Alteration Studies on the

Flan-Consolidated Group of claims

(Tenures **507295, 509012, 513281, 543699)**

in the

Nanaimo Mining Division

in

092L/01

centered on

50. 1227N and 126.2377W

for

Mikkel Schau, owner

by

October 18, 2007

Mikkel Schau, P.Geo.

(January 18, 2008)

29,534

SUMMARY

This report details the result of prospecting and local assaying as well as the results of an alteration study. The best assays report **35 ppm Ag** in a sulphide quartz cobble from till. Epithermal veins with elevated Hg were located. The alteration study shows that the regional metamorphism attained lowermost greenschist grade. Later phyllic (chlorite and sericite) alteration is localized in a later 2 mica granite within a postulated major fault zone.. Epithermal veins are emplaced in this stock as well.

The claim group is centered on 50.1227 N and 126.2733W, south of Schoen Lake Provincial Park -70584, reaching across two creek drainages and straddling a ridge of Mt Maquilla. The easterly north flowing Schoen Creek and unnamed western north flowing creek have been partially logged and access is afforded via logging roads.The Flan consolidated claims reported on herein include (507295, 50912, 513281, 543699) consists of about 1408.751 ha. and are part of the Flan-Consolidated Claims which cover a total of 1925 contiguous ha. and comprise post-map-staking consolidation of the legacy Flan Claims, and Flan-more, Flan-west, Flan-In, and Flan-extension. This report applies only to the four claims listed above. The claims are over crown land and are currently being harvested for logs.

Previous work by government and private company sampling indicate that local creeks contain anomalous values of gold. Previous moss mat analyses have located anomalous gold bearing area on the west side of Schoen Creek. Previously, Gold (1 ppm) has been reported from a vein with chalcopyrite, sphalerite and pyrite near the northwestern contact of the granite, in Karmutsen feldspar-phyric basalts (AR23546). A newly located, altered 2 mica granite body is seen to be emplaced along a major fault zone along Schoen Creek. On the opposite side of the granite stock, in the southeastern part of group, the Flan gold showing itself (AR26793, new AR) is hosted in altered gabbro and cherty tuff .

Access is currently along active logging roads. The property, has being selectively clear cut and the Flan showing itself is in an already clear cut patch. Nearest community is the logging community of Woss located some 30 km WNW near a junction with the Island Highway. There is access to the deep water ports of Gold River along well traveled gravel roads to the south and west and as well as to and Kelsey Bay and Port McNeill to the north along the paved Island Highway.

To the best of my knowledge, the land claim treaty process has not directly discussed these lands,. There has been no impediment to my claiming or working the land to time of writing. Local people I have talked to would like there to be more mineral exploration, and possibly mining, to shore up the local economy.

Recommendations for future work include intense prospecting in the vicinity, uphill and up ice of the current boulder locations. Should the property be optioned, and a modicum of money be available, a grid for more systematic work such as a geochemical soil/basal till survey and a HLEM survey should help localize the vein system. Since the gold showing is in a generally prospective area that contains small showings it is recommended that all the Flan-consolidated Claims be acquired intact.

TABLE OF CONTENT

1.0 Introduction:

Sampling for precious metals and tracer elements was conducted over several years, and thin sections for these samples were acquired mainly in 2007.. Additional sampling and assaying was conducted in in regions thought favorable The work reported here consists of examining and sampling boulders/talus and examining, and sampling, new logging road exposures as well as side trips into the clear cuts to map scarce outcrop. The petrography and alteration study has been carried out by Mikkel Schau, P.Geo. The report has been prepared by the owner of the claims, for himself. The geological work was carried out by Mikkel Schau, P.Geo., and helpers. Acme Laboratories and Vancouver Petrographics conducted lab work.

2. Property Location, Access and Title

This report applies to four (507295, 509012, 513281,543699) of the Flan-Consolidated Claims which covers a total of about 1408.751 ha of the total 1925 contiguous ha. Consisting of a post-map-staking consolidation of the legacy Flan Claims, Flan-In, Flan-more, Flan-west and Flan-extension claims.

The Flan-Consolidated Group claims are located straddling a ridge of Mt Maquilla, with an eastern creek called in the Schoen Creek and a western unnamed creek., about 30 km east-southeast of Woss, on Vancouver Island B.C. (Figures 1, 2). They are located in the Vancouver Island Ranges, in rugged country and range from 400 1000m in elevation, in partially logged Douglas fir forest. The property is in the Nanaimo Mining Division, on NTS 092L/01 and is centered at approximately 50.1227N and 126.2733W . (Fig. 1, and 2).

There are two main access routes to the claims. In general they are reached by a logging Main branching off the Island Highway towards Gold River and continues along subsidiary logging roads that pass south of Davies River. The western claims are reached by taking Club Main (a road often blocked by landslides and windfalls) which turns south, to the west of the park boundary. Claims straddling Schoen Creek are reached by subsidiary logging roads that pass through Schoen Lake Provincial Park, south, into the area of interest. Two and four wheel drive vehicles can closely approach the area, but a 4 wheel drive vehicle is needed visit the gold showing.

The claims affected by this work total 1408.751 ha and their anniversary dates are updated below as a result of this work.

Name	Record	Ha.	Anniversary Date
Flan-more	507295	517.912	Oct 31 /2009
(Old *Flan*)	509012	165.753	Nov 18 /2012
Flan-west	513281	497.218	Oct 31 /2009
Flan-int	543699	227.858	Oct 20 /2009

All the Flan-consolidated claims, which are focused on finding precious metals, are owned 100 % by Mikkel Schau.

The land situation is typical of BC; I have claimed the mineral rights in a lawful manner. To the best of my knowledge the Land Claim Treaty Process has not directly discussed these lands although they are under general claim by several groups. There has been no impediment to my claiming or working the land to time of writing. Local people have told me they would like there to be more exploration, and possibly mining in region, to shore up their local economy. Logging companies, currently harvesting the region, have been helpful with logistic information.

3.0 Previous Work

The general area has had a sparse history of mineral exploration. Early prospectors and mining companies frequented area before Schoen Lake Park was created. No significant finds were recorded in the immediate vicinity. The Lucky Jim showing on the Adam River reported assays with about one oz/t gold in early 1918 and indicated that gold was present in the general area.(Brewer 1919). Previous regional mapping by government was conducted by J.E. Muller et la. (1974) (Fig. 4) and made available in digital form by N.W. Massey (1995, 2004). Government sponsored regional geochemical surveys indicate that creeks in the watershed of claim area are anomalous.. (MapPlace, 2007). An adjacent creek valley and a hill crest (Mt Maquilla) to the west of the Schoen Creek valley was staked in 1993 and shown to carry anomalous concentrations of several economic elements, including Cu, Zn, Ag, Pb, Mo and Au (AR 23546). Those claims have since lapsed.

In 2000 gold was found at the Flan gold showing by the current owner, prospecting for precious metals under the Prospector's Assistance Program, and was staked in late 2000 based on results of an initial favorable assay report. A two mica granite was recognized in the course of later mapping and an enlarged area staked to cover the apparent edges and zone of influence of the granite (AR26793, AR27311, AR28382 and AR *newly submitted*). The current owner,

Mikkel Schau, is conducting local grass-roots exploration to enlarge the showing to become a viable prospect.

