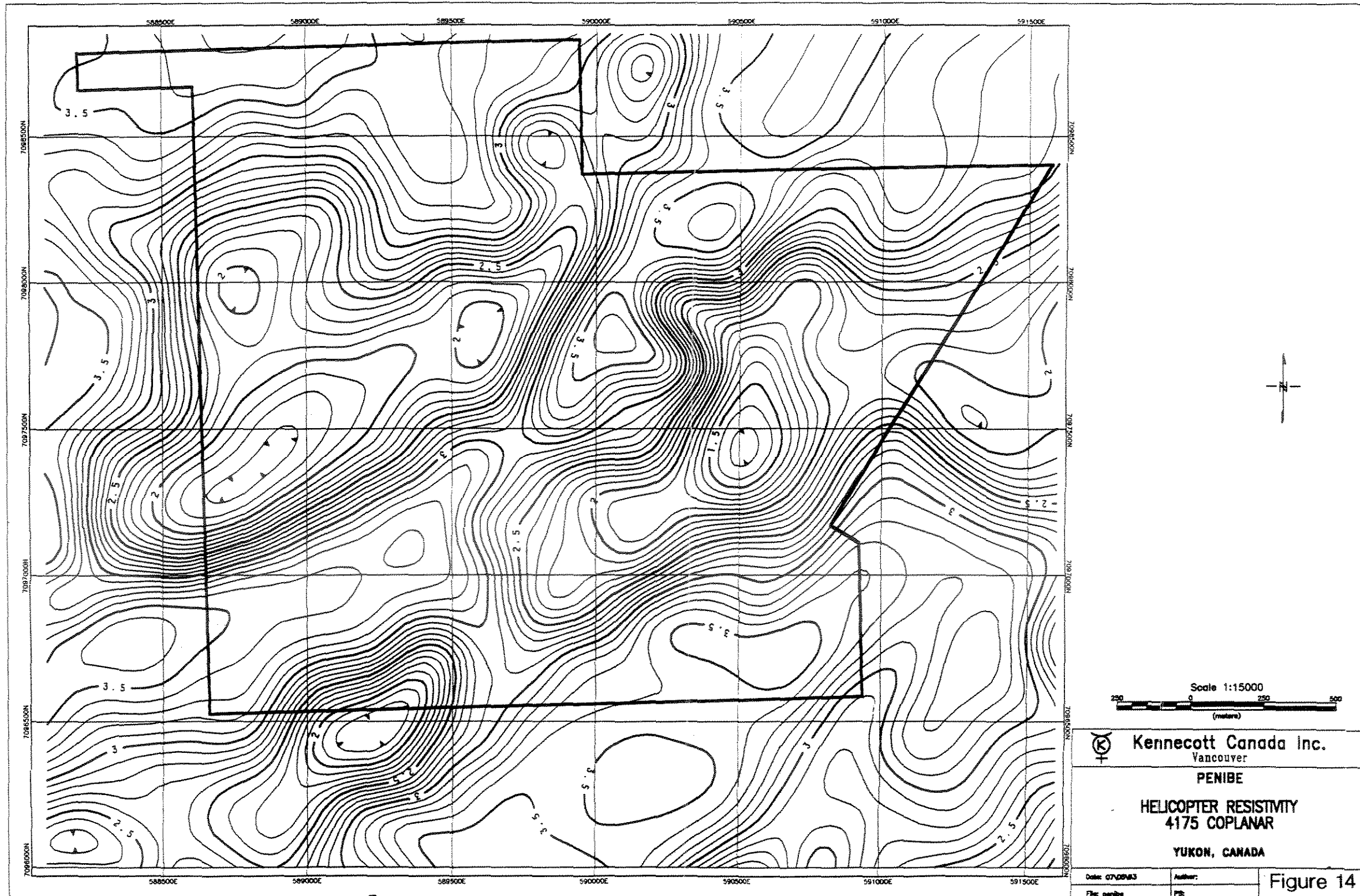
| | |
|---|---------|
|  Kennecott Canada Inc. Vancouver | |
| PENIBE | |
| FILTERED HELICOPTER MAGNETICS | |
| YUKON, CANADA | |
| Date: 07/09/83 | Author: |
| File: PENIBE | PS: |

Figure 13



Magnetic and resistivity grids for the three survey areas were then normalised and merged by geophysicists at RTZ's exploration research facility in Newbury, England. In place of new vertical gradient grid, a residual magnetic was calculated by subtraction of a 100m upward continued grid from the merged magnetic intensity grid. This residual magnetic grid highlights high frequency variations in the total magnetic field. these variations are attributable to shallow structure or sources. All new grid files prepared at Newbury were then transformed into NAD83 1:50,000 topographic map sheets.

Contoured filtered magnetics and 4,175Hz coplanar resistivity for the Penibe area are provided on Figures 13 and 14 respectively. Interpretation in this area is difficult due to the limited outcrop mapped in the area. However, the resistivity low in the southwest corner of the Penibe claim block may reflect graphitic quartzite which was noted in a trench in this area.

10.0 CONCLUSIONS AND RECOMMENDATIONS

The prospecting and mapping performed on the Penibe property was limited. As a result, the rocks sampled may not be representative of lithologies or mineralization present throughout the property. Additional prospecting, mapping and rock sampling throughout the property is required.

The two areas with anomalous base metal geochemistry require follow-up to determine whether any gold mineralization is present. Spot silver, arsenic, copper, lead, and zinc anomalies also require follow-up prospecting. The two trenches south of the Penibe claims should be re-sampled.

12.0 REFERENCES

- DEBICKI, R.L. 1984. Bedrock geology and mineralization of the Klondike area (west), 1150/14, 15 and 116B/2,3. Indian and Northern Affairs, Canada, Whitehorse, Y.T. Open file map with marginal notes.
- GEONEX AERODAT LIMITED 1987a. Report on combined helicopter borne electromagnetic, magnetic and VLF-EM survey, Bonanza Creek project, Dawson, Yukon, Job No. J8646.
- GEONEX AERODAT LIMITED 1987b. Report on combined helicopter borne electromagnetic, magnetic and VLF-EM survey, Bonanza-Eldorado Creek area, Yukon Territory. Job No.J8642.
- GEONEX AERODAT LIMITED 1987c. Report on combined helicopter borne electromagnetic, magnetic and VLF-EM survey, Dawson Syndicate (1983) exploration area, Yukon Territory. Job No.J8661.
- GREEN, L.H. 1972. Geology of Nash Creek, Larson Creek, and Dawson map-areas, Operation Ogilvie. Geological Survey of Canada, Memoir 364.
- McCONNELL, R.G. 1905. Report on the Klondike gold fields. Geological Survey of Canada, Annual Report 14, pp. B1-B17.
- METCALFE, P. 1981., Petrogenesis of the Klondike Formation, Yukon Territory. Unpublished M.Sc. thesis, University of Manitoba, Winnipeg, Manitoba.
- MORTENSEN, J.K., 1990. Geology and U-Pb geochronology of the Klondike District, west-central Yukon Territory. Canadian Journal of Earth Sciences, Volume 27, pp. 903-914.
- TEMPLEMAN-KLUIT, D.J. 1974. Reconnaissance geology of Aishihik Lake, Snag, and part of Stewart River map-areas, west-central Yukon. Geology Survey of Canada, Paper 73-41.

STATEMENT OF QUALIFICATIONS

I, Russ Cranswick, with business address at 354 - 200 Granville Street, Vancouver, B.C., V6C 1S4, and residence at P6 - 2455 York Avenue, Vancouver, B.C., V6K 1C9, hereby certify that:

- 1) I graduated from the University of British Columbia in 1987 with a B.Sc. in Geology.
- 2) I am a licensed Professional Geologist (L607) with the Association of Professional Engineers, Geologists and Geophysicists of the Northwest Territories.
- 3) I am a member of the Society of the Economic Geologists.
- 4) For the past seven years as a geologist, and the three years prior as a student, I have been actively engaged in mineral exploration in British Columbia, Yukon Territory, Northwest Territories and Ontario.
- 5) I have no interest, nor do I expect to receive any interest, in the property or any related securities.
- 6) This report is based on the work conducted by, and the personal observations of, my co-author. My contributions to this report are based on a review of the data and my familiarity with the project area.

Dated at Vancouver, British Columbia, this 22nd day of April, 1994.



R. L. Cranswick - P.Geol.



STATEMENT OF COSTS - Penibe
9 June - 10 June, 1993

Salaries

| | | | | |
|------------|------------|---|----------|-----------|
| Geologists | 3 man days | @ | \$250.00 | \$ 750.00 |
| Assistants | 4 man days | @ | \$135.00 | \$ 540.00 |

Support

| | | | | |
|----------------|--------|---|---------|-----------|
| Truck 1 rental | 2 days | @ | \$60.00 | \$ 120.00 |
| ATV rental | 2 days | @ | \$24.00 | \$ 48.00 |
| Fax rental | 2 days | @ | \$10.00 | \$ 20.00 |

Meals and Accomodations

| | | | | |
|--------------|------------|---|---------|-----------|
| Meals | 7 man days | @ | \$40.00 | \$ 280.00 |
| House Rental | 2 days | @ | \$37.00 | \$ 74.00 |

Analytical Costs

| | | | | |
|------|------------|---|---------|-----------|
| Rock | 3 samples | @ | \$16.00 | \$ 48.00 |
| Soil | 79 samples | @ | \$11.00 | \$ 869.00 |

Airborne Geophysical Reprocessing

| | | | | |
|--|-----------|---|---------|-----------|
| | 31 claims | @ | \$26.00 | \$ 806.00 |
|--|-----------|---|---------|-----------|

Supplies

\$ 100.00

Communciations/Reproductions

\$ 100.00

Report

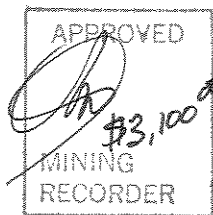
\$ 600.00

Drafting

\$ 100.00

TOTAL

\$ 4,455.00



Work performed on Penibe 3, 5, 9, 10, 15, 20, 22-27
 Costs alloted to the following groups:

| | |
|--|------------|
| DA03213 Penibe 1-11, 15, 16, 20, 21, 26 (16) | \$2,227.50 |
| DA03214 Penibe 12-14, 17-19, 22-31 (16) | |

Appendix A

Rock Sample Descriptions

Rock Sample Descriptions: Table of Abbreviations

PROJECT (PROJ.)

KG Klondike Gold *LS* Lonestar

GEOLOGIST (GEOL.)

— Geologist's Initials

SAMPLE TYPE (S-TYPE)

| | | | |
|-----------|------------------|-----------|------------------------|
| <i>CH</i> | Channel | <i>CO</i> | Drill Core |
| <i>CU</i> | Drill Cuttings | <i>DG</i> | Dump, Grab |
| <i>DH</i> | Dump, High-Grade | <i>FL</i> | Float |
| <i>GR</i> | Grab | <i>RC</i> | Rock-Chip from outcrop |

ROCK TYPE MODIFIERS (MOD1, MOD2, MOD3)

| | | | |
|------------|--------------|------------|-------------|
| <i>AZU</i> | Azurite | <i>CHL</i> | Chlorite |
| <i>DIB</i> | Diabase | <i>FEL</i> | Feldspathic |
| <i>FSP</i> | Feldspar | <i>GRA</i> | Graphite |
| <i>INT</i> | Intermediate | <i>MAG</i> | Magnetite |
| <i>MAL</i> | Malachite | <i>MUS</i> | Muscovite |
| <i>SEC</i> | Sericite | <i>SLC</i> | Silicified |
| <i>QTZ</i> | Quartz | | |

ROCK TYPE (R-TYPE)

| | | | |
|------------|--------------------|------------|------------|
| <i>AND</i> | Andesite | <i>BRX</i> | Breccia |
| <i>CLY</i> | Clay | <i>DIK</i> | Dike |
| <i>GRD</i> | Granodiorite | <i>LIM</i> | Limonite |
| <i>MAR</i> | Mariposite | <i>POR</i> | Porphyry |
| <i>PYY</i> | Pyrite concentrate | <i>QTE</i> | Quartzite |
| <i>SCH</i> | Schist | <i>ULM</i> | Ultramafic |
| <i>VEN</i> | Vein | | |

Penibe Rock Sample Descriptions

| SAMPLE # | CERTIF. # | PROJ. | PROPERTY | NTS | UTM N | UTM E | CLAIM | DATE | GEOL. | S-TYPE | MOD 1 | MOD 2 | MOD 3 | R-TYPE | NOTES |
|----------|-----------|-------|----------|---------|-----------|---------|-----------|--------|-------|--------|-------|-------|-------|--------|---|
| VR2897A | A9318224 | KG | PENIBE | 1150/14 | 7,098,578 | 590,358 | Moon 15 | 8/8/93 | PFL | FL | QTZ | FEL | MUS | SCH | WELL FOLIATED. |
| VR2898A | A9318224 | KG | PENIBE | 1150/14 | 7,098,235 | 590,337 | Penibe 8 | 8/8/93 | PFL | FL | QTZ | FEL | MUS | SCH | |
| VR2899A | A9318224 | KG | PENIBE | 1150/14 | 7,098,058 | 590,345 | Penibe 8 | 8/8/93 | PFL | FL | QTZ | SEC | | SCH | LIMONITIC STRINGERS X-CUT FOLIATION |
| VR2900A | A9318224 | KG | PENIBE | 1150/14 | 7,098,754 | 588,519 | Penibe 27 | 8/8/93 | PFL | FL | QTZ | FEL | MUS | SCH | 1.2% LIM AFTER PYY. CASING AT THIS LOCATION 30+ YEARS OLD |

Appendix B

Analytical Certificates: Rock Samples



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

o: KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
 VANCOUVER, BC
 V6C 1S4

A9316224

Comments: ATTN: ANN DOYLE

CERTIFICATE

A9316224

KENNECOTT CANADA, INC.

