

Geochemical Report
On The
APCAR Project
(Alkalic Porphyry Copper Gold Recon)

Work Period June 15th to June 18th, 2014

Located In
Whitehorse Mining District
On
NTS 115-H-09, 105-E-14, 15, 105-L-03, 04
61° 59' Latitude, 135° 46' Longitude

By
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January 2nd, 2014

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Location – The APCAR North Project is located in the Whitehorse Mining District on NTS mapsheets 115-H-09, 105-E-14, 15, 105-L-03, 04 centred at approximately 61° 59' north and 135° 46' east. The area evaluated is located east and south of Carmacks, see figs 1 and 2 for general location details.

Access – Access to the Transect target area was by direct helicopter flight from Carmacks, a one-way distance of approximately 40 kilometres. Access to Divide and Semenof was by helicopter from a staging area on the east side of the Klondike Highway just north of Twin Lakes campground, which yielded a one-way distance of approximately 50 kilometres to these two targets. Access to Aishihik and Triangulation was gained from the same staging area, and made for an approximate 25 kilometre one-way flight. The Twin Lakes staging area will provide excellent jumping off sites for helicopter intensive phases of exploration such as airborne geophysical surveys or diamond drilling programs.

Topography And Vegetation – Climate in the area of the APCAR North Project is typified by warm summers and cold winters. Precipitation is low, and is comprised of about 90 centimetres of snow and 15 centimetres of rain annually. The project is normally sufficiently snow free for an exploration season lasting from mid-May to mid-October.

The APCAR North Project is located within a physiographic region known as the Lewes Plateau, a glaciated area typified by rounded and rolling hills, plateaus and broad steep walled U-shaped valleys. Numerous lakes, streams and swamps fill the network of valleys that characterize this region. Valleys generally trend northwest and likely represent glacially enhanced features paralleling the predominant structural trend of the area. Widespread till and glaciofluvial gravels, deposited by northwest moving glaciers, occur at various elevations throughout the area, and are a hindrance to prospecting efforts. Relief varies from about 540 meters along the Yukon River in the area of the Transect Target to a height of about 1,427 meters above sea level at the Semenof Target.

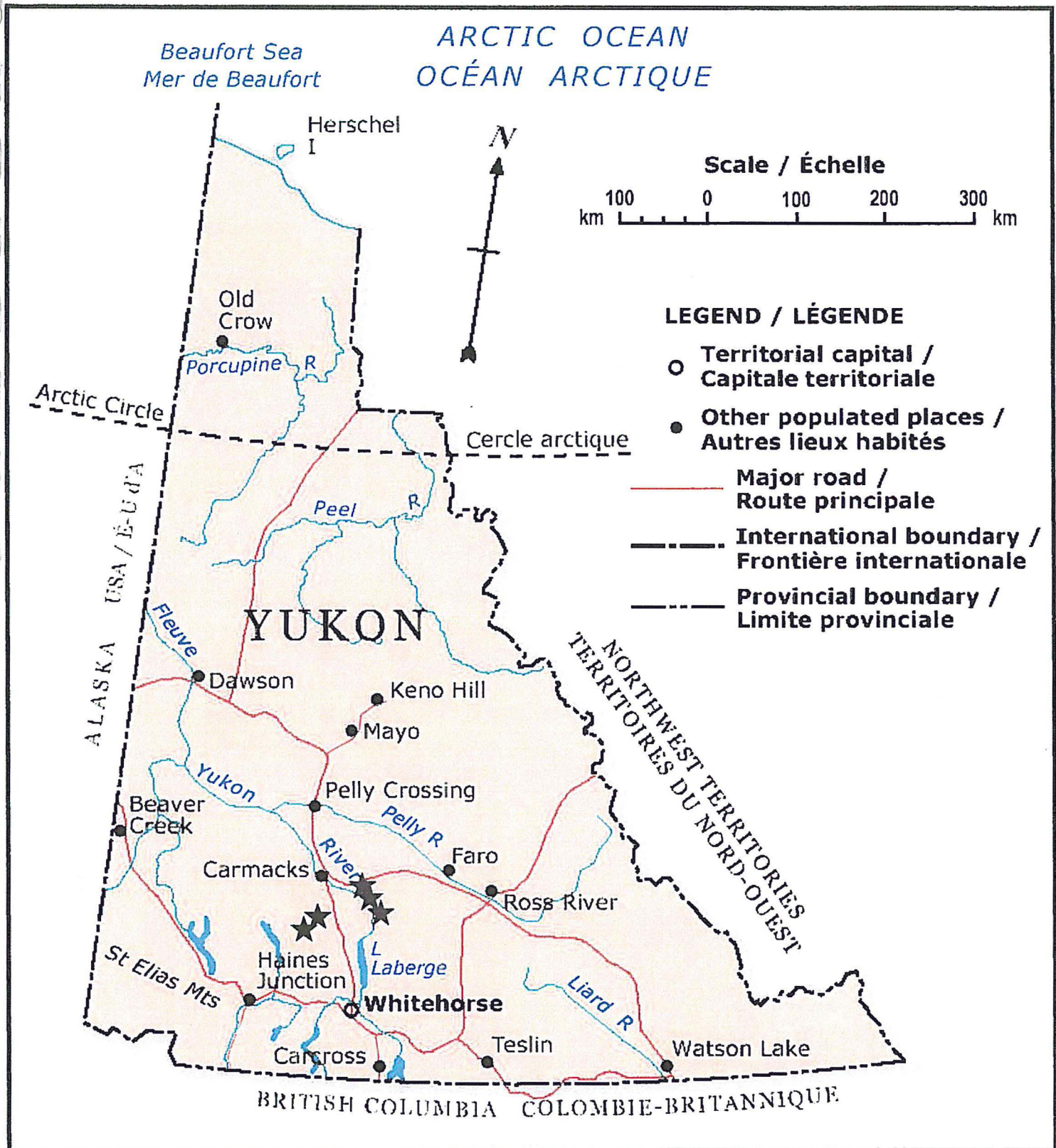
Vegetation consists of a mixture of spruce, pine and aspen common on south-facing slopes and stunted conifers and brush on north facing slopes and at higher elevations. Undergrowth at higher elevations and on steep south facing slopes consists of lichen, moss and grass while moist areas and some north facing slopes commonly contain thicker moss and more shrubs, such as alder and willow and discontinuous permafrost.

Claims And Land Status – There are very few active quartz claims within the area to be prospected. A claim block belonging to Strategic Metals (King Claims) is located in the northeast corner of the Aishihik Target and partially covers the Ah showing, while another block belonging to YES Exploration Syndicate (Ice Claims) covers the Macks Copper showing and is located in the southeast corner of the Aishihik Target. Several category A and B land claim blocks belonging to the Little Salmon Carmacks First Nation (LSC) are within the area, but apart from a large A-block along the west side of the Divide Target they will not be a hindrance to prospecting efforts.

Target Description & Geology – Alkalic to calc-alkalic porphyry copper-gold mineralization and associated deposit types within the Stikine or Quesnel Terranes (Quesnel Trough).

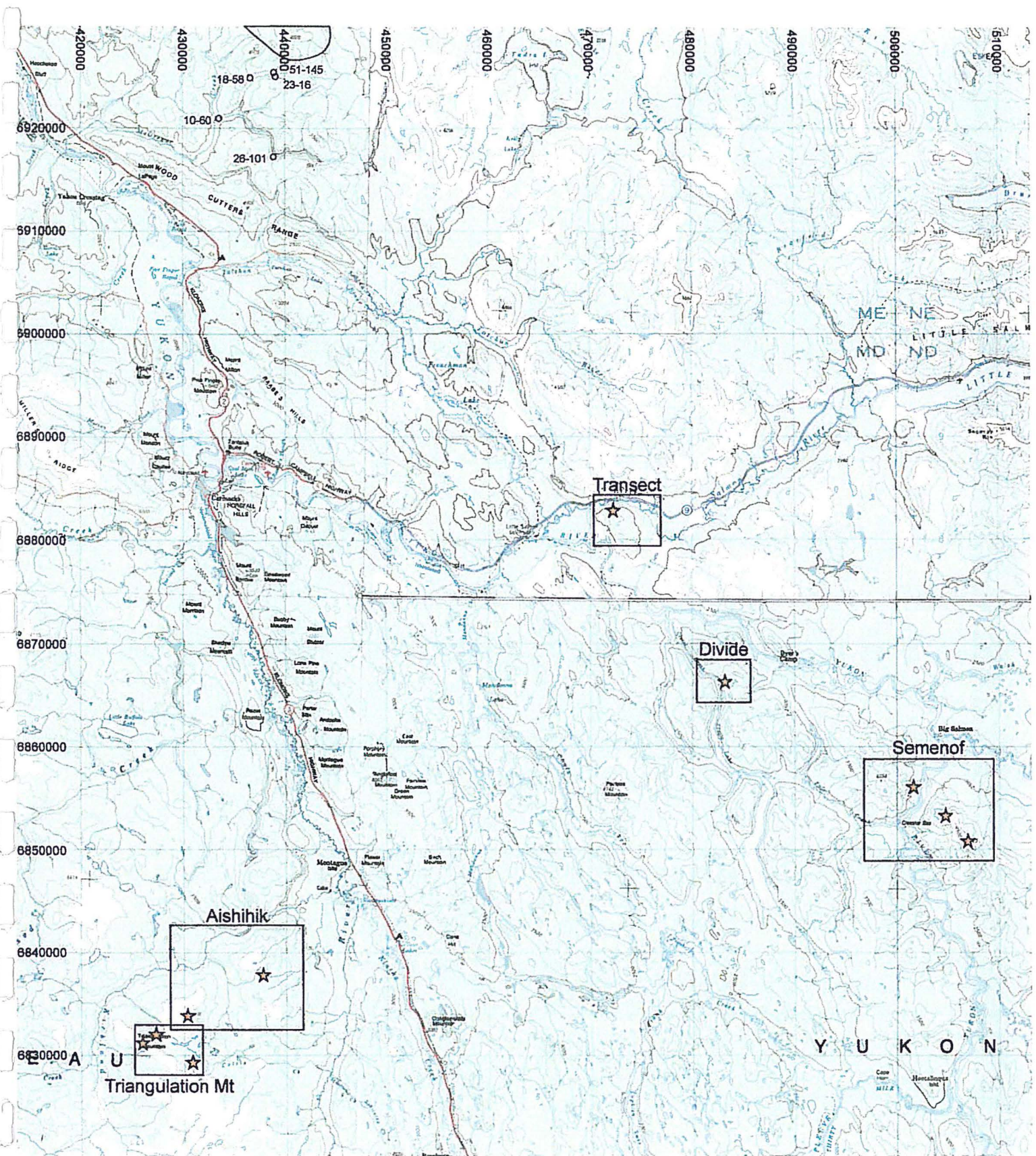
Gold-enriched porphyry deposits contain the largest reserves of copper and approximately 50% of the gold reserves in British Columbia. Deposit types include alkalic porphyry Cu-Au, and calc-alkalic porphyry Cu +/-Mo +/-Au. Alkalic porphyry deposits are exclusive to late-Triassic to mid-Jurassic intrusive activity within the Quesnel and Stikine terranes, while calc-alkalic porphyry deposits, although also found within the Quesnel and Stikine terranes, can be related to high-level stocks from either the late Triassic to mid Jurassic or late Cretaceous to early Tertiary.

Porphyry style mineralization within the Quesnel Trough is most commonly associated with late Triassic to mid Jurassic intrusive stocks, plutons or dyke complexes and coeval volcanic rocks. Mineralization occurs



Target Areas ★

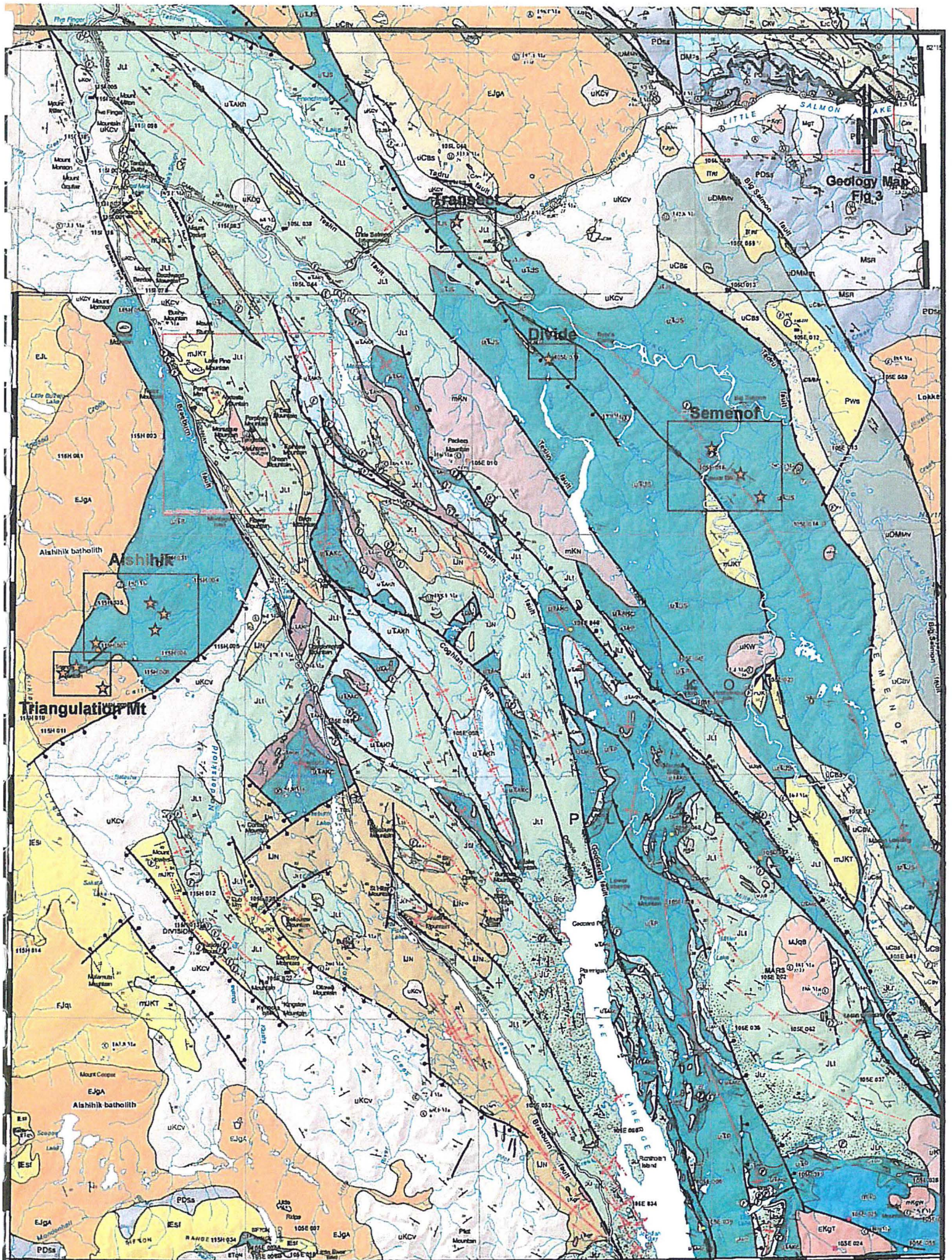
To Accompany: 2014 APCAR North Final	January 2nd, 2014
Bernie Kreft	Figure 1



Map to accompany 2014 APCAR North Final Report



Zone 8, Nad 83
 105-E/L, 115-H/I
 1cm = 5km or 1:500,000



Geology Map
Fig. 3

Aishihik

Divide

Semehof

Triangulation Mt

Alashihik batholith

E.J.G.A.

P.D.S.a.

J.L.I.

U.K.C.V.

U.T.A.K.H.

U.C.B.S.

U.C.K.V.

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QUATERNARY

Q

QUATERNARY: unconsolidated glacial, glaciolacustrine and glaciolacustrine deposits. Alluvial silt, sand, and gravel, and local volcanic ash, in part with cover of soil and organic deposits

TERTIARY(?) AND QUATERNARY

TQs

SELKIRK: resistant, brown weathering, columnar jointed, vesicular to massive basalt flows, minor pillow basalt, basaltic tuff and breccia (Selkirk Volcanics)

PLIOCENE

Pws

WALSH: undivided felsic volcanics and conglomerate, sandstone, and mudstone, resistant, thick bedded to massive, well indurated conglomerate with minor interbedded sandstone, white mudstone with interbedded gray sandstone and minor coal (Walsh Creek)

MIOCENE TO PIOCENE

MPMc

MILES CANYON: dark red to brown weathering, columnar jointed olivine basalt flows, commonly amygdaloidal and vesicular, ultramafic xenoliths (Miles Canyon Basalt)

LOWER EOCENE

IES

SKUKUM: various felsic volcanic dykes, plugs, domes, laccoliths and flows (I) and intermediate volcanics (I) (I, flow banded rhyolite flows and breccia, andesite flows and breccia, tuff, pyroclastic and epiclastic rocks, granite conglomerate, rhyolite felsic porphyry domes, plugs and laccoliths, felsic hornblende quartz-phyte felsite dykes and plugs (Skulum Gp. including Baudette Creek, Butte Creek, Oath Mountain, Crozer Breccia, Crozer Tuff and Lava, Gault, Jones Creek, Lemieux Creek, MacCauley Creek, Mount Reid, Partridge Lake, Vesuvius? and Watson River)
I, heterogeneous intermediate to felsic, hornblende-felsic porphyritic tuff, flow breccia, volcanoclastic mudstone, sandstone and conglomerate, aphanitic to porphyritic dacite flows and dykes, flow-banded rhyolite and felsic dykes and sills (Mount Creedan Volcanics, some strata formerly mapped as Mt. Hanson Gp.)

EARLY TERTIARY

ETN

NISLING RANGE SUITE: medium to coarse grained equigranular to porphyritic rocks of intermediate composition (I), fine to coarse grained, equigranular and porphyritic granitic rocks of felsic composition (I) and felsic dykes (I) (I, orange and buff weathering light coloured felsic porphyry dyke and flow rocks of intermediate to acid composition
q, biotite-hornblende granodiorite (locally K-feldspar megacrysts), quartz monzonite, quartz diorite, minor granodiorite-gneiss, hornblende and biotite hornblende diorite, biotite quartz felsic porphyry and porphyritic biotite quartz monzonite (Nisling Range Suite)
g, leucocratic, biotite granite, maroonish alkali, saccharoidal textured, milk-poor biotite granite, biotite-hornblende granite to leucocratic granodiorite with sparse, white, alkali felsic porphyroclasts, biotite quartz monzonite (Nisling Range Suite, Nisling Range, Nisling Range, Coffee Creek Granite, Anne Red Granite)

LOWER TERTIARY, MOSTLY(?) EOCENE

ITR

ROSS: most bimodal volcanics (basalt (V), rhyolite (I)) and terrestrial dacites (S), dominantly along or near Tanana Fault; farther removed, scattered occurrences of rhyolite lava and dykes (I) are also included
V, locally amygdaloidal, dark grey-green olivine basalt necks and flows, subaerial and subaqueous (locally pillowed) volcanoclastic rocks, minor olivine gabbro, locally plagioclase-phyric basalt and diabase dykes, minor shale and conglomerate
I, rhyolite flows, tufts, ash-flow tufts and breccias, locally laminated, small stocks and necks of white weathering, flow banded, quartz sandstone porphyry to granite porphyry, locally obsidian bearing, local shale, sandstone and conglomerate
S, brown, thin bedded, claystone, siltstone, shale and coal, arkosic or chert rich, thick bedded micaceous sandstone, thick bedded to massive pebble to boulder, chert quartz conglomerate
p, light coloured felsic quartz felsic porphyry and rhyolite, minor ash tuff breccia, crystal tuff and granitic, quartz felsic porphyry stocks and dykes

UPPER CRETACEOUS

uKc

CARMACKS: a volcanic succession dominated by basic volcanic strata (V), but including felsic volcanic rocks dominantly (?) at the base of the succession (I) and locally basic clastic strata (S) (gabbro (G) (ca. 68-70 Ma)
V, augite olivine basalt and breccia, hornblende felsic porphyry andesite and dacite flows, vesicular, augite-phyric andesite and trachyte, minor sandy tuff, granite boulder conglomerate, agglomerate and associated epiclastic rocks (Carmacks Gp., Lute Ridge Volcanics, Casino Volcanics)
I, acid v. tuff, crystal tuff, lapilli tuff and welded tuff including feeder plugs and necks, felsic volcanic flow rocks and quartz felsic porphyries, green and purple massive tuff-breccia with felsic phytic fragments (Carmacks Gp., Dorek Volcanics, some rocks formerly mapped as Mt. Hanson Gp., the felsic part of the Carmacks Gp. is difficult to distinguish from similar Tertiary and mid-Cretaceous (Mt. Hanson) felsic volcanic strata)
S, medium bedded, poorly sorted, coarse to fine grained sandstone, pebble conglomerate etc. shale, silt and coal, massive to thick bedded locally derived granite or quartzite pebbles to boulder conglomerate (Carmacks Gp.)
g, medium to coarse-grained, hornblende gabbro, pyroxenite

WINDY-TABLE: resistant, columnar jointed, quartz-phyric dacite flows, ash and lapilli tuff, maroon weathering, basal sedimentary and epiclastic rocks, dacite flows and flow breccia, brown basalt flows, includes dykes of quartz felsic porphyry (ca. 80 Ma) (Open Creek Volcanics)

uKw

LATE CRETACEOUS TO TERTIARY

LKP

PROSPECTOR MOUNTAIN SUITE: grey, fine to coarse-grained, massive, granitic rocks of felsic (I), intermediate (I), syenitic (I), rarely mafic (I) composition and related felsic dykes (I)
I, coarsely crystalline gabbro and diorite
I, hornblende-biotite granodiorite, hornblende diorite, quartz diorite (Wheaton Valley Granodiorite)
q, quartz monzonite, biotite quartz-rich granite, porphyritic alkali and granite with plagioclase and quartz-eye phenocrysts, biotite and hornblende quartz monzonite, granite, and leucocratic granodiorite with local alkali felsic porphyroclasts (Prospector Mountain Suite, Corvax Pluton)
I, syenite
I, quartz felsic porphyry

MID-CRETACEOUS

mKn

MOUNT NANSEN: massive aphyric or felsic-phyric andesite to dacite flows, breccia and tuff, massive, heterolithic, quartz and felsic-phyric, felsic lapilli tuff, flow banded quartz-phyric rhyolite and quartz-felsic porphyry, dykes, dykes, sills and breccia (Mount Nansen Gp., Byng Creek Volcanics, Hush Gp.)

mKw

WHITEHORSE SUITE: grey medium to coarse-grained, generally equigranular granitic rocks of felsic (I), intermediate (I), locally mafic (I) and rarely syenitic (I) composition (ca. 112-105 Ma)
I, hornblende diorite, biotite-hornblende quartz diorite and mesocratic, often strongly magnetic, hypocrystalline-hornblende diorite, quartz diorite and gabbro (Whitehorse Suite, Coast Intrusions)
q, biotite-hornblende granodiorite, hornblende quartz diorite and hornblende diorite, leucocratic, biotite hornblende granodiorite locally with sparse grey and pink potassium felsic porphyroclasts (Whitehorse Suite, Casino granodiorite, McCracken granodiorite, Nisling Range granodiorite)
g, biotite quartz monzonite, biotite granite and leucocratic, pink granophytic quartz monzonite, porphyritic biotite leucocratic, locally porphyritic (K-feldspar) hornblende monzonite to syenite, and locally porphyritic, leucocratic quartz monzonite (Mt. McHoyne Suite, Whitehorse Suite, Casino Intrusions, Mt. Ward Granite, Coffee Creek Granite)
y, hornblende syenite, granodiorite to granite or granodiorite (Whitehorse Suite)

EARLY CRETACEOUS

EKgt

TESLIN SUITE: leucocratic, fine to coarse-grained, equigranular, hornblende-biotite granite, granodiorite, quartz monzonite and quartz monzonite, locally with sparse grey and pink potassium felsic porphyroclasts, associated aplite phases and dykes (Teslin Suite)

MIDDLE JURASSIC

MJB

BOYDE SUITE: undeformed granitic rocks from two plutonic bodies one of predominantly felsic (I) and the other of intermediate composition (I)
q, medium to fine-grained, equigranular, leucocratic monzonite, syenite and granite and related dykes of dacite to andesite porphyry with euhedral andesine, hornblende and locally quartz in aphanitic greenish, or grey groundmass (Teslin Crossing Stock)
g, medium grained, hornblende monzonite, hornblende biotite quartz monzonite and minor hornblende, pink, potassium leucocratic megacrystic, hornblende granite to granodiorite and associated easterly trending mafic dyke swarms (Mt. Boyde Pluton, Bennett Granite)

EARLY JURASSIC

EJL

LONG LAKE SUITE: mostly felsic granitic rocks (I) but locally grading to syenitic (I), massive to weakly foliated, fine to coarse grained biotite, biotite-muscovite and biotite-hornblende quartz monzonite to dacite, including abundant pegmatite and apite phases, commonly K-feldspar megacrysts (Long Lake Suite)
y, resistant, dark weathering, massive, coarse- to very coarse-grained and porphyritic, mesocratic hornblende syenite, locally sheared, commonly fractured and saussuritized, locally has well developed layering of aligned pink K-feldspar tablets (Big Creek Syenite)

LATE TRIASSIC TO EARLY JURASSIC

EJga

AISHIHIK SUITE: mostly intermediate granitoid (I) but locally dacite to gabbro (G) g, medium to coarse-grained, foliated biotite-hornblende granodiorite, biotite rich screens and gneissic schlieren, foliated hornblende diorite to monzonite with local K-feldspar megacrysts, may include unfoliated granite of the Long Lake Suite (Aishihik Suite)
g, coarse-grained to pegmatitic hornblende gabbro, pyroxenite

MINERAL OCCURRENCES

(number [a g 1151 065] refers to Yukon MINFILE database) (selected, prominent occurrences are named on the maps)

VOLCANIC ASSOCIATED	VEIN/BRECCIA
▼ Cu	◇ Ag
▼ Pb, Zn, Barite	◇ Au
▼ Unknown	◇ Cu
SEDIMENT ASSOCIATED	MAFIC-ULTRAMAFIC ASSOCIATED
◆ Cu	◇ Hg, Sb
◆ Fe, Mn, Ti, V	◇ Mo
◆ Pb, Zn, Barite	◇ Unknown, Other
Unknown, Other	
PORPHYRY & SHEETED VEINS	INDUSTRIAL
— Ag	▲ Ni, Co, Cr
— Au	▲ Unknown
— Cu	▲ Asbestos
— Mo	▲ Coal
— W, Sn, Ta, Be, Nb	▲ Limestone
— U	▲ Ni, Co, Cr
□ Unknown, Other	▲ Unknown, Other
SKARN/REPLACEMENT	UNKNOWN
○ Au	○ Ag
○ Cu	○ Au
○ Pb, Zn, Barite	○ Cu
○ W, Sn, Ta, Be, Nb	○ Pb, Zn, Barite
	○ Unknown, Other

MIDDLE JURASSIC AND LOWER CRETACEOUS

mJKT

TANTALUS: massive to thick bedded chert, pebble conglomerate and grey quartz-chert felsic porphyry sandstone, interbedded dark grey mudstone, siltstone, lime sandstone and coal, rare red weathering dacite to andesite flows and tuff (Tantalus)

JLr

RIGHTFOOT: well-bedded, tan, siliceous-siltstone-mudstone, dark weathering, massive to finely laminated mudstone and limy mudstone, thick bedded to massive, massive to finely laminated mudstone and limy mudstone, thick bedded to massive, massive to finely laminated mudstone, local conglomerate, minor limestone (Liberge Gp.)