The original gold Flan showing is from a frost heaved gabbro fragment and is apparently a very thin, steep, non continuous gold-bearing vuggy quartz-pyrite-chalcopyrite vein cutting steeply across a 30 centimetre thick epidote-chlorite, pyrite, sphalerite, chalcopyrite bearing vein with local development of bull quartz stringers, located in a fault zone, cutting a gabbro sill, emplaced in the Paleozoic cherts and black shale. A westerly striking white weathered out vuggy veins carries very sporadic gold values (up to 61 ppm Au) whereas lower anomalous gold values (up to 800 ppb) has been found in the northerly striking thicker epidote rich polymetallic vein. Recent work has located sulphide-quartz veins in frost/basal till boulders very near the original showing and these carry gold values of up to 135 ppm in pyrrhotite, pyrite, chalcopyrite quartz veins with scattered fragments of gabbro.

4.0 Summary of work done:

Till and boulder prospecting on claims 20 ha. (Mainly on western claim)

Assay work (ACME Laboratories) claimed in this report):(see appendix A and C)
A608054, 16 Fire assays, 17 ICP-ES analyses of aqua regia soluble materials
A608055, 11 Whole rock determinations of major elements and trace elements
21 ICP-MS determinations of aqua regia soluble elements

Petrology of 56 thin sections (used in Alteration study (see Appendix B)

New Geophysical measurements
10 new Specific gravity determined
61 Primitive conductivity measurements
50 Semi qualitative magnetic measurements

5.0 Detailed technical data and interpretation

5.1/ Purpose

The purpose of the work recorded herein was to document the alteration types and minerals around the 2 mica granite and the mineralized Flan showing to gain a better understanding of the distribution of mineralization and veins. Many of the conditions noted to be favorable for gold deposits (Boyle, 1968) are locally present .The data reported so far supports mineral deposit models which are mainly result of hydrothermal activity near plutons and with locally reduced oxidation states.

5.2/ General Surficial Geology

The claims are located in the Sutton Ranges. Mountain glaciers have carved the

landscape and shaped the valleys with their deposits (Bobrowsky and Sibbick, 1996-7). The regional tendency is for glaciers and debris to have moved northward, away from height of land.

The claims are straddling a south trending ridge from Mt Maquilla and two adjacent valleys. The eastern one; is the U-shaped Schoen Creek valley, and the western lower part of claim is covered with a veneer of talus and soil over till. The eastern edge of this valley is near a ridge is topped by Mt Adam, and is largely outcrop. The mapped road, which follows the contours about halfway up the claim shows subcrops; overlain by talus, soil and thin basal till. Few knobs of bedrock crop out on the slopes; only at the upper steeper slopes are cliff forming outcrops abundant. In the valley of Schoen Creek only till has been uncovered by road building. No outcrops have been located in the creek bottom within the claim. Similarly. on the west side of the creek subcrops are noted in logging roads, only up high does bedrock appear. Over the ridge and again the till increases in thickness as the valley bottom is approached. It is possible that glaciofluvial features are also preserved in this valley here. Some unusual dewatering tubes were transected by logging roads.

Glacial striae were noted on local subcrops, where the surficial debris had been washed away by road side erosion, after the road had been pushed through. These striae indicated ice movement was parallel with the valley wall and directed to the north, down the valleys.

The Flan showing is on the western side of the Schoen Creek, on the northern edge of a small northwesterly directed subsidiary creek. Glacial debris was likely carried by the smaller creek and would have joined with the main down-valley ice flow somewhat to the west of the current surface. Hence, this basal till is likely associated with the smaller creek's subsidiary glacier. The silver bearing sulphide-quartz vein cobble recovered from a till in the headwaters of unnamed creek valley is also to be found up ice. A small cobble of garnet skarn was also seen in till suggesting a skarn contact somewhere in the headwater region.

Another possible example of down ice transport of material comes from considering molybdenite found in situ and the down ice location of a molybdenum moss mats anomaly some 100 m down ice.

Hicock (1986), in his study of glacial dispersion in the nearby Buttle valley recommends that in alpine drift studies, anomalies should be traced up valley into tributary valleys along the same valley side using the -0.002 mm fraction of the till matrix. Such a survey would be part of a more comprehensive exploration effort.

5.3/ Regional Geology

The claimed area can be subdivided into three meridional sectors. The eastern

one is east of Schoen Creek, and west of Mt Adam, the central one is west of Schoen Creek and east of Mt Maquilla and the western one is west of Maquilla.

The regional geology has been mapped by Muller et al 1974, (Fig 4) prior to the construction of current logging roads, and as such, suffers from not having access to the subcrops now exposed. Observations gained while prospecting in the region after the roads were available, indicate that a small elongate granite stock occurs west of Schoen Creek, possibly along the trace of a wide northerly striking steep fault zone. The contact of this stock is exposed in only one place in the north, but its general north south elongation can be deduced from outcrops and subcrops as well as distribution of talus in the valley. In the south the creek effectively separated the Karmutsen on the east from the 2 mica granite on the west. The Nimpkish Pluton is seen to subcrop along Club Main and thus the contact is at least 2-3 Km further east than marked on Massey's map.

Regional geology of the immediate area is simple. In the eastern sector, Daonella beds, a middle Triassic unit with black shale and siliceous tuffaceous cherts is cut by gabbro sills. In the central sector, a 2 mica granite intrudes the Daonella beds and associated sills, and apparently also cuts the overlying Karmutsen basalts, a thick pile of pillowed, brecciated and massive sub-aqueous lavas. Intrusive rocks include early gabbro sills. In the western sector the rocks are mainly Karmutsen basalts, which, just west of the claim boundary are cut by the Nimpkish Batholith of the Island intrusions.

Regional faulting, along with considerable alteration including chloritic, argillic and hematitic alteration, affected area. The apparent sense of movement on the mostly north-south faults, is west side up, but associated slickensides indicate largely horizontal displacement. Other steep, later?, east west faults associated with abundant alteration and a possible dextral sense of displacement are locally important. The two mica granite seems to post date the major north south faulting but is cut by the east west faulting.

A cross-section from east to west, across the Schoen Creek valley, in the vicinity of Mt Adam, would include these features from east to west:

From East

Mt Adam underlain by Karmutsen basalts (with shallow west dip)
western flanks of Mt Adam cut by a fault (steep and northerly trending)-shown on Muller's map.(west side up)
Middle Triassic black shales and cherts up against Karmutsen Basalts
Gabbro sills in tuffaceous cherts (c.f. FLAN Showing)

Schoen Creek valley, possibly underlain Middle Triassic black shales (Daonella beds) and local cherts

Across the Schoen Creek, and up the hill,

Unnamed 2 mica granitic Stock,

Karmutsen feldspar phyric basalt flows with shallow west? dip, up and over the ridge

Karmutsen down the east side of the creek, and possibly Nimpkish on the upper western walls of the valley.

Nimpkish Pluton is found intruding the north western edge of the claims west of the ridge

Southwest is mainly pillowed Karmutsen basalt.

To West

This is presented in a very preliminary sketch geology map modified from in figure 3. AR28382). The newly located two mica granite stock (briefly mentioned in AR26793, 27311 and 28382), appears to intrude along the north south zone of faulted rocks along Schoen Creek and is not lithologically similar to, nor related to, the Island intrusions.