Project: KLONDIKE GOLD
 P.O. #: 05-428

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 5-JUL-93.

| SAMPLE PREPARATION | | |
|--------------------|----------------|---|
| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION |
| 205 274 229 | | Geochem ring to approx 150 mesh 0-15 lb crush and split ICP - Aq Digestion charge |

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, W.

ANALYTICAL PROCEDURES

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION | METHOD | DETECTION LIMIT | UPPER LIMIT |
|-------------|----------------|----------------------------------|---------|-----------------|-------------|
| 983 | | Au ppb: Fuse 30 g sample | FA-AAS | 5 | 10000 |
| 2118 | | Ag ppm: 32 element, soil & rock | ICP-AES | 0.2 | 200 |
| 2119 | | Al %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2120 | | As ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2121 | | Ba ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2122 | | Be ppm: 32 element, soil & rock | ICP-AES | 0.5 | 100.0 |
| 2123 | | Bi ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2124 | | Ca %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2125 | | Cd ppm: 32 element, soil & rock | ICP-AES | 0.5 | 100.0 |
| 2126 | | Co ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2127 | | Cr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2128 | | Cu ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2150 | | Fe %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2130 | | Ga ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2131 | | Hg ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2132 | | K %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| 2151 | | La ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2134 | | Mg %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2135 | | Mn ppm: 32 element, soil & rock | ICP-AES | 5 | 10000 |
| 2136 | | Mo ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2137 | | Na %: 32 element, soil & rock | ICP-AES | 0.01 | 5.00 |
| 2138 | | Ni ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2139 | | P ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2140 | | Pb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2141 | | Sb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2142 | | Sc ppm: 32 elements, soil & rock | ICP-AES | 1 | 10000 |
| 2143 | | Sr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2144 | | Ti %: 32 element, soil & rock | ICP-AES | 0.01 | 5.00 |
| 2145 | | Tl ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2146 | | U ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2147 | | V ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2148 | | W ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2149 | | Zn ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |



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Analytical Chemists * Geochemists * Registered Assayers
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British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

o: KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
VANCOUVER, BC
V6C 1S4

Project : KLONDIKE GOLD
Comments: ATTN: ANN DOYLE

Page Number : 2-A
Total Pages : 2
Certificate Date: 05-JUL-93
Invoice No. : 19316224
P.O. Number : 05-428
Account : KAVA

CERTIFICATE OF ANALYSIS A9316224

| SAMPLE | PREP CODE | | Au ppb | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|----------|-----------|-----|--------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| | FA+AA | | | | | | | | | | | | | | | | | | | | |
| VR 5451A | 205 | 274 | < 5 | 0.2 | 0.56 | 4 | 260 | < 0.5 | < 2 | 0.04 | < 0.5 | < 1 | 83 | 2 | 0.48 | < 10 | < 1 | 0.33 | 40 | 0.05 | 60 |
| VR 5452A | 205 | 274 | < 5 | < 0.2 | 0.62 | 22 | 390 | < 0.5 | < 2 | 0.02 | < 0.5 | < 1 | 122 | 1 | 0.80 | < 10 | < 1 | 0.29 | 10 | 0.12 | 90 |
| VR 5453A | 205 | 274 | < 5 | 0.2 | 0.52 | < 2 | 280 | < 0.5 | < 2 | 0.91 | < 0.5 | < 1 | 61 | 1 | 0.46 | < 10 | < 1 | 0.32 | 20 | 0.07 | 105 |

CERTIFICATION:

Hank Beckler

CERTIFICATE OF ANALYSIS A9316224

| SAMPLE | PREP CODE | | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|----------|-----------|-----|--------|------|--------|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|--------|
| | | | | | | | | | | | | | | | | |
| VR 5451A | 205 | 274 | < 1 | 0.01 | < 1 | 60 | 18 | < 2 | 2 | 7 | < 0.01 | < 10 | < 10 | < 1 | < 10 | 12 |
| VR 5452A | 205 | 274 | < 1 | 0.06 | 1 | 90 | 14 | < 2 | 1 | 5 | < 0.01 | < 10 | < 10 | < 1 | < 10 | 34 |
| VR 5453A | 205 | 274 | < 1 | 0.01 | < 1 | 60 | < 2 | < 2 | 2 | 54 | < 0.01 | < 10 | < 10 | < 1 | < 10 | 14 |

CERTIFICATION:

Hank Beckler



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
VANCOUVER, BC
V6C 1S4

Project : KLONDIKE GOLD
Comments: ATTN: ANN DOYLE

Page No. or : 1-A
Total Pages : 2
Certificate Date: 05-JUL-93
Invoice No. : 19316224
P.O. Number : 05-428
Account : KAVA

CERTIFICATE OF ANALYSIS

A9316224

| SAMPLE | PREP CODE | Au ppb FA+AA | Ag ppm | Al % | As ppm | Ba ppm | Ba ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|----------|-----------|-----------------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|-----------|-----------|---------|-----------|-----------|--------|-----------|---------|-----------|
| VR 2897A | 205 274 | 25 | 0.4 | 0.37 | 2 | 320 | < 0.5 | < 2 | 0.42 | < 0.5 | < 1 | 155 | 1 | 0.31 | < 10 | < 1 | 0.31 | 30 | 0.03 | 50 |
| VR 2898A | 205 274 | < 5 | < 0.2 | 0.41 | < 2 | 700 | < 0.5 | < 2 | < 0.01 | < 0.5 | < 1 | 126 | < 1 | 0.25 | < 10 | < 1 | 0.33 | < 10 | 0.06 | 35 |
| VR 2899A | 205 274 | < 5 | 0.2 | 0.35 | 4 | 230 | < 0.5 | < 2 | 0.03 | < 0.3 | < 1 | 131 | < 1 | 0.25 | < 10 | < 1 | 0.31 | 10 | 0.04 | 40 |
| VR 2900A | 205 274 | < 5 | 0.2 | 0.36 | 4 | 240 | < 0.5 | 4 | < 0.01 | < 0.5 | < 1 | 117 | 1 | 0.26 | < 10 | < 1 | 0.27 | 10 | 0.03 | 25 |

CERTIFICATION:

Hart Bichler

CERTIFICATE OF ANALYSIS

A9316224

| SAMPLE | PREP CODE | Mo ppm | Na % | Ni ppm | P ppm | Pb ppm | Sb ppm | Sc ppm | Sr ppm | Ti % | Tl ppm | U ppm | V ppm | W ppm | Zn ppm |
|----------|-----------|-----------|---------|-----------|----------|-----------|-----------|-----------|-----------|---------|-----------|----------|----------|----------|-----------|
| VR 2897A | 205 274 | < 1 | 0.04 | 2 | 30 | 10 | 2 | 1 | 53 | < 0.01 | < 10 | < 10 | < 1 | < 10 | 2 |
| VR 2898A | 205 274 | < 1 | 0.02 | 1 | 20 | 6 | < 2 | < 1 | 8 | < 0.01 | < 10 | < 10 | < 1 | < 10 | 2 |
| VR 2899A | 205 274 | < 1 | 0.01 | 1 | 30 | 14 | < 2 | < 1 | 5 | < 0.01 | < 10 | < 10 | < 1 | < 10 | < 2 |
| VR 2900A | 205 274 | < 1 | 0.02 | 1 | 10 | 2 | < 2 | < 1 | 1 | < 0.01 | < 10 | < 10 | < 1 | < 10 | 2 |

CERTIFICATION:

Hart Bichler

Appendix C

Soil Sample Descriptions

Soil Sample Descriptions: List of Abbreviations

PROJECT (PROJ.)

LS Lonestar

KG Klondike Gold

SAMPLER

— Sampler's Initials

SAMPLE TYPE (TYPE)

SL Soil

ORGANIC CONTENT (ORG)

— Given as %

SOIL HORIZON (HOR)

Based upon USGS classification

1) Organic Soils

O Organic (humic to fibric organic layer)

2) Mineral Soils

A Zone of clay and sesquioxide depletion and/or in situ organic carbon concentration.

B Zone of sesquioxide, organic carbon, and clay enrichment

C Mineral soil unefected by the above pedogenic processes

R Insitu weathered rock (too hard to break with hands)