LOWER TO MIDDLE JURASSIC, HETTANGIAN TO BAJOCIAN

JLI

TANGLEFOOT: poorly sorted, medium bedded to massive lime sandstone and minor mudstone with interbeds and thick members of resistant heterolithic pebble and boulder conglomerate, calcareous siltstone, minor ash and crystal tuff, coal, limestone (Liberge Gp.)

LOWER JURASSIC, PLEIENSCHACHIAN

JLN

NORDENSKJOLD: resistant, reddish brown weathering, massive, khaki-green dacite crystal tuff and volcanoclastic sandstone, with fresh plagioclase, hornblende and biotite, grades locally to pale green, quartz weathering, silt and peeper textured, massive lime sandstone, interbedded conglomerate (Liberge Gp.)

MESOZOIC

Mg

MESOZOIC GRANITIC ROCKS UNDIVIDED: poorly described granitic rocks of uncertain age including diorite, quartz monzonite, and monzonite

LATE TRIASSIC

LTgs

STIKINE SUITE: coarse-grained, foliated, gabbroic hornblende orthogneiss, coarse-grained hornblende-biotite granite and granodiorite with K-feldspar megacrysts, foliated, fine to medium-grained hornblende quartz diorite to diorite with minor biotite (Taly Ho Leucogabbro, Lohle River Batholith, Frisco Creek diorite)

UPPER TRIASSIC, CARNIAN TO NORIAN

uTave

AKBALA: mixed clastic carbonate assemblage divisible into three dominant facies including calcareous lime sandstone (I) locally thin carbonate (II) and maroon clastic (III) (Akbalá fm, Lewis River Gp.)
I, brown mudstone, block and minor red siltstone, greenish grey calcareous sandstone and interbedded biotitic, argillaceous limestone, greens of limestone-clast pebble and cobble conglomerate, labradorite detrital flows, rare biotite-augite porphyry flows (Cassia mo. of Akbalá fm, Lewis River Gp.)
II, massive to thick bedded limestone, minor thin bedded argillaceous to sandy limestone, coarsely crystalline, massive dolomite, minor laminated chert, massive to poorly bedded, limestone conglomerate with flows and laminites, calcareous sandstone (Hancock mo. of Akbalá fm, Lewis River Gp.)
III, maroon to red weathering, medium bedded, green and red sandstone, and pebble to boulder polymictic conglomerate, red mudstone and minor interbedded, biotitic siltstone, crystalline sandstone and mudstone, coarse-grained, tan to brown, massive, lime sandstone, minor limestone (Hancock mo. of Akbalá fm, Lewis River Gp.)

uTakh

uTakhm

UPPER TRIASSIC, CARNIAN AND OLDER (?)

uTpe

POVOAS: augite or felsic-phyric, locally pillowed andesite basalt flows, breccia, tuff, sandstone and mudstone, local dacite breccia and tuff with minor limestone, greenish, chert schist, chlorite-augite-feldspar green, amphibole (Povoas fm, Lewis River Gp.)

MIDDLE TRIASSIC

MTu

JOE MOUNTAIN: massive basalt flows, tuff to locally medium grained felsic and pyroxene-phyric, pillowed andesite, variety of red massive mafic diorite, heterolithic dacite (Joe Mountain Volcanics)
g, coarse-grained and locally pegmatitic, hornblende gabbro and diorite

MTg

uPT

TAKHINI: variably sheared and metamorphosed metabasite, amphibolite gneiss, tuff, waste and marble with minor quartz mica schist and a gneiss

MIDDLE TRIASSIC TO LOWER JURASSIC

MTJC

CACHE CREEK: well bedded ribbon chert interbedded with shale, siltstone and greywacke (Cache Creek Gp.)

CARBONIFEROUS TO TRIASSIC

CTc

CACHE CREEK: oceanic assemblage of ultramafic rocks (um), volcanics (V), carbonate (I) and ribbon chert (I)
um, dark rusty to dull brown weathering, strongly magnetic, variably laminated, spherulitized and chloritized ultramafic rocks including medium to coarse-grained hornblende pyroxene diorite gabbro, peridotite, dunite, serpentinite, and pyroxenite V, andesite and basaltic spherulitic gabbro, locally pillowed, aphanitic, tufaceous (?) gabbro with clasts of limestone and chert, altered volcanic rocks with numerous serpentine bodies, massive, fine grained metabasite and hornblende diorite
I, massive, finely crystalline, locally crystalline and lustrous grey limestone, limestone breccia, massive to poorly bedded, medium grained, recrystallized white to pale yellow limestone and crinoidal biotitic limestone, rare dolomite
c, resistant, well bedded, thin bedded, grey, black, red and brown chert, with lesser cherty sandstone and siltstone, minor thin limestone beds and pillow lava (Cache Creek Gp., Metaxia)

CTcum

CTcum

CTcum

CTcum

CTcum

CTcum

UPPER TRIASSIC TO LOWER JURASSIC

uTJS

SEMENOF: augite-phyric volcanic and volcanoclastic rocks (V), minor carbonate (I) V, augite-bearing sandstone and lesser siltstone and mudstone, poorly recrystallized pyroxene deposits, augite-phyric basalt flow and agglomerate, minor (?) augite felsic crystal tuff, minor volcanic breccia with clasts of augite (felsic) porphyry (equivalent to Stone Lake northern B.C.)
I, limestone, conglomerate

uTJsm

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MAP SYMBOLS

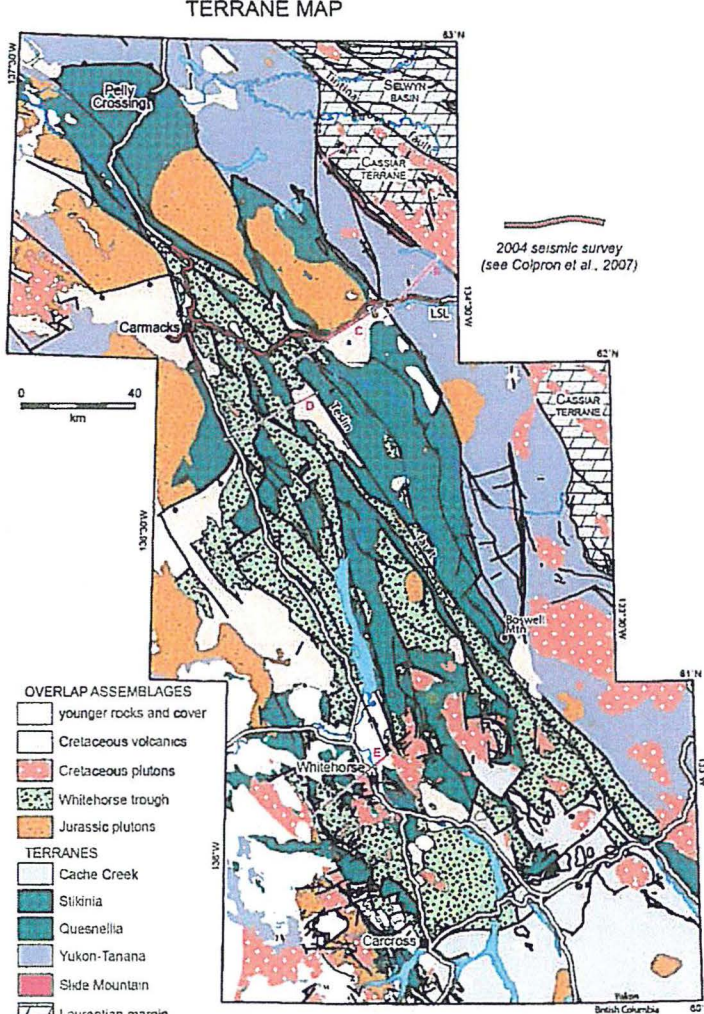
geologic contacts.....	
fault; movement not known.....	
thrust fault (ornament on hanging wall).....	
normal fault (ornament on downthrown side).....	
dextral strike-slip fault.....	
fold axial trace (anticline, syncline).....	
bedding (horizontal, inclined, vertical, upright, overturned).....	
dominant foliation (horizontal, inclined, vertical).....	
geochronology locality (U-Pb, Ar-Ar, K-Ar, Re-Os, fission track) (most significant age indicated, italic numbers refer to geochronology tables in Appendix).....	
fossil locality (italic numbers refer to fossil tables in Appendix).....	
apparent dip of bedding, foliation (in cross-section).....	
sense of displacement across strike-slip faults (in cross-section - away, toward).....	

Geology Legend Figure 3a To Accompany: 2014 APCAR North Final

Geology Legend
Figure 3b
To Accompany:
2014 APCAR North Final

- UPPER TRIASSIC**
- U_{Ta}**
SYNOROGENIC CLASTICS; resistant, massive, poorly sorted, conglomerate with pebbles to cobble size clasts varying locally but including basalt, chert, mylonite, limestone, foliated hornblende gneiss and quartz monzonite
- MIDDLE TO UPPER PERMIAN**
- Pqg**
SULPHUR CREEK SUITE: variably foliated, K-feldspar augen granite, metapsophry (ca. 264-252 Ma)
- MIDDLE MISSISSIPPIAN TO LOWER PERMIAN**
- Ck**
KLUINKIT: mafic to intermediate volcanics (v), carbonite (cn), clastics (cl) and esthalite (e)
v, mafic to intermediate calc-alkaline metavolcanic and metaplutonic rocks, minor alkali metabasalt, marble, minor felsic metavolcanic rocks, quartz muscovite schist
m, limestone, marble, locally fossiliferous
s, arkose sandstone, basal polystratic metaconglomerate
c, chert, esthalite
- Ckm**
- LATE MISSISSIPPIAN**
- MqT**
TATLMAIN SUITE: mainly granite (g) minor gabbro (gb) (ca. 336-340 Ma)
g, variably foliated to unfoliated, coarse-grained granite, medium-grained hornblende quartz diorite
gb, medium to coarse-grained hornblende gabbro
- UPPER DEVONIAN TO LOWER MISSISSIPPIAN**
- DMF**
FINLAYSON: mafic (v) to felsic (f) metavolcanic rocks of arc and back arc affinities, carbonaceous pelite, metachert (mt), minor quartzite, metavolcanic rocks (v), marble (m), ultramafic rocks (um) and megagabbro (gp)
- DMFv**
v, medium to dark green intermediate to mafic volcanic and volcanoclastic rocks, fine-grained amphibole
m, light grey to white marble, locally chertified
s, light green, fine-grained siliceous and metavolcanic rocks
f, felsic metavolcanic rocks, white quartz muscovite schist, metapsophry
cs, dark grey to black carbonaceous metaplutonic rocks, metachert
um, ultramafic rocks, serpentinite, gabbro
- DMFca**
- DMFum**
- EARLY MISSISSIPPIAN**
- MSR**
SIMPSON RANGE SUITE: mainly granodiorite to tonalite (g), locally granite and augen granite (a) (ca. 345-355 Ma)
g, foliated to strongly foliated, fine to medium-grained, hornblende bearing megacrondiorite, megacrone and metatonalite
a, megacrone
- LATE DEVONIAN TO EARLY MISSISSIPPIAN**
- DMg**
GRASS LAKES SUITE: mainly augen granite (g), locally syenite (s) (ca. 357-365 Ma)
g, foliated, coarse-grained, K-feldspar augen megacrone
s, unfoliated, coarse-grained to pegmatitic syenite, quartz monzonite (Rugged pluton)
- UPPER DEVONIAN AND OLDER**
- PDs**
SNOWCAP: mainly metasiliclastic rocks (s), minor marble (m), mafic metakolinite (n) and ultramafic rocks (um), intruded by Devonian Mississippian calc-alkaline plutons of the Grass Lakes and Simpson Range suites
s, polydeformed and metamorphosed quartzite, psammite, pelite and marble, minor gneiss and amphibolite
m, light grey to buff weathering marble, generally lenticular and discontinuous
v, medium to coarse-grained amphibolite, commonly garnet bearing, greenstone, minor marble
um, ultramafic rocks, serpentinite, megagabbro, metapsyenite
- PDm**
- PDv**
- UPPER DEVONIAN TO LOWER PERMIAN**
- CP6M**
SLIDE MOUNTAIN: basalt (b), chert, argillite, minor sandstone and conglomerate (c), gabbro (g), serpentinite (sn)
v, dark green to black basalt, greenstone, locally pillowed, thalysolite, generally weakly metamorphosed
c, grey, black, red and green chert and argillite, minor chert sandstone and pebble conglomerate
g, medium to coarse-grained gabbro, quartz monzonite, locally rodingite
um, ultramafic rocks, serpentinite, metapsyenite, diorite, fair charge
- MID-CRETACEOUS**
- mKc**
CASSIAR SUITE: medium to coarse-grained, equigranular to porphyritic rocks of largely felsic (f) composition; includes minor (?) amount of quartzite of more intermediate composition (g) (ca. 117-85 Ma)
g, granodiorite, biotite-muscovite granodiorite, quartz diorite, biotite quartz monzonite, granite (Cassiar Suite)
q, medium to coarse-grained, equigranular to porphyritic (K-feldspar) granite and biotite quartz monzonite, biotite-hornblende quartz monzonite and granodiorite (Cassiar Suite)
- UPPER TRIASSIC**
- TJc**
JONES LAKE - CASSIAR: calcareous siltstone and shale, commonly finely cross laminated, dark grey and buff weathering, recessive, thin bedded locally biotitic limestone and interbedded sandy or silty limestone
- UPPER DEVONIAN TO LOWER MISSISSIPPIAN**
- DMEca**
EARN - CASSIAR: mainly dark clastic rocks, dark grey recessive weathering, thin bedded, black siliceous slates with interbeds and members of quartz chert greywacke, chert granite gneiss and chert pebble to cobble conglomerate, may include lenses of intermediate to felsic volcanoclastic rocks
- UPPER SILURIAN TO UPPER DEVONIAN**
- SDA**
ASKIN: platy dolomitic siltstone (s) overlain by dolostone and orthoquartzite (o)
s, tan, medium grey and locally maroon weathering, light grey, thin bedded to platy dolomitic siltstone, dolomitic fine-grained sandstone and minor silty dolomite (Askin Gp.)
d, medium grey to buff weathering, medium to thick bedded dolostone, silty and sandy dolostone, limestone, medium to thick bedded, medium grained mature orthoquartzite, obliterated laminated mudstone and dolostone with vugs, birdseyes and fenestral cavities (Askin Gp.)
- ORDOVICIAN TO DEVONIAN, LOCALLY ?MISSISSIPPIAN**
- ODRC**
ROAD RIVER - CASSIAR: fine-grained, graphitic clastics of dominantly Ordovician and Silurian age, but in places including Upper Silurian and Devonian equivalents
s, recessive, dark grey to black "sooty" fine to dolomitic thin bedded to platy graphitic siltstone and fine grained impure quartzite with interbedded graphitic silty shale
- UPPER CAMBRIAN AND LOWER ORDOVICIAN**
- COK**
KECHIKA: basal fine grained calcareous pelite stria including thin bedded, lustrous, calcareous, grey slate, phyllite, limestone, minor grey dolostone and dolomite, limestone, quartz carbonate veins, minor silt and flows of basalt and basalt tuff, may include Ordovician black slate at top of succession (Kechika)
- LOWER CAMBRIAN**
- ICR**
ROSELLA: resistant, thick bedded to massive, limestone and argillaceous limestone, local archaeocyathid buildups, ribbed fragments, oolites, and pebbles, psammite, massive dolostone and limestone, marble, calc-silicate, calcareous phyllite and minor schist (Rosella)
- NEOPROTEROZOIC TO LOWER CAMBRIAN**
- PCI**
INGENIKA: muscovite-biotite-garnet schist, micaceous quartzite, minor amphibolite and marble (Harvey Gp.)

- MID-CRETACEOUS**
- mKs**
SELWYN SUITE: plutonic suite of felsic composition (f) (ca. 115-90 Ma)
q, equigranular to porphyritic (K-feldspar) biotite hornblende muscovite granite, quartz monzonite and granodiorite, porphyritic, biotite hornblende granite with large smoky grey quartz phenocrysts and locally K-feldspar phenocrysts (Selwyn Suite)
- MIDDLE TO UPPER TRIASSIC**
- TJ**
JONES LAKE: brown to buff weathering, calcareous fine-grained sandstone, argillite and shale, extensive ripple cross lamination and burrowation, massive light grey weathering, fine crystalline, dark grey limestone, minor orange weathering platy limestone (Jones Lake)
- CARBONIFEROUS TO PERMIAN**
- OPMC**
MOUNT CHRISTIE: burrowed, interbedded greenish grey cherty shale and green shale; thin to medium bedded, light grey-green to black chert, black siliceous slate and siltstone, minor quartzite, limestone and dolostone; locally abundant, large grey baffle nodules (Mount Christie)
- MISSISSIPPIAN**
- Mkm**
KALZAS: thick regionally mappable carbonate horizons, grey and buff weathering, generally thick bedded to massive, dark grey to black lead limestone, fine crystalline to cryptocrystalline, commonly bedded (Kalzas)
- DEVONIAN AND MISSISSIPPIAN**
- DME**
EARN: complex assemblage of submarine fan and channel deposits, within black siliceous shale and chert (s), and including separated small occurrences of felsic volcanic rocks (v), baffle common, and many occurrences of siltstone Pb-Zn s, thin bedded, laminated slate with thin to thickly interbedded fine to medium grained chert quartz arenite and wacke, thick members of chert pebble conglomerate; black siliceous siltstone, nodular and bedded baffle, rare limestone (Eam Gp., Porra Lake and Preves) (may include some Ordovician-Devonian Road River?)
v, massive felsic to intermediate volcanic flows, tuffs and subvolcanic plug(s) locally highly altered, greenish chert and minor black slate, quartz eye quartz sericite chlorite phyllite local vesicular or amygdaloidal basalt, locally pillowed
- ORDOVICIAN TO LOWER DEVONIAN**
- ODR**
ROAD RIVER - SELWYN: black shale and chert overlain by orange siltstone or buff platy limestone, black, gun blue, or silvery white weathering black graphitic shale and black chert; resistant grey weathering, thin to medium bedded, light grey to black, greenish grey or turquoise chert, minor argillaceous limestone (Road River Gp., Duo Lake and Emar Creek)
- CAMBRIAN TO SILURIAN**
- ESM**
MENZIE CREEK: lower Paleozoic mostly mafic volcanics, in locally thick accumulations but also of common occurrence as undifferentiated thin scattered members within other units (e.g. COR, ODR); resistant, dark grey weathering, massive, locally pillowed, dark grey green basalt, tuff and breccia (Menzie Creek)
- UPPER CAMBRIAN AND ORDOVICIAN**
- COR**
RABBITKETTLE: basal limestone that may locally include older and younger basal pelite; strata undivided, thin bedded, wavy bedded, silty limestone and grey lustrous calcareous phyllite, limestone, intraclastic breccia and conglomerate; massive to laminated, grey quartzite siltstone and chert and rare black slate, local mafic flows, breccia, and tuff (Rabbitkettle)
- LOWER CAMBRIAN**
- ICG**
GULL LAKE: dominantly fine clastic assemblage, shale, siltstone and mudstone, locally bioturbated, with minor quartz sandstone, rare green grey chert, local basal limestone and limestone conglomerate; phyllite to quartz-muscovite-biotite schist (garnet siltstone, saururite, and talusite) (Gull Lake)
- NEOPROTEROZOIC TO LOWER CAMBRIAN**
- PCH**
HYLAND: coarse turbidite clastics (s), minor limestone (Hyland Gp.)
s, thin to thick bedded, brown to pink green shale, fine to coarse grained quartz-rich sandstone, gneiss, and quartz pebble conglomerate, minor argillaceous limestone, phyllite, quartzofelsic and micaceous psammite, gritty psammite and minor marble (Hyland Gp., Ylzeiya)



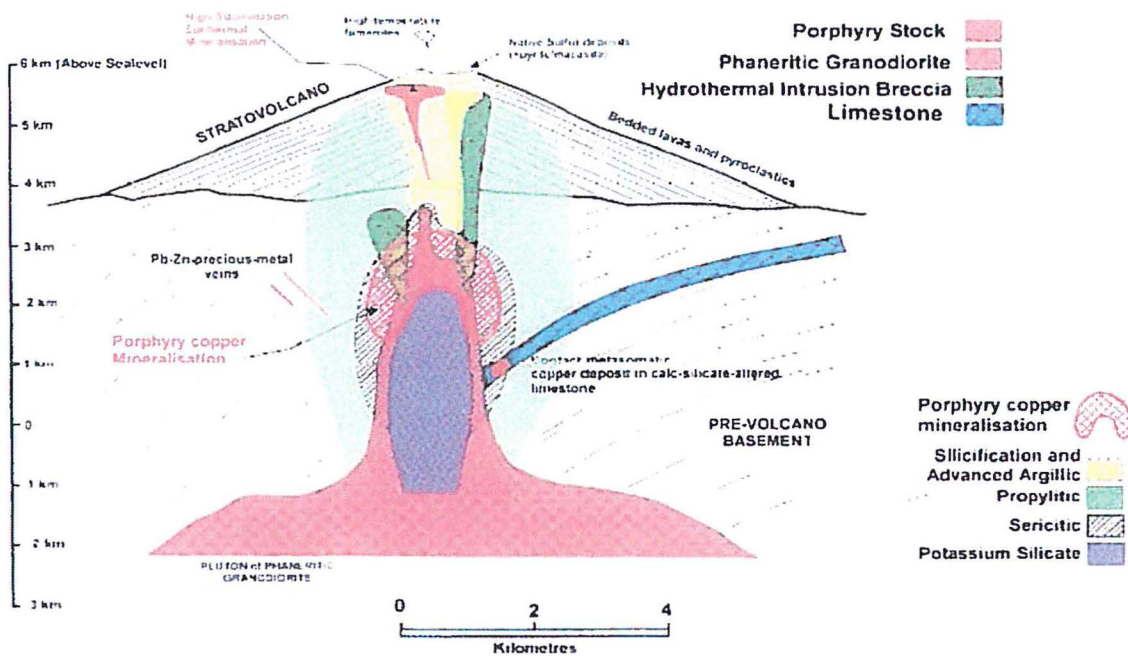
within veins, stockworks, along fractures and as disseminations within hydrothermally altered wallrock and breccia zones. Idealized alteration occurs in a concentric pattern consisting of a potassic core grading into phyllic and an outermost propylitic zone. Mineralization, especially pyrite, also commonly follows a concentrically zoned pattern consisting of a low sulphide core gradational to a pyrite and sulphide enriched halo and an outer low pyrite zone. Copper and gold grades are commonly highest at the boundary between the potassic and phyllic alteration zones associated with moderate amounts of pyrite. Most porphyry deposits within the Quesnel Trough occur within a linear array generally paralleling the continental margin, with their distribution related to the level of bedrock exposure and preservation.

The project occurs at the boundary of the Stikine and Quesnel Terranes in an area of mixed sedimentary and volcanic strata intruded by various plutonic rocks dating from either the late Triassic to mid Jurassic or the late Cretaceous to early Tertiary..

Targeting Methods – Due to their outstanding economic potential numerous studies have been completed on the various exploration methods and vectoring strategies used in the search for porphyry deposits. A synopsis of these methods and strategies is as follows.

Geological mapping provides the framework which all other exploration methods rely upon. The identification of intrusive bodies of proper age and composition helps focus exploration efforts into favorable regions. Once a mineralized system is located, there is a strong possibility that more mineralized systems will be located as they often occur in clusters both on a property as well as a regional scale.

A variety of deposit types are spatially and genetically related to porphyry copper deposits, including skarns and replacements, as well as precious metal enriched epithermal targets. Copper skarns and replacements occur within carbonate bearing lithologies near many porphyry copper intrusive complexes, and skarn mineral zoning patterns may be useful in the targeting of a potentially associated porphyry copper deposit. Epithermal style deposits, with occasional bonanza grade gold-silver values, occur peripheral to many porphyry deposits (Brucejack, Toodoggone) but can also be found crosscutting porphyry-style mineralization (Copper Canyon, Brenda Mines).



Regional stream sediment sampling surveys have demonstrated significant ability to detect exposed porphyry systems. Economic mineralization generally consists of variable amounts of chalcopyrite, bornite, molybdenite, gold and silver, along with lesser but occasionally important amounts of sphalerite. Gangue minerals include pyrite, occasionally abundant magnetite, arsenopyrite, stibnite, hematite, biotite and sericite. Common porphyry indicator minerals include apatite (fluorine bearing), rutile and titanite. Intrusive activity can often be identified by the presence of anomalous amounts of Sn and W. Stream sediment samples anomalous in copper as well as one or more of the following elements: Mo-Au-Ag-Fe-Zn-As-Sb-F-W-Sn can therefore be potentially indicative of the presence of a porphyry system.

Recent studies (Dunn, Eberlein etc) on geochemical sampling methods show that basal till samples or biogeochemical sampling methods including bark or humus sampling provide the best response over deposits located in till covered areas such as APCAR North. Of particular interest is that traditional B horizon soil sampling is invariably the least effective method for identifying mineralization in till covered areas.

Geophysical surveys have long been a key component of porphyry exploration programs. The porphyry model has clear guidelines for the various geophysical signatures associated with intrusive activity, hydrothermal alteration, and mineralization that occur during the formation of a system, thus providing a powerful guide for the selection of geophysical methods as well as their use and interpretation. Publically available geophysical data within the Yukon is generally restricted to airborne magnetics and broad scale gravity surveys. Magnetic surveys can guide geological mapping efforts as well as being able to detect the magnetite and other metallic minerals commonly associated with economic mineralization. Porphyry targets generally manifest as a circular to semi-circular magnetic high, and occasionally as a magnetic low in the case of intrusions into highly magnetic volcanics or in areas of magnetite destructive phyllic a/o argillic alteration. These magnetic anomalies are typically several square kilometres in size and may exist singly or as part of a cluster of similar features. The wide-spaced nature of publically funded gravity surveys limits their usefulness to outlining regional geological features which may help define areas with increased porphyry potential.

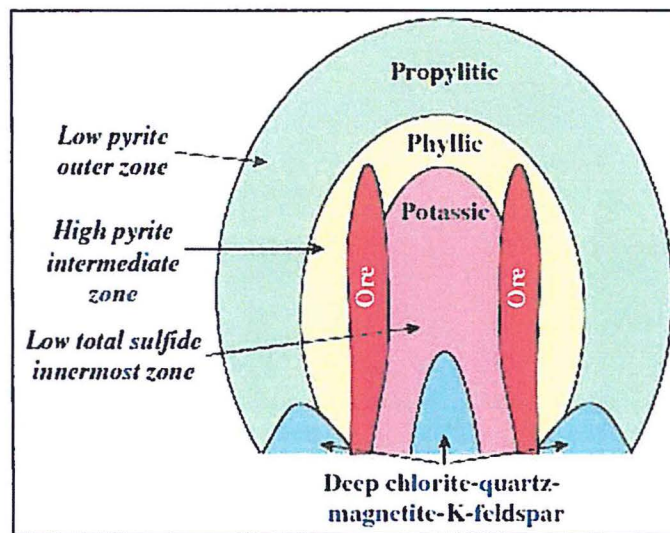


Figure 1. Cross section of a porphyry copper deposit showing idealized alteration zoning (after Lowell and Guilbert, 1970).

Other geophysical methods with applicability for regional scale porphyry exploration include airborne radiometric surveys and ASTER data. Excellent early stage targeting can be gained from airborne radiometrics which detect and map radioactive emissions from the decay of uranium, thorium, and potassium found within surficial material. Data typically includes absolute values as well as ratios for each element.

