BRITISH COLUMBIA

**Ministry of Energy & Mines**
Energy & Minerals Division
Geological Survey Branch

**ASSESSMENT REPORT**
**TITLE PAGE AND SUMMARY**

TITLE OF REPORT [type of survey(s)]: Geochemical (rock, silt, twigs) and geological (mapping + prospecting) — TOTAL COST: 2650.00

AUTHOR(S): MIKKEL SCHAU — SIGNATURE(S): Mikkel Schau

NOTICE OF WORK PERMIT NUMBER(S)/DATE(S): N/A — YEAR OF WORK: 2010

STATEMENT OF WORK - CASH PAYMENT EVENT NUMBER(S)/DATE(S): 4471170, Feb 18 2010

PROPERTY NAME: "ALEJNE"

CLAIM NAME(S) (on which work was done): 509556

COMMODITIES SOUGHT: Cu

MINERAL INVENTORY MINFILE NUMBER(S), IF KNOWN: 092L-165

MINING DIVISION: Nanaimo — NTS: 092L

LATITUDE: 50 ° 16 ' 48 " LONGITUDE: 126 ° 3 ' " (at centre of work)

OWNER(S)

1) Mikkel Schau 2)

MAILING ADDRESS

1007 Barkway Tce
Brentwood Bay

OPERATOR(S) [who paid for the work]

1) Mikkel Schau 2)

MAILING ADDRESS

as above

PROPERTY GEOLOGY KEYWORDS (lithology, age, stratigraphy, structure, alteration, mineralization, size and attitude):

Vancouver Group, basalt, Triassic, Fault, Fault breccia, vein propylite, bx+cpy,

REFERENCES TO PREVIOUS ASSESSMENT WORK AND ASSESSMENT REPORT NUMBERS: 1983, 3235, 3403, 22409, 23906, 27745, 28327, 28927

(OVER)

| TYPE OF WORK IN THIS REPORT | EXTENT OF WORK (IN METRIC UNITS) | ON WHICH CLAIMS | PROJECT COSTS APPORTIONED |
|---|---|---|---|
| Ground, mapping | 1.5 ha | 509556 | 300.00 |
| Photo interpretation | | | |
| Magnetic | | | |
| Electromagnetic | | | |
| Induced Polarization | | | |
| Radiometric | | | |
| Seismic | | | |
| Other | | | |
| Airborne | | | |
| Soil | | | |
| Silt — ICP MS/Acme | 12 | 509556 | 550.00 |
| Rock — Icp MS/Acme | 15 | 509556 | 800.00 |
| Other — twigs / Actlabs | 14 | 509556 | 800.00 |
| Core | | | |
| Non core | | | |
| Sampling/assaying | | | |
| Petrographic | | | |
| Mineralographic | | | |
| Metallurgic | | | |
| PROSPECTING (scale, area) | 1 1/2 ha. | | 200.00 |
| Line/grid (kilometres) | | | |
| (scale, area) | | | |
| Legal surveys (scale, area) | | | |
| Road, local access (kilometres)/trail | | | |
| Trench (metres) | | | |
| Underground dev. (metres) | | | |
| Other | | | |

# Geochemical and geological studies

on

the

KLEJNE CLAIMS

Tenure 509556



Centered at 50.28 N and 126.05 W in 092L08 (092L030)
Nanaimo Mining District

for

Mikkel Schau

by

Mikkel Schau, P.Geo.

February 19, 2010

Submitted May 17, 2010

# SUMMARY


The Klejne claims (tenure 509556 cover some 165.19 ha including minfile 092L-165, a well known copper vein prospect which opened up prospecting in this area in the sixties.

Early work indicated localized geophysical responses and strong geochemical anomalies at Boyes Creek.. In 1972 several trenches provided a crude guide to the size of the deposit. The prospect has never been drilled. Later work in general area focused on other showings; not in claimed area.

The area was staked in 2004, pre MTO, and was expanded during the conversion to cells. The area has been held since then.

New work this year, includes stream sampling, float sampling and in situ lithogeochemical sampling as well as a biogeochemical orientation sampling program.

The principal positive result of this season is the reaffirmation of the presence of bornite and chalcopyrite in small veinlets in altered “greenstone”.. Lithochemistry of an in situ sample is shown below.(ICP-MS)

| Sample number | Cu, in ppm | Ag, in ppb | As, in ppm | Au, in ppb |
|---|---|---|---|---|
| 006512 | **1259** | 535 | 0.5 | 29.4 |

The results from the silt study confirm the anomalous nature of Boyes Creek with silt samples returning values .

An orange sized gossany massive pyrite float sample from Boyes Creek and an angular rip-up fragment of a 10 cm wide pyrite vein were found to be barren.

The geological map should be modified slightly, based on abundant angular debris and local subcrops to show that local granodiorite and Parsons Bay Formation are found to straddle the west side of the Adam River in this particular region.

The biogeochemistry showed that western hemlock twigs from trees in vicinity of Boyes Creek are not markedly different to trees from vicinity of neighboring streams. A new area has been located for further work near Adam river in southern part of claim. Twigs from here return anomalous values 3 times background.

# Table of Contents

# Introduction

The Klejne claim overlies the Boyes Creek minfile, a Minfile Prospect (092L165), along the western side of the Adam river, south of highway 19, on northern Vancouver island. It was first staked in the early sixties after systematic logging opened up the area again. The current claim was staked in 2004 before MTO and enough work to maintain title has been conducted since then.

The mineralization is in vein(s) and locally reaches high grades. Ongoing work is attempting to enlarge the region recognized as mineralized.

# Property location, access and title

Klejne claims can be reached from Highway 19 by turning south on logging road Upper Adam 106, just west of Keta Lake (near 240 km marker). The logging road, which runs west of the Adam River, is reasonably well maintained until the southern edge of the claim is reached. Here a major bridge has been washed out, and the road is impassable to motorized travel beyond this point (Figure 1 and 2)

The claim is a conversion from two two-poster claims first claimed in 2004 and covers five cells.

| Claim name | tenure | area covered | good until |
|---|---|---|---|
| “Klejne” | 509556 | 165.19 ha. | Feb. 19, 2012 |

The new due date derived from the work done herein is given above.

**Previous work**

Prospecting work has been carried out in the general Adam River region for about a century. The ground was prospected for silver and gold in the first quarter of the century and showings of copper and gold veins were reported. A short distance south of the claim, and in the same geological context, a showing (Lucky Jim) of a contact deposit with copper (5.92%), silver (1.8 opt) and gold (.9 opt) has been described as early as 1918 (page K270, 1918 BC Minister of Mines Report).

Logging opened up the area in the 60's and regional prospecting campaigns located scattered copper rich showings. A large block was staked in 1965 by W.R. Boyes, and was taken over shortly thereafter by Western Standard Silver Mines. Early grab samples included 26.26% copper over 1 ft (30 cm) and gold up to 0.78 oz/t over 2 ft (60 cm). (cited in Leriche 1995)

AR 1993, commissioned by Bethlehem Copper Corporation, and carried out by W.M. Sharp, P.Eng., in 1969 sketched in the regional geology of a large area, some of which includes the area currently claimed. He noted the presence of a large NW trending granodiorite pluton emplaced in a sequence of Karmutsen “basalt-andesites” and the Quatsino Limestone. He noted that much mineralization of the area

is mainly in veins. The report focused on the Boyes Creek occurrence (minfile 092L-165) and adjacent showings (092L-166,7 and 8). The geological framework presented by Mr. Sharp has not changed substantially.

In 1971, Conoco Silver Mines Ltd. reported results of a soil geochemistry campaign (AR3235). Conoco Silver Ltd. also reported results of an IP survey over the Boyes Creek showing concluding that a multi-parameter anomalous zone occurred some 20 to 100 ft below the surface near the showing (AR 03403).

In 1974 the GSC published a map of the area (Mueller et al, 1974) that generally follows the geology determined by previous consultants. Quatsino limestone was shown as less widely spread than indicated by Sheppard's mapping (see above).

AR22409 commissioned by West Pride Industries provides the most complete compilation of the geology and previous work; it concluded in part, that for the Klejne region there were areas of interest that had not been adequately tested.

AR23906 commissioned by Lucky Break Gold provides additional geophysical information in the general Klejne area.

A geological compilation of area in digital form (Massey, 1994, 2005) contains contacts assembled in part from previous assessment reports.

The author has been active in the Adam River area since 2000 and several prospectors grant reports and assessment reports have been filed. They document location of several newly located mineralized showings, possibly all part of a single large hydrothermal system (see AR 27745, 28327, 28927).

Thus, work to date has shown sporadic and widespread mineralization of copper and silver with occasional gold values that occurs in veins, amygdales and shears in basaltic country rock adjacent to a large granodiorite batholith. The country rock is part of the Karmutsen Formation comprising mainly feldspar-phyric basalt, as amygdaloidal or massive flows, or as thin sills with intercalated with minor beds of limestone and associated clastics, overlain by thicker beds of Quatsino limestone and Parson's Bay Formation. New roads have exposed new subcrops and the area under discussion is mainly underlain by Karmutsen Formation.

**Summary of work done**

Prospecting and local mapping

Analytical Work

Acme

12 Silt ICP-MS, 15 gm, 37 elements (job VAN10000958-2)

15 Rock ICP-MS, 15 gm, 37 elements (job VAN10000953)

Actlabs

14 Western Hemlock twigs (invoice a10-1422 )

## Detailed data and interpretation

### *Purpose*

The purpose of this work is to confirm previous previously located mineralization and to enlarge area of interest. Prospecting, mapping, stream sampling and biogeochemical sampling are the means whereby this task was carried out.

### *General surficial geology*

The Kringle-Consolidated Claim group straddles the north-north west flowing Adam River south of its confluence with Eve River. The river runs in a typical U shaped valley, between tall hills trending roughly the same north-northwesterly direction. Local areas of till have been noted in lower areas where road construction has laid it bare. At least three different terraces along the shores of the river indicate that the river has had a complex geomorphic history. The river is currently incising its course through thick, earlier river and till deposits. Bedrock occurs sporadically in the river bottom.

The river largely follows the outcrop trend of the Quatsino Limestone. Adjacent creeks seem to occupy north or northwest trending high strain/fault zones. The hills are variably covered with colluvium which overlie thin till deposits; only where logging roads expose subcrops, or in outcrops on cliff faces and/or steep sided valleys are bedrock visible.

The surficial geology is complex. Thin till cover less than a meter is locally recognized, as are local stream derived sediments from local deltas. The main unit is colluvium, consisting of detritus from the neighboring hills. Some of the boulders may be meter sized and landslide area are common.

### *Regional Geology*

#### Geology

Contacts between country rock and batholith are possible regions of metal concentrations. Basalts of the Karmutsen Formation, limestones of the Quatsino Formation and slivers of the Parson Bay Formation are deformed, metamorphosed and metasomatised in the locally sulphidized contact of the Adam River Batholith (See figure 3).

Units

*Vancouver Group*

The units are generally as described by Massey (1994, 2005) but many lithological details are taken from Carlisle (1972). Greene has published details of the petrology of the basalts (Greene et al, 2006, 2007, 2009) and Nixon has published maps and descriptions of these units to the west (Nixon et al, 2007).

The Vancouver Group (Karmutsen, Quatsino, and Parson Bay Formations) underlies much of the region of the claims.

The *Karmutsen Formation* (or "subgroup" of Carlisle, 1972) is a low potash tholeiite basalt mass of remarkably consistent structure and thickness that constitutes the lower third of the Vancouver Group in this area.

The lower 2500 to 3000 m. consists of classical closely packed pillow lava. At the top magnesian basalts aree seen (Keogh Picrites, Greene, 2007)

The next 600 to 1000m consist of pillow breccia and aquagene tuff, typically with unsorted beds ½ to 2 m thick in the lower half.

The upper 3000m is composed of meter to decimeter thick both amygdaloidal and non-amygdaloidal basalt flows; Local beds are zoned with amygdular tops and massive cores. Some flows locally show possible pahoehoe structures in well exposed locations. Very little interflow material has been located, indicating a lack of deep weathering between the eruption of the flows. In the upper third of the unit, thin, intercalated sporadic and commonly incomplete sequences of 3 to 20 m thick consisting of discontinuous bioclastic, micritic, cherty or tuffaceous limestone which are locally overlain by closely packed pillows, which are in turn overlain by pillow breccia and then, thick massive flows.

The structure of the unit is marked by gently folded and locally severely faulted areas. The folding is part of a regional shallowly north plunging antiform. The distribution of units also suggest east trending folds of small amplitude. The faults and well developed linears trend north and north westerly directions as well as easterly directions and separate large panels of gently dipping lavas. Slickenlines indicate that the preserved (latest?) directions of slip are largely transverse.

The volcanic rocks have been regionally metamorphosed into upper zeolite ranging upward into lower greenschist grades. Albitized feldspars, amygdules and veins of pumpellyite, prehnite, epidote, calcite, and chlorite are widely noted. Adjacent to contacts with later intrusives, higher grade amphibolite bearing assemblages are more common.

Considerable regional variation is shown on aeromagnetic map, including local positive anomalies, within the area underlain by the Karmutsen, indicating that magnetite concentrations of the volcanic rocks are not uniform and/or area is underlain by highly magnetic bodies. It would appear that the northwest trending aeromagnetic anomaly crosses the regional north north east dip of the basalts. Recently it has been demonstrated that more magnesian members are much less likely to be magnetic.

The *Quatzino Formation* is a thin ribbon traversing the country in a north-northwest direction, to the northeast of the Karmutsen Formation. Regionally, it is seen to stratigraphically overlie the Karmutsen, and is known to vary in thickness from as much as 500 m to the west near Alice Lake to a thinner 150 m or so further east. In the Adam River area it is a distinct, easily recognizable unit, but the thickness is in doubt, because where best exposed it is in a ductilely deformed contact with the granodiorite. The Adam River follows part of its outcrop pattern.

The formation consists of grey limestone beds. Where undeformed it is a coarsely bioclastic, light grey, indistinctly bedded and non fissile (Carlisle, 1972). Where deformed near plutons it becomes a light grey, finely recrystallized limestone. Fossils indicate that the Quatsino Formation is upper Triassic in age (mainly Karnian, perhaps partly lower Norian (Muller et al, 1974, Nixon, 2007).

The expected negative aeromagnetic signature is poorly defined on large scale geophysical maps shown on MapPlace although the limestone is not magnetic. More detailed aeromagnetic surveys are necessary to delineate in detail, the outcrop pattern.

The *Parson Bay Formation* is considered to overlie the Quatsino Limestone. According to Carlisle, 1972, it is characterized by thinly laminated alternating fissile and non fissile black carbonaceous limestone with extremely fine grained siliceous matrix. Small slivers were recognized along the contact with the pluton, mainly northwest of Keta Lake, but it seems to disappear to the northwest, as the Adam Lake Pluton cuts through the unit to impinge directly on the Quatsino further to the northwest. Other outcrops are located in the vicinity of Tlowils Lake. It is likely that some of the silty reaction skarns intercalated with black

limestone noted on the property, north of the 250km marker represent some thin relic thin lenses of Parson Bay Formation recently recognized along the western flank of the Adam River Batholith.

*Jurassic Intrusives*

Jurassic granodiorite to diorite underlies the area to the east-northeast of the Adam River. It has been called the Adam River Batholith (Carson, 1973, Muller, et al, 1974). It is about 4 km wide and trends northwesterly in excess of 10km.

It consists mainly of mesozonal granodiorite. Rocks studied are mainly medium to fine grained biotite hornblende granodiorite and quartz diorite with a locally elevated content of mafic minerals. In thin section, pyroxene cores to amphibole grains are noted. Local veining of darker phases by lighter more feldspathic phases are common. At contacts the volcanic rock inclusions are transformed into dioritic inclusions and limestones become skarn and marble rafts.

Carson (1973), suggested that the Adam River was emplaced as a sill, along the Quatsino Formation horizon. He suggested that the sill was shaped as a gentle syncline and figured the geology in the general Adam River area on his Fig. 15 (Carson, op cit). An anticline has been postulated to the west currently expressed at surface by the Karmutsen Formation. The sense of movement of a synkinematic sill would be upper units to move away from the synclinal core. That would predict an east over west component in folds and faults. Continued examination of this hypothesis over ten years of field work by this author has resulted in it being *rejected*. The intrusive contact is vertical and crosscuts units, cross cutting the Parsons Bay Formation in the vicinity of Keta and Tlowils Lakes and intruding the underlying Quatsino further to the northwest. The Karmutsen Formation across the Adam River to the west, has dips that are directed to the north-north-east and would be expected to young in that direction. Instead they seem to be structurally thickened by cross faults. The younger Quatsino and Parsons Bay Formations rocks are found adjacent to ( ie along strike length) and in probably fault contact with a thick section of basalt, and the predicted Quatsino and Parsons Bay Formations have not been located at the top of the dipping basalts to the north as mentioned above.

Instead, given that an apophyses of granodiorite crosses the Adam River (and the Quatsino limestone), and is emplaced in the Karmutsen, it seems highly likely that the Batholith was intruded along a pre-existing north westerly directed steep fault between the Karmutsen Formation to the west and the younger Quatsino limestone and Parson Bay to the east.