COLOR

BK Black

BL Blue

BN Brown

BF Buff

GY Grey

OL Olive

OR Orange

PP Purple

RD Red

TA Tan

WT White

YW Yellow

DEPTH

Given in centimetres

CLAY CONTENT

L Low

M Medium

H High

PENIBE.XLS

| | CERTIF. # | PROJ. | PROPERTY | UTM N | UTM E | CLAIM | DATE | SAMPLER | TYPE | ORG | HQR | COLOUR | DEPTH | CLAY | MOISTURE | COMMENTS |
|---------|-----------|-------|----------|-----------|---------|-----------|---------|---------|------|-----|-----|----------|-------|------|----------|--------------------------------|
| VR3501A | A9316167 | KG | PENIBE | 7,096,843 | 589,033 | Penibe 26 | 6/9/93 | KC/TS | SL | NA | B | RD-BN | 15 | L | DRY | MEDIUM-SIZED FLOAT |
| VR3502A | A9316167 | KG | PENIBE | 7,096,861 | 589,079 | Penibe 26 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 15 | M/L | MOIST | MEDIUM-SIZED FLOAT |
| VR3503A | A9316167 | KG | PENIBE | 7,096,882 | 589,122 | Penibe 21 | 6/9/93 | KC/TS | SL | NA | B | BN-RD | 15 | M | MOIST | |
| VR3504A | A9316167 | KG | PENIBE | 7,096,904 | 589,166 | Penibe 21 | 6/9/93 | KC/TS | SL | NA | B | BN | 15 | M | MOIST | GRITTY |
| VR3505A | A9316167 | KG | PENIBE | 7,096,924 | 589,212 | Penibe 21 | 6/9/93 | KC/TS | SL | NA | B | BN | 15 | M | MOIST | GRITTY |
| VR3506A | A9316167 | KG | PENIBE | 7,096,944 | 589,257 | Penibe 21 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 20 | L | MOIST | GRITTY |
| VR3507A | A9316167 | KG | PENIBE | 7,096,965 | 589,303 | Penibe 21 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 20 | M | WET | ROCKY |
| VR3508A | A9316167 | KG | PENIBE | 7,096,984 | 589,349 | Penibe 21 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 25 | M | WET | ROCKY |
| VR3509A | A9316167 | KG | PENIBE | 7,097,005 | 589,396 | Penibe 21 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 25 | H | WET | ROCKY |
| VR3510A | A9316167 | KG | PENIBE | 7,097,023 | 589,442 | Penibe 21 | 6/9/93 | KC/TS | SL | NA | B | BN | 15 | H | WET | RD BETWEEN VR3509A AND VR3510A |
| VR3511A | A9316167 | KG | PENIBE | 7,097,046 | 589,487 | Penibe 20 | 6/9/93 | KC/TS | SL | NA | B | BN-RD | 20 | M | MOIST | |
| VR3512A | A9316167 | KG | PENIBE | 7,097,067 | 589,536 | Penibe 20 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 25 | M | MOIST | |
| VR3513A | A9316167 | KG | PENIBE | 7,097,086 | 589,577 | Penibe 15 | 6/9/93 | KC/TS | SL | NA | B | RD-BN | 25 | L | MOIST | GRITTY |
| VR3514A | A9316167 | KG | PENIBE | 7,097,108 | 589,622 | Penibe 15 | 6/9/93 | KC/TS | SL | NA | B | BN-RD | 30 | L | DRY | GRITTY |
| VR3515A | A9316167 | KG | PENIBE | 7,097,128 | 589,667 | Penibe 15 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 15 | L | DRY | GRITTY |
| VR3516A | A9316167 | KG | PENIBE | 7,097,147 | 589,713 | Penibe 15 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 20 | L | DRY | MEDIUM-SIZED FLOAT |
| VR3517A | A9316167 | KG | PENIBE | 7,097,169 | 589,757 | Penibe 15 | 6/9/93 | KC/TS | SL | NA | B | BN | 20 | M | MOIST | |
| VR3518A | A9316167 | KG | PENIBE | 7,097,189 | 589,806 | Penibe 15 | 6/9/93 | KC/TS | SL | NA | B | BN-RD | 20 | L | MOIST | GRITTY |
| VR3519A | A9316167 | KG | PENIBE | 7,097,210 | 589,851 | Penibe 15 | 6/9/93 | KC/TS | SL | NA | B | BN | 20 | H | WET | GRITTY AND ROCKY |
| VR3520A | A9316167 | KG | PENIBE | 7,097,231 | 589,897 | Penibe 15 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 15 | M | MOIST | GRITTY |
| VR3521A | A9316167 | KG | PENIBE | 7,097,251 | 589,942 | Penibe 15 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 20 | H | WET | |
| VR3522A | A9316167 | KG | PENIBE | 7,097,273 | 589,989 | Penibe 10 | 6/9/93 | KC/TS | SL | NA | B | RD-BN | 15 | M | DRY | |
| VR3524A | A9316167 | KG | PENIBE | 7,097,313 | 590,079 | Penibe 10 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 25 | M | MOIST | ROCKY |
| VR3526A | A9316167 | KG | PENIBE | 7,097,353 | 590,172 | Penibe 10 | 6/9/93 | KC/TS | SL | NA | B | BN-GY | 30 | M | MOIST | |
| VR3527A | A9316167 | KG | PENIBE | 7,097,373 | 590,217 | Penibe 10 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 20 | M | DRY | GRITTY |
| VR3528A | A9316167 | KG | PENIBE | 7,097,393 | 590,259 | Penibe 10 | 6/9/93 | KC/TS | SL | NA | B | GY-WT | 35 | H | WET | ASH? |
| VR3529A | A9316167 | KG | PENIBE | 7,097,415 | 590,307 | Penibe 10 | 6/9/93 | KC/TS | SL | NA | B | GY-BN | 25 | M | WET | |
| VR3530A | A9316167 | KG | PENIBE | 7,097,434 | 590,353 | Penibe 10 | 6/9/93 | KC/TS | SL | NA | B | BN | 20 | M | WET | |
| VR3531A | A9316167 | KG | PENIBE | 7,097,456 | 590,400 | Penibe 10 | 6/9/93 | KC/TS | SL | NA | B | BN | 15 | M | DRY | GRITTY |
| VR3532A | A9316167 | KG | PENIBE | 7,097,474 | 590,446 | Penibe 10 | 6/9/93 | KC/TS | SL | NA | B | BN-RD | 25 | M | DRY | |
| VR3533A | A9316167 | KG | PENIBE | 7,097,495 | 590,491 | Penibe 6 | 6/9/93 | KC/TS | SL | NA | B | LT BN | 15 | M | MOIST | GRITTY |
| VR3534A | A9316167 | KG | PENIBE | 7,097,519 | 590,541 | Penibe 6 | 6/9/93 | KC/TS | SL | NA | B | GY | 30 | H | WET | GRITTY |
| VR3535A | A9316167 | KG | PENIBE | 7,097,537 | 590,583 | Penibe 5 | 6/9/93 | KC/TS | SL | NA | B | BN-RD | 15 | L | MOIST | ROCKY |
| VR3536A | A9316167 | KG | PENIBE | 7,097,557 | 590,626 | Penibe 5 | 6/9/93 | KC/TS | SL | NA | B | BN | 20 | M | DRY | |
| VR3537A | A9316167 | KG | PENIBE | 7,097,578 | 590,673 | Penibe 5 | 6/9/93 | KC/TS | SL | NA | B | BN | 20 | L | DRY | GRITTY |
| VR3538A | A9316167 | KG | PENIBE | 7,097,596 | 590,714 | Penibe 5 | 6/9/93 | KC/TS | SL | NA | B | BN-RD | 15 | L | MOIST | GRITTY |
| VR3539A | A9316167 | KG | PENIBE | 7,097,618 | 590,763 | Penibe 5 | 6/9/93 | KC/TS | SL | NA | B | BN-GY | 25 | L | DRY | |
| VR3540A | A9316167 | KG | PENIBE | 7,097,633 | 590,798 | Penibe 5 | 6/9/93 | KC/TS | SL | NA | B | DK BN-GY | 20 | M | MOIST | ROCKY/SOIL IS VERY DARK |
| VR3541A | A9316167 | KG | PENIBE | 7,096,821 | 588,981 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 15 | L | WET | GRITTY |
| VR3542A | A9316167 | KG | PENIBE | 7,096,859 | 588,968 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | BN-RD | 20 | L | DRY | ROCKY |
| VR3543A | A9316167 | KG | PENIBE | 7,096,903 | 588,955 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | BN-RD | 20 | L | MOIST | GRITTY |
| VR3544A | A9316167 | KG | PENIBE | 7,096,953 | 588,942 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | BN-RD | 20 | M | WET | |
| VR3545A | A9316167 | KG | PENIBE | 7,097,003 | 588,932 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | H | WET | |
| VR3546A | A9316167 | KG | PENIBE | 7,097,056 | 588,918 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | BN | 20 | M | MOIST | GRITTY |
| VR3547A | A9316167 | KG | PENIBE | 7,097,097 | 588,909 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | WET | |
| VR3548A | A9316167 | KG | PENIBE | 7,097,149 | 588,895 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | WET | |
| VR3549A | A9316167 | KG | PENIBE | 7,097,195 | 588,886 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | WET | |
| VR3550A | A9316167 | KG | PENIBE | 7,097,233 | 588,876 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | WET | |
| VR3551A | A9316167 | KG | PENIBE | 7,097,282 | 588,863 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | MOIST | |
| VR3552A | A9316167 | KG | PENIBE | 7,097,332 | 588,855 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | BN | 20 | M | WET | |
| VR3553A | A9316167 | KG | PENIBE | 7,097,373 | 588,845 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | H | WET | |
| VR3554A | A9316167 | KG | PENIBE | 7,097,424 | 588,830 | Penibe 25 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | MOIST | RD BETWEEN VR3553A AND VR3554A |
| VR3555A | A9316167 | KG | PENIBE | 7,097,468 | 588,823 | Penibe 24 | 6/10/93 | KC/TS | SL | NA | B | GY-BK-GN | 20 | H | WET | |
| VR3556A | A9316167 | KG | PENIBE | 7,097,523 | 588,809 | Penibe 24 | 6/10/93 | KC/TS | SL | NA | B | BN-GN | 25 | M | WET | |
| VR3557A | A9316167 | KG | PENIBE | 7,097,567 | 588,799 | Penibe 24 | 6/10/93 | KC/TS | SL | NA | B | GY-BN | 20 | L | DRY | ROCKY |
| VR3558A | A9316167 | KG | PENIBE | 7,097,611 | 588,789 | Penibe 24 | 6/10/93 | KC/TS | SL | NA | B | BN | 20 | M | WET | |
| VR3559A | A9316167 | KG | PENIBE | 7,097,663 | 588,776 | Penibe 24 | 6/10/93 | KC/TS | SL | NA | B | BN | 25 | H | WET | |
| VR3560A | A9316167 | KG | PENIBE | 7,097,709 | 588,765 | Penibe 24 | 6/10/93 | KC/TS | SL | NA | B | DK BN-GN | 25 | M | DRY | |

| | CERT F. # | PROJ. | PROPERTY | UTM N | UTM E | CLAIM | DATE | SAMPLER | TYPE | ORG | HOR | COLOUR | DEPTH | CLAY | MOISTURE | COMMENTS |
|---------|-----------|-------|----------|-----------|---------|-----------|---------|---------|------|-----|-----|----------|-------|------|----------|--------------------|
| VR3561A | A9316167 | KG | PENIBE | 7,097,754 | 588,754 | Penibe 24 | 6/10/93 | KC/TS | SL | NA | B | BK-GY | 20 | M | DRY | GRITTY |
| VR3562A | A9316167 | KG | PENIBE | 7,097,796 | 588,744 | Penibe 24 | 6/10/93 | KC/TS | SL | NA | B | BN-GN | 25 | M | MOIST | |
| VR3563A | A9316167 | KG | PENIBE | 7,097,845 | 588,733 | Penibe 24 | 6/10/93 | KC/TS | SL | NA | B | BN | 20 | M | MOIST | |
| VR3564A | A9316167 | KG | PENIBE | 7,097,891 | 588,722 | Penibe 23 | 6/10/93 | KC/TS | SL | NA | B | BN | 25 | H | MOIST | |
| VR3565A | A9316167 | KG | PENIBE | 7,097,937 | 588,711 | Penibe 23 | 6/10/93 | KC/TS | SL | NA | B | BK-GY-GN | 20 | M | WET | |
| VR3566A | A9316167 | KG | PENIBE | 7,097,980 | 588,701 | Penibe 28 | 6/10/93 | KC/TS | SL | NA | B | GY-BK-GN | 25 | M | DRY | |
| VR3567A | A9316167 | KG | PENIBE | 7,098,028 | 588,689 | Penibe 28 | 6/10/93 | KC/TS | SL | NA | B | GY-BK-GN | 25 | M | DRY | |
| VR3568A | A9316167 | KG | PENIBE | 7,098,071 | 588,679 | Penibe 28 | 6/10/93 | KC/TS | SL | NA | B | GY-BK-GN | 25 | M | DRY | |
| VR3569A | A9316167 | KG | PENIBE | 7,098,128 | 588,665 | Penibe 28 | 6/10/93 | KC/TS | SL | NA | B | GY-BK-GN | 25 | M | DRY | |
| VR3570A | A9316167 | KG | PENIBE | 7,098,177 | 588,654 | Penibe 28 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 25 | L | DRY | |
| VR3571A | A9316167 | KG | PENIBE | 7,098,226 | 588,642 | Penibe 28 | 6/10/93 | KC/TS | SL | NA | B | GY | 25 | H | WET | GRAPHITE? |
| VR3572A | A9316167 | KG | PENIBE | 7,098,272 | 588,631 | Penibe 28 | 6/10/93 | KC/TS | SL | NA | B | BN | 25 | M | MOIST | |
| VR3573A | A9316167 | KG | PENIBE | 7,098,313 | 588,618 | Penibe 27 | 6/10/93 | KC/TS | SL | NA | B | BN | 20 | L | DRY | |
| VR3574A | A9316167 | KG | PENIBE | 7,098,366 | 588,609 | Comet 5 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | MOIST | |
| VR3575A | A9316167 | KG | PENIBE | 7,098,408 | 588,593 | Comet 5 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | WET | |
| VR3576A | A9316167 | KG | PENIBE | 7,098,461 | 588,586 | Comet 5 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | L | DRY | |
| VR3577A | A9316167 | KG | PENIBE | 7,098,509 | 588,575 | Comet 5 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 15 | L | DRY | ROCKY |
| VR3578A | A9316167 | KG | PENIBE | 7,098,557 | 588,563 | Comet 5 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | H | WET | |
| VR3579A | A9316167 | KG | PENIBE | 7,098,595 | 588,554 | Comet 5 | 6/10/93 | KC/TS | SL | NA | B | RD-BN | 15 | L | MOIST | MEDIUM-SIZED FLOAT |
| VR3580A | A9316167 | KG | PENIBE | 7,098,663 | 588,538 | Penibe 27 | 6/10/93 | KC/TS | SL | NA | B | RD-BN | 20 | L | DRY | |
| VR3582A | A9316167 | KG | PENIBE | 7,096,723 | 588,958 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 15 | L | WET | GRITTY |
| VR3583A | A9316167 | KG | PENIBE | 7,096,723 | 588,958 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | L | DRY | |
| VR3584A | A9316167 | KG | PENIBE | 7,096,670 | 588,947 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 25 | L | DRY | |
| VR3585A | A9316167 | KG | PENIBE | 7,096,625 | 588,937 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | BN | 20 | L | DRY | |
| VR3586A | A9316167 | KG | PENIBE | 7,096,575 | 588,927 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | L | DRY | |
| VR3587A | A9316167 | KG | PENIBE | 7,096,529 | 588,917 | Penibe 26 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | L | DRY | |
| VR3588A | A9316167 | KG | PENIBE | 7,096,478 | 588,906 | Comet 24 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | MOIST | |
| VR3589A | A9316167 | KG | PENIBE | 7,096,431 | 588,897 | Comet 24 | 6/10/93 | KC/TS | SL | NA | B | BN | 20 | M | DRY | |
| VR3590A | A9316167 | KG | PENIBE | 7,096,376 | 588,885 | Comet 24 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 15 | L | DRY | |
| VR3591A | A9316167 | KG | PENIBE | 7,096,327 | 588,875 | Comet 24 | 6/10/93 | KC/TS | SL | NA | B | LT BN | 20 | M | WET | |
| VR3592A | A9316167 | KG | PENIBE | 7,096,280 | 588,865 | Comet 24 | 6/10/93 | KC/TS | SL | NA | B | BN-RD | 20 | L | MOIST | |
| VR3593A | A9316167 | KG | PENIBE | 7,096,235 | 588,856 | Comet 24 | 6/10/93 | KC/TS | SL | NA | B | BN | 15 | M | WET | |
| VR3594A | A9316167 | KG | PENIBE | 7,096,203 | 588,849 | Comet 24 | 6/10/93 | KC/TS | SL | NA | B | GY-BK-GN | 25 | L | DRY | GRITTY |