Porphyry exploration programs have shown that thorium enrichment generally does not accompany potassium during hydrothermal alteration processes, therefore eTh/K ratios provide an excellent way to distinguish between potassic alteration and anomalous potassium related to normal lithological variations. Advanced Spaceborne Thermal Emission and Reflection Radiometer (ASTER) data can be used as a tool for mapping hydrothermal alteration zones associated with porphyry systems as well as related host-rock lithologies. Hydrothermal alteration zones associated with porphyry copper deposit can be discriminated from one another by virtue of their spectral absorption features, which are detectable by ASTER spectral bands. The identification of phyllic alteration is important in the initial stages of porphyry copper exploration as an indicator of high potential for mineralization.

History and Previous Work – Initial hard-rock exploration efforts within the target area consisted of regional scale sampling programs by the Aishihik Syndicate (4-VSE listed juniors) in 1967, United Keno Hill Mines and Chevron Minerals in 1971, and the Archer Cathro managed South Yukon JV (SYJV) in 1972-73. This work located numerous anomalies and mineralized showings most of which were never followed up. The only significant modern exploration work has been conducted in the vicinity of the Ah showing of the Aishihik Target by Camisha Resources who used Strategic Metals' King claims as a listing property in 2012. Mineralized occurrences located within the areas to be prospected and that are, or potentially indicative of, a porphyry type system are described as follows:

Ah – Aishihik – This showing consists of traces of chalcopyrite and pyrite within brecciated and sheared Stikine Terrane volcanics and adjacent (possibly coeval) early Jurassic dioritic intrusive rocks occurring as small stocks and dykes. Recent work by Archer Cathro has encountered rock sample values of up to 7220 ppm Cu and 287 ppb Au, while grid based soil sampling has returned scattered values of up to 512 ppm Cu. Given that the area has been glaciated and is covered in till of variable thickness, discontinuous and scattered anomalies are to be expected from the analyses of conventionally gathered soil samples.

Shad – Aishihik – Traces of bornite were found in a small area within Triassic green volcanic rocks close to an early Jurassic granitic pluton. The best assays returned 0.02% Cu. No work has been conducted since discovery in 1976.

Macks Copper – Aishihik – Limy bands within Stikine Terrane volcanics host skarn copper mineralization of limited extent, sampling of which returned values of up to 5.6% Cu, 116.6 g/t Ag and 1.0 g/t Au across 1.2 m. Geological mapping noted the presence of a small syenite body 500 metres northwest of the main showing as well as minor, but widespread, disseminated chalcopyrite within bleached and pyritized zones within the volcanics to the northeast of the crown grants. Previous exploration programs consisting of soil sampling and prospecting were hampered by the presence of widespread till.

Snipe – Aishihik – Initially discovered in 1967 by the Aishihik Syndicate who reported values of up to 0.22% Cu over 20 feet from a showing consisting of traces of chalcopyrite along the margins of a porphyry dyke cutting volcanics. The dyke is likely related to a hornblende-syenite intrusive lying immediately to the south. Limited subsequent work by the SYJV was unable to locate this showing, but did encounter scattered anomalous copper in soil values. Given the glacial history of the area, the exploration programs were likely hampered by the presence of widespread till and glaciofluvial matter.

Cassiar Bar – Semenof – This showing was discovered by United Keno Hill Mines who geologically mapped and sampled during 1971 and 1972. Minor chalcopyrite occurs in late Cretaceous Hutshi Group volcanic rocks which are intruded by a small granitic stock. Four grab samples of the best mineralization assayed 0.01 to 1.06% Cu and up to 9.6 g/t Ag. Recent mapping by Colpron, Murphy et al (YEG 2002 pp. 85-108) in the Frenchmen Lake area along with the showings proximity to the Teslin Fault suggests the volcanics are likely part of the Carboniferous aged Semenof block.

Snipe, Shad and Ah exhibit characteristics of alkalic porphyry copper gold deposits while Cassiar Bar and Macks Copper are copper skarn targets. Given that copper skarns are commonly found within the mineralized aureole of a porphyry system, these showings can be considered excellent indicators of the possibility for nearby porphyry style mineralization.

Curent Work and Results – Fieldwork resulted in the collection of a total of 43 spruce bark, 31 rock, 7 soil, 75 till and one silt sample. Till samples were taken from un-oxidized till found at a depth of 70-100 centimetres using hand held augers, while soil samples were taken from the C-horizon in areas where till coverage was very thin or nonexistent. Soil sampling conditions were good while till sampling was very time consuming due to the presence of a thick A-horizon, occasional mud and rare frost. Rock samples were taken from scattered outcrops, talus slides and along creek beds where bedrock was exposed. Sample sites were marked in the field using flagging inscribed with the sample code, with soil and till samples placed in industry standard soil sample envelopes and rock samples placed into standard 8.5x11 poly rock sample bags. All samples were analyzed by ACME, rocks were prepared using R200-250, silts by using SS80, bark by VA475 which involves drying 60 grams of bark and then ashing the resulting material. All samples were analyzed by Acme using package 1DX1 (36 elements by aqua regia digestion). Upon consultation with the chief geochemist at Acme, and after a thorough study of publically available data pertaining to ashing of biogeochemical samples, it was decided to subject the key elements chosen (Cu, Mo, Au, Ag, Fe, As, Pb, Sb) to the formula (ashed weight/pre-ashed weight x ashed value) in an effort to eliminate the variation resulting from concentration differences due to variations in the ratio of pre-ashed weight to ashed weight. This formula helps ensure that a sample which was concentrated 20x by ashing can be compared to a sample that was concentrated 40x by ashing.

As part of our in-house QA-QC procedures a total of 2 sample splits were made from field samples (1 bark sample and 1 soil sample), and in an effort to provide a benchmark for values to be expected from trees rooted on or near mineralization 1 bark sample was taken from a spruce tree directly overlying strong porphyry Cu-Mo style mineralization found along the Fish Lake road. This benchmark and QA-QC data is detailed in the following table along with mathematical average and percentile data for the 43 spruce bark samples.

Sample	Type	Notes	Mo	Cu	Au	Ag	Fe	As	Pb	Sb
TSB-12	Bark		0.01473	2.0667	NA	0.01227	0.00393	0.02700	0.22090	0.00491
AHKB-07	Bark	Split from TSB-12	0.01487	2.1118	0.10906	0.00991	0.00421	0.04709	0.16359	0.00496
AHK-14	Soil		0.50	27.6	4.7	<0.1	2.38	7.1	5.7	0.4
SOD-10	Soil	Split from AHK-14	0.80	28.8	29.8	<0.1	2.43	8.1	6.2	0.5
DIVB-03	Bark	from Fish Lk ppy	0.42927	12.7866	0.08013	0.12592	0.06296	0.27474	1.16190	0.03434
NA	Bark total	math average n44	0.02556	2.7696	0.03519	0.01698	0.00411	0.04060	0.17071	0.20322
NA	Bark total	50 th percentile n44	0.01278	1.3848	0.01760	0.00849	0.00206	0.02030	0.08536	0.00172
	Bark total	Max Value	0.05788	5.9008	0.12222	0.05893	0.01024	0.08327	0.30306	0.01063

* all elements in ppm except for gold in ppb and iron in percent *

* elements used are commonly enriched in porphyry, skarn and epithermal targets of the nature sought *

* values have been adjusted using the following formula: (ashed wt/pre-ashed wt) x ashed value *

Although limited in scope the above table suggests that analyses of bark samples yields acceptable reproducibility for Mo-Cu-Ag-Fe-Pb-Sb and poor reproducibility for Au-As, with the exact cause for the lack of reproducibility unknown but possibly related to uneven distribution for these elements within the bark (ie coarse distribution vs fine dissemination). A 2013 bark sampling program conducted by the author noted a similar lack of reproducibility for As-Au.

Divide – Work was designed to explore a 72 ppm Cu RGS silt sample at the margin of a positive linear aeromagnetic anomaly in an area underlain by Stikine Terrane volcanics and lesser sediments.

Exploration work yielded 4 soil/till samples, 3 rock samples, 2 bark samples and 1 silt sample from within the same drainage basin as the previously reported RGS silt anomaly. Geology consists of limonitic and fractured andesite cut by rare banded quartz veins and mineralized with trace disseminated pyrite. Rock and soil samples failed to return any significant Cu values, while the silt sample returned 118.9 ppm Cu which confirmed the RGS anomaly. It is felt that the Cu in silt anomalies are adequately explained by the traces of copper (max value 84.3 ppm) returned from sampling of the andesite exposures which are the dominant rock type and are well exposed within the drainage basin.

No Further work is recommended at this site.

Transect – An RGS silt sample, analyses of which returned 90 ppm Cu, is located just west of a small oval positive aero-magnetic anomaly, and about 4.5km north of another positive aeromagnetic anomaly in an area of Stikine Terrane andesitic to mafic volcanics.

A total of 25 bark samples, 24 soil samples, and a single rock sample were taken yielding no anomalous Cu values. Based on prospecting observations, the RGS silt was thought to be related to a high background in the mafic volcanics which were well exposed along much of the drainage basin hosting the RGS copper silt anomaly.

Due to the lack of anomalous Cu values from the sampling undertaken, no further work is recommended.

Semenof – Work was designed to follow up historic showings reportedly consisting of skarn altered volcanics samples of which reportedly yielded up to 1.06% Cu and 9.6 g/t Ag, coincident with several RGS Cu in silt and positive aeromagnetic anomalies in an area of Stikine Terrane late Triassic to early Jurassic volcanics and volcanoclastics intruded by small stocks or plutons of either late Triassic to early Jurassic or mid Cretaceous age.

A total of 18 soil, 14 rock, and 4 bark samples were taken from 2 general areas. Soil sampling in the vicinity of the showings returned up to 73.10 ppb Au, 278.70 ppm Cu and 2.30 Mo, while rock samples returned up to 207.5 ppm Cu from a grab sample of epidote altered and calcite veined andesite. Sampling approximately 4.5 km to the east near the headwaters of several creeks containing RGS Cu in silt anomalies encountered rare occurrences of andesite with chalcopyrite disseminated in calcite veins and fracture fillings.

Follow up of prospecting of the Cu anomalous soils located in the vicinity of the historic showings is recommended but of a low priority due to their proximity to the Yukon River.

Triangulation – Target consisted of two copper showings and a soil geochemical anomaly (no reported values) discovered by the South Yukon Joint Venture (SYJV) during the mid-1970's. Geology consists of late Triassic Stikine Terrane andesitic volcanics and lesser sediments in contact with an early Jurassic (192 ma) granitic intrusive similar in age and composition to the Minto Pluton host to the Minto/Sherwood Copper Mine. Exploration work was concentrated in 3 areas and yielded a total of 16 soil/till, 5 rock and 3 bark samples, with results as follows.

Work at the westernmost target area was designed to follow up a SYJV copper-molybdenum single point soil anomaly in a till covered area government mapping suggests is underlain by an early Jurassic medium to coarse-grained, foliated biotite hornblende granodiorite with local K-feldspar megacrysts. Till sampling encountered up to 300.3 ppm Cu, 6.2 ppm Mo and 0.5 ppm Ag from a sample located in the general vicinity of the SYJV anomaly. Results were generally sporadic as witnessed by two samples taken in fairly close proximity (25m apart) which returned 33.7 ppm Cu and 125.5 ppm Cu. Further prospecting is required in an up-ice (southerly) direction in an attempt to define a source for the anomalous copper-molybdenum-silver soil values.

Work at Triangulation Mt was designed to follow up several minor copper occurrences reported by SYJV in an area of Stikine Terrane andesitic volcanics close to a contact with an early Jurassic granitic intrusive. Results returned up to 940.9 ppm Cu and 122.8 ppm Mo from a grab sample of epidote altered andesite with minor disseminated and fracture controlled chalcopyrite and malachite-azurite. Soil samples from the area were not anomalous, which together with prospecting observations suggests that the mineralization is restricted in nature. Some prospecting and sampling should be conducted over the nearby volcanic-intrusive contact in an effort to see if the mineralization encountered represents "leakage" from a (hopefully mineralized) intrusive body.

Work approximately 5 km southeast of Triangulation Mountain was designed to follow up a SYJV copper showing within a likely early Jurassic aged granitic intrusive. No anomalous copper values were encountered, but prospecting did encounter a weakly potassic altered limonitic and fractured quartz biotite intrusive with occasional trace disseminated hematite. Based on the identification of favourable geology and alteration further work is required for this area.

Aishihik – The target consisted of several copper soil geochemical anomalies, near the headwaters of a creek hosting a RGS silt sample with a highly anomalous value of 68 ppm copper and the Snipe porphyry copper showing discovered by SYJV. Geology consists of late Triassic Stikine Terrane andesitic volcanics and lesser sediments close to the contact with an early Jurassic (192 ma) granitic intrusive. Exploration work was concentrated in 2 areas and yielded a total of 20 soil/till, 8 rock and 8 bark samples, with results as follows.

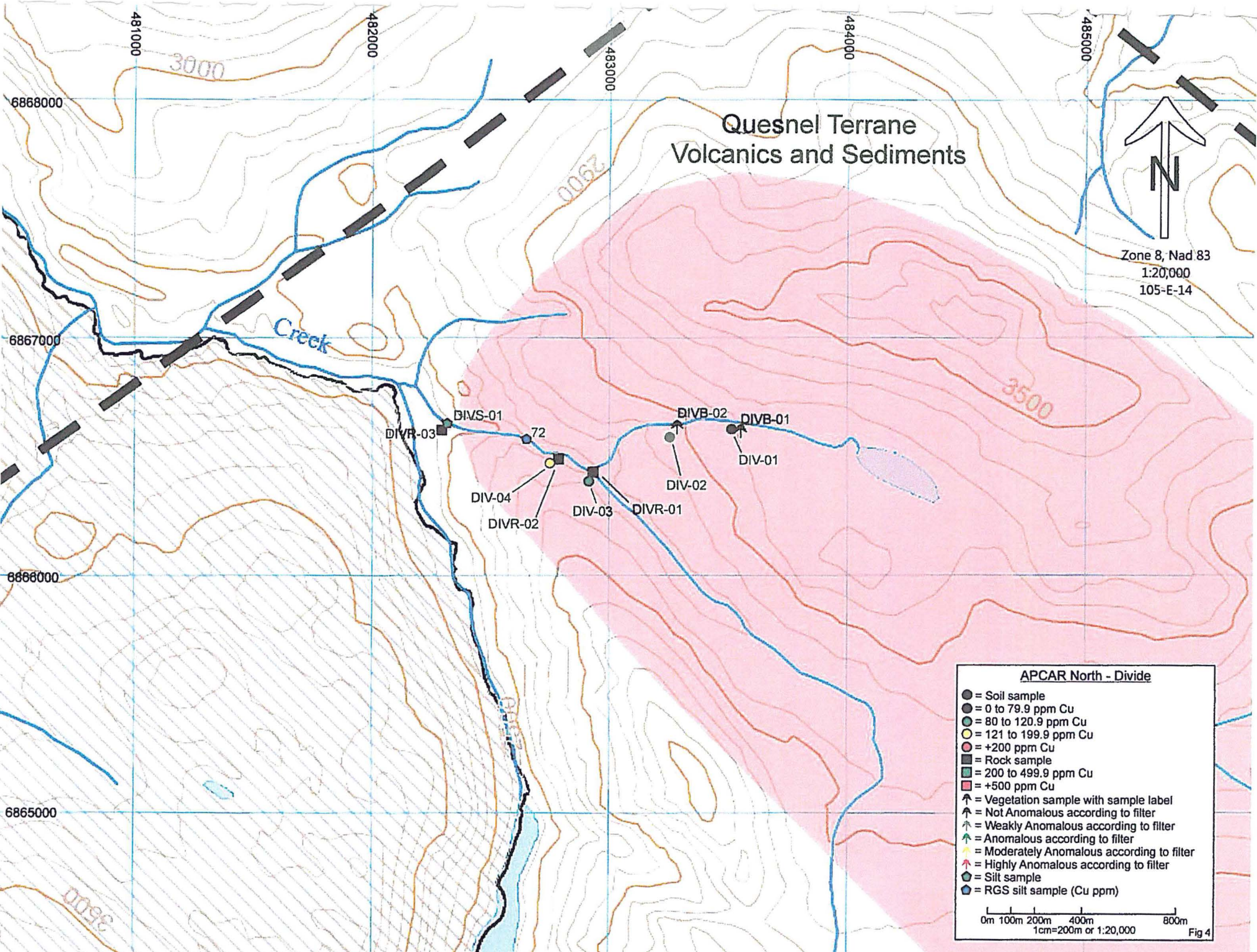
Work in the drainage basin with the copper RGS silt anomaly encountered epidote altered andesite and andesite porphyry with traces of disseminated and fracture controlled pyrite. Select samples of these rocks returned up to 1783.7 ppm copper, with nearby soil samples returning up to 311.4 ppm copper. Although these results would adequately explain the copper RGS silt and soil anomalies, further work is recommended to determine the extent of the mineralization encountered.

Work at the Snipe showing failed to encounter the previously reported mineralization or any sign of granitic intrusive rocks, with geology consisting of a monotonous sequence of weakly epidote altered andesite mineralized with rare trace disseminated pyrite. Soil/till samples were not anomalous while a single bark sample returned an anomalous value of 5.9 ppm copper (program high). A limited amount of further biogeochemical sampling and prospecting should be undertaken in the vicinity of the anomalous bark sample.

Conclusions – Work in the Triangulation Mountain area encountered a geological setting consisting of an early Jurassic granitic body along with several areas of alteration, geochemistry or mineralization, together suggesting good porphyry copper potential within the plutonic rocks in this area. Further enhancing the prospectivity of the area is that the granitic body is similar in age and composition to the Minto Pluton which is host to the Minto/Sherwood Copper mine. The amount of mineralization and alteration located during the short field program is felt to be significant due to widespread till and vegetation cover which masks bedrock.

Recommendations – Given that much of the area is till covered, the next phase of exploration should consist of a regional scale bark, till or lake sediment sampling program coupled with a regional scale magnetic and radiometric airborne geophysical survey focusing on the Aishihik batholith and adjacent rocks, centred on the Triangulation Mountain area. Some prospecting should be completed in the vicinity of Triangulation Mountain in an effort to further define the alteration, mineralization and soil anomalies located.

Reclamation – Limited surface disturbance was created by this program. Garbage and waste created during the course of the program was removed from the area and deposited in the Whitehorse landfill.



APCAR North - Divide

- = Soil sample
- = 0 to 79.9 ppm Cu
- = 80 to 120.9 ppm Cu
- = 121 to 199.9 ppm Cu
- = +200 ppm Cu
- = Rock sample
- = 200 to 499.9 ppm Cu
- = +500 ppm Cu
- ▲ = Vegetation sample with sample label
- ▲ = Not Anomalous according to filter
- ▲ = Weakly Anomalous according to filter
- ▲ = Anomalous according to filter
- ▲ = Moderately Anomalous according to filter
- ▲ = Highly Anomalous according to filter
- = Silt sample
- = RGS silt sample (Cu ppm)

0m 100m 200m 400m 800m
1cm=200m or 1:20,000

Fig 4

Quesnel Terrane Volcanics and Sediments

Zone 8, Nad 83
1:20,000
105-E-14

APCAR North - Divide Cu

- = Soil sample
- = 0 to 79.9 ppm Cu
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- ↑ = Highly Anomalous according to filter
- ⊙ = Silt sample
- ⊙ = RGS silt sample (Cu ppm)

0m 100m 200m 400m 800m
1cm=200m or 1:20,000

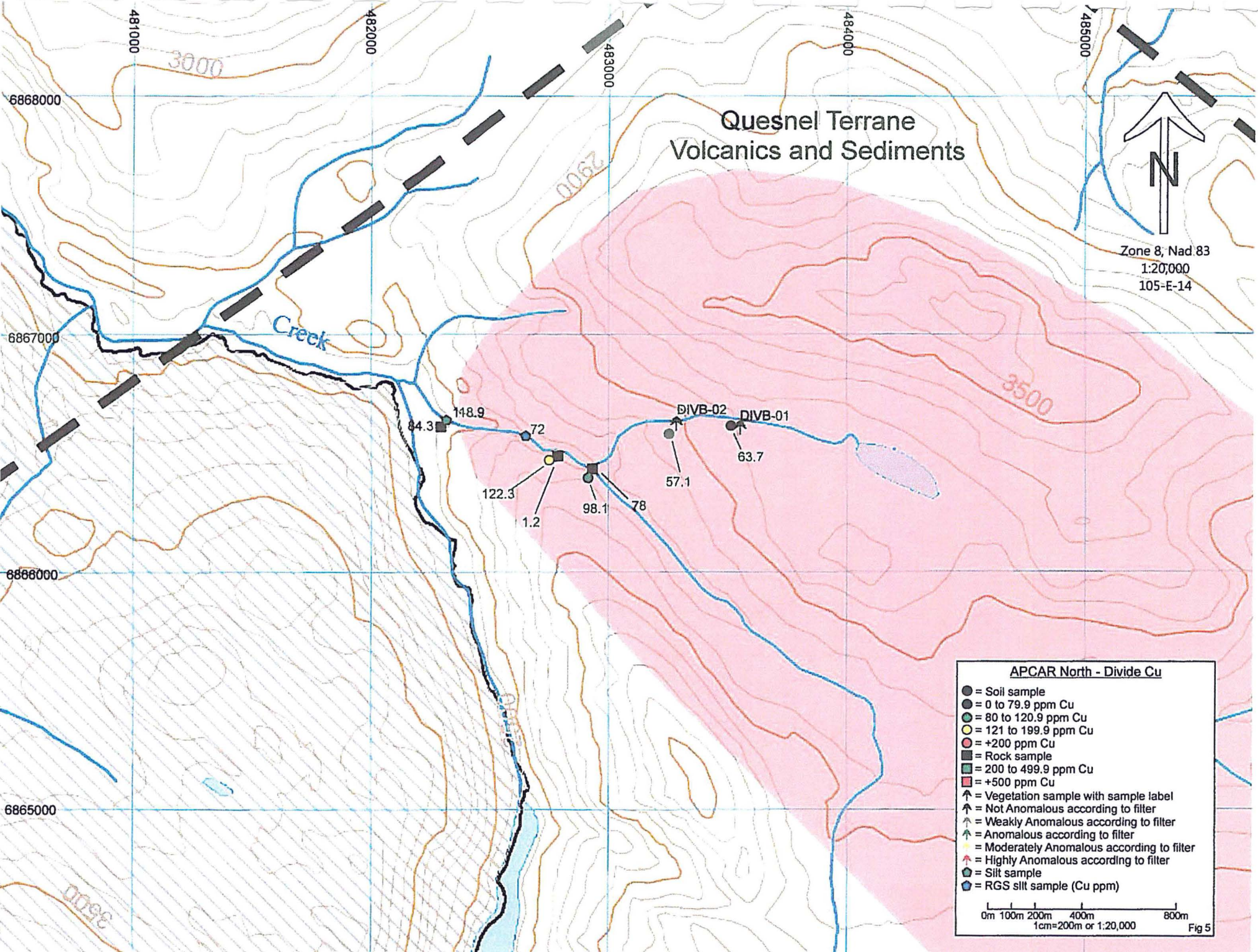
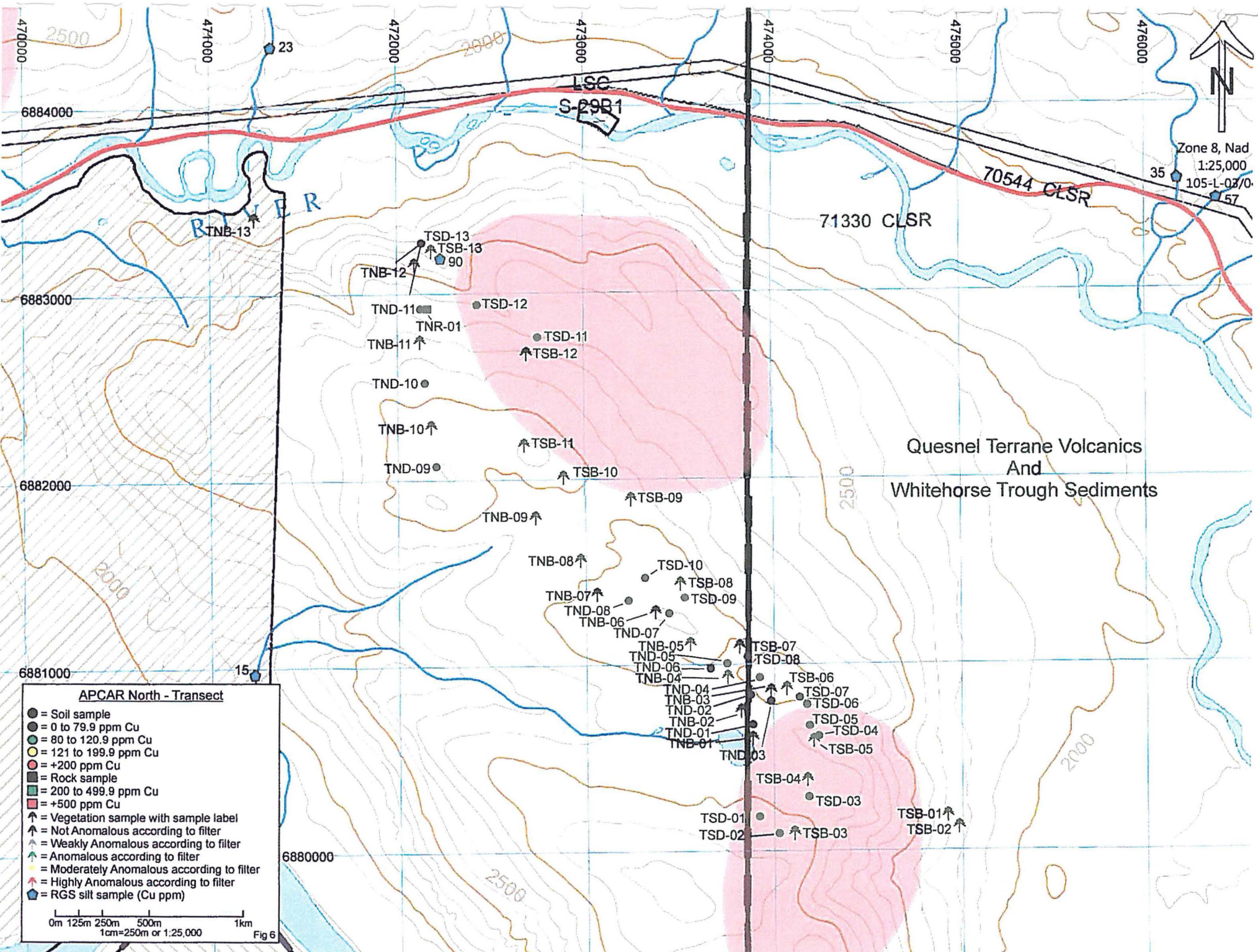
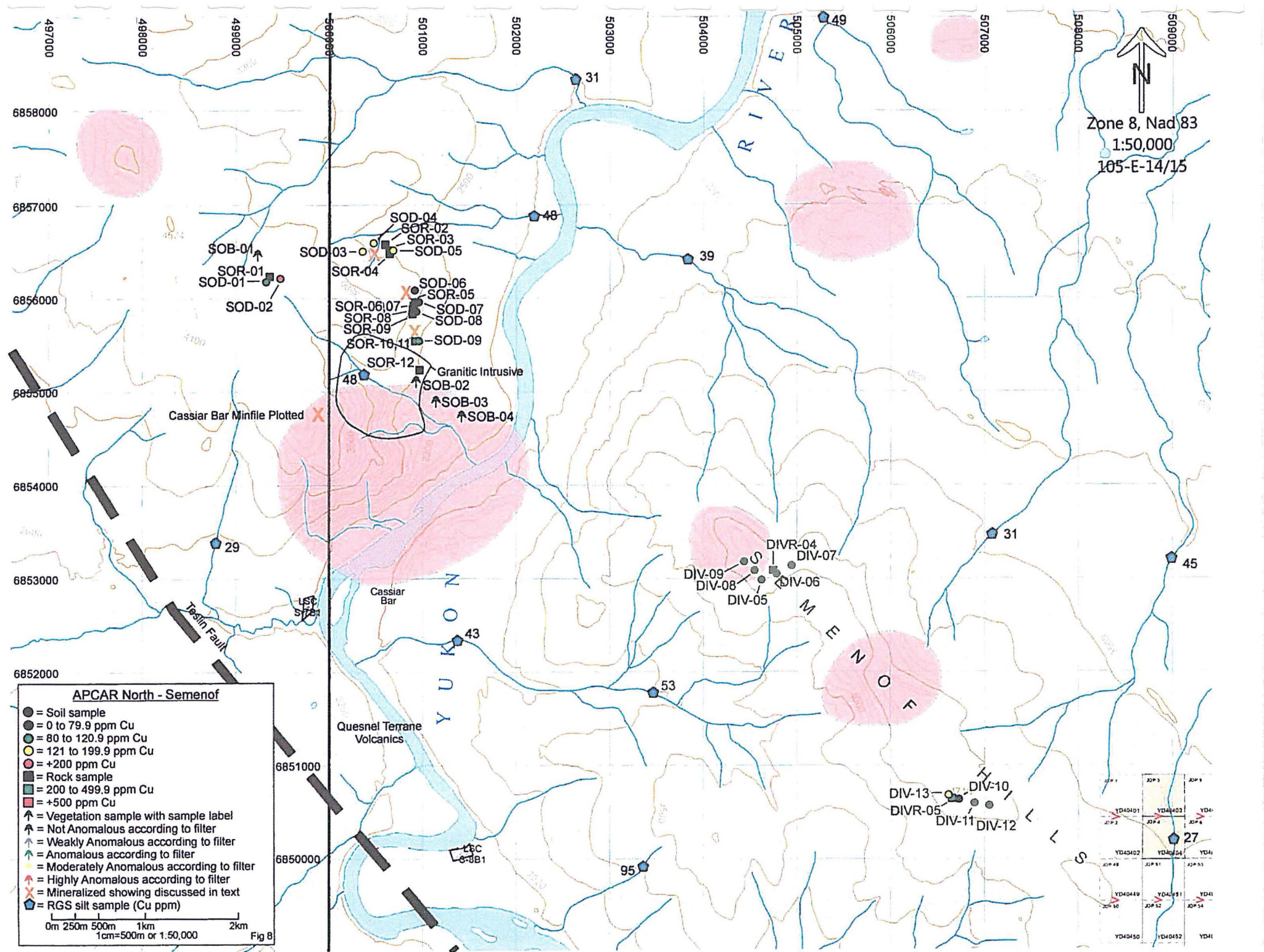