5.4 Detailed Geology

As shown on the preliminary map the geology of the claim group under discussion exceedingly poorly exposed and therefore relatively simple:

The ridge to the east of Schoen creek is probably dominated by Karmutsen pillow basalts at the top, and by lower cliffs of fine-grained gabbro sills. Just above the upper road a knoll of pyrite veined and rusty stained gabbro forms a small outcrop. Uphill of that are truck-sized frost-heaved outcrops of siliceous tuff. Subcrops exposed on the upper and lower logging roads to the east of the creek are of gabbro, cut by major steeply dipping NS and minor EW faults and veins. At the lower road an abundant amount of black shale chips in the surficial rocks suggest that the host here is black shale from the road to the creek covered by till overlain by soil and talus. Chips of black slate in the till, and chip fragments in the creek, raise the possibility that these slates (possibly Daonella Beds) may, as shown by Muller (op cit), underlie part of the valley. Up on the other side are abundant talus fragments of two mica granite. The actual eastern contact is not known but is near Schoen Creek.

The western contact of the granite has not been observed. But based on talus from the upper creeks seem confined to the lower levels of the valley, thus suggesting an elongate shaped stock. The textures which are locally seriate and show larger crystals of quartz and plagioclase set in a matrix of potash feldspar albite and quartz, are consistent with relatively shallow emplacement. The two mica nature, which is quite unexpected in

this part of BC, is suggestive of S-type granite. The presence of molybdenum supports this statement. UV investigation of granite samples , however, did not reveal any tungsten mineralization. To the west of the stock Karmutsen basalts, both massive and pillow versions outcrop on the high ridges and the western slope of the ridge. Veins in these rocks are, examples of epithermal veins, composed of quartz and manganiferous ankerite with many open fill textures and colloform structures. The best examples come from fragment up to several meters across found in a recent landslide that crossed the logging road. Less spectacular examples of the same vein type have been found in situ, in extensional parts of faults. It is significant to note that these veins carry anomalous amounts of mercury.

5.5 Detailed sampling results

5.5.1 Previous work

Results in this section depend on on data already presented.

Previous results from the FLAN showing area in the eastern sector, include

Original Flan Showing:

White quartz veins in pyritic gabbro:

gold:	up to **61.04 gm/mt**
palladium:	up to 16 ppb
silver:	up to 15.3 gm/mt
nickel:	up to 36 ppm
copper:	up to 5536 ppm
molybdenum:	up to 113 ppm
zinc:	up to 5489 ppm

Green polymetallic veins in NS fault zone in gabbro sill at Flan Showing:

gold:	up to 407 ppb
palladium	up to 9 ppb
silver:	up to 9.6 ppm
nickel:	up to 32 ppm
cobalt:	up to 187 ppm
copper:	up to 4115 ppm
molybdenum:	up to 173 ppm
zinc:	Up to 5566 ppm

Frost heaved and basal till massive sulphide boulders near Flan (2006-07 results) have given very encouraging results

gold:	up to **135.09 ppm**
palladium	up to 22 ppb
silver:	up to **71 ppm**
nickel:	up to 86 ppm
cobalt:	up to 283 ppm
copper:	up to **4.54 %**
molybdenum:	up to 16 ppm
tungsten	up to 1.5 ppm
zinc:	Up to 1163 ppm
Arsenic	up to 88 ppm
Antimony	up to <3 ppm
Bismuth	up to **74 ppm**
Mercury	up to 200 ppb

Clearly the gold bearing sulphidic samples are relatively poor in Hg, As and Sb. Thus, in the eastern sector, a near surface epithermal type deposit origin is effectively ruled out. The elevated bismuth values may indicate a somewhat deeper seated type deposit.

Previous data from veins in the central section showed some elevated values in the poisonous elements.

Arsenic	up to **5069 ppm**
Antimony	below detection limit
Bismuth	up to 7 ppm
Mercury	no data

5.5.2 Current work (Fall 2007)

Collecting along logging roads made acquisition of samples from subcrops fairly easy; prospecting in the woods and clearcuts, by contrast, is plagued by scarcity of outcrop. The topography is rugged. Continued prospecting in the western sector led to the location of locally sulphidic quartz vein fragments in till moved in from the south and the approximate location of an epithermal vein suite.

At location 164 (331501-504), cobbles of mineralized Quartz veins recovered from till in road cut

Gold varied from 6 to 57.9 ppb
Silver varied from .07 ppm to **35.8 ppm**
copper varied from 30 ppm to 2008 ppm
arsenic varied from 17.9 to 76 ppm
antimony varied from .18 to .78 ppm

bismuth varied from .1 to **55 ppm**
mercury varied from <5 to 165 ppb.

More prospecting up ice is in order.

At location 169 (331511-514 and 516), fragments of thick (+.5 m) veins consisting of thick colloform and open fill beige carbonate with quartz and scarce sulphides (minuscule pyrite cubes) were noted in a recent landslide (that crosses road). Similar veins, though not as thick (20 cm thick) were seen in outcrop a short distance away, marking a faulted contact between gabbro and pillow basalt.

Gold varies from below detection to 3.1 ppb
Silver varies from 7 to 21 ppb
Arsenic varies from 4 to 93 ppm
Antimony varies from .07 to **3.46** ppm
Bismuth varies from below detection to .1 ppm
Mercury varies from 31 ppb to **2549** ppb.
Manganese varies from 814 to 1413 ppm.

Although the veins are not significantly mineralized they show features such as mercury enrichment, that indicate that these beige manganiferous veins were probably deposited in an epithermal environment..

These mercury rich "epithermal" carbonate quartz veins are from the western sector and are different from the Bi rich polymetallic sulphide quartz veins of the eastern sector.

5.6/ Petrography (summary)

A suite of 56 samples have been thin sectioned and examined to determine the style of alteration (Appendix B), and to determine whether a coherent areal distribution of alteration minerals might be present..

As noted above there is a difference in the style and origin of veins found in the various sectors, bismuth is enriched in veins the eastern sector, arsenic in the central and mercury in the western sector..

The presence of low grade metamorphic minerals such as chlorite, actinolite, epidote, and pumpellyite confirms the lowermost greenschist grade alteration assigned to area as a result of adjacent regional studies of the Karmutsen Group.

Within the 2 mica granite, alteration is easier to track. The granites are variably sericitized and chloritized. These are are categorized as phyllic alteration. Nearer the molybdenite vein location, sericite is more common in minor veins that in the rest of the

area.

5.7/ Petrophysical Results

5.7.1/ Density

Specific gravity is determined by comparing the weight of a specimen with an equal volume (as measured by displacement of water). See appendix C for details). The density for ten samples has been determined for this report.

	Density Range
Gabbro	3.08 to 3.19 (median 3.13)
Nimpkish Quartz diorite	2.78
2 Mica Granite	2.67 to 2.79 (median 2.72)

5.7.2/ Conductivity

Conductivity, or its inverse, resistivity, is a commonly measured geophysical parameter.

The samples were tested with a common multimeter. The resistance as shown on a GMT-12A multimeter was recorded. The battery is a double A 1.5 volt 3 amp battery. The probes were placed on the sample at several different distances and on different minerals.

The conductivity of 61 samples was tested and all, save one, proved to be non conductive across 1 to 3 cm: The one sample that was conductive was pyrrhotite, pyrite, sphalerite, minor chalcopyrite bearing layered mesothermal vein (it has been referred to as the green vein in previous reports).the green vein it

This finding bears out the finding previously noted that the sulphide boulders of Flan showing would be recognizable geophysical targets.