Appendix D

Analytical Certificates: Soil Samples



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

o: KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
 VANCOUVER, BC
 V6C 1S4

A9316167

Comments:

CERTIFICATE

A9316167

KENNECOTT CANADA, INC.

Project: KLONDIKE GOLD PENIBE
 P.O. #:

Samples submitted to our lab in Vancouver, BC.
 This report was printed on 2-JUL-93.

SAMPLE PREPARATION

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION |
|-------------|----------------|---------------------------|
| 201 | 91 | Dry, sieve to -80 mesh |
| 229 | 91 | ICP - AQ Digestion charge |

* NOTE 1:

The 32 element ICP package is suitable for trace metals in soil and rock samples. Elements for which the nitric-aqua regia digestion is possibly incomplete are: Al, Ba, Be, Ca, Cr, Ga, K, La, Mg, Na, Sr, Ti, Tl, W.

ANALYTICAL PROCEDURES

| CHEMEX CODE | NUMBER SAMPLES | DESCRIPTION | METHOD | DETECTION LIMIT | UPPER LIMIT |
|-------------|----------------|----------------------------------|---------|-----------------|-------------|
| 983 | 91 | Au ppb: Fuse 30 g sample | FA-AAS | 5 | 10000 |
| 2118 | 91 | Ag ppm: 32 element, soil & rock | ICP-AES | 0.2 | 200 |
| 2119 | 91 | Al %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2120 | 91 | As ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2121 | 91 | Ba ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2122 | 91 | Be ppm: 32 element, soil & rock | ICP-AES | 0.5 | 100.0 |
| 2123 | 91 | Bi ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2124 | 91 | Ca %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2125 | 91 | Cd ppm: 32 element, soil & rock | ICP-AES | 0.5 | 100.0 |
| 2126 | 91 | Co ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2127 | 91 | Cr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2128 | 91 | Cu ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2150 | 91 | Fe %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2130 | 91 | Ga ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2131 | 91 | Hg ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2132 | 91 | K %: 32 element, soil & rock | ICP-AES | 0.01 | 10.00 |
| 2151 | 91 | La ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2134 | 91 | Mg %: 32 element, soil & rock | ICP-AES | 0.01 | 15.00 |
| 2135 | 91 | Mn ppm: 32 element, soil & rock | ICP-AES | 5 | 10000 |
| 2136 | 91 | Mo ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2137 | 91 | Na %: 32 element, soil & rock | ICP-AES | 0.01 | 5.00 |
| 2138 | 91 | Ni ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2139 | 91 | P ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2140 | 91 | Pb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2141 | 91 | Sb ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |
| 2142 | 91 | Sc ppm: 32 elements, soil & rock | ICP-AES | 1 | 10000 |
| 2143 | 91 | Sr ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2144 | 91 | Ti %: 32 element, soil & rock | ICP-AES | 0.01 | 5.00 |
| 2145 | 91 | Tl ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2146 | 91 | U ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2147 | 91 | V ppm: 32 element, soil & rock | ICP-AES | 1 | 10000 |
| 2148 | 91 | W ppm: 32 element, soil & rock | ICP-AES | 10 | 10000 |
| 2149 | 91 | Zn ppm: 32 element, soil & rock | ICP-AES | 2 | 10000 |



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

o: KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
 VANCOUVER, BC
 V6C 1S4

Page 1 of 1-A
 Total Pages : 3
 Certificate Date: 02-JUL-93
 Invoice No. : 19316167
 P.O. Number :
 Account : KAVA

Project : KLONDIKE GOLD PENIBE
 Comments:

CERTIFICATE OF ANALYSIS A9316167

| SAMPLE | PREP CODE | | Au ppb | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|---------|-----------|-----|--------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| | | | FA+AA | | | | | | | | | | | | | | | | | | |
| VR3501A | 201 | 229 | < 5 | < 0.2 | 2.55 | 10 | 290 | 0.5 | < 2 | 0.18 | < 0.5 | 6 | 30 | 17 | 2.36 | < 10 | < 1 | 0.09 | 10 | 0.55 | 170 |
| VR3502A | 201 | 229 | < 5 | < 0.2 | 1.28 | < 2 | 210 | < 0.5 | < 2 | 0.08 | < 0.5 | 2 | 13 | 4 | 1.14 | < 10 | < 1 | 0.11 | 40 | 0.20 | 70 |
| VR3503A | 201 | 229 | < 5 | < 0.2 | 2.33 | < 2 | 270 | 0.5 | < 2 | 0.15 | 0.5 | 7 | 35 | 13 | 3.06 | < 10 | < 1 | 0.10 | 10 | 0.49 | 265 |
| VR3504A | 201 | 229 | < 5 | < 0.2 | 1.96 | < 2 | 260 | 0.5 | < 2 | 0.14 | 0.5 | 4 | 20 | 8 | 2.14 | < 10 | < 1 | 0.14 | 20 | 0.31 | 135 |
| VR3505A | 201 | 229 | < 5 | < 0.2 | 1.19 | < 2 | 370 | < 0.5 | < 2 | 0.10 | < 0.5 | 3 | 13 | 7 | 1.72 | < 10 | < 1 | 0.15 | 20 | 0.23 | 135 |
| VR3506A | 201 | 229 | < 5 | < 0.2 | 1.23 | 2 | 260 | < 0.5 | < 2 | 0.07 | < 0.5 | 3 | 15 | 10 | 1.62 | < 10 | < 1 | 0.10 | 20 | 0.22 | 95 |
| VR3507A | 201 | 229 | < 5 | 0.2 | 1.37 | 6 | 230 | < 0.5 | < 2 | 0.14 | < 0.5 | 5 | 22 | 13 | 1.91 | < 10 | < 1 | 0.08 | 10 | 0.35 | 115 |
| VR3508A | 201 | 229 | < 5 | < 0.2 | 1.35 | < 2 | 170 | 0.5 | 2 | 0.15 | < 0.5 | 6 | 24 | 15 | 2.08 | < 10 | < 1 | 0.08 | 10 | 0.39 | 145 |
| VR3509A | 201 | 229 | < 5 | < 0.2 | 1.28 | 2 | 190 | 0.5 | < 2 | 0.19 | < 0.5 | 5 | 23 | 12 | 1.77 | < 10 | < 1 | 0.08 | 10 | 0.40 | 120 |
| VR3510A | 201 | 229 | < 5 | < 0.2 | 1.54 | 4 | 200 | < 0.5 | < 2 | 0.16 | < 0.5 | 3 | 23 | 10 | 1.89 | < 10 | < 1 | 0.07 | 10 | 0.38 | 115 |
| VR3511A | 201 | 229 | < 5 | < 0.2 | 1.50 | < 2 | 200 | < 0.5 | < 2 | 0.11 | < 0.5 | 4 | 20 | 8 | 2.27 | < 10 | < 1 | 0.06 | 10 | 0.39 | 140 |
| VR3512A | 201 | 229 | < 5 | < 0.2 | 2.31 | < 2 | 210 | 0.5 | < 2 | 0.15 | 0.5 | 4 | 29 | 9 | 2.74 | < 10 | < 1 | 0.08 | 10 | 0.62 | 165 |
| VR3513A | 201 | 229 | < 5 | < 0.2 | 0.91 | < 2 | 150 | < 0.5 | 2 | 0.03 | < 0.5 | < 1 | 5 | 2 | 0.74 | < 10 | < 1 | 0.08 | < 10 | 0.09 | 35 |
| VR3514A | 201 | 229 | < 5 | < 0.2 | 1.51 | < 2 | 220 | < 0.5 | 2 | 0.11 | < 0.5 | 3 | 18 | 9 | 1.67 | < 10 | < 1 | 0.07 | 10 | 0.32 | 110 |
| VR3515A | 201 | 229 | < 5 | < 0.2 | 1.74 | < 2 | 240 | < 0.5 | < 2 | 0.11 | < 0.5 | 4 | 21 | 11 | 1.88 | < 10 | < 1 | 0.06 | 10 | 0.37 | 100 |
| VR3516A | 201 | 229 | < 5 | < 0.2 | 1.22 | < 2 | 200 | < 0.5 | < 2 | 0.08 | < 0.5 | 2 | 9 | 6 | 1.58 | < 10 | < 1 | 0.03 | < 10 | 0.34 | 80 |
| VR3517A | 201 | 229 | < 5 | < 0.2 | 1.48 | 2 | 190 | < 0.5 | 2 | 0.10 | < 0.5 | 3 | 17 | 7 | 1.97 | < 10 | < 1 | 0.04 | 10 | 0.40 | 160 |
| VR3518A | 201 | 229 | < 5 | < 0.2 | 1.89 | < 2 | 210 | < 0.5 | 2 | 0.10 | < 0.5 | 5 | 17 | 11 | 2.43 | < 10 | < 1 | 0.06 | 10 | 0.56 | 160 |
| VR3519A | 201 | 229 | < 5 | < 0.2 | 1.57 | 2 | 170 | < 0.5 | < 2 | 0.12 | < 0.5 | 4 | 22 | 9 | 2.00 | < 10 | < 1 | 0.04 | 10 | 0.43 | 115 |
| VR3520A | 201 | 229 | < 5 | < 0.2 | 1.56 | 6 | 190 | < 0.5 | < 2 | 0.10 | < 0.5 | 3 | 22 | 12 | 1.94 | < 10 | < 1 | 0.06 | 10 | 0.40 | 100 |
| VR3521A | 201 | 229 | < 5 | 1.2 | 1.18 | < 2 | 170 | < 0.5 | 6 | 0.12 | < 0.5 | 2 | 18 | 15 | 1.53 | < 10 | < 1 | 0.07 | 20 | 0.27 | 70 |
| VR3522A | 201 | 229 | < 5 | < 0.2 | 2.03 | 14 | 450 | 0.5 | < 2 | 0.15 | 0.5 | 6 | 29 | 17 | 3.09 | < 10 | < 1 | 0.08 | 10 | 0.37 | 155 |
| VR3524A | 201 | 229 | < 5 | 0.4 | 0.66 | 6 | 290 | < 0.5 | 2 | 0.09 | < 0.5 | 1 | 8 | 15 | 1.03 | 10 | < 1 | 0.07 | 70 | 0.12 | 50 |
| VR3526A | 201 | 229 | < 5 | < 0.2 | 1.21 | < 2 | 220 | < 0.5 | < 2 | 0.14 | < 0.5 | 3 | 18 | 10 | 1.52 | < 10 | < 1 | 0.05 | 20 | 0.33 | 95 |
| VR3527A | 201 | 229 | < 5 | 0.4 | 1.23 | 8 | 360 | < 0.5 | < 2 | 0.20 | < 0.5 | 1 | 12 | 11 | 1.13 | 10 | < 1 | 0.08 | 40 | 0.33 | 45 |
| VR3528A | 201 | 229 | < 5 | 0.2 | 1.50 | 2 | 250 | < 0.5 | < 2 | 0.19 | < 0.5 | < 1 | 6 | 5 | 0.92 | 10 | < 1 | 0.07 | 40 | 0.74 | 250 |
| VR3529A | 201 | 229 | < 5 | 0.2 | 1.52 | < 2 | 350 | < 0.5 | < 2 | 0.21 | < 0.5 | 4 | 18 | 15 | 1.55 | < 10 | < 1 | 0.07 | 30 | 0.44 | 115 |
| VR3530A | 201 | 229 | < 5 | 0.2 | 0.57 | 38 | 210 | < 0.5 | < 2 | 0.04 | < 0.5 | 2 | 9 | 18 | 1.24 | < 10 | < 1 | 0.06 | 10 | 0.08 | 40 |
| VR3531A | 201 | 229 | < 5 | < 0.2 | 1.54 | 28 | 180 | < 0.5 | < 2 | 0.11 | < 0.5 | 4 | 22 | 13 | 2.19 | < 10 | < 1 | 0.08 | 20 | 0.30 | 110 |
| VR3532A | 201 | 229 | < 5 | < 0.2 | 2.44 | 8 | 450 | 0.5 | < 2 | 0.16 | < 0.5 | 8 | 36 | 22 | 2.66 | < 10 | < 1 | 0.07 | 20 | 0.48 | 210 |
| VR3533A | 201 | 229 | < 5 | < 0.2 | 1.17 | 10 | 220 | < 0.5 | < 2 | 0.08 | < 0.5 | 2 | 13 | 15 | 1.22 | < 10 | < 1 | 0.07 | 30 | 0.19 | 45 |
| VR3534A | 201 | 229 | < 5 | 0.2 | 1.75 | < 2 | 300 | < 0.5 | < 2 | 0.25 | 0.5 | 3 | 20 | 66 | 1.66 | < 10 | < 1 | 0.10 | 40 | 0.54 | 90 |
| VR3535A | 201 | 229 | < 5 | 0.2 | 1.31 | < 2 | 190 | < 0.5 | < 2 | 0.04 | < 0.5 | 2 | 10 | 11 | 1.21 | 10 | < 1 | 0.10 | 70 | 0.33 | 75 |
| VR3536A | 201 | 229 | < 5 | < 0.2 | 2.74 | < 2 | 400 | 0.5 | < 2 | 0.18 | 0.5 | 9 | 44 | 20 | 3.08 | < 10 | < 1 | 0.06 | 20 | 0.52 | 325 |
| VR3537A | 201 | 229 | < 5 | < 0.2 | 2.54 | 110 | 480 | < 0.5 | < 2 | 0.11 | 0.5 | 8 | 51 | 47 | 4.29 | 10 | < 1 | 0.08 | 30 | 0.64 | 150 |
| VR3538A | 201 | 229 | < 5 | < 0.2 | 2.95 | < 2 | 260 | < 0.5 | 2 | 0.13 | 0.5 | 9 | 29 | 17 | 3.00 | < 10 | < 1 | 0.07 | 10 | 0.75 | 150 |
| VR3539A | 201 | 229 | < 5 | 1.4 | 1.95 | 14 | 240 | < 0.5 | < 2 | 0.15 | 0.5 | 7 | 32 | 103 | 2.75 | < 10 | < 1 | 0.05 | 20 | 0.48 | 145 |
| VR3540A | 201 | 229 | < 5 | 1.4 | 2.13 | 14 | 350 | < 0.5 | < 2 | 0.17 | 0.5 | 8 | 30 | 108 | 2.61 | < 10 | < 1 | 0.06 | 10 | 0.44 | 220 |
| VR3541A | 201 | 229 | < 5 | < 0.2 | 0.80 | < 2 | 130 | < 0.5 | < 2 | 0.06 | < 0.5 | < 1 | 4 | 2 | 0.74 | < 10 | < 1 | 0.10 | 40 | 0.07 | 45 |
| VR3542A | 201 | 229 | < 5 | < 0.2 | 2.34 | 16 | 370 | < 0.5 | < 2 | 0.17 | < 0.5 | 5 | 27 | 13 | 2.48 | < 10 | < 1 | 0.10 | 10 | 0.37 | 145 |