K-Ar dates of 160 Ma. on Hornblende and 155 Ma. on biotite from a quartz diorite of this batholith confirm the mid Jurassic age and suggest it to be intruded contemporaneously with the deposition of the andesitic volcanic Bonanza Group (which is well displayed to the west, near Bonanza and Nimpkish lake.

Contacts are known to be hornfelsed for short distances, with local skarnification near and in limestone beds. Locally, as near 250 km marker on Highway 19, ore skarns are well exposed, as they are a km north, . Orientations are steep and complex at the contact. There is much evidence that the Karmutsen is in fault contact with the overlying Quatsino Limestone, and not in a simple stratigraphic relationship.

The high concentrations of magnetite in these I-type intrusions are well reflected in the regional positive aeromagnetic anomalies over these plutons.

*Felsic dykes*

Based on very preliminary field evidence, supported in part by prior observations made by Carlisle (1972) in adjacent areas, there appears to be at least three sets of granitoid dykes in area. The dykes observed so far, are near the intrusive contact of the main pluton.

From oldest to youngest they are:

Feldspar Porphyry “folded into tight folds” may predate the main plutonic mass.
Deformed, and argillically altered and mineralized porphyries (locally brecciated).
and later “fresh” Feldspar and Hornblende porphyries with planar or irregular contacts.

In the northern part of the claim group late basaltic dykes (diabase) cut metamorphosed basalts and are metamorphosed themselves.

Regional structures

The area of interest lies within the shallow east north east dipping homocline of Triassic rocks and the Adam River Batholith, called by Muller et al (1974), the White River Block. It is bounded to the west by a major fault, the north northwest trending Eve River Fault. To the north the Johnson Strait Fault terminates the block, the eastern and southern borders are faults on adjacent map sheets. The faults in the claimed area are sub parallel to the border faults, or are second or third order subsidiaries of it. It is thought that these faults contain a large normal component but a dextral transverse component is often mentioned in reports and shown in outcrop as sub horizontal slickenlines.

Dip directions of the massive basalt flows within each fault panel differ somewhat suggesting some jostling of fault blocks. The majority of dips of flow tops and intercalated bedding recorded by the author are more northerly than easterly. The area is more structurally complex than implied by a simple homocline, since the regional structure predicts that the youngest rocks should be to the north, instead, the Parsons Bay Formation (the youngest in this sequence) in this area, are found near Keta Lake, or far southeast of where they would be expected, in a simpler structural milieu.

Apparently, along the Adam River, a fault post dates the pluton, probably with strike slip motion; but which was probably long lived, since it seems that it also predates the pluton as well, with a sense of west side up. West of the pluton, the younging in the Karmutsen is to the east northeast. On the east side of the Adam River pluton the younging is to the south, implying an east west trending syncline.

As noted above, the intrusive rocks were probably emplaced along prior faults in the vicinity of the current course of the Adam River. These are faults that are parallel to the length of the Cordillera, hence are called orogen parallel faults. This type of faulting plays a large role in localizing some mineral deposit in other places in the world, notably Chile. It is highly likely that these faults have stayed active during later transverse faulting episodes.

The region is noted for copper bearing veins and have been described as “ copper veins in basalts” by Sussing (193?). Muller et al.(1974) repeat this categorization and assigns the showings in the vicinity of the claims to his category C; “veins in basalts”. Minfiles in the general area include 092L-163, 170, 249, 222, 165, 166, 167, and 168.

Regional Geophysics

The magnetic character of the Adam River Batholith is well expressed on regional aeromagnetic maps. Of some interest is a magnetic domain of similar magnitude seemingly located over Karmutsen Basalts. The contact, between the magnetic batholithic rocks and the non magnetic limestone is not well defined on the low resolution aeromagnetic map. Instead a sharp magnetic boundary is located several km to the west separating non magnetic basalt from magnetic basalt. The boundary is not parallel with strikes and dips determined for the basalts, but cross cuts across them instead, to roughly parallel the contact of the Adam River pluton.

The regional Cu-Ag vein showings and prospects are located within in this anomalously magnetic region.

## Property geology

### Surficial geology

The Klejne claim mainly covers the western side of the Adam River covering easterly directed steams coming off the high ground made largely of bedrock.

The surficial geology is complex. Thin till cover less than a meter thick, is locally recognized, as are local stream derived sediments from local deltas. The main unit is colluvium, consisting of detritus from the neighboring hills. Some of the boulders may be meter sized and landslide area sare common.

The main hauling road is well built. Road metal has probably trucked in from nearby quarries. Areas near the river are locally composed of frost heaved bedrock.

### Bedrock geology

The bedrock in the high hills is mainly feldspar phyric massive basalt of the Karmutsen Formation, although local lenses of hyaloclastic basalt are known Bedding is poorly defined but at least some flows appear to dip shallowly to the north east.

Areas in the valley, nearer the Adam river are underlain by frost heaved siliceous rocks, probably of the Parson's Bay formation and locally frost heaved Jurassic Island granodiorite. Across the river to the east well developed Parson's B ay Formation is known to crop out along the road

The structural relationship between the Parsons Bay formation and the Karmutsen Basalts is one of faulting. The Quatsino Limestone has not been recognized on the claim by the author and regionally a fault has been postulated along the north flowing course of the Adam River (Figure 3).

Mineralization is mainly found in faults and veins along 080, and at high angles to the above mentioned fault. Alteration is locally that of the Propylite type, indicating a more distal position to a central source of alteration.

### *Mineralization*

The Boyes Creek showing (Minfile 092L-165) consists of a braided and sheeted fracture system striking 080 and dipping steeply to the south in amygdaloidal basalts containing stringers and disseminations of chalcopyrite, bornite and subordinate chalcocite and native copper. Thirteen hand dug trenches have exposed mineralization over 330 m length with widths ranging from .3 to 5 m in the past. The average of 11 representative samples from trenches is approximately 3.25% over 1.2 m. Gold has assayed up to 0.02 oz/t. Soils from two reconnaissance lines were found to be anomalous and indicate a 600 meter easterly strike continuation of the zone (Sharp 1965, Leriche, 1995).

The south showing (Minfile 092L-166) is a single exposure of of chalcopyrite and pyrite disseminated in a calcite and epidote breccia pod fortuitously exposed at the base of a water fall. A sample

across 1.6 m assayed 0.90% Cu and 0.02 oz/t gold (Leriche op cit)

A thin malachite wash over epidosites located between the two minfiles was reported by author in 2004 (AR 27745)

Thin bornite carrying laminated quartz-calcite veins was reported in AR 28327 and 28927.

The above historical estimates do not meet 43-101 standards, and are offered only as indications of past motives for further exploration.

***Detailed sampling results***

**New results**

***Lithochemistry of In situ rocks***

6 specimens the details are shown on assay sheets in appendix B and locations on figure 4 and 5.

sample 006512 UTME 710398 UTMN 5573886 ELEV 345
KL10-RP02
Small amount of malachite, on surface, very fine grained sulphides recognized. Veins in locally purplish Karmutsen basalt bedrock, previously collected bo+cpy from veins in this area

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb,*** | ***S %,*** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.17 | **1259** | 535 | 29.4 | 0.06 | 4.24 | 583 | 152 | 4.61 |
| 0.22 | **1284** | 609 | 35.6 | 0.07 | 4.58 | 578 | 172 | 4.7 |

Previously this locality has yielded values up to 0.6% Cu

***Lithochemistry of Float and rip-ups***

9 specimens the details are shown on assay sheets in appendix B and locations on figure 4 and 5.

Two rocks composed 50% or so of pyrite turned out to essentially barren.

The best copper result was from fragments of fault zone breccias

006516 UTME 710499 UTMN 5573236 ELEV 327 m
KL10-RF01
Local malachite stained chloritic fault breccia with silicic fragments

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb,*** | ***S %,*** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.26 | 834 | 562 | 3.8 | 0.02 | 4.54 | 706 | 122 | 1.96 |

006518 UTME 710460 UTMN 5573593 ELEV 316 (11 satellites!)
KL10-RF03, near uphill side of bridge
rusty fault breccia with minor pyrite

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb,*** | ***S %,*** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.43 | 676 | 129 | 6.2 | 0.03 | 3.14 | 423 | 118 | 1.35 |

***Lithochemistry of Stream silt***

9 specimens of stream silts were collected. the details are shown on assay sheets in appendix B and locations on Figure 6 and 7).

Streams with the highest Cu content are at Boyes Creek

KL10ST09 UTME 710417 UTMN 5574142 ELEV 349 m
006533
Boyes Creek, 10-12 m wide, deep good flow, med coarse, 10% org, 60% pebbles

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb,*** | ***S %,*** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 1.30 | 142 | 239 | 3.1 | 0.07 | 6.29 | **10000+** | 251 | 1.73 |

Cu possibly elevated.

KL10ST10 UTME 710417 UTMN 5574142 ELEV 349 m
006533
Boyes Creek, 10-12 m wide, deep good flow, med coarse, 10% org, 60% pebbles, (split sample)

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb,*** | ***S %,*** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.52 | 285 | 129 | 12.2 | 0.06 | 5.59 | **3851** | 185 | 1.73 |

Cu elevated.

Two gossany till/talus samples returned

KL10Talus1 UTME 710441 UTMN 5573683 ELEV 333
006535
Oxidized till/oxidized fine colluvium. From road cut

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb,*** | ***S %,*** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 1.35 | 312 | 558 | 23.6 | 0.04 | 8.30 | **390** | 305 | 0.68 |

Cu elevated.

KL10Talus 2 UTME 710441 UTMN 5573683 ELEV 333
006536
Oxidized till/oxidized fine colluvium. From same road cut as above.

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb,*** | ***S %,*** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 1.13 | 250 | 831 | 11.5 | 0.04 | 8.21 | **831** | 321 | 0.55 |

Cu elevated.

***Biogeochemistry (western hemlock twigs)***

13 specimens of twigs from Western Hemlock were samples. the details are shown on assay sheets in appendix B and 10 are located on figure 8 and 9(the other three samples are for reference only and are not within claims).

Significance of results:

One location far from any mineralization was analyzed 4 times and gave an estimate of a baseline as well as an estimate of expected level of variance of analysis. For Cu the baseline is about 80 ppm and an estimate of the standard deviation is about 5 ppm.

One location over known copper mineralization in a similar and nearby ecosystem (Puff) gave an indication that mineralization could be recognized. A value of 250 ppm Cu was returned

Many samples returned values similar to the baseline value. Others returned values possibly elevated or anomalous.

A sample

Sample KL10TR04, at UTME 710620, UTMN 5573043, ELEV 323 m at end of south east trending unused logging road off UA106 in southern part of claim
western hemlock twigs

| Mo *ppm* | Cu *ppm* | Ag *ppm*, | *Fe %,* | Mn% |
|---|---|---|---|---|
| 1.3 | 232 | 0,6 | 0.23 | 4.59 |

Note Mn high, Cu high. probably indicating a nearby mineralized zone near the river in the southern part of the claim.

This is a potential target for further sampling

### *Test of Water pH*

Strips of calibrated pH paper were submerged in stream waters for about 2 minutes. The purpose was to isolate streams with acid runoff.

Detailed results are shown in Appendix A. Generally the pH was between 4 and 5, values expected in normal rain water. These values probably resulted from the time of year the sampling took place(during a February snow melt episode). Until the values have been repeated in the fall, after a summer dryness, the results should be viewed with caution.

### *Comparison of assay results*

Boyes Creek is known to be mineralized and carry anomalous silt samples.

Previously located mineralized locations yield anomalous results but somewhat smaller than previously realized

Float samples indicate local copper bearing samples of fault breccia are present in southern part of claims as well as massive pyrite (barren) samples.

Twigs are anomalous near southern border, near river.

## *Interpretations*

The area is hydrothermally altered; epidote being particularly abundant. It is probably part of a propylite alteration suite associated with a hydrothermal system. The veins and disseminations would seem to be irregularly disposed at this structural level. Various types of sulphidized shear zones, some cupriferous have been noted.

Geochemical anomalies both confirm known mineralized areas and also point to a possible, but, hitherto untested, region.

## *Conclusions*

Based on the results from previous as well as this work, the presence of local copper mineralization is confirmed. ICP-MS analyses of in situ sample show a variation in gold from 60 to 134 ppb. FA analysis is recommended.

A new area to test for mineralization based on biogeochemical methods has been located near utme 710595, utmn 5573061, and elevation 326 m.. Local float carries a few malachite stained samples.

# Recommendations for future work

Work to be done by prospector:

A hand trench should be located near utme 710595, utmn 5573061, and elevation 326 m. to test the hypothesis (based on biogeochemistry) that more copper mineralization is present in this vicinity.

More prospecting needed to enlarge the volume of known mineralized material.

In situ samples with bornite should be analyzed using Fire assays.

This Minfile prospect, combined with neighboring claims, could become a property of merit.

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# Author's qualifications

I, Mikkel Schau,

have been a rock hound, prospector and geologist for over 50 years. My mineral exploration experience has been with Shell, Texas Gulf Sulfur, Kennco, Geophoto, Cogema and several smaller public and private mining juniors. I have worked 10 years in southern BC and spent 23 years with the GSC as a field officer focused on mapping in northeastern Arctic Canada. For the last 15 years I have prospected and mapped in Nunavut, Nunavik, Yukon, Ontario and BC.

I reside at 1007 Barkway Terrace, Brentwood Bay, BC, V8M 1A4

My formal education is that of a geologist, I graduated with an honours B.Sc. in 1964 and Ph.D. in Geology in 1969, both, from UBC.

I am a P.Geo. (25977) in BC. And currently a BC Free Miner, # 142134.

I have 100% interest in the claims in question.

I am the author of the report entitled “Geochemical and geological studies on the KLEJNE CLAIMS, Tenure 509556” and dated May 17, 2010

Signed

Mikkel Schau, P. Geo.
(25977)

dated May 17, 2010.

# Itemized cost statement

| | | | | |
|---|---|---|---|---|
| Crew | | | | |
| | Mikkel Schau 1 days @ 600.00 | | | 600.00 |
| | Alec Tebbutt Contract (invoice 10041901) | | | 400.05 |
| | Room and Board | | | |
| | | H'kusam Lodge (apportioned with another project) | | 120.00 |
| Analytical Work | | | | |
| | Acme | | | |
| | | 12 | Silt icp-ms | 281.61 |
| | | 15 | Rock icp-ms | 416.23 |
| | Actlabs | | | |
| | | 14 | Western Hemlock twigs/ash, icp-ms | 510.83 |
| | Freight apportioned with another project | | | 21.28 |
| | Report | | | 300.00 |
| TOTAL | | | | **2650.00** |

# Appendix A; specimen descriptions and table of selected assay values

**ROCKS IN SITU**

006510 UTME 710386 UTMN 5573878 ELEV 360
KL10-RP01a
Chip sample from white (QZ?) vein and small amount of gouge in locally purplish grey Karmutsen basalt bedrock, previously collected bo+cpy from these veins

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.14 | 543 | 124 | 59.5 | <0.02 | 6.22 | 792 | 195 | 1.30 |
| 0.19 | 549 | 156 | 133.8 | <0.02 | 6.79 | 846 | 223 | 1.4 |

Copper anomalous

006511 UTME 710397 UTMN 5573885 ELEV 345
KL10-RP01
calcite and quartz veins in locally purplish Karmutsen basalt bedrock, previously collected bo+cpy from these veins

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.21 | 189 | 37 | 6.6 | <0.02 | 3.98 | 684 | 140 | **7.18** |
| 0.19 | 189 | 47 | 4,9 | 0.03 | 3.93 | 656 | 118 | **6.84** |

About 10% CALCITE

006512 UTME 710398 UTMN 5573886 ELEV 345
KL10-RP02
Small amount of malachite, on surface, very fine grained patches of bornite in quartz-calcite veins. Host is locally purplish, mainly greenish-grey, sparsely feldspar phyric Karmutsen basalt bedrock, Previously collected bo+cpy from veins in this area

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.17 | **1259** | 535 | 29.4 | 0.06 | 4.24 | 583 | 152 | 4.61 |
| 0.22 | **1284** | 609 | 35.6 | 0.07 | 4.58 | 578 | 172 | 4.7 |

Copper anomalous

006513 UTME 710397 UTMN 5573885 ELEV 345
KL10-RP03
small qz vein in locally purplish greyish aphanitic Karmutsen basalt bedrock, previously collected bo+cpy near here

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.13 | 317 | 67 | 8.9 | <0.02 | 5.81 | **1095** | 150 | 2.24 |

Copper elevated

006514 UTME 710385 UTMN 5573874 ELEV 354
KL10-RP04
Rusty and gossany/punky collected from vertical (fracture) zone 10 cm wide rusty, veined by many very thin veinlets of rust and calcite/gypsum?. Host is greyish green aphanitic basalt with scattered v fg pyrite cubes

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.61 | 189 | 77 | 13.2 | 2.24 | 6.78 | 415 | 193 | 1.05 |

006515 UTME 710375 UTMN 5573859 ELEV 349 m
KL10-RP05
sampled across zone: Rusty and gossany/punky vertical shear zone zone 80 cm wide , rusty rimmed beige to grey aphanitic basalt

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.31 | 218 | 38 | 6.5 | 0.33 | 10.15 | **1741** | 344 | 0.60 |

**FLOAT**

006516 UTME 710499 UTMN 5573236 ELEV 327 m
KL10-RF01
Local malachite stained chloritic fault breccia with silicic fragments and thin calcite veinlets

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.26 | 834 | 562 | 3.8 | 0.02 | 4.54 | 706 | 122 | 1.96 |

Copper anomalous

006517 UTME 710597 UTMN 5573043 ELEV 317m
KL10-RF02
black sulphide bearing layers in white silicic laminated tuff/chert as angular Parsons Bay float, saw speck of chalcopyrite

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 8.32 | 69 | 98 | 7.9 | 0.22 | 0.91 | 322 | 32 | 4.85 |

006518 UTME 710460 UTMN 5573593 ELEV 316 (11 satellites!)
KL10-RF03c, near uphill side of bridge
rusty fault breccia with fragments of epidiorite, minor pyrite

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.43 | 676 | 129 | 6.2 | 0.03 | 3.14 | 423 | 118 | 1.35 |

Copper anomalous

006519 UTME 710422 UTMN 5574121 ELEV 328
KL10-RF04
rusty pockmarked massive fine grained pyrite cobble from Boyes Creek

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 1.04 | 60 | 115 | 35.7 | **10.00+** | **27.94** | **1923** | 208 | 0.34 |

Also of note: Co 362 ppm, As 47 ppm, Bi 4 ppm, Se 6.5 ppm

006520 UTME 710408 UTMN 5573979 ELEV 337
KL10-RF05
Large (decimeter) ripup of a massive polycrystalline pyrite rich (50%+) shear zone in greenstone

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 4.04 | 46 | 86 | 32 | **10.00+** | 26.29 | **597** | 130 | 0.23 |

Also of note: As 34 ppm, Bi 4 ppm, Se 12.7 ppm

006521 UTME 710404 UTMN 5573980 ELEV 340
KL10-RF06
rusty weathering and rust rimmed punky gossan in aphanitic basalt with pockmarks of weathered out phenocrysts, local remnant v. fg pyrite in matrix

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.25 | 173 | 59 | 7.3 | 0.14 | 3.97 | **330** | 169 | 2.31 |

006522 UTME 710397 UTMN 5573885 ELEV 345
KL10-RF07a
rusty greenish grey aphanitic basalt talus below veined cliff and KL10RP01 , thin calcite vein with a wash of malachite.