Fig 5





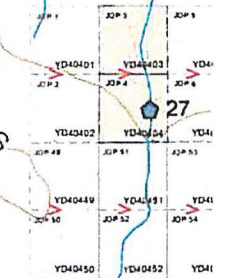
Zone 8, Nad 83
1:50,000
105-E-14/15

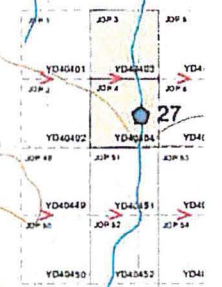
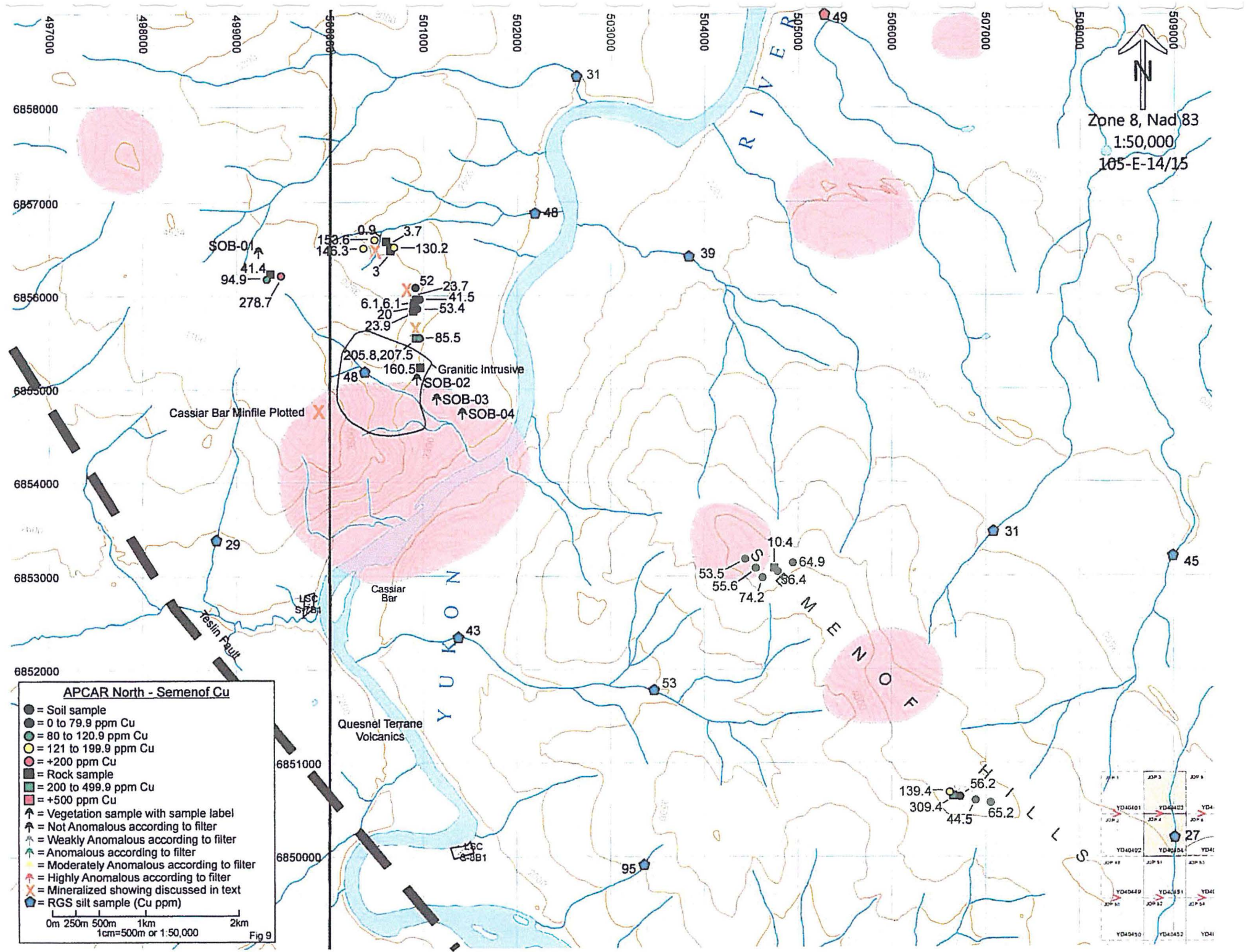
APCAR North - Semenof

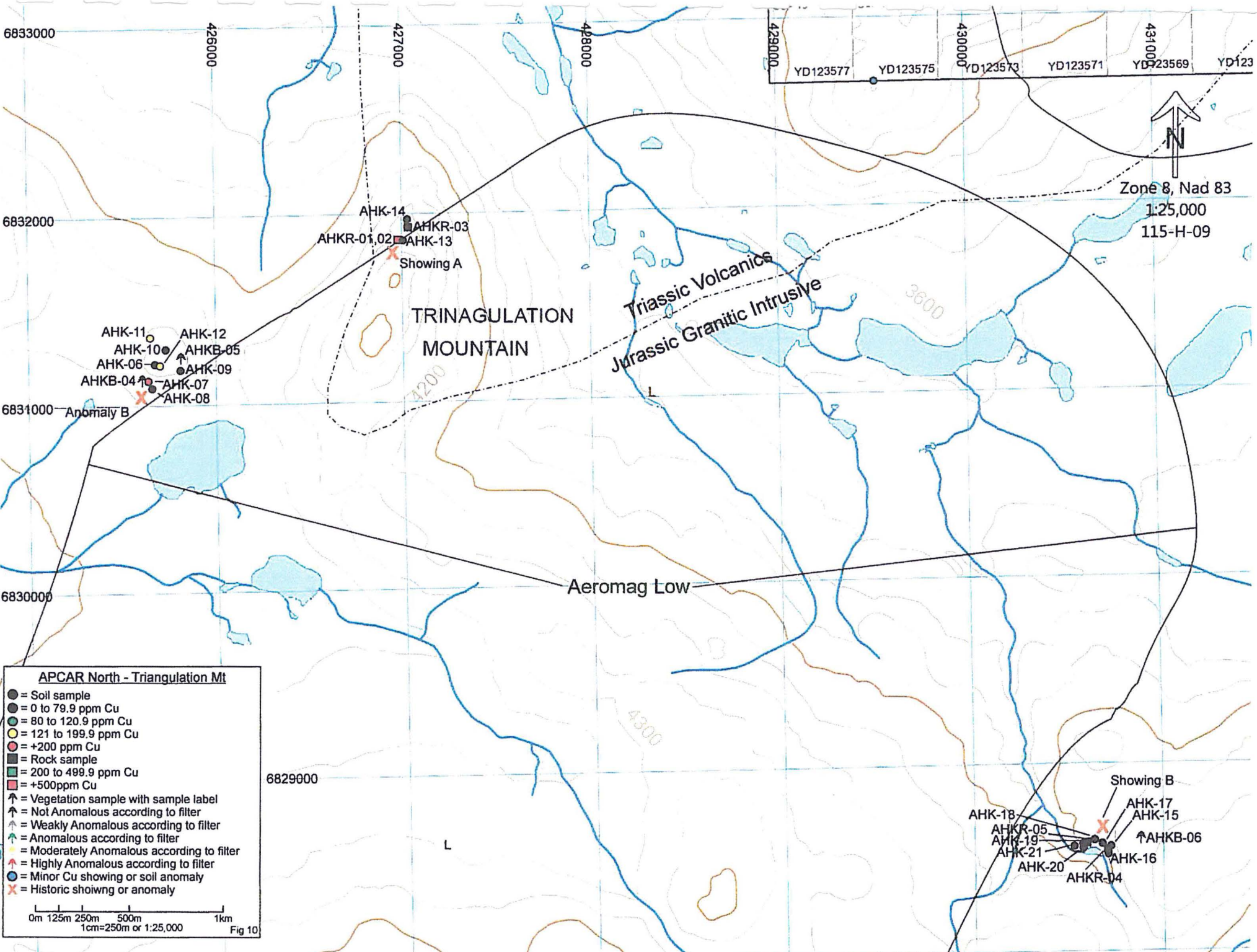
- = Soil sample
- (black) = 0 to 79.9 ppm Cu
- (green) = 80 to 120.9 ppm Cu
- (yellow) = 121 to 199.9 ppm Cu
- (red) = +200 ppm Cu
- = Rock sample
- (black) = 200 to 499.9 ppm Cu
- (red) = +500 ppm Cu
- ↑ = Vegetation sample with sample label
- ↑ (black) = Not Anomalous according to filter
- ↑ (green) = Weakly Anomalous according to filter
- ↑ (yellow) = Anomalous according to filter
- ↑ (red) = Moderately Anomalous according to filter
- ↑ (black with red outline) = Highly Anomalous according to filter
- ⊗ = Mineralized showing discussed in text
- ⬢ = RGS silt sample (Cu ppm)

0m 250m 500m 1km 2km
1cm=500m or 1.50,000

Fig 8







Zone 8, Nad 83
1:25,000
115-H-09

TRINAGULATION MOUNTAIN

Triassic Volcanics
Jurassic Granitic Intrusive

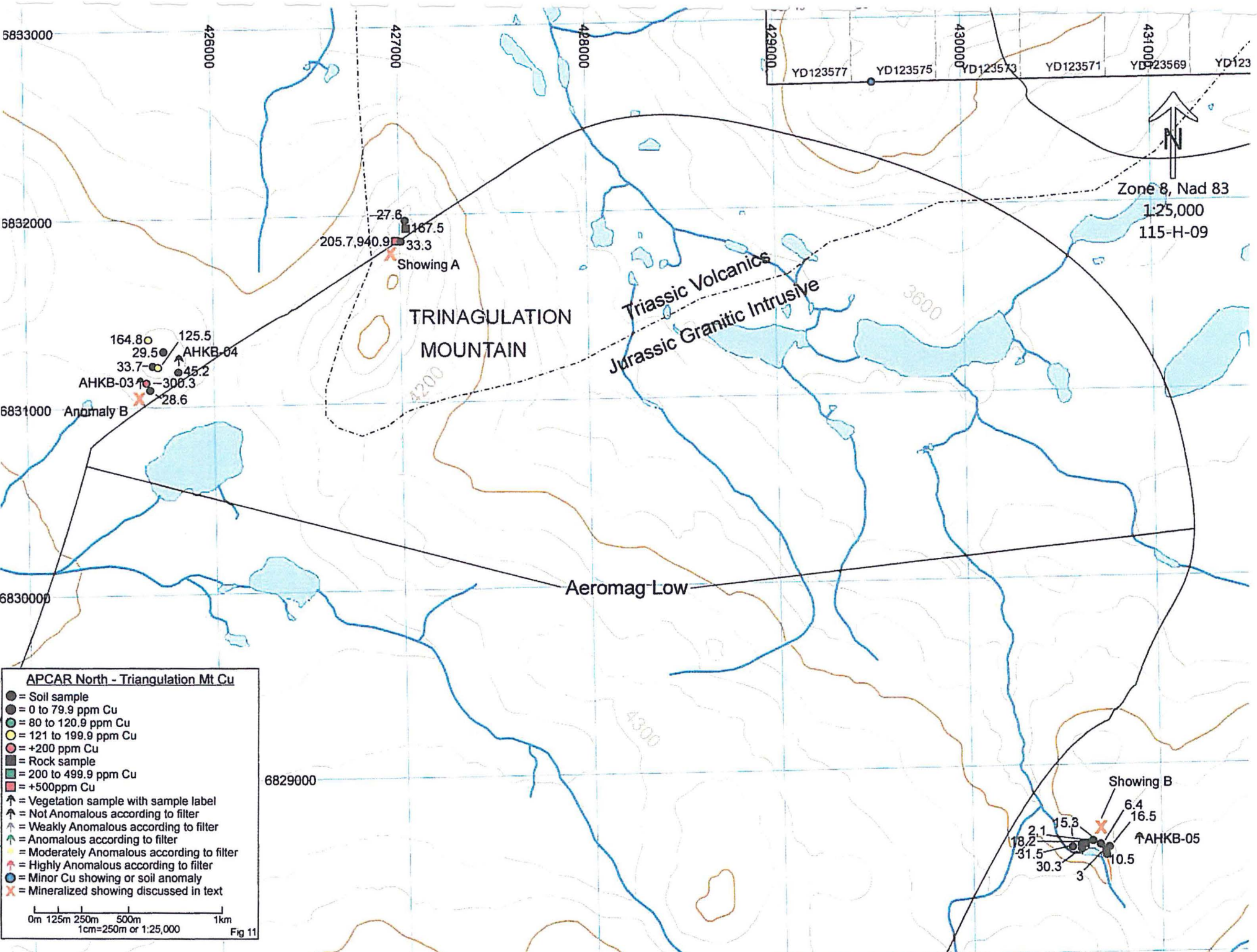
Aeromag Low

APCAR North - Triangulation Mt

- = Soil sample
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- = 121 to 199.9 ppm Cu
- = +200 ppm Cu
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- = 200 to 499.9 ppm Cu
- = +500ppm Cu
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- ↑ = Not Anomalous according to filter
- ↑ = Weakly Anomalous according to filter
- ↑ = Anomalous according to filter
- ↑ = Moderately Anomalous according to filter
- ↑ = Highly Anomalous according to filter
- = Minor Cu showing or soil anomaly
- X = Historic showing or anomaly

0m 125m 250m 500m 1km
1cm=250m or 1:25,000

Fig 10



5833000 426000 427000 428000 429000 430000 431000
 YD123577 YD123575 YD123573 YD123571 YD123569 YD123

Zone 8, Nad 83
 1:25,000
 115-H-09

TRINAGULATION MOUNTAIN

Triassic Volcanics
 Jurassic Granitic Intrusive

Aeromag Low

27.6 167.5
 205.7 940.9 33.3
 Showing A

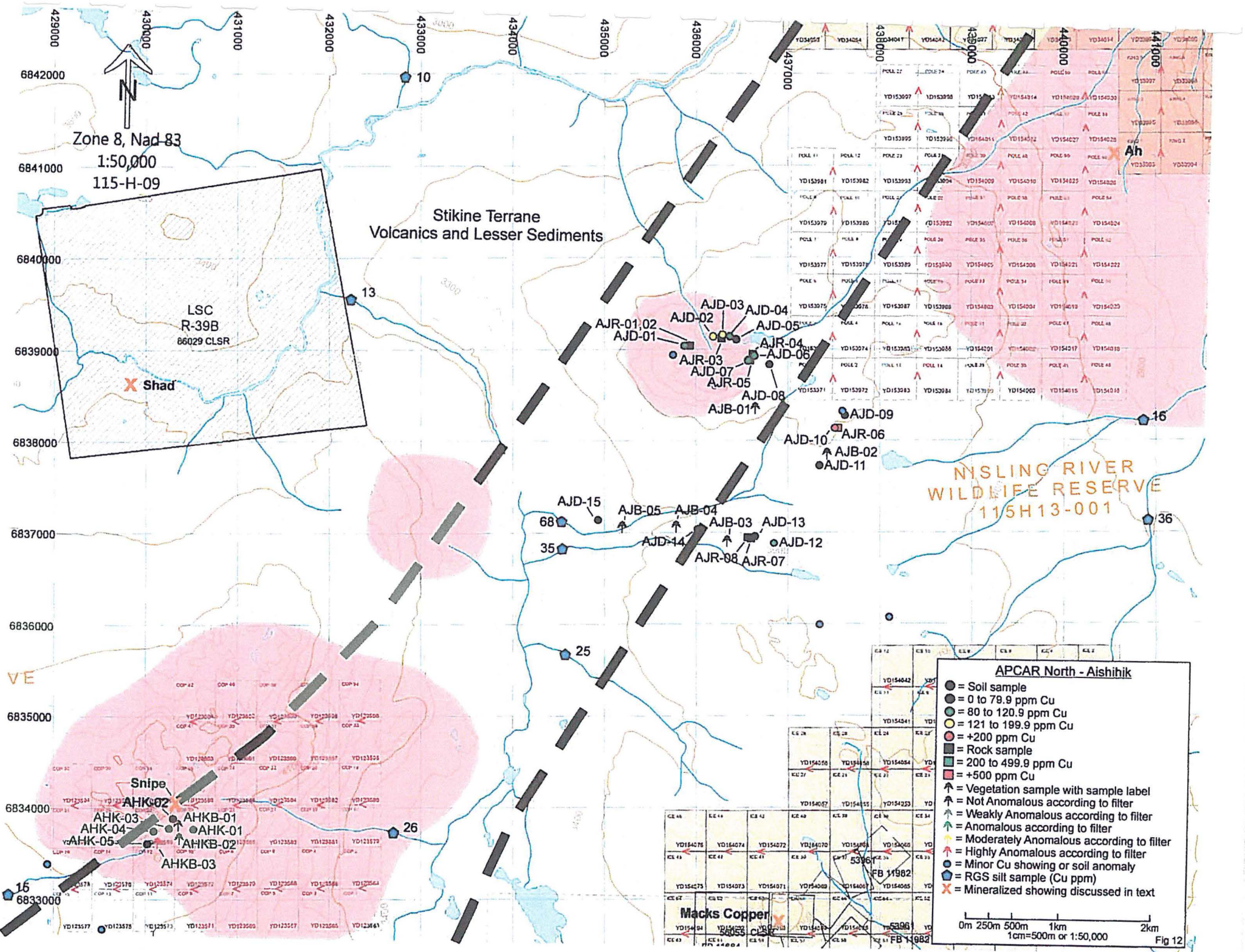
164.8 125.5
 29.5 AHKB-04
 33.7 45.2
 AHKB-03 300.3
 28.6
 Anomaly B

Showing B
 6.4 16.5
 AHKB-05
 2.1 15.3
 18.2 31.5 30.3 3
 10.5

6829000

3600

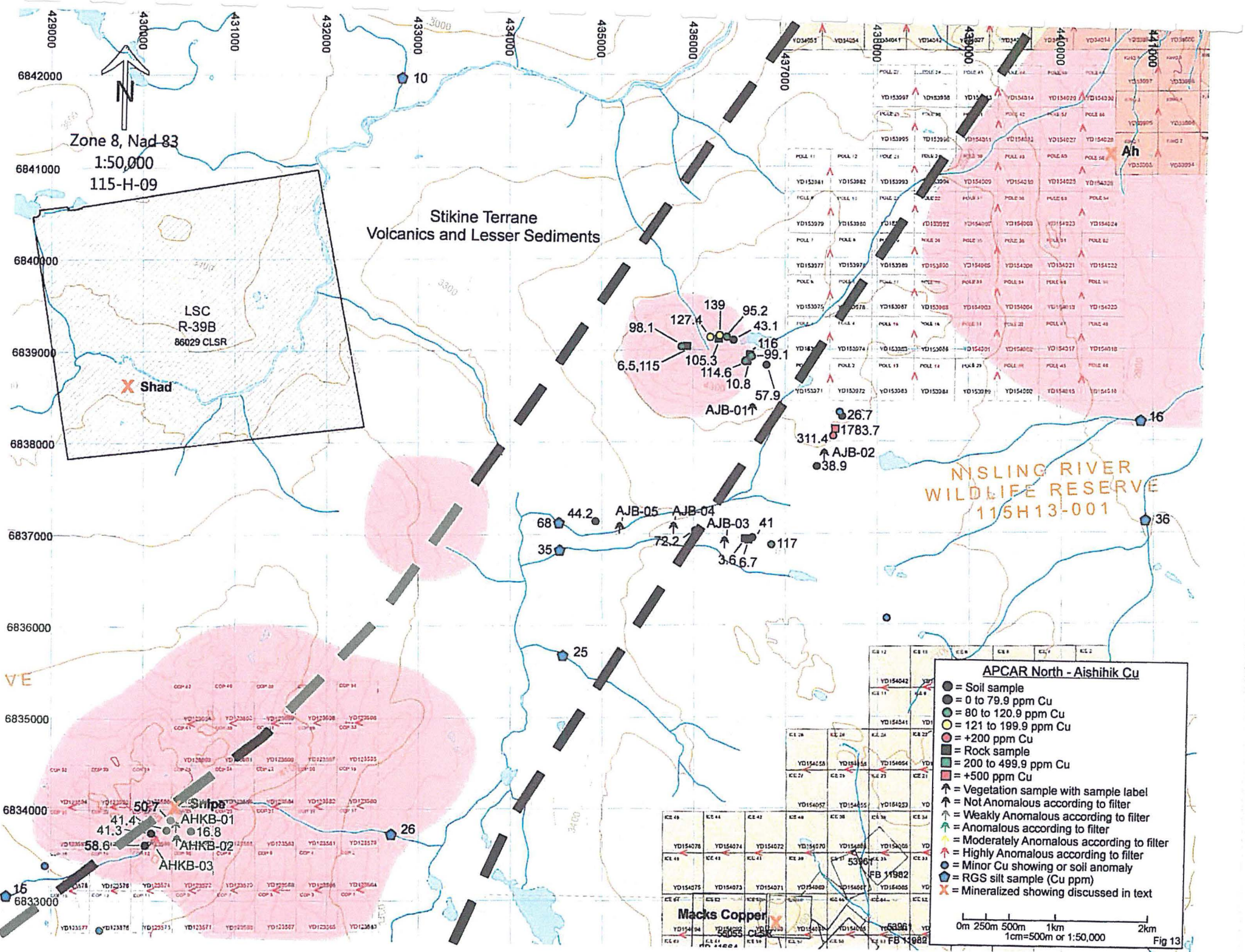
4300



APCAR North - Aishihik

- = Soil sample
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- = +200 ppm Cu
- = Rock sample
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- ↑ = Weakly Anomalous according to filter
- ↑ = Anomalous according to filter
- ↑ = Moderately Anomalous according to filter
- ↑ = Highly Anomalous according to filter
- = Minor Cu showing or soil anomaly
- = RGS silt sample (Cu ppm)
- X = Mineralized showing discussed in text

0m 250m 500m 1km 2km
 1cm=500m or 1:50,000



Zone 8, Nad 83
1:50,000
115-H-09

Stikine Terrane
Volcanics and Lesser Sediments

NISLING RIVER
WILDLIFE RESERVE
115H13-001

LSC
R-39B
86029 CLSR

X Shad

Macks Copper
5053 CLSR

APCAR North - Aishihik Cu

- = Soil sample
- = 0 to 79.9 ppm Cu
- = 80 to 120.9 ppm Cu
- = 121 to 199.9 ppm Cu
- = 200 ppm Cu
- = 200 to 499.9 ppm Cu
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- ▲ = Vegetation sample with sample label
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- ▲ = Moderately Anomalous according to filter
- ▲ = Highly Anomalous according to filter
- = Minor Cu showing or soil anomaly
- = RGS silt sample (Cu ppm)
- X = Mineralized showing discussed in text

0m 250m 500m 1km 2km
1cm=500m or 1:50,000

Statement Of Qualifications

I, Bernie Kreft, directed the exploration work described herein.

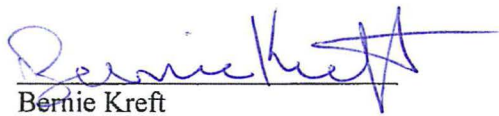
I have over 25 years prospecting experience in the Yukon and British Columbia.

This report is based on fieldwork directed and conducted by the author, and includes information from various publicly available assessment reports.

This report is based on fieldwork completed during the 2014 field season.

This report is based on fieldwork completed in the Yukon River and Kirkland Creek areas.