CERTIFICATION: *Hart Bichler*



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

To: KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
 VANCOUVER, BC
 V6C 1S4

Project : KLONDIKE GOLD PENIBE
 Comments:

Page .ber : 1-B
 Total Pages : 3
 Certificate Date: 02-JUL-93
 Invoice No. : 19316167
 P.O. Number :
 Account : KAVA

CERTIFICATE OF ANALYSIS A9316167

| SAMPLE | PREP CODE | | Mo | Na | Ni | P | Pb | Sb | Sc | Sr | Ti | Tl | U | V | W | Zn |
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| VR3501A | 201 | 229 | 1 | 0.01 | 22 | 160 | 12 | < 2 | 3 | 26 | 0.07 | < 10 | < 10 | 48 | < 10 | 60 |
| VR3502A | 201 | 229 | < 1 | < 0.01 | 6 | 100 | 30 | < 2 | 1 | 8 | 0.01 | < 10 | < 10 | 23 | < 10 | 16 |
| VR3503A | 201 | 229 | 1 | 0.01 | 17 | 250 | 8 | < 2 | 4 | 15 | 0.08 | < 10 | < 10 | 67 | < 10 | 50 |
| VR3504A | 201 | 229 | < 1 | 0.01 | 10 | 150 | 18 | < 2 | 3 | 18 | 0.03 | < 10 | < 10 | 41 | < 10 | 36 |
| VR3505A | 201 | 229 | < 1 | < 0.01 | 8 | 210 | 22 | < 2 | 2 | 10 | 0.01 | < 10 | < 10 | 26 | < 10 | 28 |
| VR3506A | 201 | 229 | < 1 | < 0.01 | 10 | 130 | 24 | < 2 | 2 | 8 | 0.01 | < 10 | < 10 | 25 | < 10 | 28 |
| VR3507A | 201 | 229 | < 1 | < 0.01 | 13 | 200 | 16 | 2 | 2 | 12 | 0.04 | < 10 | < 10 | 40 | < 10 | 38 |
| VR3508A | 201 | 229 | 1 | < 0.01 | 16 | 240 | 16 | 2 | 2 | 11 | 0.04 | < 10 | < 10 | 38 | < 10 | 44 |
| VR3509A | 201 | 229 | < 1 | 0.01 | 12 | 190 | 16 | 2 | 3 | 15 | 0.05 | < 10 | < 10 | 37 | < 10 | 36 |
| VR3510A | 201 | 229 | < 1 | 0.01 | 11 | 150 | 14 | 2 | 3 | 15 | 0.04 | < 10 | < 10 | 37 | < 10 | 34 |
| VR3511A | 201 | 229 | < 1 | < 0.01 | 9 | 190 | 20 | < 2 | 2 | 12 | 0.03 | < 10 | < 10 | 41 | < 10 | 36 |
| VR3512A | 201 | 229 | 1 | 0.01 | 13 | 170 | 16 | < 2 | 3 | 18 | 0.07 | < 10 | < 10 | 60 | < 10 | 46 |
| VR3513A | 201 | 229 | < 1 | < 0.01 | 2 | 80 | 14 | < 2 | < 1 | 7 | < 0.01 | < 10 | < 10 | 10 | < 10 | 12 |
| VR3514A | 201 | 229 | < 1 | < 0.01 | 10 | 70 | 24 | 2 | 2 | 11 | 0.02 | < 10 | < 10 | 28 | < 10 | 36 |
| VR3515A | 201 | 229 | 1 | 0.01 | 13 | 80 | 18 | < 2 | 3 | 14 | 0.03 | < 10 | < 10 | 35 | < 10 | 38 |
| VR3516A | 201 | 229 | < 1 | < 0.01 | 7 | 140 | 14 | < 2 | 2 | 8 | < 0.01 | < 10 | < 10 | 16 | < 10 | 42 |
| VR3517A | 201 | 229 | < 1 | < 0.01 | 10 | 140 | 20 | < 2 | 2 | 11 | 0.03 | < 10 | < 10 | 39 | < 10 | 38 |
| VR3518A | 201 | 229 | 1 | < 0.01 | 18 | 200 | 20 | 4 | 2 | 11 | 0.01 | < 10 | < 10 | 33 | < 10 | 50 |
| VR3519A | 201 | 229 | < 1 | 0.01 | 12 | 100 | 12 | 4 | 2 | 11 | 0.04 | < 10 | < 10 | 39 | < 10 | 38 |
| VR3520A | 201 | 229 | < 1 | < 0.01 | 12 | 90 | 36 | < 2 | 2 | 9 | 0.03 | < 10 | < 10 | 34 | < 10 | 42 |
| VR3521A | 201 | 229 | 2 | < 0.01 | 8 | 180 | 198 | 10 | 2 | 9 | 0.03 | < 10 | < 10 | 30 | < 10 | 30 |
| VR3522A | 201 | 229 | 1 | < 0.01 | 14 | 270 | 32 | < 2 | 3 | 17 | 0.04 | < 10 | < 10 | 63 | < 10 | 44 |
| VR3524A | 201 | 229 | 1 | < 0.01 | 4 | 110 | 54 | 2 | 1 | 10 | 0.01 | < 10 | < 10 | 16 | < 10 | 38 |
| VR3526A | 201 | 229 | < 1 | < 0.01 | 9 | 70 | 22 | < 2 | 2 | 14 | 0.02 | < 10 | < 10 | 31 | < 10 | 38 |
| VR3527A | 201 | 229 | < 1 | < 0.01 | 8 | 80 | 46 | 2 | 2 | 21 | 0.01 | < 10 | < 10 | 21 | < 10 | 52 |
| VR3528A | 201 | 229 | < 1 | < 0.01 | 5 | 50 | 48 | 2 | 4 | 25 | < 0.01 | < 10 | < 10 | 6 | < 10 | 72 |
| VR3529A | 201 | 229 | < 1 | 0.01 | 11 | 150 | 28 | 2 | 3 | 21 | 0.03 | < 10 | < 10 | 30 | < 10 | 38 |
| VR3530A | 201 | 229 | 4 | < 0.01 | 15 | 250 | 22 | 2 | < 1 | 15 | < 0.01 | < 10 | < 10 | 12 | < 10 | 34 |
| VR3531A | 201 | 229 | < 1 | < 0.01 | 12 | 150 | 26 | 2 | 2 | 11 | 0.06 | < 10 | < 10 | 52 | < 10 | 38 |
| VR3532A | 201 | 229 | 1 | 0.01 | 22 | 100 | 50 | 2 | 5 | 18 | 0.07 | < 10 | < 10 | 63 | < 10 | 60 |
| VR3533A | 201 | 229 | < 1 | < 0.01 | 8 | 70 | 46 | < 2 | 1 | 13 | 0.01 | < 10 | < 10 | 20 | < 10 | 26 |
| VR3534A | 201 | 229 | 2 | 0.01 | 15 | 190 | 38 | < 2 | 3 | 20 | 0.03 | < 10 | < 10 | 27 | < 10 | 64 |
| VR3535A | 201 | 229 | 2 | < 0.01 | 7 | 50 | 36 | < 2 | 2 | 5 | 0.01 | < 10 | < 10 | 14 | < 10 | 40 |
| VR3536A | 201 | 229 | 1 | 0.01 | 22 | 170 | 10 | < 2 | 5 | 20 | 0.08 | < 10 | < 10 | 79 | < 10 | 58 |
| VR3537A | 201 | 229 | 5 | < 0.01 | 43 | 530 | 24 | 2 | 3 | 16 | < 0.01 | < 10 | < 10 | 57 | 10 | 130 |
| VR3538A | 201 | 229 | 1 | 0.01 | 16 | 210 | 46 | < 2 | 3 | 16 | 0.05 | < 10 | < 10 | 59 | 10 | 68 |
| VR3539A | 201 | 229 | 6 | 0.01 | 31 | 190 | 348 | 4 | 3 | 17 | 0.05 | < 10 | < 10 | 50 | < 10 | 436 |
| VR3540A | 201 | 229 | 6 | < 0.01 | 36 | 360 | 330 | 4 | 3 | 20 | 0.03 | < 10 | < 10 | 45 | < 10 | 334 |
| VR3541A | 201 | 229 | < 1 | < 0.01 | 3 | 190 | 18 | 2 | 1 | 8 | < 0.01 | < 10 | < 10 | 8 | < 10 | 10 |
| VR3542A | 201 | 229 | < 1 | 0.01 | 15 | 140 | 18 | 2 | 3 | 23 | 0.07 | < 10 | < 10 | 55 | < 10 | 38 |