TABLE

sample	**resistance** in 1K ohms	across
quartz crystal, c axis	>3000 ohms	1 cm
quartz crystal, c axis	>3000 ohms	2 cm
quartz crystal, c axis	>3000 ohms	4 cm
quartz crystal, c axis	>3000 ohms	8 cm
native copper	1.2	1 cm
native copper	1.3	2 cm
native copper	1.4	4 cm
green vein, sulphide layer	8.0	1 to 3 cm
58 other specimens	>3000 ohms	2 cm

This strengthens the suggestion made in previous reports that some form of

electromagnetic survey would be successful in the area. A Beepmat would find near surface sulphides of the type measured above and a variety of ground techniques including HLEM or MaxMin surveys could find deeper extensions of these rocks. An AeroTEM2 survey could survey the area from a helicopter and rapidly outline areas of potential interest.

5.7.3/ Magnetic properties

No quantitative magnetic susceptibility measurements were performed for this report. Previous reports have results of these measurements (AR26793, 27311, and 28382).

The magnetic response of 50 specimens (too small to give meaningful quantitative measurements made with a magnetic susceptibility meter) are recorded below as semi qualitative responses.

Sample	magnetic response (0-5)*
Quartz	0
42 samples returned	0
4 samples returned	1
2 samples returned	2
1 samples returned	3
1 samples returned	4 i
magnetite	5

*intensity of magnetism is estimated as a value from 0, not magnetic, to 5, pure magnetite. The intensity is measured on the attraction a thin section offcut block sized fragment exerts on a RE magnet suspended from a 25 cm string.

Inspection of above table indicates that it is likely that the veins would respond positively to a detailed magnetic survey. Previous work has indicated that faults would be discernible as linear lows.

Magnetic surveys are best carried out in conjunction with other geophysical methods since there is not a large magnetic contrast between local rock units.

5.8 Interpretations:

The results are subject to restrictions; the area, especially the valley bottom, is underlain by a thick till layer, and has not been exhaustively prospected.

The rocks exposed on the claims include the middle Triassic Daonella Beds (sediment-sill unit) and basalts of the Karmutsen Group intruded by the early Jurassic Nimpkish Pluton. A later 2 mica granite stock is located in a north south fault, and it itself is subjected to local faulting.

The chert and basalt of the Triassic have been subjected to regional low grade metamorphism throughout the area. The thin sections studied from this Claim Group are consistent with this finding.

Low grade metamorphism in basic rocks is difficult to distinguish from propylitic hydrothermal alteration. The is currently no compelling reason to suspect the greenschist metamorphic are the result of anything but regional metamorphism.

The Nimpkish Pluton is essentially fresh, although, locally around some vein systems it shows local hydrous alteration.

The 2 mica granite is probably post Nimpkish Pluton in age.

The alteration seen in the 2 mica granite, and termed phyllic alteration in this report would appear to be related, in part, to hydrothermal alteration associated with with later faulting.

Veins in the eastern sector are mesothermal in nature (the Flan sulphide quartz veins) and are a contrast to the epithermal veins that cut the central and western sectors. These latter veins show open fill cockscomb and colloform textures. The pathfinder trace elements associated with these various veins is also different. The mesothermal veins have elevated Bi where as the epithermal veins of the central zone that cut the two mica granite are locally As rich, and epithermal veins located in the western sector contain elevated Hg.

It would appear that the veins are of two ages, earlier, deeper mesothermal veins, and later, nearer surface epithermal veins. A less likely scenario is that the offset along the fault along Schoen Creek has a major offset. Bringing two crustal levels to be adjacent to each other. The presence of greenschist grade mafic rocks on both sides of the fault favors the first interpretation

5.9/ Conclusions:

Alteration is of two types; regional metamorphism (probably of Jurassic age) and phyllic hydrothermal alteration post dating the emplacement of the later 2 mica granite.

Newly located veins in western sector are epithermal in nature and carry anomalous Hg.

It would appear that several geophysical methods including electromagnetic survey methods could be usefully employed in locating more such samples. Assays of stream sediments and lithogeochemical samples are also useful prospecting tools in this case.

The focus of ongoing exploration should be in the vicinity of the Flan showing itself. The accurate location and further prospecting of the western epithermal veins are to be secondary targets.

6.0 Future work

From the owner's viewpoint, more intensive prospecting is to be conducted, hoping that a target can be exposed. The presence of high grade boulders in frost heaved or basal till suggests the a more intensive search for their source is in order.

A company contemplating the Flan-Consolidated claim group could consider a systematic geochemical surveys of soil or basal till. A previous suggestion (AR23546) has been to sample soil along contour lines. This is a worthwhile endeavor especially on the eastern side of Schoen Creek.

Geophysical surveys, should be properly calibrated to take into account the various depths of till in region A very detailed magnetic survey may allow identification of faults, and possibly of veins, but magnetic contrasts are low. Preliminary conductivity measurements suggest that an SP survey, a HLEM survey or a Beermat survey may be successful.. The difference in density between mineralized material and host rocks can probably be detected with a detailed gravity survey.

The area is undergoing more logging and new road cuts are to be opened up, ready to be prospected for more mineral showings.

Exploratory drilling early in the exploration cycle including a multi hole drill fence directed in a northeasterly direction near and under Flan Showing could possibly define worthwhile exploration targets rapidly, since the area is currently easily accessible to drilling equipment.

The Claim Group is for sale, directly or by option.

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Preliminary Geology, Petrography and Petrophysics of the Flan Group; BC Gov., Geological Branch Assessment Report 26793

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Preliminary Geology, Petrography and Petrophysics of the Xanga Group; BC Gov., Geological Branch Assessment Report 27311

Schau, Mikkel, 2006
Prospector's Report on part of the Flan-Consolidated Group of claims (507295 and 513281). BC Gov., Geological Branch Assessment Report 28382

Schau, Mikkel, 2007
New Results from the Flan showing of the Flan-Consolidated Group of claims (Tenure 509012).; BC Gov., Geological Branch Assessment Report *newly submitted.*

8.0 Author's qualifications:

I have been a rock hound, prospector and geologist for over 40 years. My mineral exploration experience has been with Shell, Texas Gulf Sulfur, Kennco, Geophoto, Cogema and, several mining juniors, public and private. I have worked 11 years in southern BC and spent 23 years as party chief with the GSC focused on mapping in northeastern Arctic Canada. For the last 13 years I have prospected and explored for Precious and base metals in Nunavut, Nunavik, Yukon, and BC.

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

I am currently a BC Free Miner, # 142134, paid up until October 16, 2008.

During 2000 and 2001, I received Prospector's Assistance Program (PAP) grants to prospect on Vancouver Island.

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

I am a P.Geol. licensed (L895) in Nunavut and NT, a P.Geo. (25977) in BC and a P.Geo. (1047) in Ontario.

I am sole owner of the claims described herein.

9.0 Itemized Cost Statement

Wages:
Mikkel Schau, P.Geo., geologist
mapping (September26,27, 2007 1 1/2 day x 500 $750.00
Alec Tebbutt, contract helper
September27, 2007, 1 days @ 250, $375.00
TOTAL Wages
$750.00

Food and Accommodation:
2 person days, @$70.
Total Food and accommodation $ 140.00

Transportation:
1 trips from From Brentwood Bay to claims, and local transportation
automobile 900 km @ 40c/km $360.00

Analyses:
Assays from Acme labs
Invoices A608054, A608055 and van07002132.1 1520.97
Freight 6 parcels $ 72.00

Van Pet inv 070991-$1052.28, 70584 - $ 224.00, 71100- $ 38.16
total Van Pet $1314.44

Polished thin sections/ petrology reports (transmitted and reflected light)
$120/report 56 thin sections $6720

Specific gravity measurements 10@$8/sample /inc GST $ 80.00
Resistivity measurements 61 @$1 / measurement $ 61.00
Semiquantitative magnetic response determinations 50 @$1.00 $ 50.00

Report preparation $500.00
Telephone (portion of Sat phone rental) $ 56.54

Total project cost (October 18, 2007)
$12,000.00

APPENDIX A Rock Descriptions and partial analysis, with selected elements tabulated

For earlier results see AR 26793, 27311, 28382, and a newly submitted report.