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.28 | 84 | 37 | 7.9 | 0.19 | 6.38 | **1232** | 247 | 6.21 |

006523 UTME 710396 UTMN 5573886 ELEV 345

KL10-RF07b
rusty talus below same cliff and KL10RP01 , sample of grey to purplish grey aphanitic basalt with small chlorite amygdale fill? Cut by thin epidote veinlets

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.12 | 290 | 93 | 9.1 | 0.04 | 5.44 | **895** | 160 | 1.70 |

Copper possibly elevated

006524 UTME 710385 UTMN 5573874 ELEV 354
KL10-RF08
collected below KL10RP04, vertical 10 cm wide gossany and rusty zone, rusty, and rust rimmed aphanitic basalt cut by rusted out veins, now with clayey fill.

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.43 | 76 | 28 | 3.5 | 0.26 | 6.07 | **316** | 168 | 1.00 |

**STREAM SEDIMENTS (SILT)**

KL10ST01 UTME 712485 UTMN 5572851 ELEV 336
006525
Main creek, grey medium fine silt, 20% pebbles, less than 5% organics, sample from 3 locations, each side and middle. The location of the GPS reading indicates that the sample was taken a few metres south of the claim line. The sample is a composite of silt from this wide creek. The bridge over the creek has been washed out and the course of the creek has probably changed as it eroded both sides of the bridge abutments.

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.35 | 97 | 50 | 4.3 | <0.02 | 5.68 | **1609** | 221 | 2.62 |

KL10ST02 UTME 712497 UTMN 5572914 ELEV 336
006526
small creek 3 m wide just north of main creek
grey, med fine, 10% pebbles, <5% organic, at base of alders
pH of stream 5

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.35 | 96 | 49 | 10.4 | 0.02 | 5.54 | **1810** | 217 | 2.57 |

KL10ST03 UTME 710491 UTMN 5572960 ELEV 317
006527
creek 5-10 m wise , sample under bank, very fine grey, no pebbles, 5% orgs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.37 | 97 | 62 | 2.0 | 0.04 | 5.40 | **1769** | 211 | 2.55 |

KL10ST04 UTME 710595 UTMN 5573061 ELEV 326
006528
east of end of fsr road, small trickle of creek, dk brown, organic rich, 10% pebbles

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 1.35 | 76 | 255 | 2.0 | 0.06 | 6.95 | **4152** | 322 | 1.36 |

KL10ST05 UTME 710628 UTMN 5573043 ELEV 323
006529
medium creek, 2-3 m wide, light grey, very fine, few organics

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 5.27 | 90 | 105 | 2.5 | 0.03 | 7.02 | **4958** | 305 | 2.09 |

KL10ST06 UTME 710473 UTMN 5573218 ELEV 336
006530
creek 2-3 m wide, good flow, light grey, 70% pebbles, 5-10% org,

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.67 | 150 | 78 | 3.0 | <0.02 | 4.55 | **2978** | 185 | 2.73 |

Cu possibly elevated.

KL10ST07 UTME 710465 UTMN 5573532 ELEV 335
006531
creek 8 m wide, good flow, med grey, 10% org, 40% pebbles

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.38 | 138 | 67 | 1.9 | 0.06 | 4.97 | **2998** | 177 | 1.69 |

Cu possibly elevated.

KL10ST08 UTME 710659 UTMN 5573917 ELEV 306
006532
small shallow, but wide 4 m creek up hill from south branch lower FSR
silt very thin layer over organic rich layer, light grey to light rusty colour

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 1.19 | 134 | 229 | 5.7 | 0.07 | 6.26 | **8271** | 251 | 1.40 |

Cu possibly elevated.

KL10ST09 UTME 710417 UTMN 5574142 ELEV 349 m
006533
Boyes Creek, 10-12 m wide, deep good flow, med coarse, 10% org, 60% pebbles

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 1.30 | 142 | 239 | 3.1 | 0.07 | 6.29 | **10000+** | 251 | 1.73 |

Cu possibly elevated.

KL10ST10 UTME 710417 UTMN 5574142 ELEV 349 m
006534
Boyes Creek, 10-12 m wide, deep good flow, med coarse, 10% org, 60% pebbles, (split sample)

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 0.52 | 285 | 129 | 12.2 | 0.06 | 5.59 | **3851** | 185 | 1.73 |

Cu elevated.

KL10Talus1 UTME 710441 UTMN 5573683 ELEV 333
006535
Oxidized till/oxidized fine colluvium. From road cut

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 1.35 | 312 | 558 | 23.6 | 0.04 | 8.30 | **390** | 305 | 0.68 |

Cu elevated.

KL10Talus 2 UTME 710441 UTMN 5573683 ELEV 333
006536
Oxidized till/oxidized fine colluvium. From same road cut as above.

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | **Au *ppb*,** | ***S %*,** | **Fe%** | **Mn ppm** | **V ppm** | **Ca%** |
|---|---|---|---|---|---|---|---|---|
| 1.13 | 250 | 831 | 11.5 | 0.04 | 8.21 | **831** | 321 | 0.55 |

Cu elevated.

**pH measurements on a selection of water from creeks**

Values are more acid than would expected later in the season, due to recent and rapid snow melt
Values from calibrated pH paper

| Creek Location | utme | utmn | elev | pH measurement in 1/4 units |
|---|---|---|---|---|
| KL10ST02 | 712497 | 5572914 | 336 | 5. |
| Boggy water pond | 710457 | 5573102 | 331 | 4.5 |
| KL10RF02=ST04 | 710597 | 5573043 | 317 | 4.5 |
| Rusty soil area, small creek also TR07 | 710447 | 5573671 | 317 | 4.5 |
| Wp 467, small creek | 710584 | 5573888 | 305 | 4.75 |
| Wp 471, also ST08 | 710668 | 5573890 | 298 | 4.5 |

**BIOGEOCHEMISTRY**

Samples (unless noted) are taken from 6-8 m tall trees with a diameter from 7 to 14 cm diameter. Twigs are last years twigs several mm in diameter.

KL10TR01 UTME 710509 UTMN 5572916 ELEV 336
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe %,*** | **Mn%** |
|---|---|---|---|---|
| 0.3 | 81.1 | 0.2 | 0.13 | 2.71 |

Cu at base level

KL10TR02 UTME 710502 UTMN 5572991 ELEV 348 m
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe %,*** | **Mn%** |
|---|---|---|---|---|
| 0.4 | 88.8 | 0.3 | 0.24 | 4.45 |

Note: Mn high, Cu at base level.

KL10TR03 UTME 710586 UTMN 5573087 ELEV 319
on FSR east of UA106
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe %,*** | **Mn%** |
|---|---|---|---|---|
| 0.7 | 88.9 | <0.2 | 0.1 | 0.1 |

Cu at base level

KL10TR04 UTME 710620 UTMN 5573043 ELEV 323
at end of south east trending off UA106 in southern part of claim
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe %*,** | **Mn%** |
|---|---|---|---|---|
| 1.3 | 232 | 0,6 | 0.23 | 4.59 |

Note Mn high, Cu high.
This is a potential target for further sampling

KL10TR05 UTME 710473 UTMN 5573218 ELEV 336
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe %*,** | **Mn%** |
|---|---|---|---|---|
| 0.5 | 77.7 | <0.2 | 0.15 | 1.08 |

Cu at base level

KL10TR06 UTME 710465 UTMN 5573532 ELEV 335
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppb*,** | ***Fe %*,** | **Mn%** |
|---|---|---|---|---|
| 0.4 | 122 | 0.7 | 0.2 | 0.87 |

Cu possibly elevated

KL10TR07 UTME 710441 UTMN 5573683 ELEV 333
over gossany till exposure. Talus 1 and 2
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe %*,** | **Mn%** |
|---|---|---|---|---|
| 0.4 | 103 | 0.3 | 0.18 | 3.27 |

Cu not notably elevated

KL10TR08 UTME 710588 UTMN 5573906 ELEV 313 m
off end of side road to east toward Adam River
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe%*,** | **Mn%** |
|---|---|---|---|---|
| 1 | 125 | 0,3 | 0.16 | 0.92 |

Cu possibly elevated

KL10TR09 UTME 710672 UTMN 5573917 ELEV 306
near Adam river
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe %*,** | **Mn%** |
|---|---|---|---|---|
| 0.9 | 123 | 0.6 | 0.12 | 1.22 |

Cu possibly elevated

KL10TR10 UTME 710418 UTMN 5574152 ELEV 340 m
just north of Boyes Creek
western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe%*,** | **Mn%** |
|---|---|---|---|---|
| 0.6 | 97.4 | 0.4 | 0.29 | 1.99 |

Cu not notably elevated

KL10TR11 UTME 710386 UTMN 5573878 ELEV 339 m
this is taken above several narrow copper veins, tree much larger than rest:
chest diameter 25-30 cm.
Above on rough side road to west of main road
Western hemlock twigs

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe%*,** | **Mn%** |
|---|---|---|---|---|
| 0.4 | 109 | 0.3 | 0.58 | 1.28 |

Cu not notably elevated.

KR10TR01 UTME 704731 UTMN 5580551 ELEV 313
sample of twigs from a tree over a known copper showing (Puff) to test efficacy of samples.

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe%*,** | **Mn%** |
|---|---|---|---|---|
| 1 | 263 | 1,0 | 0.58 | 1.28 |

BL-1 Sample from Victoria Garden
This a sample from a hemlock tree taken to act as a blank, sample is from a Victoria Garden

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe%*,** | **Mn%** |
|---|---|---|---|---|
| 1.7 | 74.3 | 0.3 | 0.13 | 0.98 |

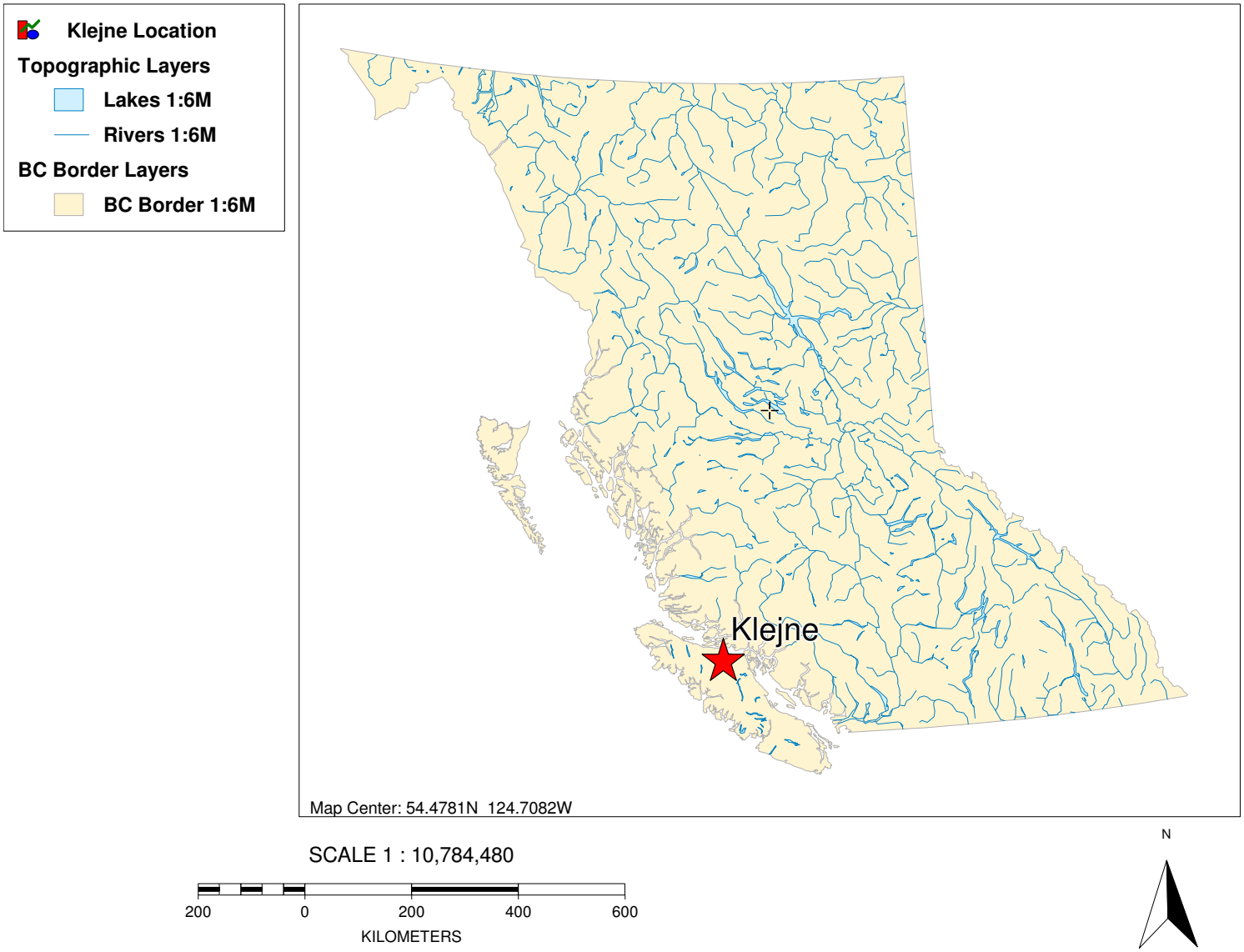
BL-2
SAME TREE AS BL-1, also chosen as QA/QC sample by lab.
This a sample from a hemlock tree taken to act as a blank, sample is from same Victoria Garden

| **Mo *ppm*** | **Cu *ppm*** | **Ag *ppm*,** | ***Fe%,*** | **Mn%** |
|---|---|---|---|---|
| 1.7 | 78.2 | 0.2 | 0.11 | 0.80 |
| 1.6 | 76.9 | 0.2 | 0.10 | 0.79 |
| 1.7 | 79.4 | <0.2 | 0.11 | 0.80 |