Respectfully Submitted,


Bernie Kreft

Statement Of Costs

Truck Travel (Whse to staging area and return 888km x \$0.60/km)		\$532.80
Acme Analytical (1 silt, 31 rocks, 45 veg, 82 soil/till: 1DX1)	✓	\$3,823.42
Report Writing and Duplication	✓	\$2,500.00
Wages Justin Kreft (3 field days x \$250/day)	✓	\$750.00
Wages Nat Rodden (3 field days x \$250/day)	✓	\$750.00
Wages Jarret Kreft (3 field days x \$250/day)	✓	\$750.00
Wages Bernie Kreft (4 days x \$350/day; 3 field + 1 sample prep)	✓	\$1,400.00
Helicopter: TNTA (3 round trips, 6.8 hours)	✓	\$8,268.80
Food And Camp Supplies (12 man days x \$100/day)	✓	<u>\$1,200.00</u>
Total		\$19,975.02

<u>Project</u>	<u>Sample</u>	<u>Type</u>	<u>Easting</u>	<u>Northing</u>	<u>Description</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>	<u>Mo</u>
Aishihik	AJB-01	Bio	437644	6838382	5x5 Black Spruce on hill side	0.00	0.03	3.48	0.02
Aishihik	AJB-02	Bio	437428	6837886	5x5 Black Spruce on hill side	0.08	0.01	4.17	0.01
Aishihik	AJB-03	Bio	436340	6836922	5x5 Black Spruce on hill side	0.00	0.03	3.85	0.02
Aishihik	AJB-04	Bio	435783	6837072	5x5 Black Spruce on hill side	0.03	0.00	2.40	0.04
Aishihik	AJB-05	Bio	435200	6837076	4x4 Black Spruce on hill side	0.00	0.01	2.33	0.05
Aishihik	AHKB-01	Bio	430337	6833837	Black Spruce, base of slope in till	0.10	0.02	4.43	0.01
Aishihik	AHKB-02	Bio	430358	6833670	As above, not really a slope possibly a moraine	0.00	0.01	3.40	0.02
Aishihik	AHKB-03	Bio	430130	6833650	Black Spruce, base of slope right limit	0.00	0.01	5.90	0.02
Aishihik	AJR-01	Rock	435955	6839049	Andesite PPY, heli pad at site	0.70	<0.1	6.50	0.70
Aishihik	AJR-02	Rock	435929	6839060	Andesite	5.50	<0.1	115.00	0.30
Aishihik	AJR-03	Rock	436281	6839123	As above with py on fracture	3.80	<0.1	105.30	0.20
Aishihik	AJR-04	Rock	436617	6838938	Epidote altered andesite	3.10	<0.1	116.00	0.20
Aishihik	AJR-05	Rock	436585	6838886	As above with limonite	1.30	<0.1	10.80	0.50
Aishihik	AJR-06	Rock	437546	6838137	As above with trace diss py and py on fractures	20.40	1.40	1783.70	1.30
Aishihik	AJR-07	Rock	436599	6836944	Weakly clay altered ? Rhyolite	2.00	<0.1	6.70	0.40
Aishihik	AJR-08	Rock	436587	6836969	Qtz ppy dyke	<0.5	<0.1	3.60	0.30
Aishihik	AJD-01	Soil	435955	6839049	On hill top by outcrop	13.10	0.10	98.10	0.50
Aishihik	AJD-02	Soil	436189	6839141	Brown with green with rusty specks	5.00	<0.1	127.40	0.60
Aishihik	AJD-03	Soil	436284	6839131	Brown with green with rusty specks	4.40	<0.1	139.00	0.70
Aishihik	AJD-04	Soil	436351	6839132	Orange with brown and green specks	2.60	<0.1	95.20	0.60
Aishihik	AJD-05	Soil	436424	6839098	Brown rocky sample	4.40	0.20	43.10	0.60
Aishihik	AJD-06	Soil	436632	6838940	Brown/green and rusty	4.50	<0.1	99.10	0.40
Aishihik	AJD-07	Soil	436577	6838889	Orange and rocky	2.80	<0.1	114.60	0.20
Aishihik	AJD-08	Soil	436798	6838843		2.00	<0.1	57.90	0.70
Aishihik	AJD-09	Soil	437624	6838288	Brown with green spots	1.00	<0.1	26.70	0.70
Aishihik	AJD-10	Soil	437548	6838140	Right below outcrop talus fines	8.00	0.30	311.40	2.30
Aishihik	AJD-11	Soil	437342	6837737	Orange and brown	0.90	<0.1	38.90	0.80
Aishihik	AJD-12	Soil	436844	6836893	Orange and brown	8.30	0.50	117.00	2.40
Aishihik	AJD-13	Soil	436641	6836963	Orange/brown with green	2.90	<0.1	41.00	0.80
Aishihik	AJD-14	Soil	436078	6837016	Brown with green	1.50	<0.1	72.20	5.00
Aishihik	AJD-15	Soil	434936	6837144		5.60	<0.1	44.20	2.80
Aishihik	AHK-01	Soil	430525	6833768	Soil "C" horizon	0.70	<0.1	16.80	0.60
Aishihik	AHK-02	Soil	430297	6833895		1.80	<0.1	50.70	0.90
Aishihik	AHK-03	Soil	430254	6833780		6.70	<0.1	41.40	0.60
Aishihik	AHK-04	Soil	430094	6833752	Little bit of rust	1.40	<0.1	41.30	0.60
Aishihik	AHK-05	Soil	430015	6833686		3.60	<0.1	58.60	0.50
Divide	DIVB-01	Bio	483539	6866592	Black Spruce	0.04	0.01	1.67	0.02
Divide	DIVB-02	Bio	483279	6866594	Black Spruce	0.00	0.01	3.68	0.01
Divide	DIVR-01	Rock	482933	6866443	Iron carb altered? Rock	2.70	<0.1	78.00	0.40
Divide	DIVR-02	Rock	482786	6866491	banded Qtz vein cutting andesite	<0.5	<0.1	1.20	2.70

<u>Project</u>	<u>Sample</u>	<u>Type</u>	<u>Easting</u>	<u>Northing</u>	<u>Description</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>	<u>Mo</u>
Divide	DIVR-03	Rock	482293	6866614	Limonitic fractured andesite	4.40	0.10	84.30	9.80
Divide	DIVS-01	Silt	482277	6866596		8.60	0.10	118.90	6.30
Divide	DIV-01	Soil	483523	6866626		12.40	<0.1	63.70	0.60
Divide	DIV-02	Soil	483256	6866596		6.70	<0.1	57.10	1.10
Divide	DIV-03	Soil	482951	6866427		2.60	<0.1	98.10	0.20
Divide	DIV-04	Soil	482797	6866490		4.10	0.20	122.30	3.40
Semenof	SOB-01	Bio	500237	6856470	6x6 Black Spruce, steep terrain	0.04	0.02	2.83	0.03
Semenof	SOB-02	Bio	500961	6855125	4x4 Black Spruce, gentle slope heading towards heli pad	0.03	0.03	3.02	0.03
Semenof	SOB-03	Bio	501151	6854923	5x5 Black Spruce, gentle slope heading towards heli pad	0.00	0.01	3.77	0.02
Semenof	SOB-04	Bio	501415	6854738	6x6 Black Spruce, gentle slope heading towards heli pad	0.05	0.01	3.27	0.02
Semenof	DIVR-04	Rock	540750	6853085	Qtz feldspar ppy dyke weakly sericite altered trace diss py	<0.5	<0.1	10.40	<0.1
Semenof	DIVR-05	Rock	506668	6850668	Andesite with cpy in epidote altered calcite areas	3.40	<0.1	309.40	1.70
Semenof	SOR-01	Rock	499371	6856236	qtz feldspar hblid intrusive	0.60	<0.1	41.40	0.70
Semenof	SOR-02	Rock	500603	6856583	Weak clay altered feldspar Qtz ppy trace diss py	<0.5	<0.1	0.90	<0.1
Semenof	SOR-03	Rock	500649	6856520	cooked up Lst with calcite veins	<0.5	<0.1	3.70	<0.1
Semenof	SOR-04	Rock	500664	6856501	Maroon Qtz ppy with sheeted Qtz-calc mm veins	0.50	<0.1	3.00	0.20
Semenof	SOR-05	Rock	500926	6855967	Clay altered limonitic feldspar rich int	<0.5	<0.1	23.70	0.20
Semenof	SOR-06	Rock	500916	6855947	?rock possible cooked sed or weird volcanic	<0.5	<0.1	6.10	0.20
Semenof	SOR-07	Rock	500916	6855947	Weakly limon and clay alt Qtz-felds int w tr diss py	2.90	<0.1	20.00	0.30
Semenof	SOR-08	Rock	500907	6855927	Limstone with calcite vein	<0.5	<0.1	2.80	<0.1
Semenof	SOR-09	Rock	500901	6855860	Qtz veined andesite	<0.5	<0.1	23.90	<0.1
Semenof	SOR-10	Rock	500924	6855547	Weakly epidote altered andesite	2.80	<0.1	205.80	0.50
Semenof	SOR-11	Rock	500924	6855544	Epidote altered and epidote calcite veined andesite	1.90	<0.1	207.50	0.30
Semenof	SOR-12	Rock	500968	6855230	Weakly epidote altered and calcite veined andesite	<0.5	<0.1	160.50	0.40
Semenof	DIV-05	Soil	504630	6852995		5.00	<0.1	74.20	1.30
Semenof	DIV-06	Soil	504755	6853083		4.50	<0.1	56.40	1.50
Semenof	DIV-07	Soil	504962	6853141		5.30	<0.1	64.90	2.10
Semenof	DIV-08	Soil	504554	6853089		6.40	<0.1	55.60	1.50
Semenof	DIV-09	Soil	504433	6853187		5.20	<0.1	53.50	2.10
Semenof	DIV-10	Soil	506740	6850640		6.00	0.20	56.20	1.60
Semenof	DIV-11	Soil	506898	6850603		35.00	<0.1	44.50	1.50
Semenof	DIV-12	Soil	507060	6850597		<0.5	<0.1	65.20	1.20
Semenof	DIV-13	Soil	506668	6850668		8.20	<0.1	139.40	1.10
Semenof	SOD-01	Soil	499341	6856204	Brown dirt, below outcrop	3.20	<0.1	94.90	1.00
Semenof	SOD-02	Soil	499476	6856221	Brown with rust specks	4.00	<0.1	278.70	1.30
Semenof	SOD-03	Soil	500352	6856516	Grey till	11.30	0.10	146.30	1.30
Semenof	SOD-04	Soil	500483	6856602	Dark grey till, area of showing	11.40	0.10	153.60	1.30
Semenof	SOD-05	Soil	500663	6856536	Outcrop in area, Dark grey till	13.20	<0.1	130.20	2.30
Semenof	SOD-06	Soil	500924	6856085	Brown till with rusty spots	5.90	<0.1	52.00	1.30
Semenof	SOD-07	Soil	500935	6855954	Below outcrop, talus fines	5.90	<0.1	41.50	1.10

<u>Project</u>	<u>Sample</u>	<u>Type</u>	<u>Easting</u>	<u>Northing</u>	<u>Description</u>	<u>Au</u>	<u>Ag</u>	<u>Cu</u>	<u>Mo</u>
Semenof	SOD-08	Soil	500913	6855871	Below outcrop, talus fines	73.10	<0.1	53.40	0.90
Semenof	SOD-09	Soil	500938	6855547		6.30	<0.1	85.50	1.10
Semenof	SOD-10	Soil	427024	6831973	Split from AHK-14	29.80	<0.1	28.80	0.80
Transect	TNB-1	Bio	473855	6880605	BlackSpruce 4x4	0.03	0.01	2.46	0.04
Transect	TNB-2	Bio	473863	6880762	BlackSpruce 4x4	0.01	0.02	2.04	0.04
Transect	TNB-3	Bio	473975	6880827	BlackSpruce 4x4	0.04	0.02	1.97	0.03
Transect	TNB-4	Bio	473775	6880953	BlackSpruce 4x4	0.05	0.02	2.10	0.02
Transect	TNB-5	Bio	473561	6881106	BlackSpruce 4x4	0.12	0.02	3.36	0.04
Transect	TNB-6	Bio	473374	6881286	BlackSpruce 3x3	0.11	0.02	2.22	0.03
Transect	TNB-7	Bio	473060	6881381	BlackSpruce 4x4	0.00	0.03	2.24	0.02
Transect	TNB-8	Bio	472970	6881568	BlackSpruce 5x5	0.02	0.01	2.21	0.01
Transect	TNB-9	Bio	472738	6881799	BlackSpruce 5x5	0.07	0.01	2.08	0.06
Transect	TNB-10	Bio	472174	6882291	BlackSpruce 5x5	0.02	0.02	1.96	0.02
Transect	TNB-11	Bio	472121	6882749	BlackSpruce 5x5	0.06	0.01	2.10	0.01
Transect	TNB-12	Bio	472092	6883161	BlackSpruce 4x4	0.07	0.01	1.76	0.02
Transect	TNB-13	Bio	471251	6883405	Black Spruce 6x6, starting too flatten out in this area	0.00	0.01	1.84	0.03
Transect	TSB-01	Bio	473924	6880191	Black spruce, small trees kind of stunted	0.00	0.02	2.22	0.04
Transect	TSB-02	Bio	473980	6880132	Near top of hill, bigger tree	0.02	0.02	2.55	0.01
Transect	TSB-03	Bio	474109	6880100	Size same as TSB-02	0.03	0.03	2.88	0.04
Transect	TSB-04	Bio	474174	6880381	Flat open area poss slight rise, same as TSB-02 in size	0.02	0.02	2.53	0.03
Transect	TSB-05	Bio	474213	6880595	Tree a bit bigger then last ones	0.09	0.02	3.30	0.02
Transect	TSB-06	Bio	474067	6880870	Black Spruce	0.03	0.02	1.94	0.03
Transect	TSB-07	Bio	473835	6881100	Black Spruce	0.00	0.01	2.50	0.02
Transect	TSB-08	Bio	473500	6881440	Black Spruce	0.02	0.02	2.61	0.02
Transect	TSB-09	Bio	473240	6881890	Black Spruce	0.02	0.06	2.14	0.02
Transect	TSB-10	Bio	472885	6882015	Black Spruce	0.10	0.01	3.11	0.04
Transect	TSB-11	Bio	472687	6882187	Black Spruce	0.04	0.03	2.71	0.02
Transect	TSB-12	Bio	472684	6882680	Black Spruce	0.00	0.01	2.07	0.01
Transect	TSB-13	Bio	472174	6883225	Black Spruce, Same as TSB-12	0.03	0.00	2.45	0.02
Transect	N/A	N/A	474191	6880768	Biotite hornblende volcanic				
Transect	N/A	N/A	474153	6880834	Dark green to blackish as above, but almost a diorite				
Transect	N/A	N/A	472405	6882943	Till only, very littlestream sed what is there is certainly transported and mixed with moderate degree of organics				
Transect	N/A	N/A	472380	6882957	Un-mineralized angular hornblende in amongst rounded till in stream bed				
Transect	TNR-01	Rock	472126	6882932	Green andesite with hairline calcite veins	<0.5	<0.1	4.40	0.10
Transect	TND-01	Soil	473832	6880605	Brown till	3.40	<0.1	28.20	0.60
Transect	TND-02	Soil	473879	6880844	Till near top of knoll	<0.5	<0.1	26.80	0.70
Transect	TND-03	Soil	473959	6880837	Brown till with rusty spots	4.80	<0.1	44.80	0.70
Transect	TND-04	Soil	473918	6880909	Till near top of knoll	3.70	<0.1	35.80	0.60

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Transect	TND-05	Soil	473771	6880953	Till near top of knoll	4.30	<0.1	45.70	0.40
Transect	TND-06	Soil	473663	6880986	Till	0.90	<0.1	26.50	0.80
Transect	TND-07	Soil	473443	6881278	Small clearing, till	17.80	<0.1	26.80	0.40
Transect	TND-08	Soil	473232	6881346		4.40	<0.1	22.00	0.50
Transect	TND-09	Soil	472201	6882079	Sandy, till?	3.10	<0.1	18.80	0.50
Transect	TND-10	Soil	472149	6882526		4.20	<0.1	21.00	0.50
Transect	TND-11	Soil	472126	6882932	Frozen, near outcrop	1.80	<0.1	27.60	0.40
Transect	TSD-01	Soil	473915	6880190	Frozen, barely "B"	5.40	<0.1	18.90	0.60
Transect	TSD-02	Soil	474021	6880096	Little rust, frozen	1.70	<0.1	33.20	0.50
Transect	TSD-03	Soil	474182	6880289	Little rust, frozen	3.80	<0.1	26.60	0.60
Transect	TSD-04	Soil	474237	6880623	Little rust, frozen	2.00	<0.1	43.60	0.40
Transect	TSD-05	Soil	474189	6880680		2.40	<0.1	32.70	0.60
Transect	TSD-06	Soil	474175	6880792	Frozen	2.50	<0.1	24.50	0.50
Transect	TSD-07	Soil	474128	6880827	C, hornblende volcanics near this site	0.80	<0.1	29.70	0.50
Transect	TSD-08	Soil	473862	6881048		0.90	<0.1	27.00	0.50
Transect	TSD-09	Soil	473523	6881363		1.50	<0.1	15.70	0.60
Transect	TSD-10	Soil	473312	6881471		3.10	<0.1	27.90	0.30
Transect	TSD-11	Soil	472739	6882774	Frozen	3.70	<0.1	25.30	0.50
Transect	TSD-12	Soil	472423	6882945		1.50	<0.1	57.00	0.60
Transect	TSD-13	Soil	472136	6883275		2.70	<0.1	29.30	0.60
Triang. Mt.	AHKB-04	Bio	425607	6831142	Black Spruce, or super old stunted white spruce	0.02	0.06	3.59	0.04
Triang. Mt.	AHKB-05	Bio	425813	6831260	As above	0.00	0.01	3.69	0.03
Triang. Mt.	AHKB-06	Bio	430875	6828620	Large black spruce	0.05	0.01	2.87	0.02
Triang. Mt.	AHKB-01	Rock	426996	6831900	Just up hill from AHK-13, weakly to moderately epidote altered andesite cut by rare Qtz lined frags min with diss py + Trace cpy	3.00	0.70	205.70	1.00
Triang. Mt.	AHKB-02	Rock	426980	6831883	Epidote altered andesite with diss and frac cpy py malachite + azurite	9.70	1.60	940.90	122.80
Triang. Mt.	AHKB-03	Rock	427022	6831937	Epidote altered andesite with calcite clots and py + cpy diss and surrounding clots	<0.5	0.50	167.50	0.40
Triang. Mt.	AHKB-04	Rock	430700	6828550	Possible potassic altered and weakly chloritized Qtz-Feld-biotite and surrounding clots	0.60	<0.1	3.00	0.30
Triang. Mt.	AHKB-05	Rock	430591	6828586	Just up hill from AHK-19, Qtz biotite intrusive some feldspars are pink, hematite disseminated	13.70	<0.1	2.10	0.20
Triang. Mt.	AHK-06	Soil	425672	6831229		1.90	<0.1	33.70	1.90
Triang. Mt.	AHK-07	Soil	425636	6831141		4.50	0.50	300.30	6.20
Triang. Mt.	AHK-08	Soil	425664	6831103		6.00	<0.1	28.60	5.50
Triang. Mt.	AHK-09	Soil	425818	6831196		4.20	<0.1	45.20	1.80
Triang. Mt.	AHK-10	Soil	425730	6831302		4.50	0.20	29.50	1.10
Triang. Mt.	AHK-11	Soil	425648	6831367	Till for sure	5.40	<0.1	164.80	6.90
Triang. Mt.	AHK-12	Soil	425695	6831222	At heli pad on hill top	7.20	<0.1	125.50	2.10
Triang. Mt.	AHK-13	Soil	427006	6831870		2.20	<0.1	33.30	0.70

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Triang. Mt.	AHK-14	Soil	427024	6831973	Duplicate of SOD-10	4.70	<0.1	27.60	0.50	
Triang. Mt.	AHK-15	Soil	430719	6828569		23.90	<0.1	16.50	1.30	
Triang. Mt.	AHK-16	Soil	430706	6828537		<0.5	<0.1	10.40	0.40	
Triang. Mt.	AHK-17	Soil	430673	6828577		4.90	<0.1	6.40	0.30	
Triang. Mt.	AHK-18	Soil	430633	6828597		2.50	<0.1	15.30	0.80	
Triang. Mt.	AHK-19	Soil	430591	6828586		1.40	<0.1	18.20	0.70	
Triang. Mt.	AHK-20	Soil	430572	6828560		5.40	<0.1	30.30	1.60	
Triang. Mt.	AHK-21	Soil	430533	6828571		3.20	<0.1	31.50	1.20	
N/A	AHKB-07	Bio	N/A	N/A		Split from TSB-12	0.11	0.01	2.11	0.01
N/A	DIVB-03	Bio	N/A	N/A		Fish Lake road sample	0.08	0.13	12.79	0.43

Sample	Area	East	North	PreAsh	Ashed	Au	Au	Ag	Ag	Cu	Cu	Mo	Mo	Pb	Pb	Fe	Fe	As	As	Sb	Sb
				Wt G	Wt G	PPB	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio
AHKB-01	Aishihik	430337	6833837	50.59	1.08	4.6	0.10	0.9	0.02	207.9	4.4	0.7	0.70	8.4	0.18	0.28	0.01	1.3	0.03	0.2	0.00
AHKB-02	Aishihik	430358	6833670	50.23	1.51	<0.5	0.00	0.3	0.01	113.0	3.4	0.8	0.80	8.6	0.26	0.34	0.01	1.8	0.05	0.3	0.01
AHKB-03	Aishihik	430130	6833650	50.63	1.32	<0.5	0.00	0.4	0.01	226.5	5.9	0.7	0.70	3.8	0.10	0.23	0.01	1.8	0.05	0.1	0.00
AHKB-04	Triang. Mt.	425607	6831142	50.57	1.75	0.6	0.02	1.7	0.06	103.7	3.6	1.2	1.20	2.2	0.08	0.10	0.00	1.8	0.06	<0.1	0.00
AHKB-05	Triang. Mt.	425813	6831260	50.43	0.97	<0.5	0.00	0.7	0.01	192.6	3.7	1.4	1.40	5.7	0.11	0.23	0.00	1.3	0.02	0.1	0.00
AHKB-06	Triang. Mt.	430875	6828620	50.59	1.30	2.1	0.05	0.3	0.01	111.3	2.9	0.6	0.60	5.0	0.13	0.21	0.01	1.3	0.03	0.2	0.01
AHKB-07	N/A	N/A	N/A	50.03	1.24	4.4	0.11	0.4	0.01	85.2	2.1	0.6	0.60	6.6	0.16	0.17	0.00	1.9	0.05	0.2	0.00
AJB-01	Aishihik	437644	6838382	50.63	1.73	<0.5	0.00	0.8	0.03	101.8	3.5	0.5	0.50	5.0	0.17	0.27	0.01	1.3	0.04	0.3	0.01
AJB-02	Aishihik	437428	6837886	50.13	1.73	2.3	0.08	0.2	0.01	121.1	4.2	0.3	0.30	3.1	0.11	0.07	0.00	0.9	0.03	0.1	0.00
AJB-03	Aishihik	436340	6836922	50.54	1.53	<0.5	0.00	1.0	0.03	127.5	3.9	0.6	0.60	2.7	0.08	0.16	0.00	1.4	0.04	0.2	0.01
AJB-04	Aishihik	435783	6837072	50.77	2.00	0.7	0.03	0.1	0.00	61.1	2.4	1.0	1.00	5.4	0.21	0.16	0.01	1.3	0.05	0.2	0.01
AJB-05	Aishihik	435200	6837076	50.14	1.78	<0.5	0.00	0.2	0.01	65.7	2.3	1.5	1.50	3.0	0.11	0.10	0.00	1.5	0.05	<0.1	0.00
DIVB-01	Divide	483539	6866592	50.18	1.30	1.4	0.04	0.2	0.01	64.5	1.7	0.7	0.70	3.7	0.10	0.10	0.00	1.6	0.04	<0.1	0.00
DIVB-02	Divide	483279	6866594	50.45	1.36	<0.5	0.00	0.2	0.01	136.6	3.7	0.2	0.20	1.2	0.03	<0.01	0.00	1.0	0.03	<0.1	0.00
DIVB-03	N/A	N/A	N/A	50.93	2.92	1.4	0.08	2.2	0.13	223.4	12.8	7.5	7.50	20.3	1.16	1.10	0.06	4.8	0.27	0.6	0.03
SOB-01	Semenof	500237	6856470	50.35	1.60	1.1	0.04	0.5	0.02	89.0	2.8	0.9	0.90	3.3	0.11	0.04	0.00	1.2	0.04	<0.1	0.00
SOB-02	Semenof	500961	6855125	50.98	1.22	1.3	0.03	1.1	0.03	126.8	3.0	1.2	1.20	6.2	0.15	0.16	0.00	1.8	0.04	0.2	0.00
SOB-03	Semenof	501151	6854923	50.79	3.25	<0.5	0.00	0.2	0.01	58.9	3.8	0.3	0.30	1.5	0.10	0.02	0.00	1.3	0.08	<0.1	0.00
SOB-04	Semenof	501415	6854738	50.42	1.82	1.4	0.05	0.4	0.01	90.5	3.3	0.6	0.60	3.0	0.11	0.17	0.01	1.3	0.05	0.1	0.00
TNB-01	Transect	473855	6880605	50.40	1.84	0.9	0.03	0.2	0.01	67.6	2.5	1.1	1.10	5.5	0.20	0.14	0.01	0.9	0.03	0.1	0.00
TNB-02	Transect	473863	6880762	50.63	0.74	0.9	0.01	1.2	0.02	140.0	2.0	2.7	2.70	10.1	0.15	0.31	0.00	1.8	0.03	0.2	0.00
TNB-03	Transect	473975	6880827	50.49	0.78	2.8	0.04	1.1	0.02	127.5	2.0	1.9	1.90	11.6	0.18	0.34	0.01	2.2	0.03	0.3	0.00
TNB-04	Transect	473775	6880953	50.55	0.85	3.1	0.05	1.0	0.02	124.7	2.1	1.3	1.30	13.2	0.22	0.30	0.01	2.1	0.04	0.2	0.00
TNB-05	Transect	473561	6881106	50.87	2.70	2.3	0.12	0.4	0.02	63.2	3.4	0.7	0.70	5.0	0.27	0.11	0.01	1.1	0.06	0.2	0.01
TNB-06	Transect	473374	6881286	50.81	0.65	8.7	0.11	1.7	0.02	174.5	2.2	2.7	2.70	17.7	0.23	0.32	0.00	2.0	0.03	0.2	0.00
TNB-07	Transect	473060	6881381	50.47	1.06	<0.5	0.00	1.3	0.03	106.6	2.2	1.0	1.00	6.5	0.14	0.18	0.00	1.8	0.04	0.1	0.00
TNB-08	Transect	472970	6881568	50.52	1.58	0.7	0.02	0.3	0.01	70.7	2.2	0.4	0.40	2.7	0.08	0.02	0.00	1.1	0.03	<0.1	0.00
TNB-09	Transect	472738	6881799	50.09	2.07	1.6	0.07	0.2	0.01	50.4	2.1	1.4	1.40	3.3	0.14	0.05	0.00	0.8	0.03	<0.1	0.00
TNB-10	Transect	472174	6882291	50.37	1.05	1.1	0.02	1.2	0.02	94.6	2.0	0.9	0.90	11.2	0.23	0.20	0.00	1.3	0.03	0.2	0.00
TNB-11	Transect	472121	6882749	50.76	2.86	1.1	0.06	0.2	0.01	37.3	2.1	0.2	0.20	3.7	0.21	0.01	0.00	<0.5	0.00	<0.1	0.00
TNB-12	Transect	472092	6883161	50.23	2.80	1.2	0.07	0.1	0.01	31.6	1.8	0.3	0.30	2.4	0.13	<0.01	0.00	1.2	0.07	<0.1	0.00
TNB-13	Transect	471251	6883405	50.62	1.92	<0.5	0.00	0.3	0.01	48.4	1.8	0.7	0.70	2.4	0.09	<0.01	0.00	1.3	0.05	<0.1	0.00

Sample	Area	East	North	PreAsh	Ashed	Au	Au	Ag	Ag	Cu	Cu	Mo	Mo	Pb	Pb	Fe	Fe	As	As	Sb	Sb
				Wt G	Wt G	PPB	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio	PPM	Ratio
TSB-01	Transect	473924	6880191	50.43	0.90	<0.5	0.00	0.9	0.02	124.8	2.2	2.2	2.20	16.8	0.30	0.41	0.01	2.6	0.05	0.3	0.01
TSB-02	Transect	473980	6880132	50.83	0.66	1.2	0.02	1.3	0.02	198.1	2.6	1.1	1.10	14.8	0.19	0.22	0.00	1.7	0.02	0.2	0.00
TSB-03	Transect	474109	6880100	50.21	1.11	1.4	0.03	1.3	0.03	130.6	2.9	1.7	1.70	12.7	0.28	0.25	0.01	2.1	0.05	0.2	0.00
TSB-04	Transect	474174	6880381	50.34	0.84	1.2	0.02	1.0	0.02	151.9	2.5	2.1	2.10	16.3	0.27	0.53	0.01	2.6	0.04	0.4	0.01
TSB-05	Transect	474213	6880595	50.63	2.06	2.1	0.09	0.4	0.02	81.2	3.3	0.6	0.60	5.3	0.22	0.07	0.00	1.1	0.04	0.1	0.00
TSB-06	Transect	474067	6880870	50.52	0.80	1.7	0.03	1.4	0.02	121.7	1.9	1.7	1.70	11.2	0.18	0.40	0.01	2.7	0.04	0.3	0.00
TSB-07	Transect	473835	6881100	50.38	2.22	<0.5	0.00	0.3	0.01	56.6	2.5	0.5	0.50	4.6	0.20	0.01	0.00	1.0	0.04	<0.1	0.00
TSB-08	Transect	473500	6881440	50.09	0.81	1.5	0.02	1.0	0.02	161.5	2.6	1.1	1.10	11.9	0.19	0.14	0.00	1.9	0.03	0.2	0.00
TSB-09	Transect	473240	6881890	50.74	0.68	1.4	0.02	4.3	0.06	160.3	2.1	1.8	1.80	17.1	0.23	0.48	0.01	3.9	0.05	0.3	0.00
TSB-10	Transect	472885	6882015	50.92	2.37	2.1	0.10	0.3	0.01	66.8	3.1	0.9	0.90	6.5	0.30	0.17	0.01	1.5	0.07	0.2	0.01
TSB-11	Transect	472687	6882187	50.69	1.15	1.7	0.04	1.3	0.03	120.1	2.7	1.0	1.00	8.9	0.20	0.16	0.00	1.4	0.03	0.2	0.00
TSB-12	Transect	472684	6882680	50.64	1.24	<0.5	0.00	0.5	0.01	84.2	2.1	0.6	0.60	9.0	0.22	0.16	0.00	1.1	0.03	0.2	0.00
TSB-13	Transect	472174	6883225	50.92	2.21	0.8	0.03	0.1	0.00	56.6	2.5	0.5	0.50	4.3	0.19	0.01	0.00	0.6	0.03	<0.1	0.00



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Client: **Kreft, Bernie**
1 Locust Place
Whitehorse YT Y1A 5G9 CANADA

Submitted By: Bernie Kreft
Receiving Lab: Canada-Vancouver
Received: June 23, 2014
Report Date: July 10, 2014
Page: 1 of 3

CERTIFICATE OF ANALYSIS

VAN14001966.1

CLIENT JOB INFORMATION

Project: None Given
Shipment ID:
P.O. Number
Number of Samples: 46

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
VA475	46	Vegetation Ashing at 475	50	Completed	VAN
Split Ash from VA475	46	Analysis sample split/packet			VAN
AQ200	46	1:1:1 Aqua Regia digestion ICP-MS analysis	0.5	Completed	VAN
DRPLP	46	Warehouse handling / disposition of pulps			VAN

ADDITIONAL COMMENTS

Sample TNB-03 - Barium not matching in REP but no more sample to recheck.