Acme certificates VAN07002132.1

STATION kind, type,	all in UTM zone 9 UTME	UTMN	elevation						
				in ppm					
	Au/ppb		Ag	Cu	As	Sb	Bi	Hg/ppb	
331501	693366	5555727	808m						
164 A, till cobble quartz vein w/ sulphides	58		.35	872	72	0.3	1.1	<5	
331502	693366	5555727	808m						
164B, till cobble quartz vein w/ sulphides (chalcopyrite)	20		**35.87**	2008	42	0.32	**55.5**	89	
331503	693366	5555727	808m						
164C, *stream sediment*	22		.66	205	77	0.7	1.3	165	
331504	693366	5555727	808m						
164D, till cobble quartz vein w/ calcite	6		.07	30	18	0.2	0.2	<5	
331505	693361	5555681	804m						
165, *stream sediment*	2		.30	192	20	0.4	0.5	83	
331506	693340	5555796	801m						
166A, creek cobble quartz vein w/ sulphides	18		.07	46	15	0.2	0.1	<5	
331507	693340	5555796	801m						
166B, creek cobble quartz vein with cr inc	.6		.05	.23	6	0.3	0.2	<5	
331508	693340	5555836	784m						
166C, creek cobble quartz vein edge	2.7		.02	8	5	0.1	0.03	<5	

331509	693326	5555796	801m					
167, ripup from road ?carbonate vein	<.2	.01		4	5	0.1	0.02	31
331510	693335	5555879	818m					
168, 8 m wide creek, *stream sediment*	7.8	.16		195	19	0.3	0.2	38
331511	693300	5555863	782					
169A, talus, landslide quartz carbonate vein open fill, colloform text Mn (1476 ppm)	<0.2	.02		12	15	1.6	0.02	**774**
331512	693300	5555863	782					
169B, talus, landslide quartz carbonate vein open fill, colloform text	<0.2	.01		1	4	0.1	0.02	31
331513	693300	5555863	782					
169C, talus, landslide quartz carbonate vein open fill, colloform text (Mn 1239 ppm)	<0.2	.01		50	21	1.4	0.1	**352**
331514	693300	5555863	782					
169D, talus, landslide quartz carbonate vein finr grained beige vein fill w tiny pyrite crystals and unident white needles	0.3	.02		54	93	1.2	0.1	**1839**
331515	693259	5555947	777					
170, talus, from new fall just up the hill basalt	3.1	.09		196	29	0.3	0.03	<5
331516	693300	5555863	782					
169F, talus, landslide quartz carbonate vein finr grained beige vein fill w tiny pyrite crystals and unident white needles	3.1	.03		173	77	3.5	0.06	**2549**

331517	692924	5556229	720					
174B, outcrop								
fault, basalt/gabbro	2.3	.02		21	97	0.4	0.03	425
331518	692925	5556244	703					
176, 6 m wide creek								
stream sediment	2.3	.06		156	8	0.2	0.11	25
331519	692835	5556490	755					
177, ripup talus								
pyritic and rusty rock	4.0	.07		173	6	0.2	0.08	12
331520	692808	5556623	748					
178,								
stream sediment	2.7	.05		2201	7	0.2	0.12	14
331521	692785	5556700	748					
179, talus, on top of till								
pyritic and rusty rock	0.7	.03		103	4	0.1	0.03	<5

Acme report A608055

	Au/ppb*	Ag		Cu	As	Sb	Bi	Hg
331666 695752,	5554600,	600						
2 mica granite	23	4.1		2173	8	<3	<3	nd
WR, TS, flan??								
331667	696572	5555004,	613 m					
green vein	26	2.3		1133	8	4	<3	nd
w/ sp, py, po, cpy								
TS, flan,								
331668	696572	5555004,	613 m					
epidosite	**282**	5.4		3830	**211**	3	<3	nd
TS, flan								
331670	695753,	5554603,	598 m					
2 mica granite	4	<.3		32	3	<3	<3	nd
with scattered sulphide (py)								
TS								
331672	695463,	5552573,	594 m					
2 mica granite	<2	.3		6	<2	<3	<3	nd
WR, TS,								

331675	695457,	5552633,	594 m					
Breccia, Fault	20	1.8	368	8	<3	<3	nd	
WR, TS								
(Zn 1288 ppm; Mn 4105 ppm)								
331676	695457,	5552633,	594 m					
Breccia, Fault	2	.3	52	3	<3	<3	nd	
WR, TS pink granite								
331677	695457,	5552633,	594 m					
Breccia, Fault	3	.4	33	<2	<3	<3	nd	
WR								
331678	695457,	5552633,	594 m					
Breccia, Fault	<2	<.3	6	<2	<3	<3	nd	
WR								
331679	695457,	5552633,	594 m					
Breccia, Fault	17	1.1	127	2	<3	<3	nd	
TS breccia fz								
331680	695457,	5552633,	594 m					
Breccia, Fault		6	1.7		429	19	<3	<3
		nd						
WR, TS grey breccia FZ								
331681	695457,	5552633,	594 m					
Breccia, Fault	3	1.5	286	5	<3	<3	nd	
WR,TS,								
* Au by fire assay								

Appendix B Petrographic descriptions and Alteration study,

SPECIMEN NUMBER F004, UTME 0690871, UTMN 5559505, 603 m

Hand specimen

Granodiorite with hornblende and biotite forming about 25% of rock selvage with clay alteration Nimpkish Granodiorite Pluton

magnetic no fizz

Thin section

Major Plagioclase 50 % local prism shaped crystals up to 5 mm across
Quartz 25% irregular shaped 3 mm crystals

Minor

Hornblende 10% greeny brown
Biotite 5 % plechroic browns
Magnetite/titanite form up to 4% opagues
Microcline, minor amounts interstitial

Accessory

pyrite and minor chalcopyrite

Texture Granitic texture larger plagioclase and quartz set in fine grained mix of quartz, plagioclase (albite) and microcline, Clusters of dark minerals.

Structures

Main rock

massive, local joints and veins

Macroscopic veins

vein of chloritic quartz, selvage clay alteration .

CLASSIFICATION

ROCK TYPE

Biotite-hornblende Granodiorite/diorite of the Nimpkish Pluton

Degree of Alteration

fresh except where fractured and veined

SPECIMEN NUMBER F006A-3 UTME 696397, UTMN 5556674, 562 m.

Hand specimen

Fine grained basalt with narrow veins

Thin section

Major Plagioclase,65%, some phenocrysts up to 7 mm relic zoning, smaller laths, 1 mm, mainly abite.,local clay-illite alteration,scarce small calcite crystals

Mafic 30% patches now consisting of chlorite and dusty opagues, probably after pyroxene

Minor Opagues 5% titanomagnetite and ilmenite

Texture Basaltic/diabasic matrix, no amygdales,

Structures

Main rock massive

Macroscopic veins

Rusty fine grained quartz veins to 5 cm across and oriented 300/65 minor sulphides

Microscopic veins

local quartz limonite veins

CLASSIFICATION

ROCK TYPE

Sparsely feldspar-phyric basalt

Degree of Alteration

Lowermost Greenschist grade of regional metamorphism

SPECIMEN NUMBER F006C UTME 696397, UTMN 5556674, 562 m.