CERTIFICATION: *Hart Bichler*



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

J: KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
 VANCOUVER, BC
 V6C 1S4

Project : KLONDIKE GOLD PENIBE
 Comments:

Page Number : 2-A
 Total Pages : 3
 Certificate Date: 02-JUL-93
 Invoice No. : 19316167
 P.O. Number :
 Account : KAVA

CERTIFICATE OF ANALYSIS

A9316167

| SAMPLE | PREP CODE | | Au ppb | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Ni % | Mn ppm |
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| | | | FA+AA | | | | | | | | | | | | | | | | | | |
| VR3543A | 201 | 229 | < 5 | < 0.2 | 1.42 | < 2 | 310 | < 0.5 | < 2 | 0.09 | < 0.5 | 1 | 8 | 3 | 1.26 | < 10 | < 1 | 0.11 | 30 | 0.14 | 60 |
| VR3544A | 201 | 229 | < 5 | < 0.2 | 1.59 | 8 | 220 | < 0.5 | < 2 | 0.13 | < 0.5 | 5 | 23 | 10 | 1.96 | < 10 | < 1 | 0.09 | 20 | 0.35 | 145 |
| VR3545A | 201 | 229 | < 5 | < 0.2 | 1.40 | < 2 | 180 | < 0.5 | < 2 | 0.12 | < 0.5 | 3 | 17 | 8 | 1.67 | < 10 | < 1 | 0.08 | 20 | 0.39 | 105 |
| VR3546A | 201 | 229 | < 5 | < 0.2 | 1.50 | 12 | 200 | < 0.5 | < 2 | 0.08 | < 0.5 | 2 | 16 | 7 | 1.73 | < 10 | < 1 | 0.08 | 10 | 0.33 | 85 |
| VR3547A | 201 | 229 | < 5 | < 0.2 | 1.89 | 2 | 230 | < 0.5 | < 2 | 0.13 | < 0.5 | 4 | 25 | 15 | 2.24 | < 10 | < 1 | 0.08 | 20 | 0.37 | 135 |
| VR3548A | 201 | 229 | < 5 | < 0.2 | 1.62 | < 2 | 190 | < 0.5 | < 2 | 0.13 | < 0.5 | 4 | 19 | 11 | 1.83 | < 10 | < 1 | 0.09 | 20 | 0.34 | 125 |
| VR3549A | 201 | 229 | < 5 | < 0.2 | 1.90 | < 2 | 250 | < 0.5 | < 2 | 0.14 | < 0.5 | 3 | 24 | 12 | 2.11 | 10 | < 1 | 0.08 | 20 | 0.41 | 140 |
| VR3550A | 201 | 229 | < 5 | < 0.2 | 1.92 | 4 | 240 | < 0.5 | < 2 | 0.14 | < 0.5 | 4 | 28 | 20 | 2.45 | 10 | < 1 | 0.10 | 30 | 0.45 | 150 |
| VR3551A | 201 | 229 | < 5 | < 0.2 | 2.88 | 8 | 240 | < 0.5 | < 2 | 0.16 | < 0.5 | 8 | 84 | 17 | 3.01 | 10 | < 1 | 0.08 | 20 | 1.48 | 255 |
| VR3552A | 201 | 229 | < 5 | < 0.2 | 2.62 | 4 | 310 | < 0.5 | < 2 | 0.18 | < 0.5 | 10 | 63 | 27 | 3.17 | 10 | < 1 | 0.08 | 30 | 1.06 | 395 |
| VR3553A | 201 | 229 | < 5 | < 0.2 | 2.05 | < 2 | 220 | < 0.5 | < 2 | 0.16 | < 0.5 | 6 | 39 | 21 | 2.39 | < 10 | < 1 | 0.08 | 30 | 0.66 | 175 |
| VR3554A | 201 | 229 | < 5 | 0.2 | 1.85 | 2 | 280 | < 0.5 | < 2 | 0.20 | < 0.5 | 5 | 26 | 24 | 2.18 | < 10 | < 1 | 0.07 | 30 | 0.50 | 175 |
| VR3555A | 201 | 229 | < 5 | 2.4 | 1.75 | 16 | 370 | < 0.5 | < 2 | 0.18 | < 0.5 | 4 | 28 | 192 | 2.54 | < 10 | < 1 | 0.06 | 10 | 0.39 | 115 |
| VR3556A | 201 | 229 | < 5 | 0.2 | 2.15 | 2 | 470 | 0.5 | < 2 | 0.23 | 0.5 | 8 | 42 | 44 | 3.07 | < 10 | < 1 | 0.06 | 10 | 0.58 | 230 |
| VR3557A | 201 | 229 | < 5 | 0.2 | 1.23 | < 2 | 430 | < 0.5 | < 2 | 0.13 | 1.0 | 7 | 24 | 30 | 2.28 | < 10 | < 1 | 0.04 | < 10 | 0.17 | 130 |
| VR3558A | 201 | 229 | < 5 | < 0.2 | 2.32 | < 2 | 410 | 0.5 | < 2 | 0.23 | 0.5 | 11 | 31 | 27 | 3.68 | < 10 | < 1 | 0.04 | 10 | 0.82 | 425 |
| VR3559A | 201 | 229 | < 5 | < 0.2 | 1.35 | 8 | 290 | < 0.5 | < 2 | 0.14 | < 0.5 | 7 | 25 | 33 | 2.65 | < 10 | < 1 | 0.04 | 10 | 0.39 | 180 |
| VR3560A | 201 | 229 | < 5 | < 0.2 | 1.62 | 2 | 480 | 0.5 | < 2 | 0.22 | < 0.5 | 9 | 30 | 36 | 3.05 | < 10 | < 1 | 0.05 | 10 | 0.41 | 230 |
| VR3561A | 201 | 229 | < 5 | < 0.2 | 1.37 | 12 | 538 | 0.5 | < 2 | 0.27 | < 0.5 | 9 | 26 | 36 | 3.10 | < 10 | < 1 | 0.05 | 10 | 0.34 | 310 |
| VR3562A | 201 | 229 | < 5 | < 0.2 | 1.52 | < 2 | 240 | < 0.5 | < 2 | 0.14 | < 0.5 | 7 | 25 | 20 | 2.46 | < 10 | < 1 | 0.03 | < 10 | 0.47 | 195 |
| VR3563A | 201 | 229 | < 5 | < 0.2 | 1.48 | 8 | 250 | < 0.5 | < 2 | 0.17 | < 0.5 | 5 | 26 | 19 | 2.58 | < 10 | < 1 | 0.04 | 10 | 0.38 | 205 |
| VR3564A | 201 | 229 | < 5 | < 0.2 | 1.72 | < 2 | 400 | 0.5 | < 2 | 0.36 | < 0.5 | 8 | 29 | 28 | 2.77 | < 10 | < 1 | 0.05 | 10 | 0.58 | 235 |
| VR3565A | 201 | 229 | < 5 | < 0.2 | 1.69 | < 2 | 390 | < 0.5 | < 2 | 0.24 | < 0.5 | 7 | 25 | 20 | 2.61 | < 10 | < 1 | 0.04 | 10 | 0.53 | 230 |
| VR3566A | 201 | 229 | < 5 | 0.2 | 1.34 | < 2 | 320 | < 0.5 | < 2 | 0.29 | 0.5 | 6 | 20 | 22 | 2.32 | < 10 | < 1 | 0.07 | 10 | 0.37 | 150 |
| VR3567A | 201 | 229 | < 5 | < 0.2 | 1.51 | < 2 | 340 | < 0.5 | < 2 | 0.27 | 0.5 | 6 | 23 | 20 | 2.39 | < 10 | < 1 | 0.04 | 10 | 0.50 | 220 |
| VR3568A | 201 | 229 | < 5 | 0.2 | 1.62 | 28 | 240 | < 0.5 | < 2 | 0.19 | < 0.5 | 6 | 25 | 25 | 2.62 | < 10 | < 1 | 0.07 | 10 | 0.40 | 175 |
| VR3569A | 201 | 229 | < 5 | < 0.2 | 1.48 | 160 | 330 | < 0.5 | < 2 | 0.31 | < 0.5 | 8 | 26 | 31 | 2.90 | < 10 | < 1 | 0.07 | 10 | 0.50 | 255 |
| VR3570A | 201 | 229 | < 5 | < 0.2 | 1.49 | 42 | 250 | < 0.5 | < 2 | 0.16 | < 0.5 | 7 | 26 | 21 | 2.47 | < 10 | < 1 | 0.06 | 10 | 0.43 | 195 |
| VR3571A | 201 | 229 | < 5 | 0.4 | 2.42 | 12 | 490 | < 0.5 | < 2 | 0.77 | 1.0 | 9 | 32 | 38 | 3.60 | < 10 | < 1 | 0.10 | 10 | 0.79 | 550 |
| VR3572A | 201 | 229 | < 5 | < 0.2 | 2.11 | 8 | 270 | < 0.5 | < 2 | 0.24 | < 0.5 | 8 | 28 | 21 | 2.87 | < 10 | < 1 | 0.06 | 10 | 0.68 | 235 |
| VR3573A | 201 | 229 | < 5 | < 0.2 | 2.03 | 2 | 260 | < 0.5 | < 2 | 0.28 | < 0.5 | 6 | 23 | 24 | 3.02 | < 10 | < 1 | 0.06 | < 10 | 0.79 | 270 |
| VR3574A | 201 | 229 | < 5 | < 0.2 | 1.69 | 12 | 260 | < 0.5 | < 2 | 0.14 | < 0.5 | 6 | 22 | 22 | 2.56 | < 10 | < 1 | 0.06 | 10 | 0.58 | 195 |
| VR3575A | 201 | 229 | < 5 | < 0.2 | 0.99 | 26 | 180 | < 0.5 | < 2 | 0.08 | < 0.5 | 3 | 14 | 6 | 1.33 | < 10 | < 1 | 0.08 | 10 | 0.24 | 85 |
| VR3576A | 201 | 229 | < 5 | < 0.2 | 1.88 | 6 | 610 | 0.5 | < 2 | 0.25 | < 0.5 | 7 | 27 | 16 | 2.36 | < 10 | < 1 | 0.09 | 20 | 0.44 | 325 |
| VR3577A | 201 | 229 | < 5 | < 0.2 | 1.17 | 10 | 480 | < 0.5 | < 2 | 0.17 | < 0.5 | 12 | 18 | 9 | 1.64 | < 10 | < 1 | 0.08 | 20 | 0.28 | 520 |
| VR3578A | 201 | 229 | < 5 | < 0.2 | 1.08 | 6 | 210 | < 0.5 | < 2 | 0.12 | < 0.5 | 4 | 17 | 9 | 1.58 | < 10 | < 1 | 0.07 | 10 | 0.28 | 120 |
| VR3579A | 201 | 229 | < 5 | < 0.2 | 1.80 | 4 | 280 | 0.5 | < 2 | 0.11 | < 0.5 | 6 | 29 | 18 | 2.34 | < 10 | < 1 | 0.08 | 20 | 0.38 | 150 |
| VR3580A | 201 | 229 | < 5 | < 0.2 | 1.49 | 12 | 240 | < 0.5 | < 2 | 0.08 | < 0.5 | 4 | 26 | 12 | 2.01 | < 10 | < 1 | 0.06 | 10 | 0.33 | 140 |
| VR3582A | 201 | 229 | < 5 | < 0.2 | 1.22 | 6 | 250 | < 0.5 | < 2 | 0.06 | < 0.5 | 4 | 17 | 6 | 2.00 | < 10 | < 1 | 0.09 | 20 | 0.22 | 95 |
| VR3583A | 201 | 229 | < 5 | < 0.2 | 1.19 | 2 | 320 | < 0.5 | < 2 | 0.07 | < 0.5 | 1 | 7 | 3 | 1.38 | < 10 | < 1 | 0.16 | 30 | 0.13 | 60 |