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Kreft, Bernie
1 Locust Place
Whitehorse YT Y1A 5G9
CANADA

CC:



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted. *** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Client: Kreft, Bernie
1 Locust Place
Whitehorse YT Y1A 5G9 CANADA

Project: None Given
Report Date: July 10, 2014

Page: 2 of 3

Part: 1 of 2

CERTIFICATE OF ANALYSIS

VAN14001966.1

Method	VA475	VA475	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
Analyte	Ash	Wtshed	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca
Unit	g	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL	0.001	0.001	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01
TSB-01	Vegetation	50.426	0.897	2.2	124.8	16.8	2471	0.9	13.0	4.6	>10000	0.41	2.6	<0.5	0.4	709	1.0	0.3	<0.1	10	38.25
TSB-02	Vegetation	50.825	0.655	1.1	198.1	14.8	1933	1.3	13.6	6.3	>10000	0.22	1.7	1.2	0.3	927	1.3	0.2	<0.1	6	37.62
TSB-03	Vegetation	50.214	1.107	1.7	130.6	12.7	1436	1.3	9.1	4.5	>10000	0.25	2.1	1.4	0.3	950	3.0	0.2	<0.1	7	39.50
TSB-04	Vegetation	50.341	0.837	2.1	151.9	16.3	2100	1.0	16.4	5.3	>10000	0.53	2.6	1.2	0.6	1017	2.0	0.4	<0.1	12	34.59
TSB-05	Vegetation	50.630	2.060	0.6	81.2	5.3	910	0.4	3.4	2.5	3334	0.07	1.1	2.1	0.1	1726	0.6	0.1	<0.1	3	39.48
OVEN STD-1	Vegetation	18.974	0.527	1.3	40.1	7.3	1461	1.0	10.0	0.7	>10000	0.10	3.3	<0.5	0.9	551	0.2	0.4	0.1	2	29.01
TSB-06	Vegetation	50.515	0.804	1.7	121.7	11.2	1512	1.4	13.1	6.4	9988	0.40	2.7	1.7	0.5	1298	0.8	0.3	<0.1	9	31.95
TSB-07	Vegetation	50.384	2.221	0.5	56.6	4.6	1348	0.3	0.7	1.1	5279	0.01	1.0	<0.5	<0.1	1040	1.6	<0.1	<0.1	2	>40
TSB-08	Vegetation	50.092	0.809	1.1	161.5	11.9	2408	1.0	8.9	3.2	>10000	0.14	1.9	1.5	0.2	1082	0.5	0.2	<0.1	4	36.63
TSB-09	Vegetation	50.741	0.677	1.8	160.3	17.1	3197	4.3	22.4	5.8	>10000	0.48	3.9	1.4	0.6	1059	0.9	0.3	<0.1	11	31.78
TSB-10	Vegetation	50.917	2.374	0.9	66.8	6.5	1171	0.3	2.4	2.3	4820	0.17	1.5	2.1	0.3	1408	0.8	0.2	<0.1	6	>40
TSB-11	Vegetation	50.690	1.145	1.0	120.1	8.9	2254	1.3	7.8	2.4	>10000	0.16	1.4	1.7	0.2	658	0.7	0.2	<0.1	5	>40
TSB-12	Vegetation	50.642	1.243	0.6	84.2	9.0	1402	0.5	7.8	4.1	>10000	0.16	1.1	<0.5	0.2	745	1.2	0.2	<0.1	5	>40
TSB-13	Vegetation	50.917	2.207	0.5	56.6	4.3	904	0.1	1.1	0.8	1224	0.01	0.6	0.8	<0.1	2443	0.2	<0.1	<0.1	<2	>40
AHKB-01	Vegetation	50.587	1.078	0.7	207.9	8.4	3739	0.9	7.4	3.4	3367	0.28	1.3	4.6	0.2	1438	1.2	0.2	<0.1	7	>40
AHKB-02	Vegetation	50.227	1.512	0.8	113.0	8.6	3406	0.3	14.2	5.9	4848	0.34	1.8	<0.5	0.2	1420	0.6	0.3	<0.1	9	38.18
AHKB-03	Vegetation	50.629	1.319	0.7	226.5	3.8	3332	0.4	6.1	2.5	3085	0.23	1.8	<0.5	0.2	1221	0.7	0.1	<0.1	6	35.87
AHKB-04	Vegetation	50.569	1.753	1.2	103.7	2.2	2427	1.7	6.9	6.3	3586	0.10	1.8	0.6	0.2	1864	0.5	<0.1	<0.1	4	>40
AHKB-05	Vegetation	50.426	0.967	1.4	192.6	5.7	2666	0.7	6.9	3.4	5390	0.23	1.3	<0.5	0.2	1305	1.7	0.1	<0.1	6	34.36
AHKB-06	Vegetation	50.592	1.303	0.6	111.3	5.0	3985	0.3	6.1	3.7	4905	0.21	1.3	2.1	0.2	1610	0.5	0.2	<0.1	6	>40
AHKB-07	Vegetation	50.028	1.240	0.6	85.2	6.6	1323	0.4	7.6	4.4	>10000	0.17	1.9	4.4	0.2	810	0.1	0.2	<0.1	5	>40
AJB-01	Vegetation	50.634	1.731	0.5	101.8	5.0	2628	0.8	4.3	4.1	4685	0.27	1.3	<0.5	0.3	1420	0.1	0.3	<0.1	7	36.60
AJB-02	Vegetation	50.132	1.728	0.3	121.1	3.1	1149	0.2	9.2	2.7	4480	0.07	0.9	2.3	0.1	2320	0.3	0.1	<0.1	3	38.76
AJB-03	Vegetation	50.543	1.528	0.6	127.5	2.7	1996	1.0	3.1	2.6	7080	0.16	1.4	<0.5	0.2	1456	0.2	0.2	<0.1	5	37.72
AJB-04	Vegetation	50.770	1.997	1.0	61.1	5.4	1097	0.1	6.0	3.2	3963	0.16	1.3	0.7	0.2	1834	0.1	0.2	<0.1	5	39.55
AJB-05	Vegetation	50.142	1.782	1.5	65.7	3.0	1351	0.2	1.2	2.4	3713	0.10	1.5	<0.5	0.1	1768	<0.1	<0.1	<0.1	4	38.74
DIVB-01	Vegetation	50.177	1.300	0.7	64.5	3.7	1191	0.2	6.8	3.9	4536	0.10	1.6	1.4	0.1	1492	0.2	<0.1	<0.1	4	39.88
DIVB-02	Vegetation	50.454	1.361	0.2	136.6	1.2	2275	0.2	<0.1	2.1	4291	<0.01	1.0	<0.5	<0.1	1352	0.5	<0.1	<0.1	<2	39.80
DIVB-03	Vegetation	50.929	2.915	7.5	223.4	20.3	962	2.2	13.0	10.4	2728	1.10	4.8	1.4	1.9	1450	0.2	0.6	0.5	24	26.67
SOB-01	Vegetation	50.345	1.602	0.9	89.0	3.3	1599	0.5	<0.1	1.4	1182	0.04	1.2	1.1	<0.1	683	<0.1	<0.1	<0.1	3	38.96

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Client: Kreft, Bernie
1 Locust Place
Whitehorse YT Y1A 5G9 CANADA

Project: None Given
Report Date: July 10, 2014

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Page: 2 of 3 **Part:** 2 of 2

CERTIFICATE OF ANALYSIS

VAN14001966.1

Method	Analyte	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Ti	S	Ga	Se	Te
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	
TSB-01	Vegetation	0.774	2	8	1.54	175	0.015	406	0.43	0.178	3.71	0.1	<0.01	1.4	<0.1	0.72	1	<0.5	<0.2
TSB-02	Vegetation	0.933	1	6	1.58	2537	0.011	486	0.30	0.116	4.29	<0.1	0.01	1.0	<0.1	0.47	<1	<0.5	<0.2
TSB-03	Vegetation	0.731	1	7	0.99	1537	0.012	268	0.29	0.115	2.67	0.1	0.01	0.9	<0.1	0.42	<1	<0.5	<0.2
TSB-04	Vegetation	0.766	2	10	1.38	290	0.019	410	0.50	0.189	3.90	0.1	<0.01	1.8	<0.1	0.48	2	<0.5	<0.2
TSB-05	Vegetation	0.423	<1	4	0.74	4272	0.006	225	0.21	0.056	4.06	<0.1	<0.01	0.5	<0.1	0.19	<1	<0.5	<0.2
OVEN STD-1	Vegetation	2.721	2	5	2.34	1062	0.012	349	0.15	0.098	>10	0.4	<0.01	0.7	<0.1	0.85	<1	0.5	<0.2
TSB-06	Vegetation	0.840	2	9	1.49	512	0.017	426	0.42	0.206	4.88	<0.1	<0.01	1.4	<0.1	0.47	1	<0.5	<0.2
TSB-07	Vegetation	0.328	<1	2	0.60	3792	0.005	213	0.08	0.041	4.13	<0.1	<0.01	0.4	<0.1	0.23	<1	<0.5	<0.2
TSB-08	Vegetation	0.980	<1	4	1.74	610	0.009	428	0.21	0.115	4.94	<0.1	<0.01	0.8	<0.1	0.42	<1	<0.5	<0.2
TSB-09	Vegetation	1.023	2	10	1.78	223	0.019	473	0.54	0.251	6.50	<0.1	<0.01	1.5	<0.1	0.68	1	<0.5	<0.2
TSB-10	Vegetation	0.493	1	5	0.69	1302	0.014	220	0.33	0.180	7.46	0.2	<0.01	1.5	<0.1	0.27	<1	<0.5	<0.2
TSB-11	Vegetation	0.541	1	6	0.91	2204	0.010	252	0.27	0.109	2.35	<0.1	<0.01	0.8	<0.1	0.38	<1	<0.5	<0.2
TSB-12	Vegetation	0.442	1	5	0.90	3075	0.009	269	0.23	0.083	2.13	<0.1	<0.01	0.8	<0.1	0.28	<1	<0.5	<0.2
TSB-13	Vegetation	0.266	<1	3	0.92	2050	0.004	220	0.07	0.040	3.55	<0.1	<0.01	0.5	<0.1	0.23	<1	<0.5	<0.2
AHKB-01	Vegetation	0.602	1	10	1.06	336	0.012	239	0.21	0.117	3.13	<0.1	<0.01	1.0	<0.1	0.45	<1	<0.5	<0.2
AHKB-02	Vegetation	0.695	2	9	1.48	357	0.017	244	0.56	0.135	3.19	<0.1	<0.01	1.4	<0.1	0.41	<1	<0.5	<0.2
AHKB-03	Vegetation	0.505	1	8	1.22	773	0.012	363	0.24	0.140	5.95	<0.1	<0.01	1.1	<0.1	0.24	<1	<0.5	<0.2
AHKB-04	Vegetation	0.481	1	4	1.39	3636	0.007	299	0.25	0.183	4.14	<0.1	<0.01	0.5	<0.1	0.21	<1	<0.5	<0.2
AHKB-05	Vegetation	1.064	1	6	1.42	731	0.013	249	0.24	0.153	>10	<0.1	<0.01	1.1	<0.1	0.28	<1	0.9	<0.2
AHKB-06	Vegetation	0.381	1	10	1.19	374	0.010	300	0.17	0.127	2.50	<0.1	<0.01	0.8	<0.1	0.37	<1	<0.5	<0.2
AHKB-07	Vegetation	0.412	1	6	0.95	584	0.009	303	0.23	0.114	1.82	<0.1	<0.01	0.8	<0.1	0.40	<1	<0.5	<0.2
AJB-01	Vegetation	0.496	2	4	1.17	684	0.013	294	0.26	0.250	6.42	<0.1	<0.01	0.9	<0.1	0.29	<1	1.1	<0.2
AJB-02	Vegetation	0.496	<1	2	0.93	3075	0.007	241	0.25	0.100	6.50	<0.1	<0.01	0.5	<0.1	0.21	<1	<0.5	<0.2
AJB-03	Vegetation	0.430	1	3	1.16	1322	0.010	238	0.32	0.140	5.99	<0.1	<0.01	0.7	<0.1	0.23	<1	1.3	<0.2
AJB-04	Vegetation	0.422	1	3	0.96	1562	0.010	180	0.35	0.075	3.89	<0.1	<0.01	0.7	<0.1	0.16	<1	<0.5	0.2
AJB-05	Vegetation	0.289	<1	2	0.72	3087	0.008	274	0.15	0.111	5.00	<0.1	<0.01	0.5	<0.1	0.21	<1	0.6	<0.2
DIVB-01	Vegetation	0.368	<1	2	1.20	3671	0.006	462	0.17	0.097	2.59	<0.1	<0.01	0.4	<0.1	0.14	<1	<0.5	<0.2
DIVB-02	Vegetation	0.278	<1	2	1.04	3296	0.002	328	0.34	0.040	3.11	<0.1	<0.01	0.3	<0.1	0.17	<1	<0.5	<0.2
DIVB-03	Vegetation	0.347	6	17	1.50	1025	0.037	136	0.80	0.311	2.22	0.7	<0.01	2.4	<0.1	0.18	2	0.5	<0.2
SOB-01	Vegetation	0.352	<1	1	0.81	2938	0.005	272	0.08	0.114	5.21	<0.1	<0.01	0.4	<0.1	0.21	<1	0.5	<0.2

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Client: **Kreft, Bernie**
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Project: None Given
 Report Date: July 10, 2014

Page: 3 of 3

Part: 1 of 2

CERTIFICATE OF ANALYSIS

VAN14001966.1

Method	VA475	VA475	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
Analyte	Ash	Washed	Wt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca
Unit	g	g	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%
MDL	0.001	0.001	0.1	0.1	0.1	1	0.1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01
SOB-02	Vegetation	50.983	1.216	1.2	126.8	6.2	1264	1.1	1.7	3.0	3823	0.16	1.8	1.3	0.2	979	1.1	0.2	<0.1	5	>40
SOB-03	Vegetation	50.786	3.253	0.3	58.9	1.5	1171	0.2	<0.1	0.9	1354	0.02	1.3	<0.5	<0.1	814	0.7	<0.1	<0.1	2	39.98
SOB-04	Vegetation	50.422	1.821	0.6	90.5	3.0	1394	0.4	3.7	3.0	2979	0.17	1.3	1.4	0.2	1309	0.7	0.1	<0.1	6	31.40
TNB-01	Vegetation	50.403	1.835	1.1	67.6	5.5	1765	0.2	0.6	2.7	2970	0.14	0.9	0.9	0.2	1452	0.4	0.1	<0.1	4	>40
TNB-02	Vegetation	50.631	0.739	2.7	140.0	10.1	1324	1.2	13.0	6.3	>10000	0.31	1.8	0.9	0.3	943	1.5	0.2	0.1	7	36.74
TNB-03	Vegetation	50.493	0.781	1.9	127.5	11.6	2234	1.1	20.7	7.8	>10000	0.34	2.2	2.8	0.4	1237	0.7	0.3	<0.1	9	32.90
TNB-04	Vegetation	50.554	0.850	1.3	124.7	13.2	2508	1.0	7.1	3.9	>10000	0.30	2.1	3.1	0.4	953	1.8	0.2	<0.1	8	30.48
TNB-05	Vegetation	50.866	2.703	0.7	63.2	5.0	1114	0.4	<0.1	1.5	3236	0.11	1.1	2.3	0.2	1423	0.5	0.2	<0.1	3	>40
TNB-06	Vegetation	50.812	0.647	2.7	174.5	17.7	3060	1.7	18.1	8.0	>10000	0.32	2.0	8.7	0.4	1057	1.8	0.2	<0.1	8	29.40
TNB-07	Vegetation	50.473	1.059	1.0	106.6	6.5	2336	1.3	8.1	5.2	>10000	0.18	1.8	<0.5	0.3	1006	3.1	0.1	<0.1	5	39.34
TNB-08	Vegetation	50.515	1.579	0.4	70.7	2.7	1834	0.3	<0.1	0.7	1211	0.02	1.1	0.7	<0.1	2376	0.2	<0.1	<0.1	<2	>40
TNB-09	Vegetation	50.093	2.071	1.4	50.4	3.3	1720	0.2	<0.1	1.2	1920	0.05	0.8	1.6	0.1	1550	0.3	<0.1	<0.1	3	>40
TNB-10	Vegetation	50.371	1.046	0.9	94.6	11.2	2101	1.2	13.3	3.4	>10000	0.20	1.3	1.1	0.2	930	1.2	0.2	<0.1	5	39.55
TNB-11	Vegetation	50.756	2.861	0.2	37.3	3.7	1233	0.2	<0.1	0.7	1358	0.01	<0.5	1.1	<0.1	1328	0.2	<0.1	<0.1	<2	>40
TNB-12	Vegetation	50.233	2.804	0.3	31.6	2.4	896	0.1	<0.1	0.4	786	<0.01	1.2	1.2	<0.1	879	0.2	<0.1	<0.1	<2	>40
TNB-13	Vegetation	50.621	1.924	0.7	48.4	2.4	1590	0.3	<0.1	0.3	1068	<0.01	1.3	<0.5	<0.1	1345	<0.1	<0.1	<0.1	<2	>40

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Bureau Veritas Commodities Canada Ltd.

9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA

PHONE (604) 253-3158

Client: Kreft, Bernie
1 Locust Place
Whitehorse YT Y1A 5G9 CANADA

Project: None Given
Report Date: July 10, 2014

Page: 3 of 3

Part: 2 of 2

CERTIFICATE OF ANALYSIS

VAN14001966.1

Method	Analyte	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	AQ200	
		P	La	Cr	Mg	Ba	Ti	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
Unit		%	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
MDL		0.001	1	1	0.01	1	0.001	20	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	
SOB-02	Vegetation	0.565	1	2	0.71	1689	0.009	346	0.18	0.095	2.58	<0.1	<0.01	0.6	<0.1	0.15	<1	<0.5	<0.2
SOB-03	Vegetation	0.251	<1	1	0.42	2652	0.004	175	0.07	0.044	3.72	<0.1	<0.01	0.2	<0.1	0.14	<1	<0.5	<0.2
SOB-04	Vegetation	0.381	1	4	0.86	4884	0.010	274	0.21	0.139	>10	<0.1	<0.01	0.7	<0.1	0.16	<1	<0.5	<0.2
TNB-01	Vegetation	0.566	1	2	1.00	679	0.009	286	0.18	0.065	1.91	<0.1	<0.01	0.6	<0.1	0.23	<1	<0.5	<0.2
TNB-02	Vegetation	0.739	2	4	1.04	270	0.012	470	0.33	0.140	3.12	<0.1	<0.01	1.0	<0.1	0.40	1	<0.5	<0.2
TNB-03	Vegetation	0.855	2	5	2.10	361	0.015	519	0.40	0.200	5.35	0.1	<0.01	1.1	<0.1	0.32	1	<0.5	0.2
TNB-04	Vegetation	0.639	2	4	1.01	522	0.013	433	0.32	0.165	4.10	<0.1	<0.01	1.0	<0.1	0.37	<1	<0.5	<0.2
TNB-05	Vegetation	0.336	<1	2	0.85	2781	0.007	201	0.18	0.075	2.65	<0.1	<0.01	0.4	<0.1	0.21	<1	<0.5	<0.2
TNB-06	Vegetation	1.988	2	4	1.91	611	0.018	565	0.57	0.238	>10	0.1	<0.01	1.4	<0.1	0.56	1	0.6	<0.2
TNB-07	Vegetation	0.650	1	3	1.44	851	0.010	329	0.27	0.152	4.03	<0.1	<0.01	0.8	<0.1	0.30	<1	<0.5	<0.2
TNB-08	Vegetation	0.368	<1	1	1.07	3592	0.005	306	0.08	0.075	4.78	<0.1	<0.01	0.3	<0.1	0.26	<1	0.6	<0.2
TNB-09	Vegetation	0.407	<1	1	0.98	3022	0.005	286	0.11	0.065	4.85	<0.1	<0.01	0.4	<0.1	0.24	<1	0.7	<0.2
TNB-10	Vegetation	0.560	1	3	1.33	2274	0.009	310	0.40	0.113	3.25	<0.1	<0.01	0.7	<0.1	0.42	<1	0.8	<0.2
TNB-11	Vegetation	0.184	<1	<1	0.45	3116	0.003	173	0.06	0.042	1.41	<0.1	<0.01	0.3	<0.1	0.25	<1	<0.5	<0.2
TNB-12	Vegetation	0.146	<1	<1	0.44	1367	0.003	157	0.05	0.034	2.77	<0.1	<0.01	0.1	<0.1	0.17	<1	0.9	<0.2
TNB-13	Vegetation	0.111	<1	<1	0.52	2520	0.002	180	0.04	0.027	1.59	<0.1	<0.01	0.2	<0.1	0.18	<1	<0.5	<0.2

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PHONE (604) 253-3158

Client: **Kreft, Bernie**
1 Locust Place
Whitehorse YT Y1A 5G9 CANADA

Submitted By: Bernie Kreft
Receiving Lab: Canada-Vancouver
Received: June 23, 2014
Report Date: July 24, 2014
Page: 1 of 3

CERTIFICATE OF ANALYSIS

VAN14001965.1

CLIENT JOB INFORMATION

Project: None Given
Shipment ID:
P.O. Number
Number of Samples: 31

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days
DISP-RJT Dispose of Reject After 90 days

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: Kreft, Bernie
1 Locust Place
Whitehorse YT Y1A 5G9
CANADA

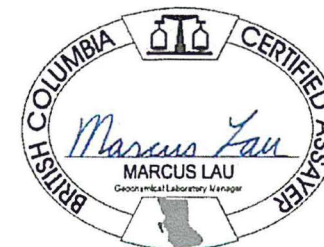
CC:

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
PRP70-250	31	Crush, split and pulverize 250 g rock to 200 mesh			VAN
AQ201	31	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN
DRPLP	31	Warehouse handling / disposition of pulps			VAN
DRRJT	29	Warehouse handling / Disposition of reject			VAN

ADDITIONAL COMMENTS

No reject material to recheck DUP for sample ARJ-03.