Hand specimen

Fine grained basalt with narrow veins, sample from selvage of white vein not magnetic, no fizz in HCL, not conductive,

Thin section

Major pyroxene, 65% 3 to 5 mm grains of green, largely altered to uralite, local twinned crystals, larger grains poikilitic,

plagioclase 30% smaller1-3 mm grains normally zoned

Minor opagues 5 % as patches and dusty aggregates near altered pyroxenes, mainly altered ilmenite?

Texture Porphyritic "Pyroxenes" with poikilitic pyroxenes enclosing small plagioclase laths and fine grained diabasic texture

Structures

Main rock

massive with thin ultramylonite tendrils

Macroscopic veins

thin white quartz veins at 345/75, local chalcopyrite in selvage

Microscopic veins

1 mm wide thin veins of comminuted material, now fine grained and indeterminate small veins of quartz and epidote, and epidote-actinolite

CLASSIFICATION

ROCK TYPE

Uralitized Melagrabbro

Degree of Alteration

pervasively altered/ to lower greenschist facies of regional metamorphism with overprint of local semi ductile dynamothermal metamorphism

SPECIMEN NUMBER F006D UTME 696397, UTMN 5556674, 562 m.

Hand specimen
Dark grey crystalline massive rock-trap
not magnetic, no fizz in HCL, not conductive,

Thin section (Thick)

Major Plagioclase, 60% local phenocrysts, normally zoned, relatively fresh
Pyroxene 35 % pyroxene mainly altered to actinolite/hornblende and chlorite, material between finer grained feldpars also actinolitic
different alteration patches suggest two mafic minerals were once present
Minor titanomagnetite and ilmenite 5% as opague 1 mm areas and as fine dust
quartz local minor interstitial quartz
Accessory Pyrite

Texture porphyritic gabbro/basalt with scattered amygdales

Structures

Main rock massive, amygdales filled with actinolite and chlorite
Macroscopic veins
pyrrhotite wallpaper

CLASSIFICATION

ROCK TYPE
Porphyritic gabbro/basalt, near its contact since a few amygdales are present
Degree of Alteration
Probably *regionally metamorphosed to lower greenschist grade.* This is consistent with other regional and local studies in nearby areas.

SPECIMEN NUMBER F007B UTME 696558, UTMN 5556690, 513 m

Hand specimen
Very dark fine grained rock in fault zone with local rusty patches and local chalcopyrite
locally magnetic, no fizz in HCL, not conductive,

Thin section

Major Relic plagioclase, now mainly altered. To albite and indeterminate very fine grained materials. One A major alteration assemblage in some feldspar is pumpellyite and actinolite along with chlorite. Local albite.
Relict pyroxene is now also overgrown and altered largely to actinolite
Minor Small opague masses, mostly due to alteration

Texture A diabasic texture has been overprinted by pervasive greenschist mineral growth

Structures

Main rock massive
Macroscopic veins
Main fault 015/75, t is strained quartz with patches of deep green actinolite
Microscopic veins
Earlier opague (iron sulphides/oxides) and chlorite veins
Late mm thick prehnite and quartz crosscuts all.

CLASSIFICATION

ROCK TYPE
Regionally metamorphosed diabase
Degree of Alteration
Alteration is consistent with regional metamorphism to lower greenschist grade

SPECIMEN NUMBER F007C UTME 696558, UTMN 5556690, 513 m

Hand specimen

Very dark fine grained rock in fault zone with quartz vein
not magnetic, minor fizz in HCL, not conductive,

Thin section

Major Relic plagioclase, now mainly altered. as albite and indeterminate very fine grained materials.
Relict pyroxene is now also overgrown and altered largely to actinolite and chlorite
Minor Small opague masses, mostly due to alteration
Calcite along edges of vein

Texture A foliated greenstone

Structures

Main rock
Foliated
Macroscopic veins
Sigmoid shaped vein in foliated (semiductile) fault zone, vein in fault is strained quartz and chlorite with with patches of deep green actinolite
Microscopic veins
Earlier opague (iron sulphides/oxides) and chlorite veins
Late mm thick prehnite and quartz crosscuts all.

CLASSIFICATION

ROCK TYPE
Vein in ductile fault zone
Degree of Alteration
Alteration is consistent with deformation in regional metamorphism to lower greenschist grade

SPECIMEN NUMBER F007F UTME 696558, UTMN 5556690, 513 m

Hand specimen

black trap block in part of a ladder vein
mildly? magnetic, no fizz in HCL, not conductive,

Thin section (Broken)

Major Plagioclase 65% in small laths, set in r
Pyroxene 30%, relatively fresh and interstitial
Minor Opagues5%
Chlorite at edges of pyroxene and opagues
Texture Diabasic

Structures

Main rock massive rock which is a rotated piece in a ladder vein complex
Macroscopic veins part of ladder vein system developed here

CLASSIFICATION

ROCK TYPE
Diabase

SPECIMEN NUMBER F007X UTME 696558, UTMN 5556690, 513 m

Hand specimen

basalt/dyke? fresh

not magnetic, no fizz in HCL, not conductive,

Thin section

Major plagioclase, altered to pumpellyite and actinolite

Pyroxene Relatively fresh

Minor chlorite

opagues

Texture diabasic

Structures

Main rock massive block

CLASSIFICATION

ROCK TYPE

Basalt or very fine grained border phase of gabbro.

Degree of Alteration

The alteration (altered feldspars, fresh pyroxene) is consistent with regional metamorphism in lowermost greenschist grade.

SPECIMEN NUMBER F008 UTME 696481, UTMN 55565711, 584 m.

Hand specimen

Shear zone developed in gabbro

not magnetic, minor fizz in HCL, not conductive,

Thin section

Major Feldspars pervasively altered to recrystallized quartz

Minor mafics are now sericite, chlorite and limonite

Accessory Calcite

Texture Flaser texture

Structures

Main rock Laminated rock with relic patches of gabbroic textures interleaved with thin veins of illite/sericite and quartz and chlorite sericite and limonite lamellae locally containing recrystallized quartz augen

Macroscopic veins Shear zone oriented 330/80 and vein oriented at 100/80 with local sulphides

Microscopic veins main texture cut by later crosscutting chloritic veins

CLASSIFICATION

ROCK TYPE

Protomylonitic gabbro with local well developed flaser quartz lamellae

Degree of Alteration

Excellent example of dynamic metamorphism in greenschist grade surroundings.

(enriched in Ba 1808 ppm, V 452 ppm, Cu 580 ppm, and As 100 ppm.)

SPECIMEN NUMBER F010A UTME 695715, UTMN 5556101, 641 m

Hand specimen

Light colored beige, thin lammellar to fissile mylonite zone.
Not magnetic (M-0), no fizz in HCL, not conductive,

Thin section

Major

Quartz, almond shaped aggregates of quartz set in very fine grained quartz crystals
Plagioclase, recrystallized to illite and clay minerals in matrix
Potash feldspar, largely recrystallized to illite in comminuted matrix

Minor

Illite alteration, very minor chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Foliated, laminar, flaser texture with almond shaped recrystallized quartz augen.