# Figures

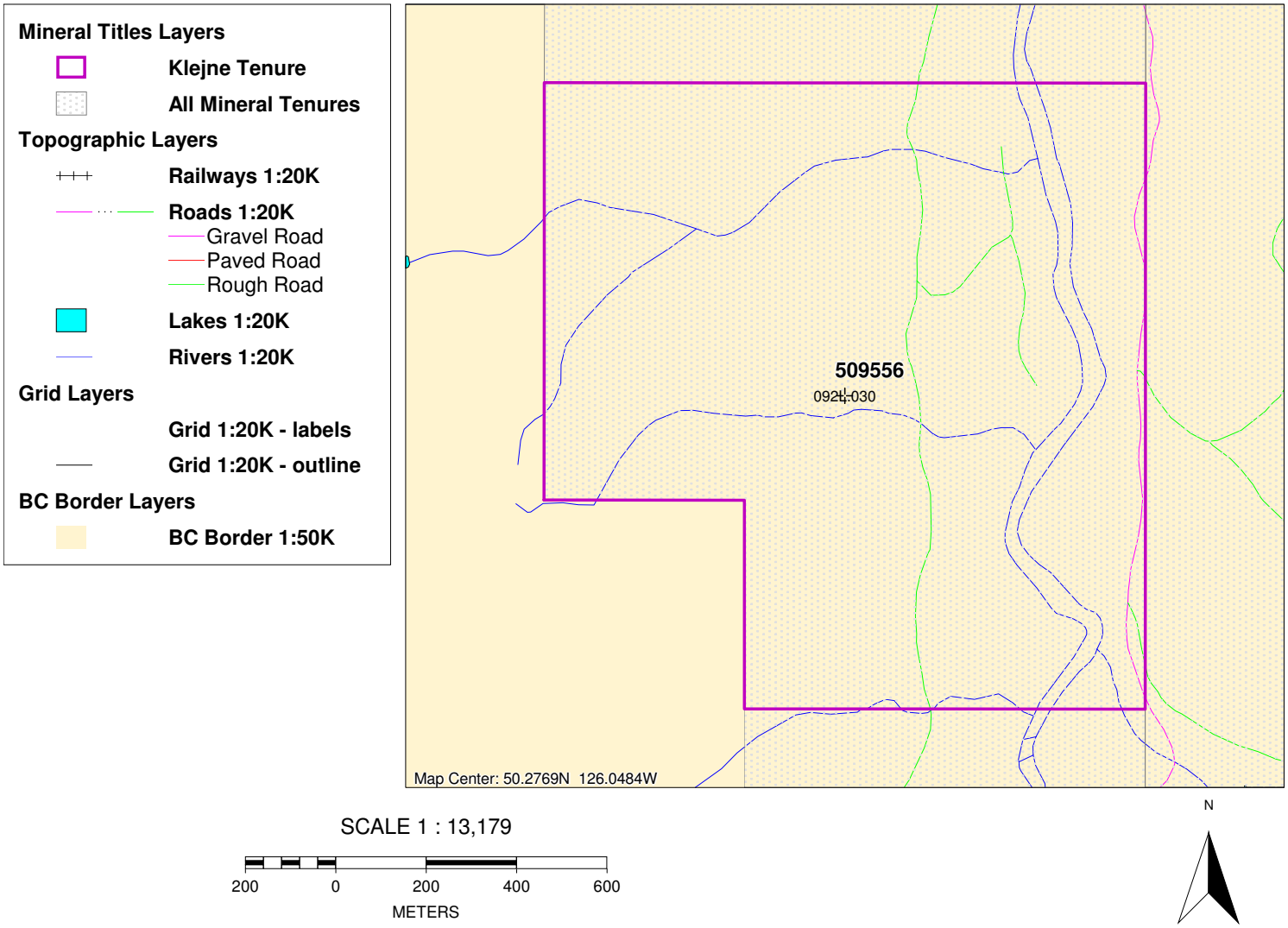
# Klejne Location Map

**Figure 1**



# Klejne Claim Map

**Figure 2**



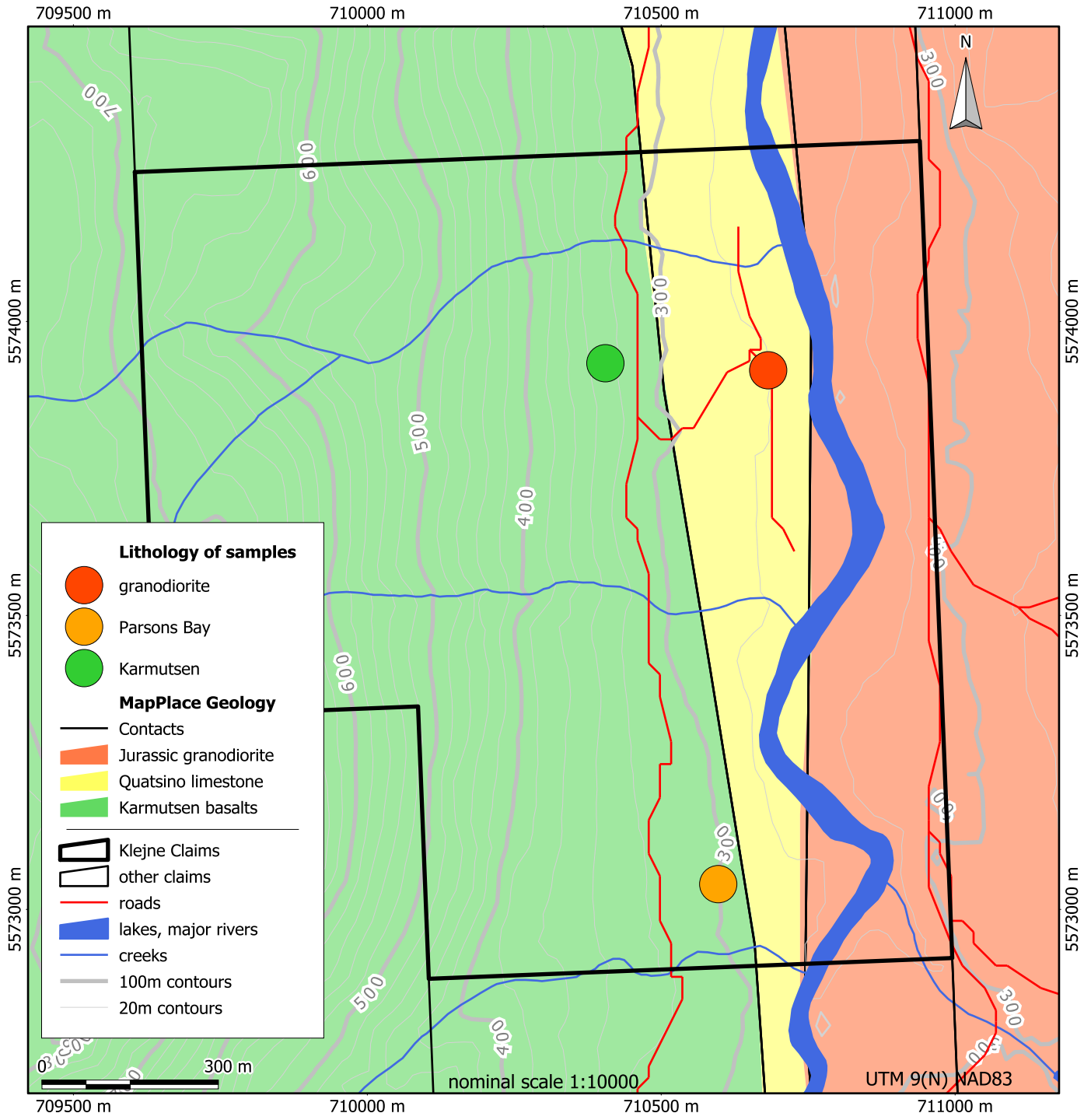



**Figure 3**
**Geology**

**Klejne Claims**
**May 2010**

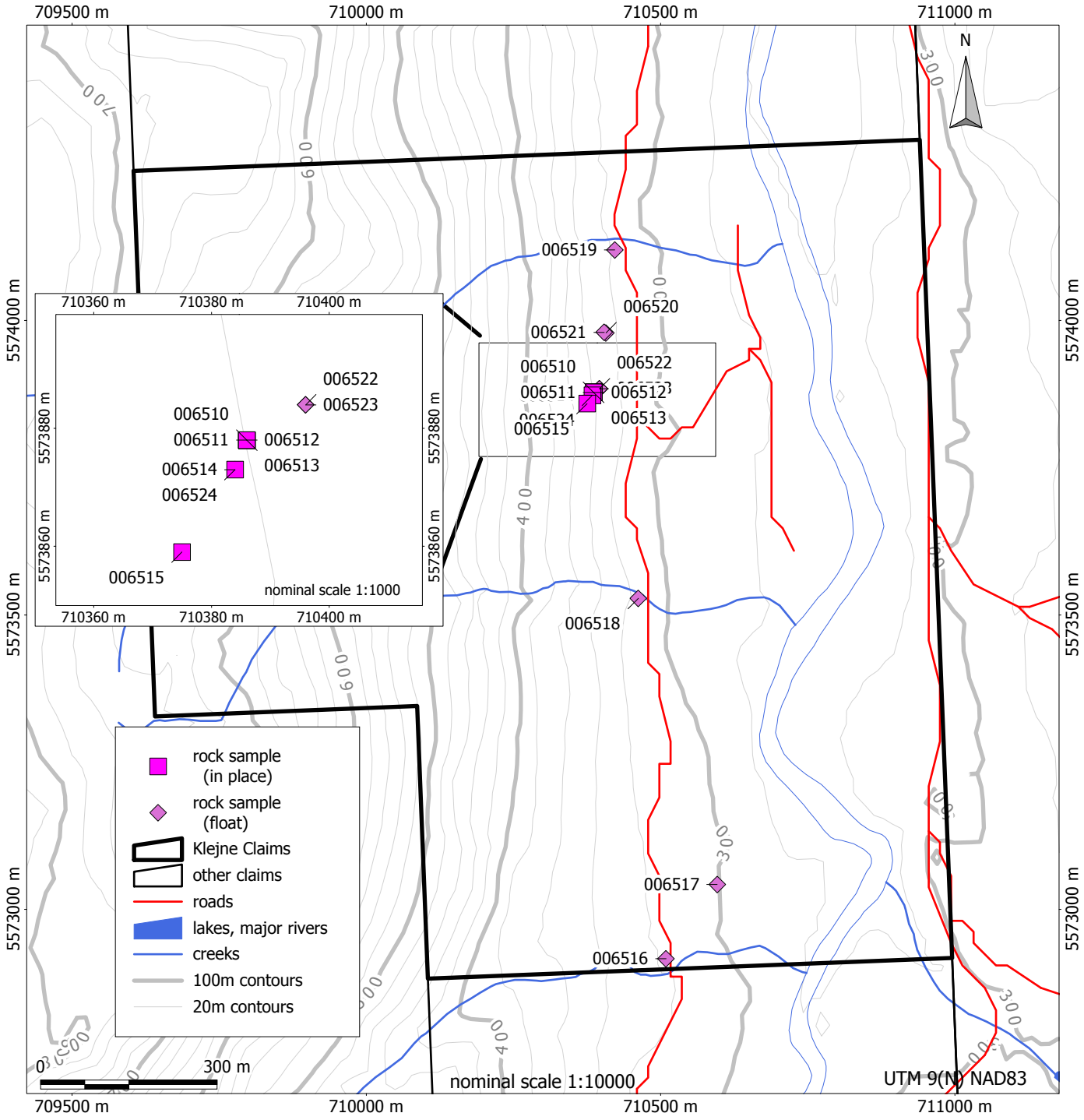



**Figure 4**
**Rock sample locations**

**Klejne Claims**
**May 2010**

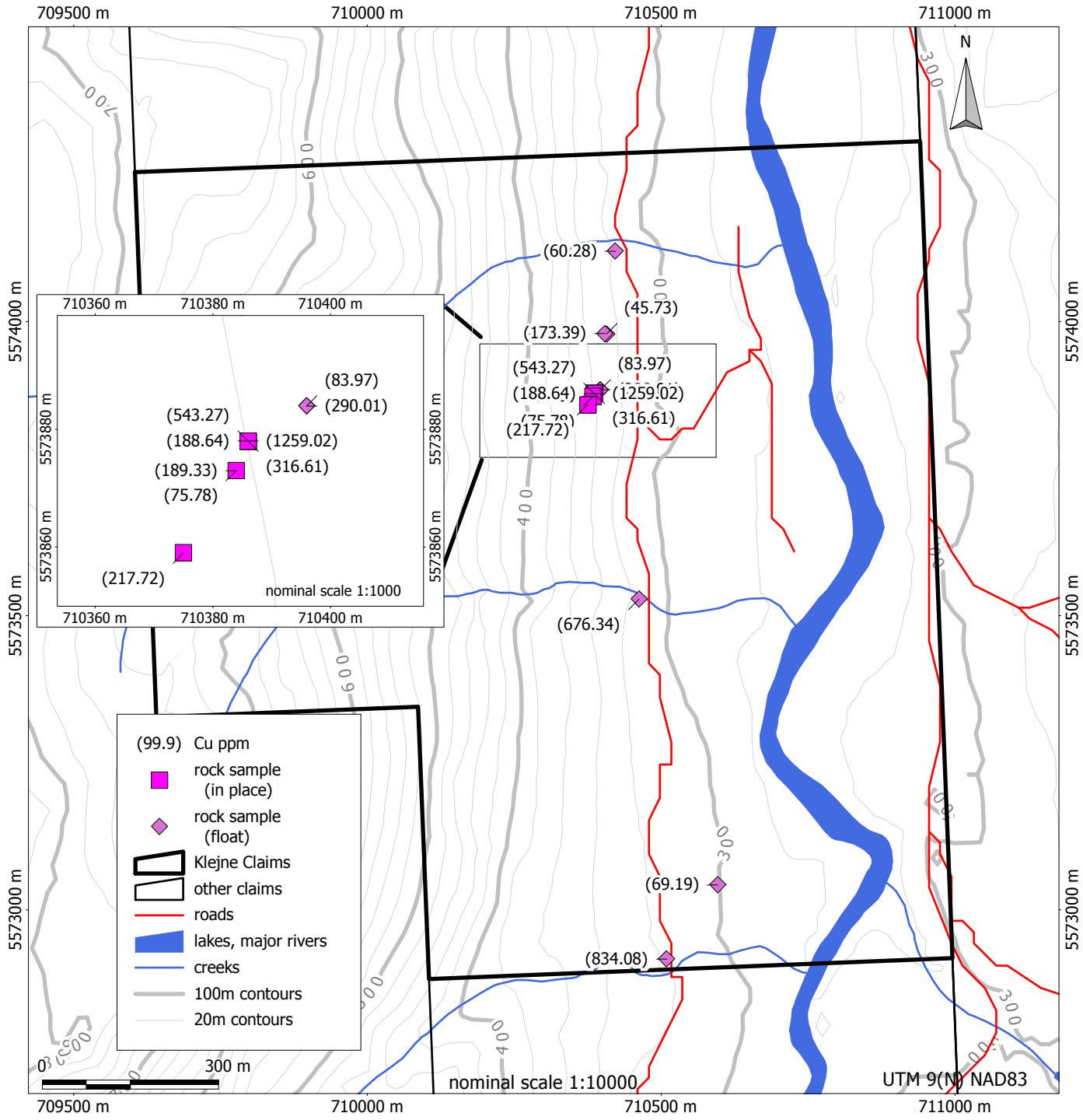



**Figure 5**
**Copper in rock samples**

**Klejne Claims**
**May 2010**

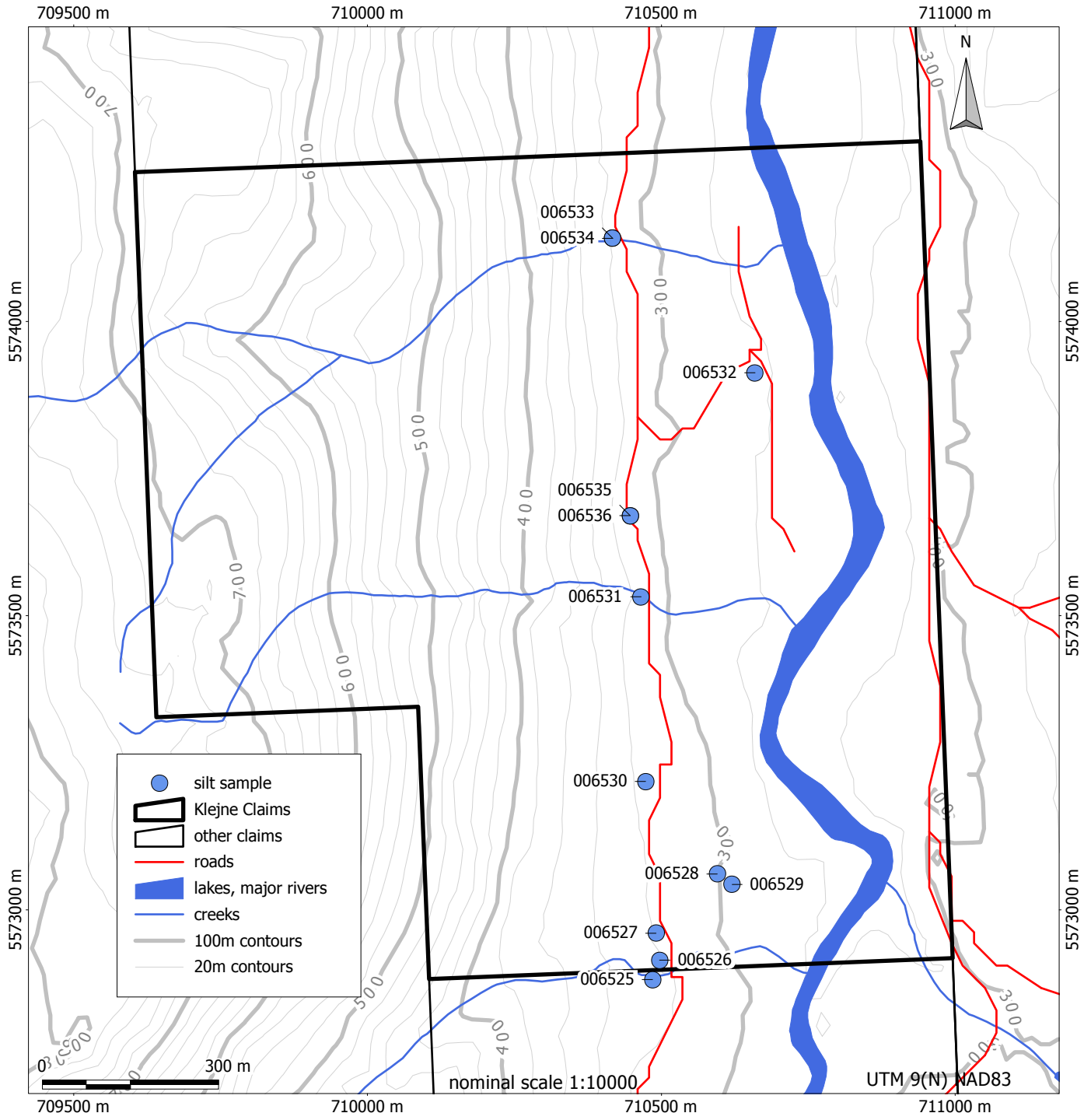



**Figure 6**
**Silt sample locations**

**Klejne Claims**
**May 2010**

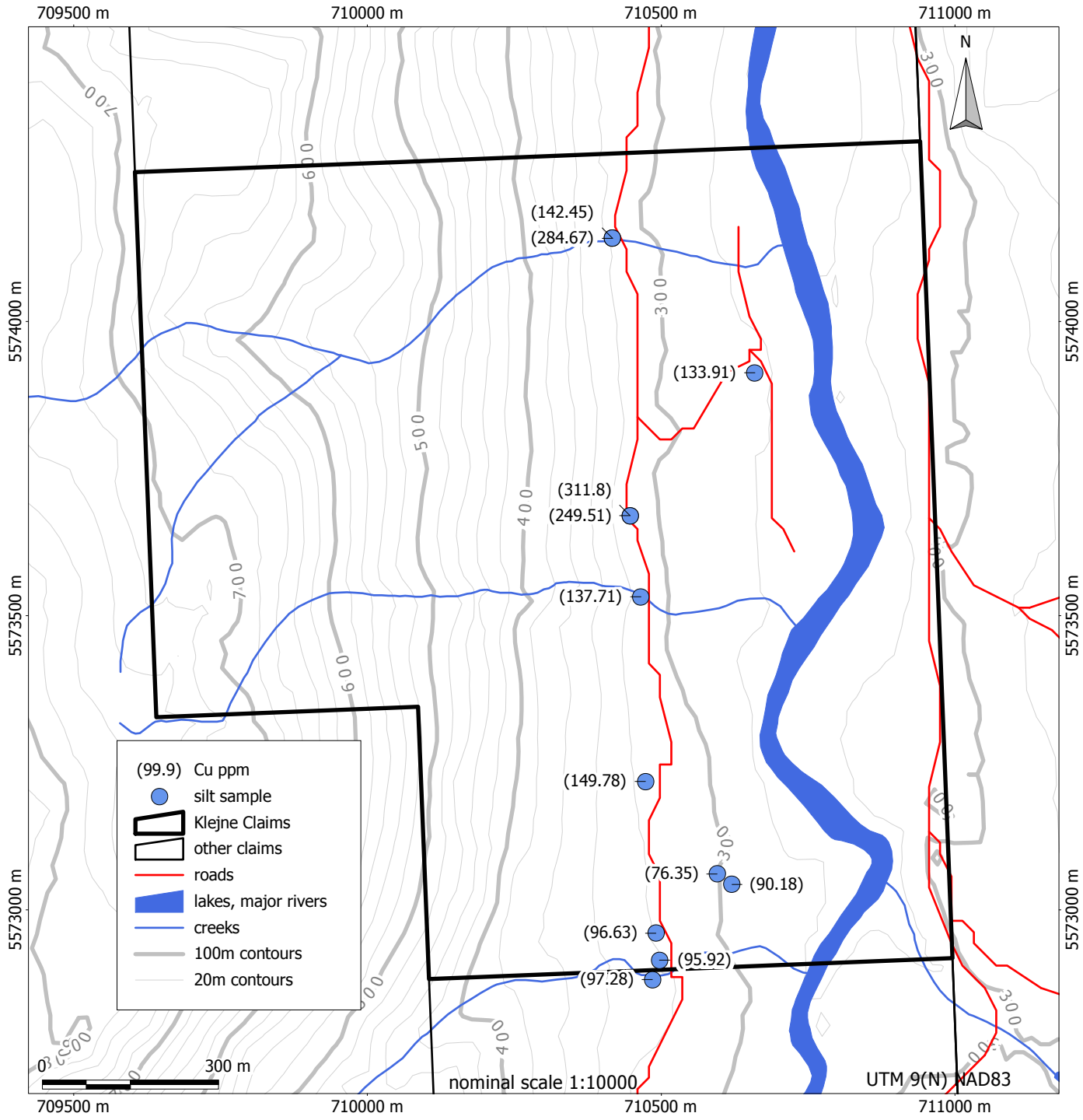



**Figure 7**
**Copper in silt samples**

**Klejne Claims**
**May 2010**

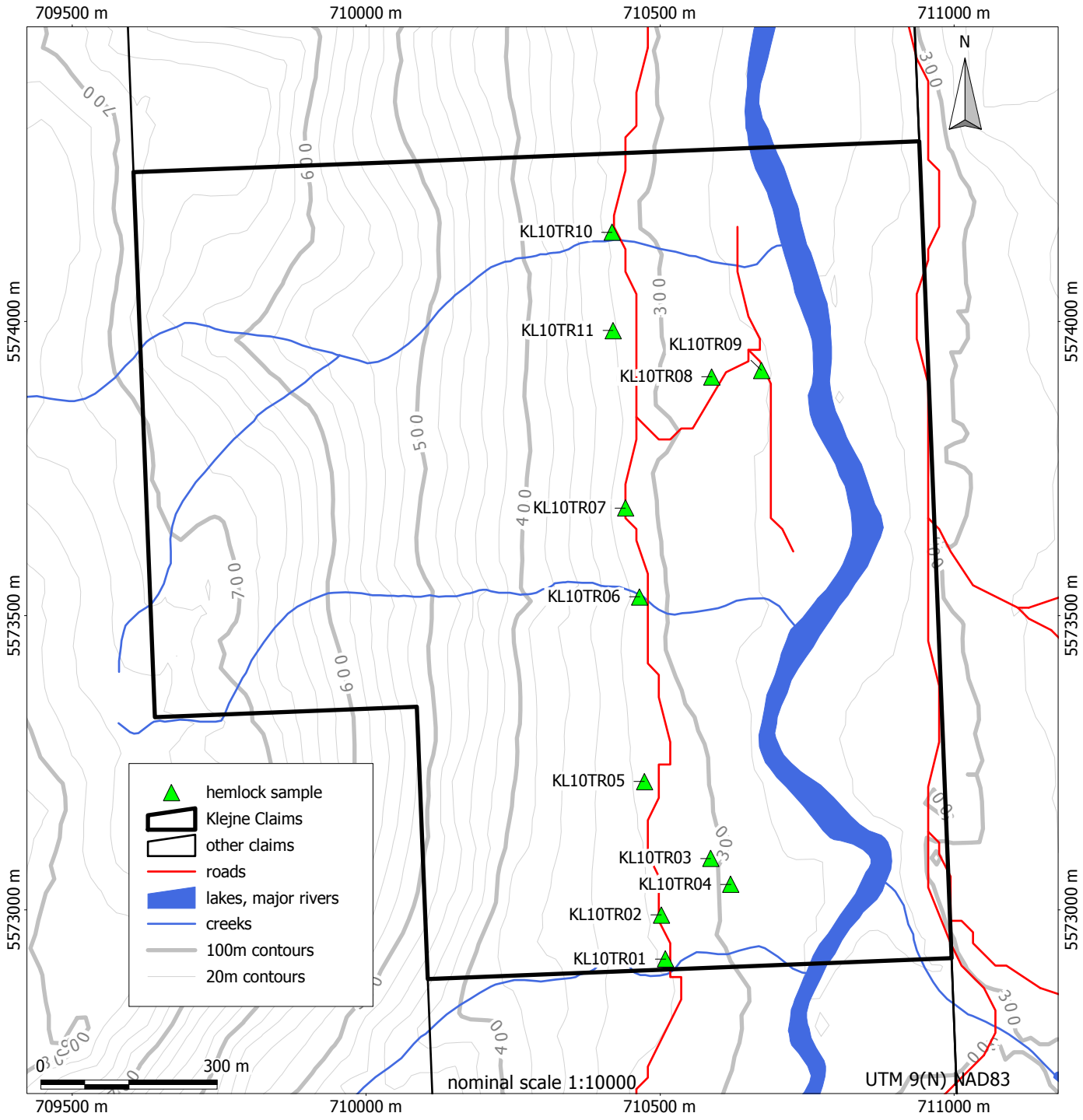



**Figure 8**
**Hemlock sample locations**

**Klejne Claims**
**May 2010**

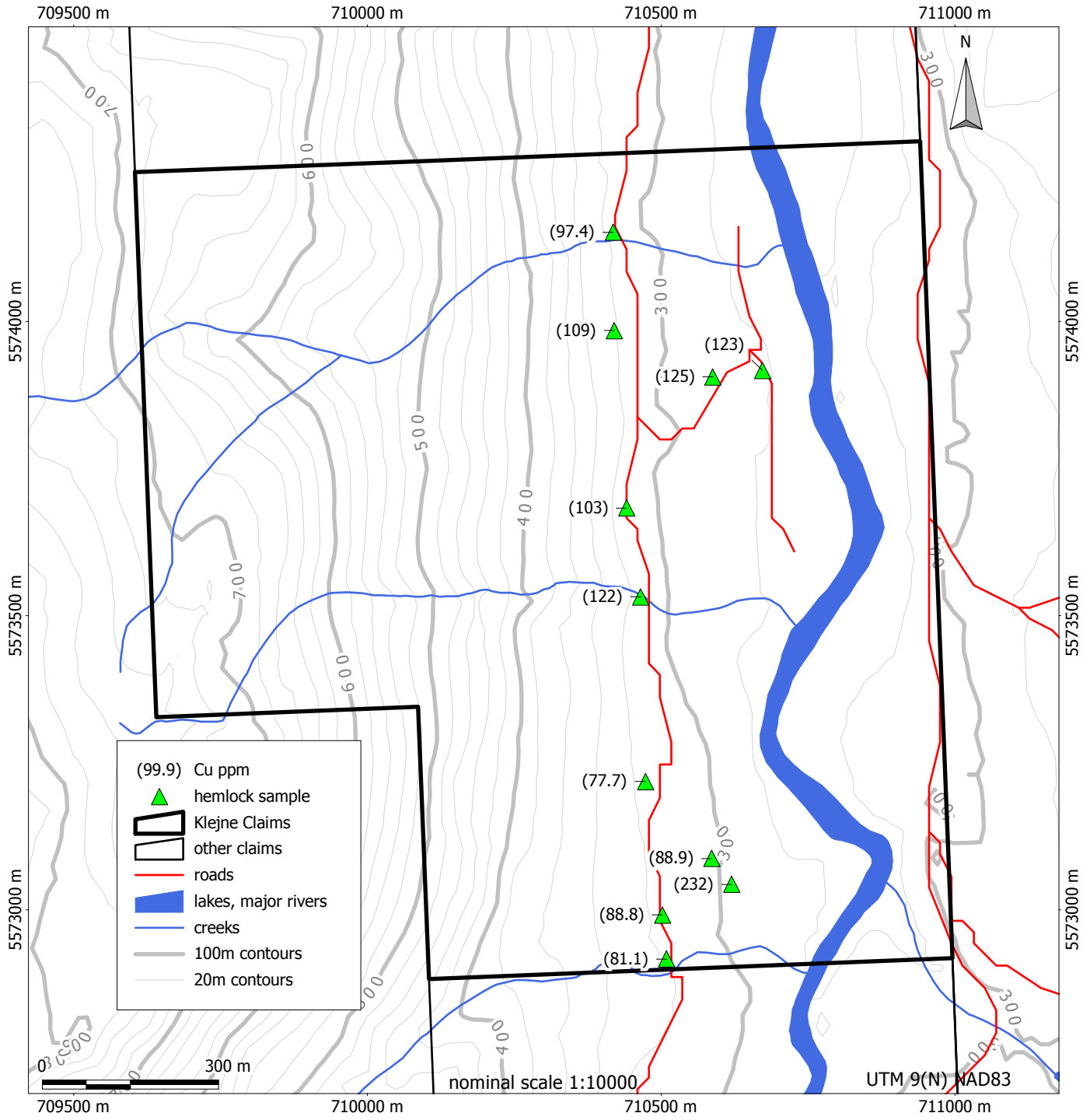



**Figure 9**
**Copper in hemlock samples**

**Klejne Claims**
**May 2010**

# Appendix B: certificate of assays

Acme Analytical Laboratories (Vancouver) Ltd.
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Phone (604) 253-3158 Fax (604) 253-1716
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**Client:** **Schau, Mikkel**
1007 Barkway Terrace
Brentwood Bay BC V8M 1A4 Canada

Submitted By: Mikkel Schau
Receiving Lab: Canada-Vancouver
Received: March 11, 2010
Report Date: April 12, 2010
Page: 1 of 2

# CERTIFICATE OF ANALYSIS VAN10000958.2

## CLIENT JOB INFORMATION

Project: ADAM RIVER
Shipment ID: KLEJNE PROJECT
P.O. Number
Number of Samples: 15

## SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
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.

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Method Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| R200-250 | 15 | Crush, split and pulverize 250 g rock to 200 mesh | | | VAN |
| 1F02 | 15 | 1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis | 15 | Completed | VAN |
| 2A13 | 3 | Total S Analysis by Leco | 0.1 | Completed | VAN |

## ADDITIONAL COMMENTS

Version 2: 2A13 included

Invoice To: Schau, Mikkel
1007 Barkway Terrace
Brentwood Bay BC V8M 1A4
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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

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1007 Barkway Terrace
Brentwood Bay BC V8M 1A4 Canada

Project: ADAM RIVER
Report Date: April 12, 2010



# CERTIFICATE OF ANALYSIS VAN10000958.2

| Method | | WGHT | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | Wgt | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca |
| Unit | | kg | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % |
| MDL | | 0.01 | 0.01 | 0.01 | 0.01 | 0.1 | 2 | 0.1 | 0.1 | 1 | 0.01 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.01 | 0.02 | 0.02 | 2 | 0.01 |
| 006510 | Rock | 0.35 | 0.14 | 543.3 | 0.55 | 96.3 | 124 | 53.6 | 37.3 | 792 | 6.22 | 0.4 | 0.1 | 59.5 | 0.3 | 24.9 | 0.32 | 0.05 | <0.02 | 195 | 1.30 |
| 006511 | Rock | 0.50 | 0.21 | 188.6 | 0.56 | 56.2 | 37 | 38.7 | 25.9 | 684 | 3.98 | 0.5 | <0.1 | 6.6 | 0.2 | 39.0 | 0.06 | 0.10 | <0.02 | 140 | 7.18 |
| 006512 | Rock | 0.41 | 0.17 | 1259 | 0.87 | 54.9 | 535 | 45.7 | 28.6 | 583 | 4.24 | 0.5 | <0.1 | 29.4 | 0.2 | 45.6 | 0.45 | 0.09 | <0.02 | 152 | 4.61 |
| 006513 | Rock | 0.62 | 0.13 | 316.6 | 0.55 | 91.0 | 67 | 60.5 | 40.3 | 1095 | 5.81 | 0.4 | <0.1 | 8.9 | 0.3 | 34.1 | 0.11 | 0.07 | <0.02 | 150 | 2.24 |
| 006514 | Rock | 0.79 | 0.61 | 189.3 | 0.59 | 50.1 | 77 | 39.4 | 29.8 | 415 | 6.78 | 18.4 | 0.1 | 13.2 | 0.4 | 25.4 | 0.05 | 0.49 | <0.02 | 193 | 1.05 |
| 006515 | Rock | 0.49 | 0.31 | 217.7 | 3.17 | 150.8 | 38 | 63.2 | 52.0 | 1741 | 10.15 | 1.5 | 0.1 | 6.5 | 0.4 | 7.7 | 0.07 | 0.34 | 0.18 | 344 | 0.60 |
| 006516 | Rock | 0.56 | 0.26 | 834.1 | 0.64 | 85.9 | 562 | 48.8 | 36.3 | 706 | 4.54 | 0.2 | 0.1 | 3.8 | 0.2 | 33.7 | 0.06 | 0.02 | <0.02 | 122 | 1.96 |
| 006517 | Rock | 1.34 | 8.32 | 69.19 | 15.13 | 163.2 | 98 | 31.1 | 5.9 | 322 | 0.91 | 7.7 | 2.5 | 7.9 | 0.5 | 287.1 | 2.29 | 1.08 | 0.07 | 32 | 4.85 |
| 006518 | Rock | 0.77 | 0.43 | 676.3 | 1.43 | 71.5 | 129 | 24.2 | 18.2 | 423 | 3.14 | 0.2 | 0.1 | 6.2 | 0.4 | 24.0 | 0.10 | 0.03 | <0.02 | 118 | 1.35 |
| 006519 | Rock | 0.16 | 1.04 | 60.28 | 7.45 | 149.4 | 115 | 64.7 | 362.0 | 1923 | 27.39 | 46.6 | <0.1 | 35.7 | 0.2 | 27.5 | 0.04 | 0.08 | 4.89 | 208 | 0.34 |
| 006520 | Rock | 0.84 | 4.04 | 45.73 | 9.25 | 70.2 | 86 | 33.1 | 142.8 | 597 | 26.29 | 33.6 | <0.1 | 32.0 | 0.1 | 24.0 | 0.03 | 0.35 | 4.05 | 130 | 0.23 |
| 006521 | Rock | 0.93 | 0.25 | 173.4 | 0.71 | 36.1 | 59 | 72.0 | 22.0 | 330 | 3.97 | 0.4 | 0.1 | 7.3 | 0.3 | 65.0 | 0.06 | <0.02 | 0.05 | 169 | 2.31 |
| 006522 | Rock | 0.61 | 0.28 | 83.97 | 1.73 | 143.5 | 37 | 65.6 | 38.4 | 1232 | 6.38 | 0.9 | <0.1 | 7.9 | 0.2 | 330.7 | 0.63 | 0.10 | 0.04 | 247 | 6.21 |
| 006523 | Rock | 0.97 | 0.12 | 290.0 | 0.63 | 72.9 | 93 | 52.5 | 35.3 | 895 | 5.44 | 0.5 | <0.1 | 9.1 | 0.3 | 41.9 | 0.13 | 0.06 | <0.02 | 160 | 1.70 |
| 006524 | Rock | 0.39 | 0.43 | 75.78 | 0.49 | 38.0 | 28 | 41.2 | 25.7 | 316 | 6.07 | 1.9 | 0.1 | 3.5 | 0.3 | 24.8 | 0.06 | 0.12 | <0.02 | 168 | 1.00 |