This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only. All results are considered the confidential property of the client. Acme assumes the liabilities for actual cost of analysis only. Results apply to samples as submitted.
*** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Bureau Veritas Commodities Canada Ltd.
 9050 Shaughnessy St Vancouver BC V6P 6E5 CANADA
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Client: **Kreft, Bernie**
 1 Locust Place
 Whitehorse YT Y1A 5G9 CANADA

Project: None Given
 Report Date: July 24, 2014

Page: 2 of 3 Part: 1 of 2

CERTIFICATE OF ANALYSIS

VAN14001965.1

Method	Analyte	Unit	MDL	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
				Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P
				kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	
AJR-01	Rock			0.42	0.7	6.5	4.0	114	<0.1	8.6	7.6	747	1.62	1.2	0.7	4.4	32	0.2	<0.1	<0.1	11	0.47	0.122
AJR-02	Rock			0.28	0.3	115.0	1.0	30	<0.1	25.6	17.6	312	2.38	1.0	5.5	0.2	36	0.1	0.1	<0.1	77	1.36	0.046
AJR-03	Rock			0.33	0.2	105.3	2.4	22	<0.1	1.4	4.7	240	1.31	1.5	3.8	0.2	11	0.1	<0.1	<0.1	50	1.03	0.097
AJR-04	Rock			0.72	0.2	116.0	1.1	67	<0.1	53.1	24.3	547	3.43	0.7	3.1	0.3	39	<0.1	0.1	<0.1	80	1.31	0.070
AJR-05	Rock			0.51	0.5	10.8	0.9	30	<0.1	18.6	12.5	725	2.76	0.8	1.3	0.3	47	<0.1	0.2	<0.1	53	1.31	0.103
AJR-06	Rock			0.55	1.3	1783.7	0.6	53	1.4	14.4	7.2	305	3.88	3.4	20.4	0.7	30	0.6	0.1	0.2	151	1.05	0.109
AJR-07	Rock			0.50	0.4	6.7	5.3	7	<0.1	0.6	0.3	66	0.39	7.6	2.0	10.7	3	<0.1	<0.1	<0.1	6	0.03	0.004
AJR-08	Rock			0.40	0.3	3.6	3.5	22	<0.1	0.9	0.6	74	1.02	1.0	<0.5	14.9	10	<0.1	<0.1	<0.1	2	0.08	0.007
SOR-01	Rock			0.49	0.7	41.4	8.4	61	<0.1	1.9	6.5	844	2.85	1.7	0.6	2.5	121	0.1	0.2	<0.1	117	1.80	0.095
SOR-02	Rock			0.52	<0.1	0.9	2.6	30	<0.1	1.2	3.1	347	1.21	0.6	<0.5	0.4	37	<0.1	<0.1	<0.1	15	1.53	0.057
SOR-03	Rock			0.59	<0.1	3.7	0.7	9	<0.1	1.0	1.3	447	0.40	1.0	<0.5	0.4	370	0.6	0.2	<0.1	4	32.39	0.010
SOR-04	Rock			0.73	0.2	3.0	4.6	28	<0.1	7.0	6.2	801	2.09	4.0	0.5	1.1	263	0.2	0.2	<0.1	46	20.11	0.068
SOR-05	Rock			0.64	0.2	23.7	3.5	87	<0.1	2.4	4.1	424	1.27	8.1	<0.5	0.3	21	0.4	0.5	0.1	10	1.17	0.059
SOR-06	Rock			0.38	0.2	6.1	2.4	49	<0.1	2.1	0.7	1342	0.23	2.8	<0.5	<0.1	176	0.6	<0.1	0.2	2	34.40	0.021
SOR-07	Rock			0.63	0.3	20.0	3.4	100	<0.1	2.1	2.9	257	1.42	3.0	2.9	0.3	28	0.3	<0.1	0.2	11	0.92	0.052
SOR-08	Rock			0.55	<0.1	2.8	0.8	9	<0.1	0.4	1.2	171	0.40	0.8	<0.5	<0.1	239	0.3	0.1	<0.1	10	34.17	0.014
SOR-09	Rock			0.50	<0.1	23.9	1.0	21	<0.1	11.4	4.6	337	0.88	<0.5	<0.5	0.3	11	<0.1	<0.1	<0.1	12	0.98	0.012
SOR-10	Rock			0.51	0.5	205.8	1.3	67	<0.1	16.3	19.4	612	4.02	2.4	2.8	0.5	22	<0.1	<0.1	<0.1	142	0.94	0.063
SOR-11	Rock			0.55	0.3	207.5	1.6	64	<0.1	18.2	21.6	492	4.21	3.0	1.9	0.5	34	0.1	0.1	<0.1	156	2.00	0.059
SOR-12	Rock			0.52	0.4	160.5	1.6	78	<0.1	4.9	17.0	801	4.83	1.4	<0.5	0.6	44	<0.1	<0.1	<0.1	122	1.05	0.112
AHKR-01	Rock			0.92	1.0	205.7	18.0	165	0.7	6.8	22.1	1417	3.30	2.0	3.0	0.6	53	0.3	0.5	0.4	49	1.04	0.141
AHKR-02	Rock			0.97	122.8	940.9	5.0	74	1.6	10.6	26.6	508	2.66	5.2	9.7	0.3	108	1.0	1.0	0.3	51	1.76	0.080
AHKR-03	Rock			0.84	0.4	167.5	11.1	623	0.5	10.1	18.3	1778	3.43	5.4	<0.5	0.7	89	11.8	0.4	<0.1	110	4.64	0.138
AHKR-04	Rock			0.65	0.3	3.0	3.0	24	<0.1	3.0	2.8	237	1.20	3.7	0.6	12.4	41	<0.1	<0.1	<0.1	18	0.30	0.037
AHKR-05	Rock			1.06	0.2	2.1	2.3	26	<0.1	2.6	2.2	341	1.66	1.2	13.7	5.4	42	<0.1	<0.1	<0.1	20	0.90	0.048
DIVR-01	Rock			0.80	0.4	78.0	1.2	60	<0.1	6.4	11.3	1259	4.42	17.2	2.7	1.1	152	<0.1	0.4	<0.1	87	8.12	0.086
DIVR-02	Rock			0.48	2.7	1.2	0.2	32	<0.1	0.2	0.7	2302	3.17	0.7	<0.5	<0.1	125	<0.1	<0.1	<0.1	15	26.62	0.006
DIVR-03	Rock			0.86	9.8	84.3	1.4	58	0.1	7.1	4.1	193	3.21	1.5	4.4	0.4	65	1.1	0.5	<0.1	112	1.76	0.038
DIVR-04	Rock			0.60	<0.1	10.4	12.1	38	<0.1	22.1	7.8	496	1.74	9.2	<0.5	4.1	755	<0.1	0.5	<0.1	14	3.05	0.064
DIVR-05	Rock			0.94	1.7	309.4	1.1	28	<0.1	12.0	12.1	643	4.70	1.5	3.4	2.0	118	<0.1	<0.1	<0.1	113	2.74	0.204

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CERTIFICATE OF ANALYSIS

VAN14001965.1

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
				La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
				ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm
				1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2
AJR-01	Rock			29	<1	0.30	314	0.184	<1	0.84	0.062	0.17	<0.1	0.02	2.6	<0.1	<0.05	3	<0.5	<0.2
AJR-02	Rock			<1	33	1.20	92	0.134	<1	2.31	0.277	0.32	<0.1	0.01	5.1	<0.1	<0.05	6	<0.5	<0.2
AJR-03	Rock			2	2	0.14	22	0.107	<1	0.54	0.042	0.03	<0.1	<0.01	2.8	<0.1	<0.05	2	<0.5	<0.2
AJR-04	Rock			1	74	1.63	118	0.184	<1	1.82	0.067	0.43	<0.1	<0.01	7.2	<0.1	<0.05	6	<0.5	<0.2
AJR-05	Rock			2	50	0.42	53	0.106	1	0.90	0.034	0.05	<0.1	<0.01	6.8	<0.1	<0.05	2	<0.5	<0.2
AJR-06	Rock			3	49	1.28	41	0.186	3	2.11	0.157	0.23	0.5	0.02	4.2	0.3	0.72	8	1.0	<0.2
AJR-07	Rock			14	1	0.03	16	0.009	1	0.21	0.069	0.14	<0.1	0.01	0.9	<0.1	<0.05	<1	<0.5	<0.2
AJR-08	Rock			20	1	0.06	15	0.004	<1	0.45	0.056	0.10	<0.1	<0.01	0.7	<0.1	<0.05	2	<0.5	<0.2
SOR-01	Rock			15	2	0.55	40	0.129	<1	0.98	0.094	0.17	0.3	<0.01	4.8	<0.1	<0.05	6	<0.5	<0.2
SOR-02	Rock			3	1	0.08	153	0.003	<1	0.41	0.058	0.14	0.2	<0.01	1.8	<0.1	<0.05	1	<0.5	<0.2
SOR-03	Rock			7	2	0.29	14	<0.001	1	0.09	0.006	0.02	<0.1	<0.01	2.5	0.2	0.06	<1	0.8	<0.2
SOR-04	Rock			8	27	1.17	85	0.020	<1	1.10	0.018	0.04	0.1	0.07	9.1	<0.1	<0.05	4	<0.5	<0.2
SOR-05	Rock			2	1	0.04	322	<0.001	<1	0.53	0.037	0.15	<0.1	<0.01	1.4	<0.1	<0.05	1	0.5	<0.2
SOR-06	Rock			2	2	0.17	55	<0.001	<1	0.02	0.002	<0.01	<0.1	<0.01	0.5	<0.1	0.07	<1	0.5	0.2
SOR-07	Rock			5	2	0.35	125	0.002	1	0.79	0.048	0.18	<0.1	<0.01	0.9	<0.1	<0.05	3	0.9	<0.2
SOR-08	Rock			2	2	2.58	3	<0.001	<1	0.02	0.005	<0.01	<0.1	0.02	3.3	<0.1	<0.05	<1	0.7	<0.2
SOR-09	Rock			3	6	0.38	52	0.001	<1	0.46	0.005	0.05	<0.1	<0.01	1.0	<0.1	<0.05	2	<0.5	<0.2
SOR-10	Rock			3	16	1.73	21	0.298	3	1.77	0.063	0.07	<0.1	<0.01	7.8	<0.1	<0.05	6	<0.5	<0.2
SOR-11	Rock			2	28	1.07	8	0.283	3	1.02	0.058	0.01	<0.1	<0.01	10.0	<0.1	<0.05	4	<0.5	<0.2
SOR-12	Rock			3	<1	1.16	14	0.239	<1	1.37	0.063	0.01	0.1	<0.01	6.7	<0.1	<0.05	6	<0.5	<0.2
AHKR-01	Rock			4	4	1.08	119	0.097	<1	1.84	0.038	0.15	<0.1	<0.01	3.3	0.1	0.07	5	<0.5	<0.2
AHKR-02	Rock			3	4	0.38	97	0.155	2	1.35	0.007	0.03	0.2	<0.01	3.5	<0.1	0.11	3	0.9	0.3
AHKR-03	Rock			5	18	1.16	510	0.253	<1	2.02	0.055	1.11	0.3	0.01	7.6	0.4	<0.05	4	0.7	<0.2
AHKR-04	Rock			19	7	0.18	96	0.001	<1	0.47	0.042	0.13	<0.1	<0.01	1.7	<0.1	<0.05	2	<0.5	<0.2
AHKR-05	Rock			20	6	0.13	123	0.002	<1	0.46	0.044	0.19	0.3	0.01	2.2	<0.1	<0.05	2	<0.5	<0.2
DIVR-01	Rock			7	7	1.99	28	0.002	3	0.41	0.040	0.07	<0.1	0.16	8.2	<0.1	0.44	2	<0.5	<0.2
DIVR-02	Rock			2	<1	5.32	5	<0.001	<1	0.04	0.008	<0.01	<0.1	<0.01	6.0	<0.1	<0.05	<1	<0.5	<0.2
DIVR-03	Rock			3	14	0.50	30	0.290	3	2.71	0.144	0.08	<0.1	0.17	6.4	<0.1	0.12	6	4.8	<0.2
DIVR-04	Rock			17	20	1.08	1508	<0.001	1	0.24	0.051	0.10	<0.1	0.07	5.8	<0.1	0.09	<1	<0.5	<0.2
DIVR-05	Rock			12	17	1.21	87	0.160	<1	2.20	0.138	0.10	0.5	0.01	6.7	<0.1	<0.05	7	<0.5	<0.2



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Client: **Kreft, Bernie**
 1 Locust Place
 Whitehorse YT Y1A 5G9 CANADA

Project: None Given
 Report Date: July 24, 2014

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Part: 1 of 2

CERTIFICATE OF ANALYSIS

VAN14001965.1

Method	WGHT	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Wgt	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	
Unit	kg	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	
MDL	0.01	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	
TNR-01	Rock	0.61	0.1	4.4	1.6	53	<0.1	6.8	14.7	509	2.31	<0.5	<0.5	0.6	80	<0.1	<0.1	<0.1	34	0.87	0.048



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CERTIFICATE OF ANALYSIS

VAN14001965.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	
Analyte	La	Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te	
Unit	ppm	ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
MDL	1	1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.1	0.05	1	0.5	0.2	
TNR-01	Rock	3	3	1.09	78	0.094	<1	1.64	0.029	0.16	<0.1	<0.01	4.4	<0.1	<0.05	3	<0.5	<0.2



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Client: **Kreft, Bernie**
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Submitted By: Bernie Kreft
Receiving Lab: Canada-Vancouver
Received: June 23, 2014
Report Date: July 14, 2014
Page: 1 of 5

CERTIFICATE OF ANALYSIS

VAN14001964.1

CLIENT JOB INFORMATION

Project: None Given
Shipment ID:
P.O. Number
Number of Samples: 114

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Procedure Code	Number of Samples	Code Description	Test Wgt (g)	Report Status	Lab
Dry at 60C	113	Dry at 60C			VAN
SS80	113	Dry at 60C sieve 100g to -80 mesh			VAN
AQ201	113	1:1:1 Aqua Regia digestion ICP-MS analysis	15	Completed	VAN

SAMPLE DISPOSAL

DISP-PLP Dispose of Pulp After 90 days
DISP-RJT-SOIL Immediate Disposal of Soil Reject

ADDITIONAL COMMENTS

Acme does not accept responsibility for samples left at the laboratory after 90 days without prior written instructions for sample storage or return.

Invoice To: **Kreft, Bernie**
1 Locust Place
Whitehorse YT Y1A 5G9
CANADA

CC:



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*** asterisk indicates that an analytical result could not be provided due to unusually high levels of interference from other elements.



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Project: None Given
Report Date: July 14, 2014

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CERTIFICATE OF ANALYSIS VAN14001964.1

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
				Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
				ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm		
				0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1
AJD-01	Soil			0.5	98.1	4.2	47	0.1	20.1	16.4	710	4.12	18.6	13.1	2.3	45	<0.1	0.6	0.7	91	0.66	0.030	14
AJD-02	Soil			0.6	127.4	2.6	51	<0.1	16.6	16.8	866	4.04	24.8	5.0	1.6	52	<0.1	0.4	0.4	84	0.73	0.070	11
AJD-03	Soil			0.7	139.0	2.5	55	<0.1	19.2	17.4	891	4.19	30.0	4.4	1.5	49	<0.1	0.5	0.3	83	0.79	0.053	9
AJD-04	Soil			0.6	95.2	3.3	50	<0.1	21.1	18.7	699	4.04	18.3	2.6	1.5	42	<0.1	0.3	0.5	88	0.57	0.028	6
AJD-05	Soil			0.6	43.1	5.2	48	0.2	17.0	11.0	359	2.94	12.3	4.4	2.4	36	<0.1	0.3	0.3	67	0.42	0.061	9
AJD-06	Soil			0.4	99.1	2.9	58	<0.1	21.4	19.0	830	3.97	28.2	4.5	1.7	47	<0.1	0.4	0.2	82	0.66	0.029	10
AJD-07	Soil			0.2	114.6	0.7	53	<0.1	19.0	31.2	715	5.10	9.5	2.8	0.9	55	<0.1	0.1	<0.1	108	1.54	0.072	6
AJD-08	Soil			0.7	57.9	2.3	51	<0.1	25.6	18.1	737	3.82	22.9	2.0	1.4	48	<0.1	0.3	0.2	78	0.72	0.027	6
AJD-09	Soil			0.7	26.7	5.2	41	<0.1	14.1	10.2	467	2.79	11.1	1.0	1.8	37	<0.1	0.5	0.2	64	0.43	0.032	7
AJD-10	Soil			2.3	311.4	3.8	42	0.3	21.6	25.1	507	3.60	22.7	8.0	1.9	36	<0.1	0.3	0.4	71	0.51	0.046	8
AJD-11	Soil			0.8	38.9	6.0	47	<0.1	8.4	8.3	320	2.88	8.1	0.9	5.6	80	<0.1	0.3	0.2	58	0.44	0.026	14
AJD-12	Soil			2.4	117.0	4.8	46	0.5	17.3	12.5	374	3.86	12.2	8.3	2.2	31	<0.1	0.5	0.1	85	0.31	0.021	8
AJD-13	Soil			0.8	41.0	5.7	43	<0.1	8.3	9.0	323	3.07	11.1	2.9	5.4	64	<0.1	0.3	0.2	68	0.57	0.039	18
AJD-14	Soil			5.0	72.2	5.8	43	<0.1	12.3	9.5	290	3.41	9.6	1.5	4.1	47	<0.1	0.3	0.2	69	0.48	0.049	15
AJD-15	Soil			2.8	44.2	4.5	36	<0.1	13.2	7.8	245	2.31	5.9	5.6	2.0	30	<0.1	0.2	0.1	56	0.35	0.030	7
AHK-01	Soil			0.6	16.8	8.3	49	<0.1	10.4	6.9	353	2.40	7.6	0.7	3.8	38	<0.1	0.3	0.1	51	0.30	0.038	12
AHK-02	Soil			0.9	50.7	8.9	66	<0.1	13.1	15.8	825	3.68	13.0	1.8	1.5	62	<0.1	0.3	<0.1	72	0.38	0.045	9
AHK-03	Soil			0.6	41.4	14.4	59	<0.1	10.7	10.9	566	3.05	7.3	6.7	2.4	36	<0.1	0.3	<0.1	60	0.30	0.030	11
AHK-04	Soil			0.6	41.3	10.2	72	<0.1	13.7	10.6	471	3.03	6.6	1.4	2.0	27	0.1	0.3	<0.1	68	0.25	0.029	8
AHK-05	Soil			0.5	58.6	7.4	62	<0.1	15.4	14.6	604	3.64	6.0	3.6	2.1	40	<0.1	0.2	<0.1	80	0.31	0.031	8
AHK-06	Soil			1.9	33.7	9.5	87	<0.1	13.7	9.1	411	2.86	6.9	1.9	3.1	40	<0.1	0.3	0.3	61	0.28	0.029	9
AHK-07	Soil			6.2	300.3	20.7	92	0.5	11.4	8.9	340	3.13	8.2	4.5	3.4	26	0.2	0.5	0.6	64	0.12	0.022	11
AHK-08	Soil			5.5	28.6	6.0	41	<0.1	12.6	7.3	395	2.16	6.0	6.0	2.4	81	<0.1	0.3	0.1	46	0.36	0.055	9
AHK-09	Soil			1.8	45.2	14.8	105	<0.1	10.5	7.8	593	2.71	7.1	4.2	3.4	51	<0.1	0.3	0.3	55	0.40	0.070	11
AHK-10	Soil			1.1	29.5	6.8	56	0.2	10.1	7.5	370	2.42	5.4	4.5	3.1	35	<0.1	0.3	0.2	54	0.31	0.058	13
AHK-11	Soil			6.9	164.8	15.6	123	<0.1	8.5	12.3	847	4.04	5.5	5.4	5.7	37	<0.1	0.7	0.6	76	0.30	0.074	20
AHK-12	Soil			2.1	125.5	12.4	107	<0.1	8.2	9.4	728	3.14	7.3	7.2	5.6	58	0.1	0.4	0.5	63	0.44	0.058	24
AHK-13	Soil			0.7	33.3	6.2	67	<0.1	11.8	9.0	519	2.74	7.8	2.2	3.3	52	0.1	0.4	0.1	59	0.42	0.064	16
AHK-14	Soil			0.5	27.6	5.7	49	<0.1	12.3	8.3	536	2.38	7.1	4.7	3.4	45	<0.1	0.4	0.1	53	0.33	0.073	12
AHK-15	Soil			1.3	16.5	5.8	43	<0.1	7.9	7.1	445	2.07	7.2	23.9	2.5	50	<0.1	0.5	0.1	44	0.37	0.080	11

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Client: **Kreft, Bernie**
 1 Locust Place
 Whitehorse YT Y1A 5G9 CANADA

Project: None Given
 Report Date: July 14, 2014

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Part: 2 of 2

CERTIFICATE OF ANALYSIS

VAN14001964.1

Method	Analyte	Unit	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	
			Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
MDL			ppm	%	ppm	%	ppm	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
			1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	
AJD-01	Soil		29	0.81	112	0.066	1	2.25	0.058	0.06	<0.1	0.05	10.8	0.1	<0.05	6	<0.5	0.4
AJD-02	Soil		23	0.68	139	0.068	<1	1.76	0.039	0.13	<0.1	0.04	9.5	0.1	<0.05	5	<0.5	<0.2
AJD-03	Soil		30	0.90	123	0.059	<1	2.08	0.035	0.09	<0.1	0.03	11.8	<0.1	<0.05	6	<0.5	<0.2
AJD-04	Soil		34	0.89	148	0.088	<1	2.80	0.022	0.09	<0.1	0.02	7.7	0.2	<0.05	7	<0.5	<0.2
AJD-05	Soil		27	0.62	106	0.071	1	2.10	0.018	0.11	<0.1	0.03	5.7	<0.1	<0.05	5	<0.5	<0.2
AJD-06	Soil		34	1.08	112	0.071	<1	2.42	0.027	0.06	<0.1	0.04	12.4	<0.1	<0.05	6	0.6	<0.2
AJD-07	Soil		28	0.65	101	0.040	<1	2.89	0.056	0.19	<0.1	0.01	14.3	0.2	<0.05	6	<0.5	<0.2
AJD-08	Soil		35	1.06	123	0.078	<1	2.42	0.028	0.05	<0.1	0.01	8.5	<0.1	<0.05	6	<0.5	<0.2
AJD-09	Soil		23	0.60	121	0.045	1	1.86	0.024	0.05	<0.1	0.02	4.7	0.1	<0.05	5	<0.5	<0.2
AJD-10	Soil		35	0.68	87	0.108	<1	2.34	0.032	0.12	0.4	0.04	6.0	0.3	<0.05	6	<0.5	<0.2
AJD-11	Soil		15	0.42	226	0.026	<1	2.34	0.042	0.07	<0.1	0.02	5.8	0.1	<0.05	6	<0.5	<0.2
AJD-12	Soil		28	0.68	63	0.068	<1	2.73	0.032	0.11	<0.1	0.03	7.3	<0.1	<0.05	7	<0.5	<0.2
AJD-13	Soil		16	0.56	110	0.039	<1	2.31	0.032	0.06	<0.1	0.03	7.0	0.2	<0.05	6	0.5	<0.2
AJD-14	Soil		23	0.51	95	0.044	<1	2.44	0.027	0.13	<0.1	0.03	6.8	<0.1	<0.05	6	<0.5	<0.2
AJD-15	Soil		22	0.46	83	0.073	<1	1.74	0.033	0.09	0.1	0.01	3.7	<0.1	<0.05	5	<0.5	<0.2
AHK-01	Soil		18	0.40	150	0.044	<1	1.59	0.019	0.04	<0.1	0.03	4.3	<0.1	<0.05	5	<0.5	<0.2
AHK-02	Soil		16	0.96	110	0.020	<1	2.27	0.014	0.05	<0.1	0.02	5.0	<0.1	<0.05	6	<0.5	<0.2
AHK-03	Soil		17	0.63	90	0.029	<1	1.79	0.014	0.09	<0.1	0.02	4.9	<0.1	<0.05	5	<0.5	<0.2
AHK-04	Soil		21	0.67	102	0.041	<1	2.30	0.015	0.05	0.1	0.08	4.3	0.1	<0.05	6	<0.5	<0.2
AHK-05	Soil		22	1.04	82	0.049	<1	2.43	0.014	0.10	<0.1	0.01	6.0	<0.1	<0.05	6	<0.5	<0.2
AHK-06	Soil		22	0.56	225	0.074	<1	2.01	0.016	0.10	0.1	0.02	4.2	0.1	<0.05	6	<0.5	<0.2
AHK-07	Soil		17	0.55	95	0.043	<1	2.33	0.015	0.09	0.2	0.04	4.9	0.2	<0.05	6	<0.5	<0.2
AHK-08	Soil		15	0.33	331	0.044	<1	1.51	0.020	0.07	0.1	0.02	3.2	<0.1	<0.05	4	<0.5	<0.2
AHK-09	Soil		16	0.52	217	0.056	<1	1.48	0.018	0.08	0.1	0.03	4.2	0.1	<0.05	4	<0.5	<0.2
AHK-10	Soil		21	0.40	175	0.068	<1	1.65	0.016	0.07	0.1	0.03	3.9	0.1	<0.05	5	<0.5	<0.2
AHK-11	Soil		16	0.72	225	0.043	<1	2.17	0.017	0.17	0.3	0.01	6.7	0.4	<0.05	8	<0.5	<0.2
AHK-12	Soil		16	0.63	208	0.066	<1	1.57	0.029	0.10	0.2	0.06	8.6	0.2	<0.05	6	<0.5	<0.2
AHK-13	Soil		16	0.50	250	0.061	<1	1.80	0.025	0.13	0.1	0.03	5.4	0.1	<0.05	5	<0.5	<0.2
AHK-14	Soil		18	0.37	184	0.045	<1	1.60	0.016	0.07	<0.1	0.04	4.5	0.1	<0.05	4	<0.5	<0.2
AHK-15	Soil		15	0.31	178	0.029	<1	1.09	0.015	0.08	<0.1	0.04	3.2	<0.1	<0.05	4	<0.5	<0.2

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Client: **Kreft, Bernie**
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Project: None Given
 Report Date: July 14, 2014

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CERTIFICATE OF ANALYSIS VAN14001964.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1	
AHK-16	Soil	0.4	10.4	3.6	46	<0.1	4.6	4.1	307	1.22	2.6	<0.5	0.4	53	0.2	0.2	<0.1	27	0.50	0.052	9
AHK-17	Soil	0.3	6.4	2.3	21	<0.1	3.0	4.1	423	1.02	1.5	4.9	0.9	16	<0.1	<0.1	<0.1	24	0.13	0.025	7
AHK-18	Soil	0.8	15.3	5.9	61	<0.1	8.1	8.9	820	3.06	7.3	2.5	5.9	39	0.2	0.4	<0.1	38	0.35	0.044	36
AHK-19	Soil	0.7	18.2	6.3	36	<0.1	8.7	6.3	481	2.06	9.3	1.4	4.0	64	0.1	0.3	<0.1	40	0.55	0.044	21
AHK-20	Soil	1.6	30.3	8.3	55	<0.1	13.7	11.3	619	3.00	26.6	5.4	1.7	77	0.1	0.5	0.1	56	0.42	0.071	11
AHK-21	Soil	1.2	31.5	6.6	46	<0.1	14.3	8.6	580	2.51	23.8	3.2	3.1	74	<0.1	0.5	0.1	48	0.56	0.066	15
WID-01	Soil	0.4	15.4	4.0	28	<0.1	14.7	5.4	188	1.89	6.0	4.6	3.9	23	<0.1	0.4	<0.1	44	0.32	0.058	21
WID-02	Soil	0.4	9.9	4.4	30	<0.1	8.9	4.6	228	1.48	3.2	3.7	1.6	25	<0.1	0.3	<0.1	37	0.24	0.022	6
WID-03	Soil	0.4	14.2	4.6	31	<0.1	13.6	6.1	161	1.99	7.3	3.6	3.5	28	<0.1	0.4	<0.1	51	0.29	0.056	9
WID-04	Soil	0.4	23.7	5.6	40	<0.1	15.6	6.5	210	2.36	8.2	2.1	3.6	44	<0.1	0.4	<0.1	55	0.33	0.037	8
WID-05	Soil	0.3	13.9	7.2	73	<0.1	13.9	7.9	465	2.77	8.0	2.2	3.0	107	<0.1	0.3	<0.1	56	0.92	0.087	8
WID-06	Soil	0.4	16.1	4.4	31	<0.1	14.4	5.5	199	1.90	6.4	2.3	3.7	24	<0.1	0.4	0.1	46	0.28	0.061	13
WID-07	Soil	0.3	11.9	4.7	30	<0.1	13.0	5.5	195	1.77	5.0	1.6	2.9	23	<0.1	0.3	0.1	40	0.27	0.053	12
WID-08	Soil	0.3	19.6	5.3	43	<0.1	15.6	6.5	323	2.13	6.2	1.8	3.4	48	<0.1	0.4	<0.1	52	0.56	0.087	15
WID-09	Soil	0.4	21.3	5.7	36	<0.1	17.8	7.4	320	2.08	7.2	14.1	3.0	40	0.1	0.4	0.1	46	0.65	0.084	13
WID-10	Soil	0.4	20.8	5.7	34	<0.1	15.7	7.1	328	1.92	6.1	1.9	2.0	43	<0.1	0.3	0.1	46	0.56	0.075	13
WID-11	Soil	0.4	21.6	4.7	32	<0.1	18.7	6.2	230	2.03	6.3	5.2	4.2	28	<0.1	0.5	<0.1	49	0.33	0.045	20
WID-12	Soil	0.4	22.1	6.7	50	<0.1	16.2	7.3	284	2.57	7.5	1.9	2.8	46	<0.1	0.3	<0.1	55	0.33	0.029	8
WID-13	Soil	0.2	12.5	4.4	31	<0.1	12.5	5.3	216	1.69	5.3	1.7	3.2	27	<0.1	0.3	<0.1	40	0.32	0.051	10
WID-14	Soil	0.5	13.4	6.6	45	<0.1	13.8	6.4	207	2.26	6.5	1.3	2.8	33	<0.1	0.3	<0.1	58	0.34	0.019	22
WID-15	Soil	0.4	11.3	7.1	65	<0.1	13.9	8.4	369	2.75	6.2	2.6	2.2	64	<0.1	0.3	<0.1	56	0.50	0.083	7
WIL-01	Soil	0.6	12.9	5.3	38	<0.1	14.8	7.0	234	2.54	6.5	3.4	3.5	24	<0.1	0.4	<0.1	56	0.23	0.030	10
WIL-02	Soil	0.5	21.4	6.8	41	<0.1	19.9	8.6	198	2.82	9.2	5.8	5.3	27	<0.1	0.4	0.1	63	0.21	0.021	18
WIL-03	Soil	0.4	20.6	6.5	50	<0.1	22.9	9.1	255	3.03	11.3	2.9	5.8	29	<0.1	0.3	0.1	66	0.28	0.039	14
WIL-04	Soil	0.4	18.6	5.5	44	<0.1	19.7	7.5	251	2.58	9.6	2.2	4.5	29	<0.1	0.4	<0.1	61	0.30	0.048	18
WIL-05	Soil	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
WIL-06	Soil	0.3	12.6	4.4	110	<0.1	13.1	11.7	700	3.69	3.4	20.7	2.5	87	<0.1	<0.1	<0.1	75	0.61	0.152	10
WIL-07	Soil	0.2	14.3	4.7	29	<0.1	16.4	6.2	262	1.83	5.9	3.4	4.0	26	<0.1	0.3	<0.1	44	0.36	0.082	16
WIL-08	Soil	0.4	22.0	5.7	44	<0.1	20.6	8.3	267	2.62	7.5	2.5	4.3	36	<0.1	0.3	0.1	62	0.44	0.056	17
WIL-09	Soil	0.4	9.4	7.8	70	<0.1	13.2	8.8	419	2.67	6.0	1.9	2.8	109	<0.1	0.2	<0.1	57	0.82	0.062	10