CERTIFICATION:

Hart Buchler



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
 212 Brooksbank Ave., North Vancouver
 British Columbia, Canada V7J 2C1
 PHONE: 604-984-0221

o: KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
 VANCOUVER, BC
 V6C 1S4

Project : KLONDIKE GOLD PENIBE
 Comments:

Page 1 of 2-B
 Total Pages : 3
 Certificate Date: 02-JUL-93
 Invoice No. : 19316167
 P.O. Number :
 Account : KAVA

CERTIFICATE OF ANALYSIS

A9316167

| SAMPLE | PREP CODE | | Mo | Na | Ni | P | Pb | Sb | Sc | Sr | Ti | Tl | U | V | W | Zn |
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| VR3543A | 201 | 229 | < 1 | < 0.01 | 3 | 110 | 16 | < 2 | 1 | 12 | < 0.01 | < 10 | < 10 | 21 | < 10 | 18 |
| VR3544A | 201 | 229 | < 1 | < 0.01 | 12 | 90 | 20 | < 2 | 2 | 14 | 0.04 | < 10 | < 10 | 40 | < 10 | 36 |
| VR3545A | 201 | 229 | < 1 | < 0.01 | 8 | 90 | 24 | 2 | 2 | 14 | 0.03 | < 10 | < 10 | 31 | < 10 | 32 |
| VR3546A | 201 | 229 | < 1 | < 0.01 | 8 | 120 | 26 | 2 | 3 | 9 | 0.03 | < 10 | < 10 | 35 | < 10 | 28 |
| VR3547A | 201 | 229 | < 1 | 0.01 | 12 | 130 | 18 | 2 | 3 | 15 | 0.06 | < 10 | < 10 | 47 | < 10 | 44 |
| VR3548A | 201 | 229 | < 1 | 0.01 | 13 | 150 | 18 | 2 | 2 | 16 | 0.04 | < 10 | < 10 | 42 | < 10 | 38 |
| VR3549A | 201 | 229 | < 1 | 0.01 | 11 | 100 | 8 | < 2 | 3 | 19 | 0.04 | < 10 | < 10 | 45 | < 10 | 46 |
| VR3550A | 201 | 229 | 1 | 0.01 | 14 | 160 | 26 | 2 | 4 | 16 | 0.06 | < 10 | < 10 | 47 | < 10 | 54 |
| VR3551A | 201 | 229 | < 1 | 0.01 | 17 | 190 | 12 | < 2 | 5 | 17 | 0.06 | < 10 | < 10 | 64 | 10 | 64 |
| VR3552A | 201 | 229 | 1 | 0.01 | 23 | 200 | 30 | < 2 | 7 | 23 | 0.06 | < 10 | < 10 | 57 | < 10 | 88 |
| VR3553A | 201 | 229 | < 1 | 0.01 | 17 | 130 | 40 | 2 | 4 | 19 | 0.06 | < 10 | < 10 | 48 | < 10 | 76 |
| VR3554A | 201 | 229 | < 1 | 0.01 | 15 | 150 | 52 | 6 | 4 | 22 | 0.06 | < 10 | < 10 | 47 | < 10 | 58 |
| VR3555A | 201 | 229 | 4 | 0.01 | 18 | 410 | 28 | 2 | 3 | 29 | 0.03 | < 10 | < 10 | 45 | < 10 | 134 |
| VR3556A | 201 | 229 | 1 | 0.01 | 26 | 240 | 12 | 2 | 8 | 23 | 0.05 | < 10 | < 10 | 55 | < 10 | 74 |
| VR3557A | 201 | 229 | 3 | 0.01 | 30 | 330 | 16 | 2 | 2 | 15 | 0.02 | < 10 | < 10 | 40 | < 10 | 96 |
| VR3558A | 201 | 229 | < 1 | < 0.01 | 26 | 370 | 12 | < 2 | 7 | 17 | 0.02 | < 10 | < 10 | 49 | < 10 | 92 |
| VR3559A | 201 | 229 | < 1 | < 0.01 | 22 | 280 | 4 | 2 | 6 | 12 | 0.03 | < 10 | < 10 | 43 | < 10 | 66 |
| VR3560A | 201 | 229 | 1 | < 0.01 | 24 | 240 | 10 | < 2 | 6 | 16 | 0.03 | < 10 | < 10 | 48 | < 10 | 64 |
| VR3561A | 201 | 229 | 1 | < 0.01 | 23 | 400 | 2 | 2 | 7 | 16 | 0.02 | < 10 | < 10 | 42 | < 10 | 62 |
| VR3562A | 201 | 229 | 1 | < 0.01 | 16 | 150 | 6 | < 2 | 3 | 10 | 0.03 | < 10 | < 10 | 40 | < 10 | 50 |
| VR3563A | 201 | 229 | 1 | < 0.01 | 17 | 220 | 6 | < 2 | 4 | 11 | 0.03 | < 10 | < 10 | 46 | < 10 | 48 |
| VR3564A | 201 | 229 | 1 | 0.01 | 18 | 500 | 6 | 4 | 7 | 22 | 0.04 | < 10 | < 10 | 52 | < 10 | 58 |
| VR3565A | 201 | 229 | 1 | < 0.01 | 15 | 410 | < 2 | < 2 | 5 | 16 | 0.03 | < 10 | < 10 | 53 | < 10 | 56 |
| VR3566A | 201 | 229 | 1 | < 0.01 | 12 | 660 | 4 | 2 | 4 | 19 | 0.02 | < 10 | < 10 | 44 | < 10 | 72 |
| VR3567A | 201 | 229 | < 1 | < 0.01 | 13 | 420 | 10 | 2 | 4 | 18 | 0.04 | < 10 | < 10 | 48 | < 10 | 70 |
| VR3568A | 201 | 229 | 2 | < 0.01 | 18 | 560 | 12 | 2 | 3 | 17 | 0.05 | < 10 | < 10 | 49 | < 10 | 74 |
| VR3569A | 201 | 229 | < 1 | 0.01 | 21 | 760 | 8 | < 2 | 6 | 21 | 0.04 | < 10 | < 10 | 48 | < 10 | 92 |
| VR3570A | 201 | 229 | 1 | < 0.01 | 17 | 210 | 14 | 2 | 4 | 17 | 0.03 | < 10 | < 10 | 42 | < 10 | 62 |
| VR3571A | 201 | 229 | < 1 | 0.01 | 24 | 860 | 18 | < 2 | 9 | 45 | 0.03 | < 10 | < 10 | 66 | 10 | 102 |
| VR3572A | 201 | 229 | 1 | < 0.01 | 17 | 180 | < 2 | < 2 | 4 | 24 | 0.08 | < 10 | < 10 | 59 | < 10 | 68 |
| VR3573A | 201 | 229 | < 1 | < 0.01 | 15 | 350 | 8 | 4 | 3 | 29 | 0.10 | < 10 | < 10 | 55 | < 10 | 60 |
| VR3574A | 201 | 229 | < 1 | < 0.01 | 15 | 170 | 12 | < 2 | 4 | 15 | 0.04 | < 10 | < 10 | 48 | < 10 | 72 |
| VR3575A | 201 | 229 | < 1 | < 0.01 | 7 | 60 | 14 | < 2 | 2 | 9 | 0.02 | < 10 | < 10 | 26 | < 10 | 26 |
| VR3576A | 201 | 229 | < 1 | 0.01 | 17 | 140 | 18 | 2 | 4 | 18 | 0.04 | < 10 | < 10 | 50 | < 10 | 46 |
| VR3577A | 201 | 229 | < 1 | 0.01 | 10 | 160 | 12 | < 2 | 2 | 15 | 0.04 | < 10 | < 10 | 39 | < 10 | 26 |
| VR3578A | 201 | 229 | < 1 | < 0.01 | 11 | 90 | 18 | < 2 | 2 | 10 | 0.04 | < 10 | < 10 | 36 | < 10 | 26 |
| VR3579A | 201 | 229 | < 1 | < 0.01 | 17 | 90 | 28 | 2 | 3 | 11 | 0.03 | < 10 | < 10 | 46 | < 10 | 38 |
| VR3580A | 201 | 229 | < 1 | < 0.01 | 13 | 70 | 26 | < 2 | 3 | 9 | 0.03 | < 10 | < 10 | 42 | < 10 | 34 |
| VR3582A | 201 | 229 | < 1 | < 0.01 | 6 | 150 | 28 | < 2 | 2 | 6 | 0.02 | < 10 | < 10 | 34 | < 10 | 20 |
| VR3583A | 201 | 229 | < 1 | < 0.01 | 3 | 120 | 22 | < 2 | 1 | 7 | < 0.01 | < 10 | < 10 | 18 | < 10 | 16 |

CERTIFICATION: *Hart Bichler*



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers

212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

o: KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
VANCOUVER, BC
V6C 1S4

Project : KLONDIKE GOLD PENIBE
Comments:

Page 1 of 3-A
Total Pages : 3
Certificate Date: 02-JUL-93
Invoice No. : 19316167
P.O. Number :
Account : KAVA

CERTIFICATE OF ANALYSIS

A9316167

| SAMPLE | PREP CODE | | Au ppb | Ag ppm | Al % | As ppm | Ba ppm | Be ppm | Bi ppm | Ca % | Cd ppm | Co ppm | Cr ppm | Cu ppm | Fe % | Ga ppm | Hg ppm | K % | La ppm | Mg % | Mn ppm |
|---------|-----------|-----|--------|--------|------|--------|--------|--------|--------|------|--------|--------|--------|--------|------|--------|--------|------|--------|------|--------|
| | | | FA+AA | | | | | | | | | | | | | | | | | | |
| VR3584A | 201 | 229 | < 5 | 0.2 | 2.12 | 14 | 310 | 1.0 | < 2 | 0.12 | < 0.5 | 6 | 29 | 11 | 2.70 | < 10 | < 1 | 0.10 | 20 | 0.35 | 155 |
| VR3585A | 201 | 229 | < 5 | < 0.2 | 1.16 | < 2 | 250 | < 0.5 | < 2 | 0.14 | < 0.5 | 1 | 12 | 6 | 1.41 | < 10 | < 1 | 0.11 | 20 | 0.17 | 85 |
| VR3586A | 201 | 229 | < 5 | < 0.2 | 1.01 | < 2 | 150 | < 0.5 | < 2 | 0.11 | < 0.5 | 2 | 14 | 8 | 1.31 | < 10 | < 1 | 0.07 | 20 | 0.27 | 75 |
| VR3587A | 201 | 229 | < 5 | 5.4 | 1.28 | < 2 | 320 | < 0.5 | < 2 | 0.09 | 0.5 | 2 | 19 | 21 | 1.79 | < 10 | 4 | 0.04 | 30 | 0.51 | 80 |
| VR3588A | 201 | 229 | < 5 | 0.4 | 2.98 | 16 | 150 | 0.5 | < 2 | 0.06 | < 0.5 | 6 | 128 | 46 | 3.90 | < 10 | < 1 | 0.02 | 10 | 2.07 | 380 |
| VR3589A | 201 | 229 | < 5 | 0.8 | 2.66 | 4 | 280 | 0.5 | < 2 | 0.09 | < 0.5 | 7 | 62 | 41 | 3.20 | < 10 | 1 | 0.02 | 10 | 1.03 | 310 |
| VR3590A | 201 | 229 | < 5 | < 0.2 | 2.45 | < 2 | 150 | 0.5 | < 2 | 0.08 | 0.5 | 8 | 54 | 76 | 3.45 | < 10 | < 1 | 0.02 | 10 | 1.96 | 395 |
| VR3591A | 201 | 229 | < 5 | < 0.2 | 1.77 | 4 | 280 | 0.5 | < 2 | 0.07 | < 0.5 | 4 | 23 | 15 | 2.03 | < 10 | < 1 | 0.03 | 30 | 0.49 | 125 |
| VR3592A | 201 | 229 | < 5 | 0.4 | 1.02 | < 2 | 100 | < 0.5 | < 2 | 0.06 | < 0.5 | 1 | 12 | 19 | 1.08 | < 10 | < 1 | 0.03 | 20 | 0.46 | 65 |
| VR3593A | 201 | 229 | < 5 | 1.8 | 1.58 | 14 | 210 | 0.5 | < 2 | 0.09 | 1.0 | 3 | 21 | 480 | 2.51 | < 10 | 1 | 0.03 | 10 | 0.69 | 140 |
| VR3594A | 201 | 229 | < 5 | < 0.2 | 2.86 | 42 | 420 | 1.0 | < 2 | 0.11 | 1.0 | 12 | 46 | 124 | 3.73 | 10 | < 1 | 0.07 | 50 | 1.30 | 255 |

CERTIFICATION: *Hart Bickler*



Chemex Labs Ltd.