Structures

Main rock, Protomylonite in shear zone
Macroscopic vein in fault is 10 cm thick quartz
Microscopic veins small veins of chlorite and opague (iron sulphide) traverse slide

CLASSIFICATION

ROCK TYPE

Protomylonite developed in 2 mica granite, see 010B

Degree of Alteration

Dynamic alteration from brittle/ductile milieu

SPECIMEN NUMBER F010B UTME 695715, UTMN 5556101, 641 m

Hand specimen

Light colored beige muscovite bearing granite hosting thin mylonite zone.
Not magnetic (M-0), no fizz in HCL, not conductive,

Thin section

Major

Quartz, larger crystals to 3 mm locally strained
fine grained in matrix

Plagioclase, larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Biotite Relict 1 mm grains are altered to a fine grained mix of opague, limonite and green chlorite.

Muscovite Scarce Flakes to 1 mm, at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Apatite grains locally noted

Texture

Granitic, showing inter grown larger crystals and ground-mass of quartz and plagioclase. Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive host to shear zone 010A

Microscopic veins small veins of chlorite and opague (iron sulphide) traverse slide

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local , associated with fault, and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.

SPECIMEN NUMBER F011A UTME 695701, UTMN 5556088, 644 m

Hand specimen

½ m vein in beige 2 mica medium grained granite

not magnetic (M=0), no fizz in HCL, not conductive,

Thin section

Major

Quartz, larger crystals 1 to 4 mm, locally strained
fine grained in matrix

Plagioclase, abundant, larger (2-4 mm) well formed crystals with normal zoning, the core is somewhat obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite. Kspar also rims many of the grains

Minor

Muscovite Flakes are scarce.

Biotite Relict biotite is scarce.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

Major veins

.5 m vein

Microscopic veins

sericite and quartz veins in crackle veins

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F011B UTME 695701, UTMN 5556088, 644 m

Hand specimen

½ m vein in beige medium grained 2 mica granite

not magnetic (M=0), no fizz in HCL, not conductive,

Thin section

Major

Quartz, 30%, larger crystals 2-3 mm, locally strained
fine grained in matrix

Plagioclase, 30% abundant, larger (2-4 mm) well formed crystals with normal zoning, the core is somewhat obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 35% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite. Kspar also rims many of the grains

Minor

Muscovite Flakes 3% at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite Relict 1% parts of brown to pale beige pleochroic biotite are locally altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

Major veins
.5 m vein
Microscopic veins
sericite and quartz veins in crackle veins

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F012 UTME 695712, UTMN 5556052, 634 m

Hand specimen

Faulted slickensided chloritic granite

not magnetic, no fizz in HCL, not conductive,

Thin section

Major

Quartz,30% larger crystals 1 to 4 mm, locally strained
fine grained in matrix

Plagioclase, 35% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 30% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite Flakes 3% at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite Relict 1% parts of brown to pale beige pleochroic biotite are more less completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive
Major veins: main shear at 340/80 with subhorizontal plunge
small cross shear with developed chlorite at 270/90 with subhorizontal plunge
Microscopic veins
epidote in 1 mm vein, another contains chlorite and calcite. A third type vein has ?pumpellyite and sericite.

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F014 UTME 695709, UTMN 5555986, 644 m

Hand specimen

Greenish colored broken and veined chloritic granite

not magnetic =0, no fizz in HCL, not conductive,

Thin section

Major Quartz, 35% most abundant, larger crystals to 8 mm, locally strained fine grained in matrix

Plagioclase, 30% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 35% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite Flakes 2% at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 1% completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive, with local "crush" foliation or fracture cleavage but fractured and healed sericite and quartz.

Major veins

main shear main fault 080/50 with apparent sinistral sense of movement

4 cm thick extension vein of chlorite developed on 345/near vertical and local slickenlines plunging 10 degrees to the north

Microscopic veins

chlorite and sericite in abundant veins

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. There is more chlorite than muscovite/sericite.

SPECIMEN NUMBER F015 UTME 695704, UTMN 5555939, 629 m

Hand specimen

2 mica granite with a color index of about 10, w/ quartz veins and pink alteration, transition from chloritic to hematitic alteration

not magnetic (M=0), no fizz in HCL, not conductive, SG = 2.74

Thin section

Major Quartz, 25%, larger crystals 1 to 4 mm, locally strained also as fine grained in matrix

Potash 50%, feldspar, largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Plagioclase, 20%larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Minor

Muscovite 3%, Flakes up to 1 mm in length at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 1%, Relict parts of brown to pale beige pleochroic biotite are more less completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F016 UTME 695697, UTMN 5555875, 622m
Hand specimen
rusty to beige and pink granite with local veins

not magnetic)M=0), no fizz in HCL, not conductive,

Thin section

Major Quartz, 35% larger crystals 1 to 4 mm, locally strained
fine grained in matrix

Plagioclase, 25% seriate up to larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite.

Potash feldspar, 30% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite Flakes about 5 – 7 % at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with what used to be biotite.

Biotite Flakes thought to have been be biotite have now been completely altered to a mix of fine grained opagues and muscovite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in muscovite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

Major veins rusty fracture partings 110/80, cross faults 060/vert, with subhorizontal slickenlines.

Microscopic veins, partings accentuated by limonite

CLASSIFICATION

ROCK TYPE

Altered muscovite granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary . There is much more muscovite/sericite than chlorite. Rusty colored Liesegang patterns on joint surfaces

SPECIMEN NUMBER F017 UTMN 695692, UTMN 5555852, 631m

Hand specimen

Veined and broken dark chloritic granite

not magnetic (M=0), no fizz in HCL, not conductive,

Thin section

Major

Quartz,35% larger crystals 1 to 4 mm, locally strained
fine grained in matrix

Plagioclase, 15% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 45% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite Flakes 3% at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 1% Completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive, Tectonised. Zones of microcataclastic breccia, and veining associated with faults.

Major veins crush zones are rich in sericite set in very fine grained quartz (and albite?)

Microscopic veins

CLASSIFICATION

ROCK TYPE

Crushed Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F018C UTME 695697, UTMN 5555802, 622m

Hand specimen

Green 2 mica granite

not magnetic M=0), no fizz in HCL, not conductive,

Thin section

Major

Quartz, 35% larger crystals 1 to 2 mm, locally crushed, and generally strained

fine grained in matrix

Plagioclase, 25% seriate, to (2-3 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 35% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite 3% Local flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 1% Relict parts of brown to pale beige pleochroic biotite are more less completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive with faults

Microscopic veins quartz and local sericite, also a chlorite vein set

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F019A UTME 695694, UTMN 5555791, 617 m

Hand specimen

Sheared host is brown stained beige granitic rock

not magnetic (M=0), no fizz in HCL, not conductive,

Thin section

Major Quartz, 30% larger crystals 1 to 4 mm, locally strained fine grained in matrix

Plagioclase, 30% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 35% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite 2% A trace of flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 1% Fewer relict parts of brown to pale beige pleochroic biotite are more less completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F019-D UTME 695694, UTMN 5555791, 617 m

Hand specimen

Vein; between edges, an amorphous mix of indeterminate material rich in manganese and arsenic, chlorite and quartz

not magnetic =0, some fizz in HCL, not conductive,

Thin section

Major fine grained to amorphous mix of protomylonitic material

Texture Protomylonitic to mylonitic

Structures

Main rock comminuted indefinite rock materials in fluxion structure

CLASSIFICATION

ROCK TYPE Mylonitic core of complex calcite bordered vein.