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Project: None Given
 Report Date: July 14, 2014

Page: 3 of 5

Part: 2 of 2

CERTIFICATE OF ANALYSIS

VAN14001964.1

Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
				Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
				ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm		
				1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	
AHK-16	Soil			10	0.21	180	0.022	<1	0.84	0.030	0.09	<0.1	0.03	2.2	<0.1	<0.05	3	<0.5	<0.2
AHK-17	Soil			6	0.13	86	0.026	<1	0.50	0.033	0.05	0.1	0.02	1.8	<0.1	<0.05	2	<0.5	<0.2
AHK-18	Soil			12	0.20	296	0.011	<1	1.03	0.025	0.15	0.1	0.03	7.4	<0.1	<0.05	4	<0.5	<0.2
AHK-19	Soil			13	0.28	328	0.021	<1	1.21	0.018	0.22	0.1	0.03	5.5	<0.1	<0.05	4	<0.5	<0.2
AHK-20	Soil			19	0.39	251	0.017	<1	1.54	0.018	0.11	<0.1	0.06	4.5	0.1	<0.05	5	<0.5	<0.2
AHK-21	Soil			17	0.33	343	0.016	<1	1.26	0.020	0.08	0.1	0.09	5.9	<0.1	<0.05	4	<0.5	<0.2
WID-01	Soil			24	0.34	92	0.048	2	0.91	0.014	0.05	0.1	<0.01	4.3	<0.1	<0.05	3	<0.5	<0.2
WID-02	Soil			17	0.28	132	0.047	1	1.04	0.023	0.05	0.1	<0.01	2.0	<0.1	<0.05	3	<0.5	<0.2
WID-03	Soil			24	0.35	110	0.057	1	1.17	0.014	0.07	0.1	<0.01	3.0	<0.1	<0.05	3	<0.5	<0.2
WID-04	Soil			26	0.40	157	0.065	1	1.60	0.019	0.06	<0.1	<0.01	4.5	<0.1	<0.05	5	<0.5	<0.2
WID-05	Soil			17	0.72	169	0.112	1	2.87	0.021	0.09	<0.1	<0.01	3.7	<0.1	<0.05	10	<0.5	<0.2
WID-06	Soil			24	0.35	129	0.053	1	1.04	0.012	0.06	0.1	0.02	4.0	<0.1	<0.05	4	<0.5	<0.2
WID-07	Soil			24	0.34	143	0.057	1	0.99	0.014	0.06	0.1	0.02	3.6	<0.1	<0.05	3	<0.5	<0.2
WID-08	Soil			24	0.43	174	0.068	2	1.28	0.022	0.07	0.1	0.06	4.9	<0.1	<0.05	4	<0.5	<0.2
WID-09	Soil			24	0.43	218	0.056	3	1.08	0.019	0.06	0.2	0.02	3.7	<0.1	<0.05	4	<0.5	<0.2
WID-10	Soil			23	0.38	197	0.055	<1	1.20	0.022	0.05	0.2	0.02	3.3	<0.1	<0.05	4	<0.5	<0.2
WID-11	Soil			27	0.38	156	0.066	1	1.23	0.017	0.05	0.1	0.03	5.4	<0.1	<0.05	4	<0.5	<0.2
WID-12	Soil			23	0.52	166	0.072	<1	2.11	0.013	0.06	<0.1	<0.01	3.4	<0.1	<0.05	7	<0.5	<0.2
WID-13	Soil			21	0.37	122	0.061	<1	0.96	0.015	0.05	0.1	0.01	2.7	<0.1	<0.05	3	<0.5	<0.2
WID-14	Soil			25	0.48	79	0.091	<1	1.66	0.014	0.06	<0.1	0.02	4.1	<0.1	<0.05	6	<0.5	<0.2
WID-15	Soil			19	0.75	90	0.103	1	2.47	0.012	0.12	<0.1	<0.01	3.6	<0.1	<0.05	9	<0.5	<0.2
WIL-01	Soil			29	0.38	177	0.080	<1	1.51	0.018	0.08	0.2	0.07	3.7	<0.1	<0.05	4	<0.5	<0.2
WIL-02	Soil			37	0.44	110	0.086	<1	1.73	0.014	0.09	0.1	0.01	6.7	<0.1	<0.05	5	<0.5	<0.2
WIL-03	Soil			36	0.51	148	0.096	<1	1.84	0.013	0.12	0.2	0.02	5.8	<0.1	<0.05	6	<0.5	<0.2
WIL-04	Soil			31	0.49	115	0.084	<1	1.61	0.024	0.10	<0.1	0.01	5.6	<0.1	<0.05	5	<0.5	<0.2
WIL-05	Soil			L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.	L.N.R.
WIL-06	Soil			19	1.20	240	0.177	2	2.48	0.014	0.58	<0.1	<0.01	3.6	0.2	<0.05	10	<0.5	<0.2
WIL-07	Soil			22	0.36	116	0.052	1	0.87	0.015	0.09	0.1	0.01	3.8	<0.1	<0.05	3	<0.5	<0.2
WIL-08	Soil			34	0.51	127	0.080	<1	1.47	0.021	0.07	0.1	0.02	6.2	<0.1	<0.05	5	<0.5	<0.2
WIL-09	Soil			22	0.64	176	0.120	2	2.39	0.022	0.07	0.1	<0.01	4.5	<0.1	<0.05	10	<0.5	<0.2

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.

CERTIFICATE OF ANALYSIS

VAN14001964.1

Method	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201
Analyte	Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La	
Unit	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	ppm	%	%	ppm	
MDL	0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	0.1	2	0.01	0.001	1	
WIL-10	Soil	0.3	15.6	5.2	46	<0.1	15.0	6.5	244	1.82	5.7	3.0	3.6	31	<0.1	0.3	<0.1	42	0.41	0.064	13
WIL-11	Soil	0.3	16.8	7.1	86	<0.1	15.3	10.4	498	3.33	6.1	1.7	4.2	59	<0.1	0.2	<0.1	69	0.53	0.068	19
WIL-12	Soil	0.3	16.5	9.4	107	<0.1	16.5	12.3	689	3.89	9.4	1.7	4.1	73	<0.1	0.3	<0.1	75	0.70	0.089	9
WIL-13	Soil	0.4	21.5	7.3	69	<0.1	17.4	9.7	463	3.10	7.9	1.4	5.2	96	<0.1	0.4	<0.1	71	0.64	0.044	12
WIL-14	Soil	0.3	17.1	7.1	49	<0.1	17.9	8.4	267	2.82	8.6	1.5	5.0	79	<0.1	0.3	<0.1	59	0.65	0.029	9
WIL-15	Soil	0.5	21.4	6.8	59	<0.1	16.5	9.5	434	2.52	6.3	4.4	4.3	68	0.1	0.4	<0.1	57	0.78	0.086	28
DIV-01	Soil	0.6	63.7	5.3	54	<0.1	24.8	15.5	578	3.84	10.8	12.4	2.4	83	0.1	0.5	<0.1	117	1.36	0.039	10
DIV-02	Soil	1.1	57.1	5.3	48	<0.1	29.9	13.5	491	3.12	17.4	6.7	1.8	124	0.2	0.7	<0.1	83	3.46	0.043	9
DIV-03	Soil	0.2	98.1	0.8	35	<0.1	16.7	29.4	647	6.32	1.1	2.6	0.4	84	<0.1	<0.1	<0.1	301	2.09	0.022	2
DIV-04	Soil	3.4	122.3	3.5	80	0.2	24.2	36.3	1507	7.65	7.5	4.1	0.9	56	0.2	0.8	<0.1	121	3.33	0.049	7
DIV-05	Soil	1.3	74.2	6.4	59	<0.1	54.0	20.3	685	3.94	12.8	5.0	1.9	37	<0.1	0.9	0.1	105	0.58	0.049	9
DIV-06	Soil	1.5	56.4	8.6	74	<0.1	47.4	20.6	702	4.58	21.6	4.5	2.0	25	<0.1	1.6	0.1	105	0.41	0.041	9
DIV-07	Soil	2.1	64.9	8.8	71	<0.1	46.0	18.9	790	4.21	19.9	5.3	2.2	30	0.2	1.0	0.1	101	0.40	0.079	11
DIV-08	Soil	1.5	55.6	7.7	79	<0.1	50.0	17.3	616	3.76	16.3	6.4	2.4	21	0.2	1.3	0.2	109	0.30	0.042	11
DIV-09	Soil	2.1	53.5	9.9	83	<0.1	55.8	17.9	644	4.05	34.3	5.2	1.8	23	0.1	1.9	0.2	78	0.36	0.105	9
DIV-10	Soil	1.6	56.2	7.8	85	0.2	56.2	17.5	990	3.79	23.3	6.0	2.0	21	0.3	1.3	0.2	98	0.36	0.059	10
DIV-11	Soil	1.5	44.5	8.6	74	<0.1	62.6	17.8	530	3.69	21.4	35.0	2.3	19	0.1	1.6	0.3	78	0.29	0.061	10
DIV-12	Soil	1.2	65.2	8.4	74	<0.1	61.3	19.0	698	4.12	18.0	<0.5	2.3	22	<0.1	1.2	0.2	99	0.35	0.064	9
DIV-13	Soil	1.1	139.4	5.2	65	<0.1	42.6	24.0	875	4.50	8.8	8.2	2.2	54	<0.1	0.5	0.1	130	0.69	0.099	11
SOD-01	Soil	1.0	94.9	6.3	63	<0.1	38.0	14.8	487	3.57	12.8	3.2	2.9	29	0.1	0.9	<0.1	88	0.38	0.033	9
SOD-02	Soil	1.3	278.7	4.7	61	<0.1	36.4	16.2	659	3.88	14.8	4.0	2.7	34	<0.1	0.7	<0.1	107	0.50	0.035	12
SOD-03	Soil	1.3	146.3	5.1	72	0.1	31.7	21.7	904	4.38	13.5	11.3	1.6	90	0.2	0.7	<0.1	114	4.28	0.076	9
SOD-04	Soil	1.3	153.6	5.4	77	0.1	45.2	23.7	916	4.51	18.2	11.4	2.1	64	0.2	0.6	<0.1	116	2.08	0.076	12
SOD-05	Soil	2.3	130.2	5.6	76	<0.1	37.6	23.0	937	4.24	26.2	13.2	1.8	93	0.4	0.9	<0.1	110	4.89	0.076	11
SOD-06	Soil	1.3	52.0	5.5	47	<0.1	32.8	11.6	520	2.74	14.3	5.9	2.2	47	<0.1	0.9	0.1	72	1.25	0.074	11
SOD-07	Soil	1.1	41.5	6.7	79	<0.1	22.9	12.4	898	2.70	12.8	5.9	1.5	40	0.4	0.7	0.2	65	0.78	0.069	13
SOD-08	Soil	0.9	53.4	5.7	63	<0.1	30.1	12.6	537	3.11	14.8	73.1	1.9	48	0.2	0.8	0.1	78	0.72	0.062	11
SOD-09	Soil	1.1	85.5	3.7	52	<0.1	19.3	12.7	447	3.26	7.4	6.3	1.6	24	0.1	0.4	<0.1	91	0.56	0.043	6
SOD-10	Soil	0.8	28.8	6.2	47	<0.1	12.2	8.9	546	2.43	8.1	29.8	3.5	43	<0.1	0.5	0.1	56	0.35	0.072	12
TSD-01	Soil	0.6	18.9	7.4	40	<0.1	15.2	6.8	204	2.16	7.5	5.4	3.6	22	<0.1	0.3	0.2	55	0.35	0.052	13

CERTIFICATE OF ANALYSIS

VAN14001964.1

Method	Analyte	Unit	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	
			Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te
MDL			ppm	%	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	
			1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2	
WIL-10	Soil		23	0.46	151	0.081	<1	1.08	0.019	0.05	0.1	0.01	3.3	<0.1	<0.05	4	0.8	<0.2
WIL-11	Soil		22	0.93	109	0.146	<1	2.58	0.019	0.07	0.1	0.02	4.7	<0.1	<0.05	11	<0.5	<0.2
WIL-12	Soil		22	1.15	169	0.167	<1	3.19	0.022	0.09	<0.1	<0.01	4.7	<0.1	<0.05	12	<0.5	<0.2
WIL-13	Soil		28	0.67	190	0.139	2	2.92	0.022	0.14	<0.1	<0.01	5.4	<0.1	<0.05	10	<0.5	<0.2
WIL-14	Soil		29	0.55	154	0.102	<1	2.49	0.025	0.07	<0.1	<0.01	4.2	<0.1	<0.05	8	<0.5	<0.2
WIL-15	Soil		27	0.59	164	0.110	1	1.83	0.025	0.09	0.2	0.03	6.0	<0.1	<0.05	7	<0.5	<0.2
DIV-01	Soil		35	0.90	153	0.117	6	2.15	0.037	0.07	<0.1	0.09	12.8	<0.1	<0.05	6	<0.5	<0.2
DIV-02	Soil		36	0.82	160	0.095	3	1.63	0.036	0.07	<0.1	0.06	7.9	<0.1	<0.05	5	<0.5	<0.2
DIV-03	Soil		10	3.18	143	0.135	9	5.38	0.172	0.10	<0.1	0.05	23.0	<0.1	<0.05	10	<0.5	<0.2
DIV-04	Soil		28	0.95	97	0.136	18	3.25	0.013	0.06	<0.1	0.11	20.3	<0.1	0.15	11	2.0	<0.2
DIV-05	Soil		88	1.31	186	0.140	1	2.00	0.019	0.17	0.1	0.08	7.7	0.1	<0.05	6	1.0	<0.2
DIV-06	Soil		59	1.37	223	0.105	2	2.55	0.013	0.10	0.1	0.09	7.0	0.1	<0.05	7	<0.5	<0.2
DIV-07	Soil		52	1.09	206	0.080	3	2.33	0.012	0.09	0.1	0.04	7.4	0.1	<0.05	7	0.5	<0.2
DIV-08	Soil		68	1.04	231	0.115	4	2.28	0.011	0.15	0.2	0.07	8.7	0.2	<0.05	6	1.2	<0.2
DIV-09	Soil		57	0.99	148	0.063	3	2.13	0.010	0.11	0.2	0.10	6.2	0.2	<0.05	5	0.6	<0.2
DIV-10	Soil		60	0.90	299	0.054	1	1.76	0.011	0.08	0.1	0.03	10.5	0.2	<0.05	5	1.0	<0.2
DIV-11	Soil		65	1.08	154	0.071	5	2.21	0.009	0.10	0.2	0.03	6.1	0.2	<0.05	5	<0.5	<0.2
DIV-12	Soil		64	1.14	186	0.111	1	2.45	0.011	0.10	0.2	0.04	6.8	0.1	<0.05	7	<0.5	<0.2
DIV-13	Soil		80	1.98	164	0.171	3	2.66	0.021	0.14	0.2	0.03	7.6	<0.1	<0.05	7	<0.5	<0.2
SOD-01	Soil		50	0.96	187	0.085	2	2.51	0.011	0.07	0.2	0.05	7.4	0.1	<0.05	5	<0.5	<0.2
SOD-02	Soil		52	1.06	191	0.100	3	2.44	0.015	0.06	0.1	0.05	9.9	<0.1	<0.05	6	<0.5	<0.2
SOD-03	Soil		46	1.41	183	0.125	4	2.26	0.028	0.10	0.1	0.18	10.7	<0.1	<0.05	7	<0.5	<0.2
SOD-04	Soil		53	1.47	178	0.117	4	2.37	0.033	0.10	<0.1	0.12	12.3	<0.1	<0.05	7	<0.5	<0.2
SOD-05	Soil		42	1.29	188	0.103	5	1.87	0.021	0.10	<0.1	0.15	11.1	<0.1	<0.05	6	<0.5	<0.2
SOD-06	Soil		38	0.62	116	0.071	3	1.06	0.019	0.05	<0.1	0.09	6.9	0.2	<0.05	3	<0.5	<0.2
SOD-07	Soil		35	0.57	325	0.069	2	1.59	0.017	0.15	0.1	0.04	6.1	<0.1	<0.05	5	<0.5	<0.2
SOD-08	Soil		43	0.73	316	0.078	6	1.75	0.017	0.16	0.1	0.04	8.1	<0.1	0.06	5	<0.5	<0.2
SOD-09	Soil		30	0.71	159	0.048	3	2.14	0.013	0.10	<0.1	0.02	8.1	<0.1	<0.05	6	<0.5	<0.2
SOD-10	Soil		19	0.34	196	0.050	<1	1.58	0.014	0.07	0.1	0.05	4.8	0.1	<0.05	4	<0.5	<0.2
TSD-01	Soil		30	0.43	132	0.067	3	1.42	0.012	0.04	0.2	0.05	3.3	<0.1	<0.05	5	<0.5	<0.2



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Project: None Given

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Method	Analyte	Unit	MDL	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201	AQ201		
				Mo	Cu	Pb	Zn	Ag	Ni	Co	Mn	Fe	As	Au	Th	Sr	Cd	Sb	Bi	V	Ca	P	La
				ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppb	ppm	ppm	ppm	ppm	ppm	%	%	ppm	ppm		
				0.1	0.1	0.1	1	0.1	0.1	0.1	1	0.01	0.5	0.5	0.1	1	0.1	0.1	2	0.01	0.001	1	
TSD-02	Soil			0.5	33.2	6.2	36	<0.1	24.2	8.9	423	2.27	9.4	1.7	4.0	32	<0.1	0.5	<0.1	54	0.51	0.067	14
TSD-03	Soil			0.6	26.6	6.7	39	<0.1	26.0	9.8	421	2.45	10.0	3.8	4.2	32	<0.1	0.6	0.1	62	0.47	0.068	16
TSD-04	Soil			0.4	43.6	5.5	38	<0.1	27.3	9.3	380	2.15	9.2	2.0	3.8	41	<0.1	0.5	<0.1	63	0.58	0.083	18
TSD-05	Soil			0.6	32.7	5.7	41	<0.1	38.8	10.6	302	2.79	9.4	2.4	4.5	35	0.1	0.5	<0.1	79	0.49	0.041	9
TSD-06	Soil			0.5	24.5	5.7	43	<0.1	27.8	9.3	312	2.54	8.6	2.5	4.1	36	<0.1	0.5	<0.1	72	0.44	0.037	12
TSD-07	Soil			0.5	29.7	5.1	37	<0.1	28.6	9.0	269	2.52	7.5	0.8	3.9	33	<0.1	0.4	<0.1	72	0.37	0.020	10
TSD-08	Soil			0.5	27.0	4.5	37	<0.1	26.9	9.2	297	2.28	6.0	0.9	3.1	42	<0.1	0.4	<0.1	61	0.40	0.051	10
TSD-09	Soil			0.6	15.7	5.3	30	<0.1	18.8	7.0	190	1.99	5.9	1.5	2.7	20	<0.1	0.3	<0.1	51	0.19	0.024	8
TSD-10	Soil			0.3	27.9	5.2	34	<0.1	23.0	8.3	390	1.94	6.4	3.1	3.6	62	0.1	0.4	<0.1	50	1.65	0.085	13
TSD-11	Soil			0.5	25.3	6.4	39	<0.1	22.0	9.4	299	2.38	10.3	3.7	5.0	29	<0.1	0.6	0.1	56	0.45	0.071	16
TSD-12	Soil			0.6	57.0	4.0	40	<0.1	83.3	16.4	505	3.21	6.1	1.5	2.7	43	0.1	0.3	<0.1	89	0.76	0.036	13
TSD-13	Soil			0.6	29.3	4.9	42	<0.1	25.0	8.8	422	2.04	8.7	2.7	2.9	97	0.2	0.5	<0.1	54	2.06	0.082	12
TND-01	Soil			0.6	28.2	6.4	36	<0.1	29.9	8.8	323	2.34	9.4	3.4	4.9	29	<0.1	0.5	0.1	56	0.50	0.069	16
TND-02	Soil			0.7	26.8	5.1	33	<0.1	27.9	7.8	330	2.21	6.0	<0.5	4.2	36	<0.1	0.3	<0.1	61	0.35	0.031	14
TND-03	Soil			0.7	44.8	6.3	44	<0.1	32.7	11.5	422	3.38	10.4	4.8	4.6	38	<0.1	0.4	<0.1	83	0.57	0.030	16
TND-04	Soil			0.6	35.8	5.5	38	<0.1	30.8	9.1	425	2.43	6.7	3.7	3.9	45	<0.1	0.4	<0.1	61	0.56	0.055	15
TND-05	Soil			0.4	45.7	5.2	37	<0.1	36.8	10.7	308	2.74	9.0	4.3	4.3	41	<0.1	0.3	<0.1	77	0.49	0.035	14
TND-06	Soil			0.8	26.5	5.1	38	<0.1	28.2	9.1	285	2.41	7.6	0.9	2.7	35	<0.1	0.4	<0.1	65	0.45	0.056	9
TND-07	Soil			0.4	26.8	5.4	35	<0.1	25.4	7.9	371	2.23	6.3	17.8	3.9	37	<0.1	0.4	<0.1	55	0.48	0.057	16
TND-08	Soil			0.5	22.0	5.7	36	<0.1	21.4	8.2	353	2.02	7.8	4.4	4.0	29	<0.1	0.5	0.2	47	0.42	0.065	13
TND-09	Soil			0.5	18.8	5.3	33	<0.1	19.5	8.0	334	1.86	8.5	3.1	3.8	24	<0.1	0.6	0.2	41	0.36	0.058	14
TND-10	Soil			0.5	21.0	4.8	37	<0.1	25.5	8.1	314	2.07	5.9	4.2	3.6	39	<0.1	0.4	0.1	47	0.48	0.066	11
TND-11	Soil			0.4	27.6	5.1	38	<0.1	24.4	8.3	266	1.90	5.2	1.8	3.2	39	<0.1	0.4	0.1	45	0.59	0.063	12
DIVS-01	Soil			6.3	118.9	2.8	91	0.1	29.6	30.2	1053	6.99	6.5	8.6	0.8	78	0.4	0.8	<0.1	170	3.23	0.076	5



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Project: None Given
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CERTIFICATE OF ANALYSIS

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Method	Analyte	AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201		AQ201	
		Cr	Mg	Ba	Tl	B	Al	Na	K	W	Hg	Sc	Tl	S	Ga	Se	Te		
Unit		ppm	%	ppm	%	ppm	%	%	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm		
MDL		1	0.01	1	0.001	1	0.01	0.001	0.01	0.1	0.01	0.1	0.05	1	0.5	0.2			
TSD-02	Soil	32	0.48	163	0.061	3	1.08	0.017	0.04	0.2	0.07	6.7	<0.1	<0.05	3	<0.5	<0.2		
TSD-03	Soil	38	0.52	177	0.074	<1	1.27	0.015	0.05	0.2	0.05	7.2	<0.1	<0.05	4	<0.5	<0.2		
TSD-04	Soil	33	0.57	110	0.057	<1	1.12	0.020	0.04	0.3	0.06	6.6	<0.1	<0.05	3	<0.5	<0.2		
TSD-05	Soil	62	0.69	197	0.086	2	1.93	0.024	0.05	0.1	0.03	5.9	<0.1	<0.05	5	<0.5	<0.2		
TSD-06	Soil	45	0.55	230	0.078	2	1.70	0.014	0.05	0.2	0.02	5.6	<0.1	<0.05	4	0.9	<0.2		
TSD-07	Soil	52	0.55	226	0.082	2	1.75	0.012	0.04	0.2	0.01	4.9	<0.1	<0.05	5	<0.5	<0.2		
TSD-08	Soil	37	0.55	176	0.064	2	1.47	0.015	0.05	0.1	<0.01	4.3	<0.1	<0.05	4	0.5	<0.2		
TSD-09	Soil	31	0.38	150	0.060	<1	1.48	0.014	0.03	0.2	0.02	2.8	<0.1	<0.05	4	<0.5	<0.2		
TSD-10	Soil	30	0.52	184	0.074	2	1.01	0.040	0.04	<0.1	0.04	4.3	<0.1	<0.05	3	<0.5	<0.2		
TSD-11	Soil	36	0.48	127	0.068	2	1.22	0.014	0.06	0.2	0.03	5.5	<0.1	<0.05	3	<0.5	<0.2		
TSD-12	Soil	99	1.32	114	0.112	4	1.75	0.022	0.06	<0.1	0.03	8.6	<0.1	<0.05	5	<0.5	<0.2		
TSD-13	Soil	32	0.67	178	0.080	4	1.11	0.073	0.06	0.1	0.04	4.8	<0.1	<0.05	3	<0.5	<0.2		
TND-01	Soil	42	0.52	174	0.072	2	1.32	0.018	0.05	0.3	0.04	6.3	<0.1	<0.05	4	<0.5	<0.2		
TND-02	Soil	43	0.48	180	0.073	2	1.24	0.014	0.04	0.2	0.05	6.1	<0.1	<0.05	4	<0.5	<0.2		
TND-03	Soil	55	0.69	163	0.100	3	1.75	0.020	0.08	0.1	0.06	9.4	<0.1	<0.05	5	0.6	<0.2		
TND-04	Soil	42	0.57	200	0.072	3	1.34	0.026	0.05	0.1	0.06	6.8	<0.1	<0.05	4	<0.5	<0.2		
TND-05	Soil	71	0.67	150	0.096	2	1.76	0.014	0.06	<0.1	0.04	8.7	<0.1	<0.05	5	<0.5	<0.2		
TND-06	Soil	44	0.56	187	0.073	3	1.64	0.014	0.06	0.1	0.03	3.5	<0.1	<0.05	4	0.5	<0.2		
TND-07	Soil	38	0.54	196	0.066	<1	1.23	0.018	0.05	0.2	0.06	6.9	<0.1	<0.05	3	<0.5	<0.2		
TND-08	Soil	29	0.50	145	0.052	2	1.06	0.014	0.03	0.2	0.04	5.5	<0.1	<0.05	3	<0.5	<0.2		
TND-09	Soil	26	0.46	141	0.049	1	0.93	0.012	0.03	0.2	0.02	4.4	<0.1	<0.05	3	<0.5	<0.2		
TND-10	Soil	32	0.57	185	0.057	<1	1.32	0.016	0.05	0.1	0.02	3.6	<0.1	<0.05	4	0.7	<0.2		
TND-11	Soil	29	0.54	128	0.065	<1	1.05	0.023	0.05	0.2	0.03	4.4	<0.1	<0.05	3	<0.5	<0.2		
DIVS-01	Soil	40	1.36	86	0.224	43	3.73	0.031	0.05	0.1	0.10	13.7	0.2	0.59	11	3.9	<0.2		

This report supersedes all previous preliminary and final reports with this file number dated prior to the date on this certificate. Signature indicates final approval; preliminary reports are unsigned and should be used for reference only.