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Brentwood Bay BC V8M 1A4 Canada

Project: ADAM RIVER
Report Date: April 12, 2010



# CERTIFICATE OF ANALYSIS VAN10000958.2

| | Method | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 2A Leco |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Sc | Tl | S | Hg | Se | Te | Ga | TOT/S |
| | Unit | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | % | ppb | ppm | ppm | ppm | % |
| | MDL | 0.001 | 0.5 | 0.5 | 0.01 | 0.5 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.1 | 0.02 | 0.02 | 5 | 0.1 | 0.02 | 0.1 | 0.02 |
| 006510 | Rock | 0.057 | 4.3 | 52.7 | 3.03 | 24.6 | 0.275 | 2 | 3.16 | 0.080 | 0.11 | <0.1 | 5.5 | <0.02 | <0.02 | <5 | 0.2 | <0.02 | 9.5 | <0.02 |
| 006511 | Rock | 0.040 | 3.0 | 39.2 | 1.80 | 3.8 | 0.296 | 2 | 3.39 | 0.018 | 0.03 | <0.1 | 3.7 | <0.02 | <0.02 | <5 | <0.1 | <0.02 | 9.8 | 0.03 |
| 006512 | Rock | 0.048 | 3.4 | 46.7 | 1.82 | 4.5 | 0.285 | 1 | 2.09 | 0.022 | 0.02 | <0.1 | 3.6 | <0.02 | 0.06 | <5 | 0.7 | <0.02 | 6.8 | 0.07 |
| 006513 | Rock | 0.063 | 4.4 | 57.4 | 3.17 | 20.2 | 0.257 | 1 | 3.21 | 0.020 | 0.09 | <0.1 | 5.4 | <0.02 | <0.02 | <5 | 0.2 | <0.02 | 9.0 | N.A. |
| 006514 | Rock | 0.069 | 3.9 | 38.8 | 1.95 | 7.4 | 0.525 | <1 | 1.74 | 0.032 | 0.03 | <0.1 | 10.1 | 0.41 | 2.24 | 129 | 0.6 | <0.02 | 7.6 | N.A. |
| 006515 | Rock | 0.060 | 4.3 | 62.2 | 3.66 | 10.9 | 0.475 | <1 | 3.71 | 0.027 | 0.04 | <0.1 | 26.7 | <0.02 | 0.33 | <5 | 0.1 | <0.02 | 17.4 | N.A. |
| 006516 | Rock | 0.011 | 1.2 | 31.5 | 2.06 | 6.0 | 0.547 | 3 | 4.84 | 0.751 | 0.02 | <0.1 | 6.0 | <0.02 | 0.02 | <5 | 0.1 | 0.02 | 16.1 | N.A. |
| 006517 | Rock | 0.075 | 5.7 | 17.0 | 0.21 | 39.9 | 0.142 | 11 | 3.73 | 0.480 | 0.04 | <0.1 | 2.5 | <0.02 | 0.22 | 9 | 6.4 | 0.10 | 7.3 | N.A. |
| 006518 | Rock | 0.071 | 3.1 | 10.1 | 0.95 | 3.7 | 0.628 | 2 | 1.28 | 0.033 | <0.01 | <0.1 | 4.1 | <0.02 | 0.03 | <5 | 0.7 | <0.02 | 4.7 | N.A. |
| 006519 | Rock | 0.043 | 0.9 | 24.8 | 2.79 | 9.7 | 0.303 | <1 | 3.75 | 0.011 | 0.02 | <0.1 | 14.9 | <0.02 | >10 | <5 | 6.5 | 0.26 | 11.6 | N.A. |
| 006520 | Rock | 0.027 | 1.1 | 21.0 | 1.00 | 9.1 | 0.204 | <1 | 1.49 | 0.016 | 0.04 | <0.1 | 8.3 | <0.02 | >10 | 7 | 12.7 | 0.09 | 5.5 | N.A. |
| 006521 | Rock | 0.055 | 3.8 | 25.4 | 0.95 | 10.2 | 0.453 | 2 | 4.30 | 0.398 | 0.02 | <0.1 | 2.0 | <0.02 | 0.14 | <5 | 0.2 | <0.02 | 10.2 | N.A. |
| 006522 | Rock | 0.046 | 3.6 | 96.5 | 3.34 | 99.2 | 0.287 | <1 | 5.43 | 0.112 | 0.15 | <0.1 | 17.1 | <0.02 | 0.19 | 5 | 0.3 | <0.02 | 11.0 | N.A. |
| 006523 | Rock | 0.055 | 4.1 | 48.7 | 2.62 | 28.8 | 0.282 | <1 | 3.28 | 0.096 | 0.10 | <0.1 | 5.0 | <0.02 | 0.04 | <5 | 0.3 | <0.02 | 9.2 | N.A. |
| 006524 | Rock | 0.059 | 2.8 | 42.6 | 1.48 | 3.9 | 0.581 | 1 | 1.27 | 0.048 | 0.02 | <0.1 | 3.9 | <0.02 | 0.28 | 21 | 0.1 | <0.02 | 5.9 | N.A. |

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Project: ADAM RIVER
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# QUALITY CONTROL REPORT VAN10000958.2

| | Method | WGHT | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Wgt | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca |
| | Unit | kg | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % |
| | MDL | 0.01 | 0.01 | 0.01 | 0.01 | 0.1 | 2 | 0.1 | 0.1 | 1 | 0.01 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.01 | 0.02 | 0.02 | 2 | 0.01 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| 006511 | Rock | 0.50 | 0.21 | 188.6 | 0.56 | 56.2 | 37 | 38.7 | 25.9 | 684 | 3.98 | 0.5 | <0.1 | 6.6 | 0.2 | 39.0 | 0.06 | 0.10 | <0.02 | 140 | 7.18 |
| REP 006511 | QC | | | | | | | | | | | | | | | | | | | | |
| 006519 | Rock | 0.16 | 1.04 | 60.28 | 7.45 | 149.4 | 115 | 64.7 | 362.0 | 1923 | 27.39 | 46.6 | <0.1 | 35.7 | 0.2 | 27.5 | 0.04 | 0.08 | 4.89 | 208 | 0.34 |
| REP 006519 | QC | | 1.00 | 59.51 | 7.60 | 141.9 | 117 | 62.9 | 355.9 | 1920 | 27.03 | 46.2 | <0.1 | 40.5 | 0.2 | 27.1 | 0.04 | 0.14 | 4.91 | 210 | 0.36 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD CSC | Standard | | | | | | | | | | | | | | | | | | | | |
| STD DS7 | Standard | | 20.48 | 113.0 | 63.74 | 384.3 | 829 | 53.5 | 8.7 | 614 | 2.29 | 49.1 | 4.7 | 63.7 | 4.5 | 71.4 | 6.16 | 5.87 | 4.40 | 81 | 0.93 |
| STD OREAS76A | Standard | | | | | | | | | | | | | | | | | | | | |
| STD DS7 Expected | | | 20.5 | 109 | 70.6 | 411 | 890 | 56 | 9.7 | 627 | 2.39 | 48.2 | 4.9 | 70 | 4.4 | 68.7 | 6.38 | 4.6 | 4.51 | 84 | 0.93 |
| STD CSC Expected | | | | | | | | | | | | | | | | | | | | | |
| STD OREAS76A Expected | | | | | | | | | | | | | | | | | | | | | |
| BLK | Blank | | <0.01 | <0.01 | <0.01 | <0.1 | <2 | <0.1 | <0.1 | <1 | <0.01 | <0.1 | <0.1 | <0.2 | <0.1 | <0.5 | <0.01 | <0.02 | <0.02 | <2 | <0.01 |
| BLK | Blank | | | | | | | | | | | | | | | | | | | | |
| Prep Wash | | | | | | | | | | | | | | | | | | | | | |
| G1 | Prep Blank | <0.01 | 0.10 | 32.28 | 3.14 | 41.8 | 25 | 2.6 | 4.0 | 569 | 1.91 | 0.3 | 2.2 | 1.1 | 6.2 | 54.0 | 0.02 | <0.02 | 0.10 | 37 | 0.47 |
| G1 | Prep Blank | <0.01 | 0.16 | 3.01 | 3.02 | 42.7 | 9 | 3.1 | 4.0 | 542 | 1.86 | 0.2 | 2.1 | 0.9 | 6.5 | 51.1 | 0.02 | <0.02 | 0.07 | 36 | 0.47 |

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# QUALITY CONTROL REPORT VAN10000958.2

| | Method | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 2A Leco |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Sc | Tl | S | Hg | Se | Te | Ga | TOT/S |
| | Unit | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | % | ppb | ppm | ppm | ppm | % |
| | MDL | 0.001 | 0.5 | 0.5 | 0.01 | 0.5 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.1 | 0.02 | 0.02 | 5 | 0.1 | 0.02 | 0.1 | 0.02 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | |
| 006511 | Rock | 0.040 | 3.0 | 39.2 | 1.80 | 3.8 | 0.296 | 2 | 3.39 | 0.018 | 0.03 | <0.1 | 3.7 | <0.02 | <0.02 | <5 | <0.1 | <0.02 | 9.8 | 0.03 |
| REP 006511 | QC | | | | | | | | | | | | | | | | | | | 0.02 |
| 006519 | Rock | 0.043 | 0.9 | 24.8 | 2.79 | 9.7 | 0.303 | <1 | 3.75 | 0.011 | 0.02 | <0.1 | 14.9 | <0.02 | >10 | <5 | 6.5 | 0.26 | 11.6 | N.A. |
| REP 006519 | QC | 0.043 | 1.0 | 24.7 | 2.73 | 10.3 | 0.336 | <1 | 3.73 | 0.011 | 0.02 | <0.1 | 14.6 | <0.02 | >10 | 5 | 6.7 | 0.25 | 11.8 | |
| Reference Materials | | | | | | | | | | | | | | | | | | | | |
| STD CSC | Standard | | | | | | | | | | | | | | | | | | | 4.40 |
| STD DS7 | Standard | 0.074 | 12.9 | 188.9 | 1.02 | 401.5 | 0.131 | 38 | 0.99 | 0.092 | 0.44 | 3.9 | 3.0 | 3.97 | 0.20 | 190 | 3.5 | 1.21 | 4.4 | |
| STD OREAS76A | Standard | | | | | | | | | | | | | | | | | | | 17.71 |
| STD DS7 Expected | | 0.08 | 11.7 | 179 | 1.05 | 370.3 | 0.124 | 38.6 | 0.959 | 0.089 | 0.44 | 3.4 | 2.5 | 4.19 | 0.19 | 200 | 3.5 | 1.08 | 4.6 | |
| STD CSC Expected | | | | | | | | | | | | | | | | | | | | 4.25 |
| STD OREAS76A Expected | | | | | | | | | | | | | | | | | | | | 18 |
| BLK | Blank | <0.001 | <0.5 | <0.5 | <0.01 | <0.5 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.1 | <0.02 | <0.02 | <5 | <0.1 | <0.02 | <0.1 | |
| BLK | Blank | | | | | | | | | | | | | | | | | | | <0.02 |
| Prep Wash | | | | | | | | | | | | | | | | | | | | |
| G1 | Prep Blank | 0.076 | 12.5 | 10.1 | 0.51 | 158.5 | 0.133 | <1 | 0.92 | 0.079 | 0.49 | <0.1 | 2.3 | 0.27 | <0.02 | <5 | <0.1 | <0.02 | 4.4 | N.A. |
| G1 | Prep Blank | 0.086 | 12.5 | 10.8 | 0.51 | 172.1 | 0.129 | 1 | 0.86 | 0.073 | 0.47 | <0.1 | 2.3 | 0.30 | <0.02 | <5 | <0.1 | <0.02 | 4.4 | N.A. |

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1007 Barkway Terrace
Brentwood Bay BC V8M 1A4 Canada

Submitted By: Mikkel Schau
Receiving Lab: Canada-Vancouver
Received: April 05, 2010
Report Date: April 13, 2010
Page: 1 of 2

# CERTIFICATE OF ANALYSIS VAN10000958R.1

## CLIENT JOB INFORMATION

Project: ADAM RIVER
Shipment ID: KLEJNE PROJECT
P.O. Number
Number of Samples: 3

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Method Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| P200 | 3 | Pulverize to 85% passing 200 mesh | | | VAN |
| 1F02 | 3 | 1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis | 15 | Completed | VAN |

## SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
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.

## ADDITIONAL COMMENTS

Re-analysis of 1F02 from rock rejects

Invoice To: Schau, Mikkel
1007 Barkway Terrace
Brentwood Bay BC V8M 1A4
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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.
"*" 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: ADAM RIVER
Report Date: April 13, 2010



# CERTIFICATE OF ANALYSIS VAN10000958R.1

| Method | | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| Unit | | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| MDL | | 0.01 | 0.01 | 0.01 | 0.1 | 2 | 0.1 | 0.1 | 1 | 0.01 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.01 | 0.02 | 0.02 | 2 | 0.01 | 0.001 |
| 006510 | Rock | 0.19 | 549.2 | 0.84 | 92.2 | 156 | 56.6 | 37.2 | 846 | 6.79 | 0.9 | 0.1 | 133.8 | 0.3 | 29.6 | 0.34 | 0.11 | <0.02 | 223 | 1.40 | 0.060 |
| 006511 | Rock | 0.19 | 188.6 | 0.62 | 51.9 | 47 | 37.9 | 24.8 | 656 | 3.93 | 0.4 | <0.1 | 4.9 | 0.2 | 34.9 | 0.05 | 0.09 | <0.02 | 118 | 6.84 | 0.041 |
| 006512 | Rock | 0.22 | 1284 | 1.20 | 54.1 | 609 | 47.2 | 28.7 | 578 | 4.58 | 0.8 | <0.1 | 35.6 | 0.2 | 56.2 | 0.43 | 0.20 | <0.02 | 172 | 4.70 | 0.050 |

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Brentwood Bay BC V8M 1A4 Canada

Project: ADAM RIVER
Report Date: April 13, 2010



# CERTIFICATE OF ANALYSIS VAN10000958R.1

| Method | | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Sc | Tl | S | Hg | Se | Te | Ga |
| Unit | | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | % | ppb | ppm | ppm | ppm |
| MDL | | 0.5 | 0.5 | 0.01 | 0.5 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.1 | 0.02 | 0.02 | 5 | 0.1 | 0.02 | 0.1 |
| 006510 | Rock | 4.6 | 56.8 | 3.09 | 27.8 | 0.356 | 2 | 3.36 | 0.117 | 0.12 | <0.1 | 6.6 | <0.02 | <0.02 | <5 | 0.3 | <0.02 | 9.6 |
| 006511 | Rock | 3.0 | 38.8 | 1.77 | 3.8 | 0.250 | 1 | 3.31 | 0.018 | 0.03 | <0.1 | 3.2 | <0.02 | <0.02 | <5 | 0.3 | <0.02 | 9.4 |
| 006512 | Rock | 4.0 | 44.9 | 1.81 | 7.0 | 0.366 | 2 | 2.20 | 0.055 | 0.02 | <0.1 | 4.6 | <0.02 | 0.06 | <5 | 0.9 | <0.02 | 7.1 |

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Brentwood Bay BC V8M 1A4 Canada