Analytical Chemists * Geochemists * Registered Assayers
212 Brooksbank Ave., North Vancouver
British Columbia, Canada V7J 2C1
PHONE: 604-984-0221

to: KENNECOTT CANADA, INC.

354 - 200 GRANVILLE ST.
VANCOUVER, BC
V6C 1S4

Project : KLONDIKE GOLD PENIBE
Comments:

Page : per :3-B
Total Pages :3
Certificate Date: 02-JUL-93
Invoice No. :19316167
P.O. Number :
Account :KAVA

CERTIFICATE OF ANALYSIS

A9316167

| SAMPLE | PREP CODE | | Mo | Na | Ni | P | Pb | Sb | Sc | Sr | Ti | Tl | U | V | W | Zn |
|---------|-----------|-----|-----|--------|-----|-----|------|-----|-----|-----|------|------|------|-----|------|-----|
| | | | ppm | % | ppm | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm |
| VR3584A | 201 | 229 | < 1 | < 0.01 | 14 | 160 | 20 | < 2 | 3 | 12 | 0.06 | < 10 | < 10 | 56 | < 10 | 34 |
| VR3585A | 201 | 229 | < 1 | < 0.01 | 6 | 110 | 22 | 2 | 1 | 14 | 0.03 | < 10 | < 10 | 36 | < 10 | 22 |
| VR3586A | 201 | 229 | < 1 | < 0.01 | 8 | 120 | 20 | < 2 | 1 | 9 | 0.03 | < 10 | < 10 | 25 | < 10 | 26 |
| VR3587A | 201 | 229 | 2 | < 0.01 | 8 | 130 | 114 | 16 | 2 | 9 | 0.02 | < 10 | < 10 | 26 | < 10 | 106 |
| VR3588A | 201 | 229 | < 1 | < 0.01 | 35 | 210 | 202 | < 2 | 6 | 7 | 0.03 | < 10 | < 10 | 72 | < 10 | 152 |
| VR3589A | 201 | 229 | < 1 | < 0.01 | 25 | 140 | 98 | 2 | 6 | 11 | 0.05 | < 10 | < 10 | 69 | < 10 | 128 |
| VR3590A | 201 | 229 | < 1 | < 0.01 | 28 | 110 | 88 | < 2 | 6 | 8 | 0.02 | < 10 | < 10 | 57 | < 10 | 226 |
| VR3591A | 201 | 229 | < 1 | < 0.01 | 14 | 60 | 28 | 2 | 3 | 8 | 0.03 | < 10 | < 10 | 36 | < 10 | 58 |
| VR3592A | 201 | 229 | 1 | < 0.01 | 8 | 50 | 64 | 2 | 1 | 4 | 0.02 | < 10 | < 10 | 18 | < 10 | 44 |
| VR3593A | 201 | 229 | 9 | < 0.01 | 16 | 360 | 2880 | 10 | 2 | 33 | 0.01 | < 10 | < 10 | 30 | < 10 | 364 |
| VR3594A | 201 | 229 | 13 | < 0.01 | 70 | 370 | 386 | 4 | 5 | 15 | 0.02 | < 10 | < 10 | 65 | < 10 | 206 |

CERTIFICATION:

Hart Bichler

*needs
approval*

copy

MINFILE: 116B 007
PAGE NO: 1 of 3
UPDATED: 07/26/94

**YUKON MINFILE
STANDARD REPORT
EXPLORATION AND GEOLOGICAL SERVICES DIVISION, DIAND
WHITEHORSE**

NAME(S): Virgin
MINFILE #: 116B 007
MAJOR COMMODITIES: Au
MINOR COMMODITIES: Ag
TECTONIC ELEMENT: Yukon Tanana Terrane
NTS MAP SHEET: 116 B 3
LATITUDE: 64°00'05"N
LONGITUDE: 139°14'02"W
DEPOSIT TYPE: Vein
STATUS: Underground Past Producer

CLAIMS (PREVIOUS AND CURRENT)

OPHIR, GORDON, VIRGIN, JEAN, HUN, GOS, EASY, KLOT, MOON, PENIBE, BULLDOZER

WORK HISTORY

Staked as Ophir, etc cl (597) in Jun/01, Gordon cl (6981) in May/04, Virgin cl (10862) in May/08 and Jean cl (11141) in Aug/09 by J. Whitelaw, who completed two adits (12 m and 3 m), a 6 m shaft, a 12 m long open-cut and a number of trenches in 1902-07. A two stamp mill was installed during 1913 by Klondike Gold Quartz ML, which sank a second shaft to 10.7 m, extended one of the adits to 88.4 m and is rumoured to have recovered about \$5000 in gold. The property was purchased in 1914 by Bear Creek Mg CL, which added a few claims and surveyed and leased several in 1915. The property later reverted to Klondike Gold Quartz which reorganized in 1934 and attempted to install a larger mill.

Restaked as Hun cl (Y65318) in May/72 by R.G. Hilker for Sullivan and Rogers, who conducted mapping and geochemical sampling later in the year and trenching in 1973; and as Gos cl (YA5138) in Jul/76 by F. Burkhard. F. Merryth tied on Long cl (YA4691) in May/80 and Dawson Eldorado added Easy & Klot cl (YA65445) in Feb/83 and performed mapping and geochemical surveys later in the year. Gallant Gold ML tied on Moon cl (YA79671) to the north in Jan/84 and Penibe cl (YA84296) to the east in Jul/84 and explored with mapping, sampling and an airborne EM survey later in the year and trenching in 1989. Arbor Resources staked two fractional claims (Bulldozer, YB39722) at the head of Bear Creek in December, 1990, and trenched geochemical anomalies on the Moon claims in early 1992. The Moon 1-55 cl (YA79671) and Penibe 1-31 cl (YA84296) were transferred to Kennecott Canada Inc. in May/93 as part of an option agreement. In Jun/93, Kennecott reprocessed 1987 airborne geophysical data and prospected, mapped and soil sampled the Penibe claims.

GEOLOGY

The area is underlain by blocky quartz-muscovite-(chlorite) schist with small quartz augen and abundant but barren, narrow foliaform quartz and quartz-feldspar sweets. The old workings on the property are either completely caved or have been covered by placer tailings. The workings were visited briefly by MacLean (1914) and Bostock (1935), and the results of these examinations are summarized below.

During MacLean's visit in 1912, the workings consisted of a shaft 7 m deep near the Discovery post on Bear Creek, a trench immediately southeast of the shaft, and a short (3.2 m) adit. MacLean stated that in the shaft "the first 8 ft contained but little quartz; with increasing depth, stringers and bunches were encountered, and, for the last 10 ft the excavation is largely in quartz...A sample taken clear across the bottom (4 ft wide), panned good colours of gold". Two samples of vein quartz from the trench yielded gold colours by panning. In the adit, veins and stringers of quartz were observed and these comprised up to 25% of the rock at the face. Four samples were taken from the adit by MacLean and all showed good colours in the pan. Gold content of samples collected from the property varied considerably, but two samples from the adit were reported by MacLean to have assayed 27.4 g/t and 30.9 g/t Au.

GEOLOGY (CONTINUED)

Bostock (1935) examined the property during the period that Klondike Gold Quartz Mines was developing it. As a result of his examination, Bostock stated: "In the sides of shaft No. 1 the northern of the two shafts, three quartz veins are visible. They are 4 to 14 inches wide, strike between 118 and 130°, and dip northeast at angles of 50 to 70°. Shaft No. 2 is about 70 ft south and 30 ft east of shaft No. 1. On the south side of Shaft No. 2 there are two quartz veins 8" and 14" wide and 16" apart. They strike 130° and dip northeast at angles of respectively 55° and 70°. Approximately 25 ft southward along the strike two veins are exposed. These resemble and probably are continuations of the two veins seen in No. 2 shaft. The quartz of the veins is dense and white. A very few crystals of pyrite are present in the quartz in places and some iron stain occurs along fractures. It is reported that specks of free gold can be found in fractures in the veins. A large, trench-like excavation about 90 ft lower than and southeast of the shafts, and made where the veins in the shafts might be expected to occur, reveals a mass of quartz float and, in two places, quartz that may be in place. This quartz holds a little pyrite. No. 1 adit is approximately 110 ft lower than, and 325 ft south from, No. 2 shaft. The adit is 30 ft long and runs northwest directly into the hill. At its inner end a group of small veins, of quartz like that of the other veins described, occur. The veins are 1 to 4 inches wide, occur across a width of 45", strike 125°, and dip northeast at an angle of 5°. The entry of No. 2 adit is approximately 600 ft southeast of No. 2 shaft and at an elevation of about 1720 ft. From the portal the adit runs directly into the hill. It follows a course of 328° for approximately 200 ft and at the end of this distance bends to the northeast and continues along this course for nearly 90 ft. This adit, like the other workings, is in green schists. It cuts across a number of small, corrugated veins and lenses of quartz that tend to follow the planes of schistosity in the schists. In a few places large cubes of pyrite occur in the veins and in the schists. No veins in No. 2 adit were noted to cut across the schists in the direction followed by the veins in the shafts."

Klondike Gold Quartz Mines, which did further development on the property after Bostock, presented the following Au assay data in a company prospectus prepared in late 1934 or early 1935:

| | |
|--------------|--|
| Shaft No. 1: | grab(?) samples taken at 0.6 m intervals from surface to a depth of 12 m; total of 24 samples, range 3.8 to 260.2 g/t, avg. 30.5 g/t |
| Shaft No. 2: | grab(?) samples taken at 0.6 m intervals from surface to a depth of 8.5 m; total of 10 samples, range 7.2 to 75.8 g/t, avg. 26.4 g/t |
| No. 1 adit: | grab(?) samples taken at roughly 3 m intervals from 8 m from portal to 18.3 m; total of 5 samples, range 20.9 to 44.9 g/t, avg. 32.6 g/t |
| No. 2 adit: | channel samples taken at 3 m intervals over 43 m interval from 21 m from portal to 64 m from portal; total of 15 samples, range 20.9 to 100.1 g/t, avg. 36.7 g/t channel samples at 1.5 m intervals over 21.3 m interval along crosscut beginning at 64 m from portal; total of 15 samples, range 20.9 to 185.8 g/t, avg. 40.8 g/t. |

As stated above, the workings on the property are presently inaccessible and it is therefore impossible to verify these rather impressive assay results. In view of Bostock's description of the workings, however, the validity of these assays is somewhat questionable.

GEOLOGY (CONTINUED)

In summary, gold-bearing, discordant, slightly pyritic quartz veins occur at several locations on the property. Galena is locally present in trace amounts. The veins strike northwest, dip moderately to steeply to the northeast, and range from 2 to 40 cm in thickness. Blocks of vein quartz, apparently locally derived and containing trace amounts of pyrite in cubes and grain aggregates up to 2 cm in diameter, are present near Shaft No. 2. Some of these blocks are from discordant veins as much as 1 m in thickness and suggest the presence of relatively large veins in the immediate vicinity. The significance, if any, of the assay results quoted by Klondike Gold Quartz Mines remains uncertain. Gold is definitely present in at least micro-amounts in some of the vein material at the mouth of Discovery Pup (as noted by MacLean), and visible gold (associated with pyrite) has been found in discordant vein material in the chute to the ore bin at the old mill. Bostock's description of the wallrock in the No. 2 adit, however, suggests that all of the quartz present there is foliaform, and thus is unlikely to contain gold. The waste dump of the No. 2 adit has been removed during placer mining and cannot be sampled.

Hastings Management Corp. trenched geochemical anomalies on the Moon claims in 1992. Trenches 92TR12, 14 and 15 cut siliceous, pyritic sericite schist which contained up to 10.2 ppm Ag, 1440 ppm Pb and 8 ppm Hg. Trench 92TR13 cut graphitic schist containing up to 175 ppb Au, 46 ppm Ag and 347 ppm Cu.

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