Project: ADAM RIVER
Report Date: April 13, 2010



# QUALITY CONTROL REPORT VAN10000958R.1

| | Method | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca | P |
| | Unit | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % | % |
| | MDL | 0.01 | 0.01 | 0.01 | 0.1 | 2 | 0.1 | 0.1 | 1 | 0.01 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.01 | 0.02 | 0.02 | 2 | 0.01 | 0.001 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD DS7 | Standard | 20.47 | 105.7 | 65.47 | 381.7 | 992 | 57.3 | 9.9 | 611 | 2.37 | 49.5 | 4.7 | 62.9 | 4.3 | 69.0 | 6.36 | 5.91 | 4.58 | 80 | 0.93 | 0.079 |
| STD DS7 Expected | | 20.5 | 109 | 70.6 | 411 | 890 | 56 | 9.7 | 627 | 2.39 | 48.2 | 4.9 | 70 | 4.4 | 68.7 | 6.38 | 4.6 | 4.51 | 84 | 0.93 | 0.08 |
| BLK | Blank | <0.01 | <0.01 | <0.01 | <0.1 | <2 | <0.1 | <0.1 | <1 | <0.01 | <0.1 | <0.1 | <0.2 | <0.1 | <0.5 | <0.01 | <0.02 | <0.02 | <2 | <0.01 | <0.001 |
| Prep Wash | | | | | | | | | | | | | | | | | | | | | |
| G1 | Prep Blank | 0.18 | 3.74 | 3.04 | 48.7 | 13 | 3.0 | 4.4 | 583 | 1.96 | 21.7 | 2.1 | 6.9 | 6.1 | 58.3 | 0.01 | 0.19 | 0.05 | 37 | 0.51 | 0.078 |

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Project: ADAM RIVER
Report Date: April 13, 2010



# QUALITY CONTROL REPORT VAN10000958R.1

| | Method | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Sc | Tl | S | Hg | Se | Te | Ga |
| | Unit | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | % | ppb | ppm | ppm | ppm |
| | MDL | 0.5 | 0.5 | 0.01 | 0.5 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.1 | 0.02 | 0.02 | 5 | 0.1 | 0.02 | 0.1 |
| Reference Materials | | | | | | | | | | | | | | | | | | |
| STD DS7 | Standard | 12.6 | 193.5 | 1.03 | 397.4 | 0.132 | 37 | 1.00 | 0.084 | 0.46 | 3.8 | 2.7 | 3.96 | 0.20 | 215 | 3.7 | 1.16 | 4.6 |
| STD DS7 Expected | | 11.7 | 179 | 1.05 | 370.3 | 0.124 | 38.6 | 0.959 | 0.089 | 0.44 | 3.4 | 2.5 | 4.19 | 0.19 | 200 | 3.5 | 1.08 | 4.6 |
| BLK | Blank | <0.5 | <0.5 | <0.01 | <0.5 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.1 | <0.02 | <0.02 | <5 | <0.1 | <0.02 | <0.1 |
| Prep Wash | | | | | | | | | | | | | | | | | | |
| G1 | Prep Blank | 12.4 | 8.8 | 0.51 | 156.2 | 0.138 | <1 | 0.96 | 0.085 | 0.52 | <0.1 | 2.2 | 0.34 | <0.02 | <5 | 0.1 | <0.02 | 4.6 |

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**Client:** **Schau, Mikkel**
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Submitted By: Mikkel Schau
Receiving Lab: Canada-Vancouver
Received: March 10, 2010
Report Date: March 18, 2010
Page: 1 of 2

# CERTIFICATE OF ANALYSIS VAN10000953.1

## CLIENT JOB INFORMATION

Project: KLEJNE
Shipment ID:
P.O. Number
Number of Samples: 13

## SAMPLE DISPOSAL

STOR-PLP Store After 90 days Invoice for Storage
DISP-RJT-SOIL Immediate Disposal of Soil Reject

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

## SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

| Method Code | Number of Samples | Code Description | Test Wgt (g) | Report Status | Lab |
|---|---|---|---|---|---|
| SS80 | 12 | Dry at 60C sieve 100g to -80 mesh | | | VAN |
| Dry at 60C | 12 | Dry at 60C | | | VAN |
| 1F02 | 12 | 1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis | 15 | Completed | VAN |
| DISP2 | 12 | Heat treatment of Soils and Sediments | | | VAN |

## ADDITIONAL COMMENTS

Invoice To: Schau, Mikkel
1007 Barkway Terrace
Brentwood Bay BC V8M 1A4
Canada

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
CLARENCE LEONG
GENERAL MANAGER

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.
"*" 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:** **Schau, Mikkel**
1007 Barkway Terrace
Brentwood Bay BC V8M 1A4 Canada

Project: KLEJNE
Report Date: March 18, 2010



# CERTIFICATE OF ANALYSIS VAN10000953.1

| Method | | WGHT | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | Wgt | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca |
| Unit | | kg | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % |
| MDL | | 0.01 | 0.01 | 0.01 | 0.01 | 0.1 | 2 | 0.1 | 0.1 | 1 | 0.01 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.01 | 0.02 | 0.02 | 2 | 0.01 |
| 006525 | Silt | | 0.35 | 97.28 | 3.49 | 78.6 | 50 | 47.0 | 33.6 | 1609 | 5.68 | 0.6 | 0.2 | 4.3 | 0.4 | 25.1 | 0.16 | 0.06 | 0.03 | 221 | 2.62 |
| 006526 | Silt | | 0.35 | 95.92 | 3.93 | 80.4 | 49 | 46.4 | 34.8 | 1810 | 5.54 | 0.7 | 0.2 | 10.4 | 0.4 | 26.2 | 0.22 | 0.09 | 0.05 | 217 | 2.57 |
| 006527 | Silt | | 0.37 | 96.63 | 4.69 | 79.4 | 62 | 44.7 | 34.7 | 1769 | 5.40 | 0.7 | 0.2 | 2.0 | 0.3 | 25.4 | 0.18 | 0.07 | 0.04 | 211 | 2.55 |
| 006528 | Silt | | 1.35 | 76.35 | 8.02 | 84.9 | 255 | 29.7 | 28.0 | 4152 | 6.95 | 3.2 | 0.4 | 2.0 | 0.4 | 16.6 | 0.66 | 0.25 | 0.11 | 322 | 1.36 |
| 006529 | Silt | | 5.27 | 90.18 | 3.64 | 92.5 | 105 | 46.9 | 60.4 | 4958 | 7.02 | 45.3 | 1.7 | 2.5 | 0.6 | 19.2 | 0.64 | 0.16 | 0.05 | 305 | 2.09 |
| 006530 | Silt | | 0.67 | 149.8 | 3.26 | 86.3 | 76 | 48.3 | 29.5 | 2978 | 4.55 | 17.9 | 0.7 | 3.0 | 0.6 | 40.6 | 0.74 | 0.15 | 0.06 | 185 | 2.73 |
| 006531 | Silt | | 0.38 | 137.7 | 8.10 | 89.4 | 67 | 36.5 | 42.3 | 2998 | 4.97 | 1.1 | 0.2 | 1.9 | 0.3 | 48.7 | 0.20 | 0.08 | 0.05 | 177 | 1.69 |
| 006532 | Silt | | 1.19 | 133.9 | 6.59 | 119.3 | 229 | 37.7 | 75.3 | 8271 | 6.26 | 0.9 | 0.4 | 5.7 | 0.5 | 19.9 | 1.10 | 0.12 | 0.09 | 251 | 1.40 |
| 006533 | Silt | | 1.30 | 142.4 | 6.95 | 131.8 | 239 | 38.6 | 88.2 | >10000 | 6.29 | 1.2 | 0.4 | 3.1 | 0.5 | 20.6 | 1.13 | 0.12 | 0.08 | 251 | 1.31 |
| 006534 | Silt | | 0.52 | 284.7 | 11.46 | 77.8 | 129 | 35.3 | 71.4 | 3851 | 5.59 | 1.9 | 0.2 | 12.2 | 0.3 | 42.8 | 0.30 | 0.12 | 0.08 | 185 | 1.73 |
| 006535 | Silt | | 1.35 | 311.8 | 2.36 | 56.9 | 558 | 27.9 | 20.7 | 390 | 8.30 | 2.5 | 0.5 | 23.6 | 0.6 | 17.6 | 0.40 | 0.20 | 0.18 | 305 | 0.68 |
| 006536 | Silt | | 1.13 | 249.5 | 2.87 | 58.2 | 831 | 27.0 | 21.8 | 364 | 8.21 | 1.5 | 0.5 | 11.5 | 0.6 | 17.6 | 0.42 | 0.25 | 0.19 | 321 | 0.55 |
| 006537 | Silt | 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. |

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1007 Barkway Terrace
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Project: KLEJNE
Report Date: March 18, 2010



# CERTIFICATE OF ANALYSIS VAN10000953.1

| Method | | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Analyte | | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Sc | Tl | S | Hg | Se | Te | Ga |
| Unit | | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | % | ppb | ppm | ppm | ppm |
| MDL | | 0.001 | 0.5 | 0.5 | 0.01 | 0.5 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.1 | 0.02 | 0.02 | 5 | 0.1 | 0.02 | 0.1 |
| 006525 | Silt | 0.042 | 3.7 | 41.6 | 1.44 | 20.2 | 0.549 | 4 | 4.28 | 0.015 | 0.01 | <0.1 | 10.2 | <0.02 | <0.02 | 46 | 0.6 | <0.02 | 12.5 |
| 006526 | Silt | 0.044 | 3.9 | 40.1 | 1.41 | 23.2 | 0.533 | 5 | 4.21 | 0.015 | 0.02 | <0.1 | 10.1 | <0.02 | 0.02 | 69 | 0.7 | <0.02 | 12.5 |
| 006527 | Silt | 0.047 | 4.1 | 42.3 | 1.33 | 23.5 | 0.509 | 5 | 4.28 | 0.018 | 0.01 | <0.1 | 10.0 | <0.02 | 0.04 | 75 | 0.8 | <0.02 | 12.0 |
| 006528 | Silt | 0.070 | 4.5 | 73.8 | 0.44 | 30.1 | 0.582 | 3 | 4.28 | 0.009 | 0.01 | <0.1 | 8.6 | <0.02 | 0.06 | 185 | 1.1 | 0.06 | 16.5 |
| 006529 | Silt | 0.039 | 4.3 | 68.5 | 0.96 | 29.8 | 0.654 | 4 | 5.35 | 0.010 | <0.01 | <0.1 | 10.5 | <0.02 | 0.03 | 85 | 1.2 | <0.02 | 17.0 |
| 006530 | Silt | 0.056 | 6.6 | 45.5 | 1.04 | 32.4 | 0.404 | 4 | 6.11 | 0.015 | 0.02 | <0.1 | 14.4 | <0.02 | <0.02 | 82 | 1.2 | 0.03 | 11.0 |
| 006531 | Silt | 0.055 | 3.3 | 36.2 | 0.98 | 35.8 | 0.405 | 4 | 3.96 | 0.019 | 0.02 | <0.1 | 8.2 | <0.02 | 0.06 | 116 | 1.0 | 0.04 | 9.6 |
| 006532 | Silt | 0.063 | 5.1 | 72.7 | 0.71 | 47.0 | 0.466 | 4 | 4.65 | 0.011 | 0.01 | <0.1 | 11.6 | 0.07 | 0.07 | 199 | 1.3 | 0.03 | 14.7 |
| 006533 | Silt | 0.067 | 5.5 | 69.1 | 0.69 | 56.1 | 0.454 | 3 | 4.77 | 0.012 | 0.01 | <0.1 | 11.7 | 0.10 | 0.07 | 199 | 1.4 | 0.02 | 14.9 |
| 006534 | Silt | 0.052 | 2.8 | 35.0 | 1.04 | 33.7 | 0.428 | 3 | 4.31 | 0.020 | 0.04 | <0.1 | 8.2 | <0.02 | 0.06 | 108 | 1.1 | 0.02 | 10.8 |
| 006535 | Silt | 0.048 | 5.9 | 71.3 | 0.86 | 15.5 | 0.909 | 1 | 6.50 | 0.013 | <0.01 | <0.1 | 15.0 | <0.02 | 0.04 | 299 | 1.8 | <0.02 | 12.5 |
| 006536 | Silt | 0.046 | 6.2 | 68.0 | 0.69 | 16.9 | 1.032 | <1 | 5.97 | 0.011 | <0.01 | <0.1 | 14.7 | <0.02 | 0.04 | 321 | 1.4 | 0.03 | 12.4 |
| 006537 | Silt | 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. |

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1007 Barkway Terrace
Brentwood Bay BC V8M 1A4 Canada

Project: KLEJNE
Report Date: March 18, 2010



# QUALITY CONTROL REPORT VAN10000953.1

| | Method | WGHT | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | Wgt | Mo | Cu | Pb | Zn | Ag | Ni | Co | Mn | Fe | As | U | Au | Th | Sr | Cd | Sb | Bi | V | Ca |
| | Unit | kg | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | % | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | % |
| | MDL | 0.01 | 0.01 | 0.01 | 0.01 | 0.1 | 2 | 0.1 | 0.1 | 1 | 0.01 | 0.1 | 0.1 | 0.2 | 0.1 | 0.5 | 0.01 | 0.02 | 0.02 | 2 | 0.01 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | | | |
| 006529 | Silt | | 5.27 | 90.18 | 3.64 | 92.5 | 105 | 46.9 | 60.4 | 4958 | 7.02 | 45.3 | 1.7 | 2.5 | 0.6 | 19.2 | 0.64 | 0.16 | 0.05 | 305 | 2.09 |
| REP 006529 | QC | | 5.38 | 93.89 | 3.89 | 95.2 | 116 | 49.5 | 64.8 | 5289 | 7.27 | 54.2 | 1.8 | 1.3 | 0.5 | 21.2 | 0.61 | 0.19 | 0.05 | 310 | 2.20 |
| Reference Materials | | | | | | | | | | | | | | | | | | | | | |
| STD DS7 | Standard | | 19.36 | 102.4 | 60.31 | 384.9 | 785 | 50.0 | 8.8 | 612 | 2.34 | 50.5 | 4.4 | 77.5 | 4.2 | 68.7 | 6.29 | 5.97 | 4.56 | 81 | 0.94 |
| STD DS7 Expected | | | 20.5 | 109 | 70.6 | 411 | 890 | 56 | 9.7 | 627 | 2.39 | 48.2 | 4.9 | 70 | 4.4 | 68.7 | 6.38 | 4.6 | 4.51 | 84 | 0.93 |
| BLK | Blank | | <0.01 | <0.01 | <0.01 | <0.1 | <2 | <0.1 | <0.1 | <1 | <0.01 | <0.1 | <0.1 | <0.2 | <0.1 | <0.5 | <0.01 | <0.02 | <0.02 | <2 | <0.01 |

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1007 Barkway Terrace
Brentwood Bay BC V8M 1A4 Canada

Project: KLEJNE
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# QUALITY CONTROL REPORT VAN10000953.1

| | Method | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 | 1F15 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Analyte | P | La | Cr | Mg | Ba | Ti | B | Al | Na | K | W | Sc | Tl | S | Hg | Se | Te | Ga |
| | Unit | % | ppm | ppm | % | ppm | % | ppm | % | % | % | ppm | ppm | ppm | % | ppb | ppm | ppm | ppm |
| | MDL | 0.001 | 0.5 | 0.5 | 0.01 | 0.5 | 0.001 | 1 | 0.01 | 0.001 | 0.01 | 0.1 | 0.1 | 0.02 | 0.02 | 5 | 0.1 | 0.02 | 0.1 |
| Pulp Duplicates | | | | | | | | | | | | | | | | | | | |
| 006529 | Silt | 0.039 | 4.3 | 68.5 | 0.96 | 29.8 | 0.654 | 4 | 5.35 | 0.010 | <0.01 | <0.1 | 10.5 | <0.02 | 0.03 | 85 | 1.2 | <0.02 | 17.0 |
| REP 006529 | QC | 0.046 | 4.6 | 72.5 | 0.97 | 30.8 | 0.719 | 6 | 5.20 | 0.012 | <0.01 | <0.1 | 11.5 | <0.02 | 0.03 | 78 | 1.8 | 0.04 | 16.4 |
| Reference Materials | | | | | | | | | | | | | | | | | | | |
| STD DS7 | Standard | 0.072 | 12.0 | 174.4 | 1.02 | 405.2 | 0.126 | 38 | 0.99 | 0.088 | 0.45 | 4.0 | 2.6 | 4.23 | 0.19 | 196 | 3.7 | 1.22 | 4.6 |
| STD DS7 Expected | | 0.08 | 11.7 | 179 | 1.05 | 370.3 | 0.124 | 38.6 | 0.959 | 0.089 | 0.44 | 3.4 | 2.5 | 4.19 | 0.19 | 200 | 3.5 | 1.08 | 4.6 |
| BLK | Blank | <0.001 | <0.5 | <0.5 | <0.01 | <0.5 | <0.001 | <1 | <0.01 | <0.001 | <0.01 | <0.1 | <0.1 | <0.02 | <0.02 | <5 | <0.1 | <0.02 | <0.1 |

Report: A10-1422
Report Date: 4/14/2010

**Final Report**
**Activation Laboratories**

| **Analyte Symbol** | Li | Be | B | Na | Mg | Al | Si | K | Ca | Sc | Ti | V | Cr | Mn | Fe | Co | Ni | Cu | Zn | Ga |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Unit Symbol** | ppm | ppm | ppm | % | % | ppm | ppm | % | % | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm | ppm |
| **Detection Limit** | 0.5 | 0.005 | 5 | 0.01 | 0.01 | 2 | 0.2 | 0.01 | 0.1 | 0.5 | 1 | 1 | 1 | 0.1 | 0.01 | 0.01 | 5 | 0.2 | 1 | 0.1 |
| **Analysis Method** | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS |
| KL10TR01 | 0.9 | < 0.005 | 219 | 0.06 | > 1.60 | 11000 | < 0.2 | 0.1 | 17.5 | < 0.5 | 126 | 3 | 3 | 27100 | 0.13 | 9.01 | 65 | 81.1 | 239 | 1 |
| KL10TR02 | 1.1 | < 0.005 | 214 | 0.06 | > 1.60 | 16600 | < 0.2 | > 1.60 | 14.4 | 1 | 291 | 9 | 4 | 44500 | 0.24 | 7.18 | 50 | 88.8 | 417 | 1.8 |
| KL10TR03 | 0.6 | < 0.005 | 278 | 0.1 | > 1.60 | 12100 | < 0.2 | 0.1 | 10.4 | < 0.5 | 123 | 3 | 2 | 1000 | 0.1 | 3.2 | 43 | 88.9 | 452 | 1.6 |
| KL10TR04 | 1.4 | < 0.005 | 278 | 0.32 | > 1.60 | 9590 | < 0.2 | > 1.60 | 12.4 | 1 | 216 | 11 | 4 | 45900 | 0.23 | 5.38 | 33 | 232 | 474 | 1.9 |
| KL10TR05 | 0.7 | < 0.005 | 270 | 0.08 | > 1.60 | 3320 | < 0.2 | > 1.60 | 13.7 | 1 | 192 | 5 | 3 | 10800 | 0.15 | 2.2 | 17 | 77.7 | 303 | 0.9 |
| KL10TR06 | 0.6 | < 0.005 | 236 | 0.07 | > 1.60 | 12200 | < 0.2 | > 1.60 | 10.2 | 1 | 242 | 7 | 3 | 8710 | 0.2 | 3.22 | 48 | 122 | 548 | 1 |
| KL10TR07 | 0.6 | < 0.005 | 237 | 0.1 | > 1.60 | 5080 | < 0.2 | 0.1 | 10.1 | 1 | 204 | 6 | 4 | 32700 | 0.18 | 4.51 | 28 | 103 | 452 | 1.5 |
| KL10TR08 | 1 | < 0.005 | 215 | 0.11 | > 1.60 | 5300 | < 0.2 | 0.1 | 10.2 | 1 | 177 | 5 | 5 | 9250 | 0.16 | 1.76 | 29 | 125 | 690 | 1 |
| KL10TR09 | 0.9 | < 0.005 | 193 | 0.09 | > 1.60 | 14600 | < 0.2 | > 1.60 | 10.8 | 1 | 160 | 5 | 3 | 12200 | 0.12 | 2.92 | 28 | 123 | 400 | 0.9 |
| KL10TR10 | 1.2 | < 0.005 | 281 | 0.13 | > 1.60 | 9830 | < 0.2 | > 1.60 | 11.3 | 1 | 304 | 11 | 5 | 19900 | 0.29 | 7.86 | 53 | 97.4 | 677 | 1.6 |
| KL10TR11 | 1.4 | < 0.005 | 335 | 0.12 | > 1.60 | 13600 | < 0.2 | > 1.60 | 11.2 | 1 | 247 | 7 | 4 | 27200 | 0.2 | 15.6 | 44 | 109 | 426 | 1.4 |
| KR10TR01 | 2.3 | < 0.005 | 183 | 0.2 | > 1.60 | 15100 | 0.5 | > 1.60 | 8 | 4 | 514 | 24 | 11 | 12800 | 0.58 | 11.7 | 37 | 263 | 382 | 2.5 |
| BL1 | 2.7 | < 0.005 | 1600 | 0.65 | > 1.60 | 4170 | < 0.2 | > 1.60 | 11.6 | 1 | 178 | 6 | 4 | 9840 | 0.13 | 1.44 | 17 | 74.3 | 710 | 1.1 |
| BL2 | 2.2 | < 0.005 | 1700 | 0.44 | > 1.60 | 3620 | < 0.2 | 0.1 | 10.6 | 1 | 169 | 5 | 3 | 7980 | 0.11 | 1.35 | 15 | 78.2 | 679 | 0.9 |

**Final Report**
**Activation Laboratories**

| Analyte Symbol | Ge | As | Se | Rb | Sr | Y | Zr | Nb | Mo | Ag | Cd | In | Sb | Te | Cs | Ba | La | Ce | Pr | Nd |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Unit Symbol** | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm |
| **Detection Limit** | 0.1 | 1 | 1 | 0.01 | 0.1 | 0.001 | 0.5 | 0.005 | 0.1 | 0.2 | 0.01 | 1 | 0.02 | 0.01 | 0.001 | 3 | 0.002 | 0.01 | 0.002 | 0.002 |
| **Analysis Method** | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS |
| KL10TR01 | < 0.1 | < 1 | 2 | 67 | 206 | 1 | < 0.5 | < 0.005 | 0.3 | 0.2 | 1.08 | 4 | 0.16 | 0.1 | 0.8 | 35 | 0.9 | 1.6 | < 0.002 | 1 |
| KL10TR02 | < 0.1 | 1 | 2 | 38 | 111 | 2 | < 0.5 | < 0.005 | 0.4 | 0.3 | 2.52 | 9 | 0.96 | 0.1 | 1 | 46 | 2.4 | 4.8 | 1 | 2 |
| KL10TR03 | < 0.1 | < 1 | 1 | 77 | 58.1 | < 0.001 | < 0.5 | < 0.005 | 0.7 | < 0.2 | 8.94 | 11 | 0.41 | 0.1 | 2 | 28 | 1.1 | 1.7 | < 0.002 | 1 |
| KL10TR04 | < 0.1 | 2 | 1 | 87 | 99.8 | 1 | < 0.5 | < 0.005 | 1.3 | 0.6 | 9.38 | 21 | 0.71 | 0.1 | 2.3 | 73 | 3.6 | 6.2 | 1 | 2 |
| KL10TR05 | < 0.1 | < 1 | 1 | 69 | 162 | 1 | < 0.5 | < 0.005 | 0.5 | < 0.2 | 3.12 | 6 | 0.71 | 0.1 | 1.2 | 83 | 1.8 | 3.3 | < 0.002 | 1 |
| KL10TR06 | < 0.1 | < 1 | 1 | 62 | 204 | 1 | < 0.5 | < 0.005 | 0.4 | 0.7 | 2.82 | 6 | 0.25 | 0.1 | 0.8 | 195 | 2.5 | 4.9 | < 0.002 | 2 |
| KL10TR07 | < 0.1 | < 1 | 2 | 110 | 90.8 | 1 | < 0.5 | < 0.005 | 0.4 | 0.3 | 3.92 | 7 | 0.36 | 0.1 | 0.7 | 177 | 4.9 | 8.5 | 1 | 3 |
| KL10TR08 | < 0.1 | < 1 | 1 | 59 | 161 | 2 | < 0.5 | < 0.005 | 1 | 0.3 | 7.3 | 11 | 1.3 | 0.1 | 0.6 | 116 | 11 | 18 | 2 | 7 |
| KL10TR09 | < 0.1 | 1 | 2 | 69 | 124 | 1 | < 0.5 | 1 | 0.9 | 0.6 | 7.18 | 7 | 1.52 | < 0.01 | 1.2 | 64 | 3.5 | 5.2 | 1 | 2 |
| KL10TR10 | < 0.1 | < 1 | 3 | 68 | 129 | 1 | < 0.5 | < 0.005 | 0.6 | 0.4 | 7.64 | 10 | 0.37 | 0.1 | 1.3 | 63 | 2.7 | 4.6 | 1 | 2 |
| KL10TR11 | < 0.1 | < 1 | 2 | 78 | 143 | 1 | < 0.5 | < 0.005 | 0.4 | 0.3 | 4.67 | 6 | 0.43 | 0.1 | 2.8 | 75 | 2.8 | 5.1 | 1 | 2 |
| KR10TR01 | < 0.1 | 1 | 2 | 229 | 108 | 2 | 1 | 1 | 1 | 1 | 11.9 | 17 | 0.36 | 0.1 | 4.6 | 46 | 2.9 | 4.8 | 1 | 3 |
| BL1 | < 0.1 | 2 | 4 | 35 | 238 | 1 | 0.6 | < 0.005 | 1.7 | 0.3 | 4.68 | 7 | 1.08 | 0.1 | 0.3 | 132 | 2 | 3.3 | < 0.002 | 1 |
| BL2 | < 0.1 | 1 | 3 | 44.5 | 224 | < 0.001 | < 0.5 | < 0.005 | 1.7 | 0.2 | 4.19 | 4 | 0.84 | 0.1 | 0.3 | 111 | 1.5 | 2.05 | < 0.002 | 1 |

**Final Report**
**Activation Laboratories**

| Analyte Symbol | Sm | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb | Lu | Hf | Ta | W | Re | Tl | Pb | Bi | Th | U | % Yield |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Unit Symbol** | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm |
| **Detection Limit** | 0.001 | 0.001 | 0.01 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.01 | 0.001 | 0.5 | 0.1 | 0.001 | 0.1 | 0.05 | 0.001 | 0.001 | |
| **Analysis Method** | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS |
| KL10TR01 | 0.2 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 2.3 | < 0.001 | 11 | < 0.05 | < 0.001 | < 0.001 | 2.17 |
| KL10TR02 | 0.5 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 2.1 | < 0.001 | 18 | 0.1 | < 0.001 | < 0.001 | 2.23 |
| KL10TR03 | 0.1 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 1 | < 0.001 | 18 | 0.1 | < 0.001 | < 0.001 | 2.38 |
| KL10TR04 | 0.5 | < 0.001 | 1 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 2.4 | < 0.001 | 49 | 0.2 | < 0.001 | < 0.001 | 2.34 |
| KL10TR05 | 0.3 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 1.3 | < 0.001 | 13 | < 0.05 | < 0.001 | < 0.001 | 1.95 |
| KL10TR06 | 0.3 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 1 | < 0.001 | 11 | < 0.05 | < 0.001 | < 0.001 | 2.24 |
| KL10TR07 | 0.5 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 1.8 | < 0.001 | 21 | 0.1 | < 0.001 | < 0.001 | 2.34 |
| KL10TR08 | 1.2 | < 0.001 | 1 | < 0.001 | 1 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 1.8 | < 0.001 | 42 | 0.1 | < 0.001 | < 0.001 | 1.68 |
| KL10TR09 | 0.5 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 2 | < 0.001 | 35 | 0.1 | < 0.001 | < 0.001 | 1.77 |
| KL10TR10 | 0.5 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 1.3 | < 0.001 | 24 | 0.1 | < 0.001 | < 0.001 | 2.6 |
| KL10TR11 | 0.4 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 0.7 | < 0.001 | 21 | < 0.05 | < 0.001 | < 0.001 | 1.85 |
| KR10TR01 | 0.7 | < 0.001 | 1 | < 0.001 | 1 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 0.9 | < 0.001 | 25 | 0.1 | < 0.001 | < 0.001 | 1.94 |
| BL1 | 0.3 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 2.6 | < 0.001 | 21 | 0.1 | < 0.001 | < 0.001 | 2.67 |
| BL2 | 0.2 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 7.3 | < 0.001 | 11.5 | 0.1 | < 0.001 | < 0.001 | 2.54 |

**Final Report**
**Activation Laboratories**

| **Analyte Symbol** | Li | Be | B | Na | Mg | Al | Si | K | Ca | Sc | Ti | V | Cr | Mn | Fe | Co | Ni | Cu | Zn |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Unit Symbol** | ppm | ppm | ppm | % | % | ppm | ppm | % | % | ppm | ppm | ppm | ppm | ppm | % | ppm | ppm | ppm | ppm |
| **Detection Limit** | 0.5 | 0.005 | 5 | 0.01 | 0.01 | 2 | 0.2 | 0.01 | 0.1 | 0.5 | 1 | 1 | 1 | 0.1 | 0.01 | 0.01 | 5 | 0.2 | 1 |
| **Analysis Method** | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS |
| Coal Ash Std-2 Meas | | < 0.005 | 67 | 0.03 | 0.03 | 1340 | | < 0.01 | 0.3 | < 0.5 | 109 | 3 | 2 | 36.8 | 0.13 | 0.63 | | 3.7 | 4 |
| Coal Ash Std-2 Cert | | 0.46 | 70 | 0.05 | 0.04 | 1660 | | 0.01 | 0.4 | 0.6 | 122 | 4 | 3 | 37.5 | 0.17 | 0.67 | | 3.8 | 5 |
| BL2 Orig | 2.2 | < 0.005 | 1670 | 0.44 | > 1.60 | 3590 | < 0.2 | 0.1 | 10.5 | 1 | 167 | 5 | 3 | 7940 | 0.1 | 1.33 | 15 | 76.9 | 681 |
| BL2 Dup | 2.2 | < 0.005 | 1740 | 0.44 | > 1.60 | 3650 | < 0.2 | 0.1 | 10.6 | 1 | 170 | 5 | 3 | 8030 | 0.11 | 1.38 | 15 | 79.4 | 677 |
| Method Blank Method Blank | < 0.5 | < 0.005 | < 5 | < 0.01 | < 0.01 | < 2 | < 0.2 | < 0.01 | < 0.1 | < 0.5 | < 1 | < 1 | < 1 | < 0.1 | < 0.01 | < 0.01 | < 5 | < 0.2 | < 1 |

**Final Report**
**Activation Laboratories**

| **Analyte Symbol** | Ga | Ge | As | Se | Rb | Sr | Y | Zr | Nb | Mo | Ag | Cd | In | Sb | Te | Cs | Ba | La | Ce |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Unit Symbol** | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm | ppm | ppm | ppm |
| **Detection Limit** | 0.1 | 0.1 | 1 | 1 | 0.01 | 0.1 | 0.001 | 0.5 | 0.005 | 0.1 | 0.2 | 0.01 | 1 | 0.02 | 0.01 | 0.001 | 3 | 0.002 | 0.01 |
| **Analysis Method** | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS |
| Coal Ash Std-2 Meas | 0.9 | 0.1 | < 1 | < 1 | 0.3 | 113 | 2 | 1.7 | < 0.005 | 0.1 | < 0.2 | 0.03 | 8 | 0.03 | 0.1 | < 0.001 | 350 | 2.4 | 4.3 |
| Coal Ash Std-2 Cert | 0.9 | 0.1 | 1 | 1 | 0.34 | 128 | 1.98 | 3.1 | 0.42 | 0.2 | 0.1 | 0.04 | 7 | 0.05 | 0.05 | 0.04 | 330 | 2.02 | 3.86 |
| BL2 Orig | 0.9 | < 0.1 | 1 | 3 | 44 | 221 | < 0.001 | < 0.5 | < 0.005 | 1.6 | 0.2 | 4.23 | 4 | 0.86 | 0.1 | 0.3 | 110 | 1.5 | 2.1 |
| BL2 Dup | 0.9 | < 0.1 | 1 | 3 | 45 | 226 | < 0.001 | < 0.5 | < 0.005 | 1.7 | 0.2 | 4.16 | 4 | 0.83 | 0.1 | 0.3 | 112 | 1.5 | 2 |
| Method Blank Method Blank | < 0.1 | < 0.1 | < 1 | < 1 | < 0.01 | < 0.1 | < 0.001 | < 0.5 | < 0.005 | < 0.1 | < 0.2 | < 0.01 | < 1 | < 0.02 | < 0.01 | < 0.001 | < 3 | < 0.002 | < 0.01 |

**Final Report**
**Activation Laboratories**

| **Analyte Symbol** | Pr | Nd | Sm | Eu | Gd | Tb | Dy | Ho | Er | Tm | Yb | Lu | Hf | Ta | W | Re | Tl | Pb | Bi |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Unit Symbol** | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppm | ppb | ppm | ppm | ppm |
| **Detection Limit** | 0.002 | 0.002 | 0.001 | 0.001 | 0.01 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.001 | 0.01 | 0.001 | 0.5 | 0.1 | 0.001 | 0.1 | 0.05 |
| **Analysis Method** | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS | NP-MS |
| Coal Ash Std-2 Meas | 1 | 2 | 0.4 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | | | < 0.001 | 1.8 | < 0.05 |
| Coal Ash Std-2 Cert | 0.44 | 1.64 | 0.35 | 0.07 | 0.34 | 0.05 | 0.28 | 0.05 | 0.16 | 0.02 | 0.15 | 0.03 | 0.1 | 0.02 | | | 0.06 | 2.1 | 0.04 |
| BL2 Orig | < 0.002 | 1 | 0.2 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 7.3 | < 0.001 | 11 | 0.1 |
| BL2 Dup | < 0.002 | 1 | 0.2 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | 7.3 | < 0.001 | 12 | 0.1 |
| Method Blank Method Blank | < 0.002 | < 0.002 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.001 | < 0.01 | < 0.001 | < 0.5 | < 0.1 | < 0.001 | < 0.1 | < 0.05 |

**Final Report**
**Activation Laboratories**

| **Analyte Symbol** | Th | U | % Yield |
|---|---|---|---|
| **Unit Symbol** | ppm | ppm | ppm |
| **Detection Limit** | 0.001 | 0.001 | |
| **Analysis Method** | NP-MS | NP-MS | NP-MS |
| Coal Ash Std-2 Meas | 1 | < 0.001 | |
| Coal Ash Std-2 Cert | 0.56 | 0.29 | |
| BL2 Orig | < 0.001 | < 0.001 | 2.54 |
| BL2 Dup | < 0.001 | < 0.001 | 2.54 |
| Method Blank Method Blank | < 0.001 | < 0.001 | |