SPECIMEN NUMBER F019B UTME 695694, UTMN 5555791, 617 m

Hand specimen

Part of vein: upper quartz calcite edge

fizzes in HCL, not conductive

Thin section

Major Calcite, coarse, with growth zones outlined by minor opagues and dust. Clearly the calcite was part of a coxcomb vein fill. Later zones of comminuted calcite mixed with some quartz and limonite

Texture Coarse grained

Structures

Main rock Coarse and locally tectonically disrupted coxcomb texture

Microscopic veins of size reduced calcite and minor quartz and limonite

CLASSIFICATION

ROCK TYPE

Calcite Vein (Epithermal open fill, later tectonized)

Degree of Alteration

Open fill textures dynamically altered

SPECIMEN NUMBER F019C UTME 695694, UTMN 5555791, 617 m

Hand specimen

Vein; lower quartz calcite edge of vein

not magnetic (M=0), fizzes in HCL, not conductive

Thin section

Major coarse grained 3-10 mm grains of calcite

Minor minor zones of opagues and limonite as well as fluid inclusions?

Texture Coarsely crystalline

Structures

Main rock edge of vein, relatively massive on this scale. Is part of a zoned vein B and C are the edges and D is the center.

Macroscopic veins patches of limonite and quartz are found in opening zones.

CLASSIFICATION

ROCK TYPE

Part of a composite calcite vein

SPECIMEN NUMBER F021A UTME 695426, UTMN 5554312, 705m

Hand specimen

Altered veined and altered granite (for unaltered rock see F021B.)

not magnetic, no fizz in HCL, not conductive,

Thin section

Major Quartz, 35% larger crystals 1 to 4 mm, locally strained
fine grained in matrix and veinlets

Plagioclase, 20% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar,35% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite 3 % Flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 2% Relict parts of brown to pale beige pleochroic biotite are locally altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues 3 % are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F021B UTME 695426, UTMN 5554312, 705 m

Hand specimen

Veined 2 mica granite, cr

not magnetic, no fizz in HCL, not conductive,

Thin section

Major

Quartz, 30% larger crystals to 4 mm, pervasively strained fine grained in matrix

Potash 45% feldspar, largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Plagioclase, 20% larger (4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Minor

Muscovite 3%, Flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 2%, Relict parts of brown to pale beige pleochroic biotite are more less completely altered to a fine grained mix of opague and green chlorite with local patches of prehnite along several cleavage planes.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F024 UTME 695447, UTMN 5554400, 701 m

Hand specimen

Chloritic leuco-granite

magnetic (M=2), no fizz in HCL, not conductive,

Thin section

Major

Quartz,30% larger crystals 4 mm, locally strained

fine grained in matrix

Plagioclase, 30% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 30% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Biotite completely altered to a fine grained mix of opague and green chlorite.

Muscovite Flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Accessory

Opagues are present as small (.4 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more chlorite than muscovite/sericite.

SPECIMEN NUMBER F025 UTME 695484, UTMN 5554503, 696 m

Hand specimen

Chloritic leuco-granite

magnetic (M=2), no fizz in HCL, not conductive,

Thin section

Major

Quartz, 30% larger crystals 4 mm, locally strained
fine grained in matrix

Plagioclase, 25% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 40% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite Flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.6 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more chlorite. than muscovite/sericite.

SPECIMEN NUMBER F026A UTME 695515, UTMN 5554555, 679m

Hand specimen

Beige and rusty (locally pyritic) locally porphyritic 2 mica granite

mildly magnetic (M=1), no fizz in HCL, not conductive, SG = 2.79

Staining for potash feldspar shows the feldspar to be largely interstitial to crystals of quartz and plagioclase

Thin section

Major

Quartz, 35% larger crystals 5 mm, locally strained
fine grained in matrix

Plagioclase, 25% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 30% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite 2 mm Flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite Relict parts of green to pale beige pleochroic biotite are more less altered to a fine grained mix of opague and green chlorite with local intercleavage grains of prehnite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite. Some relic magnetite?

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive, locally porphyritic

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F031D UTME 695530, UTMN 5554465, 661 m

Hand specimen

Beige 2 mica granite w/ rusty vein

not magnetic (M=0), no fizz in HCL, not conductive,

Thin section

Major

Quartz, 35% larger crystals 1 to 4 mm, locally strained
fine grained in matrix

Plagioclase, 25% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 30% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite 4% Flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite Relict 2% parts of brown to pale beige pleochroic biotite are more less completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F032A UTME 695658, UTMN 5554244, 626 m

Hand specimen

Greenish granite with 15% well defined dark spots (biotite, muscovite and opagues)

not magnetic (M=0), no fizz in HCL, not conductive, SG = 2.70

Thin section

Major

Quartz, 30%, larger crystals 4 mm, locally strained
fine grained in matrix

Plagioclase, 20% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash 45% feldspar, largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite Flakes 2% at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 1%Relict parts of brown to pale beige pleochroic biotite are more less completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues 2%are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

CLASSIFICATION

ROCK TYPE

Relatively fresh two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F041B UTM 695820, UTMN 5556916, 542 m

Hand specimen

Dark grey, fine grained gabbro with pilotaxitic texture with sulphide specks mildly magnetic (M=1), no fizz in HCL, not conductive, SG = 3.15

Thin section

Major Plagioclase, 45% locally porphyritic and glomeroporphyritic, plagioclase in groundmass is as small laths

Pyroxene 40% pervasively altered to uralite and a very green chlorite (chrome rich chlorite??)

Minor 10% Titanomagnetite, local leucoxene

Accessory small Apatite grains

Texture medium grained gabbro with oriented feldspars (pilotaxitic) texture

Structures

Main rock massive

CLASSIFICATION

ROCK TYPE

Uralite Gabbro

Degree of Alteration

Pervasively uralitized.(chlorite and actinolite indicates lower greenschist grade.

SPECIMEN NUMBER F042 UTME 695795, UTMN 5556756, 574 m

Hand specimen

Fine grained epidotized border phase of a gabbro

Magnetic (M=2), no fizz in HCL, not conductive, SG = 2.98

Thin section

Major Plagioclase laths altered to very fine grained saussurite

Pyroxene altered to actinolite and chlorite

Minor early titanomagnetite-opagues cut by later veins

Accessory Apatite grains

Texture Pilotaxitic textures in diabase/ basalt

Structures

Main rock massive with minor fracture cleavage marked by opague trace

Microscopic veins

early veins of sericite and chlorite, cut by later calcite veins

CLASSIFICATION

ROCK TYPE

Fine grained pilotaxitic diabase/basalt

Degree of Alteration

Regional alteration in lower greenschist grade

SPECIMEN NUMBER F044B UTME 695805, UTMN 5556878, 545 m

Hand specimen

Medium grained gabbro

mildly magnetic (M=1), no fizz in HCL, not conductive, SG = 3.08

Thin section

Major Plagioclase feldspar 55% laths up to 3 mm, largely replaced by pumpellyite

Pyroxene 35% replaced by actinolite and chlorite

Minor opague patches

Texture Diabasic, altered feldspar laths in altered matrix

Structures

Main rock massive

CLASSIFICATION

ROCK TYPE

basalt/diabase

Degree of Alteration

pervasive alteration in lower greenschist facies

SPECIMEN NUMBER F045-1 UTME 691488, UTMN 5558558, 590m

Hand specimen

shear zone and white vein in pink granodiorite

non magnetic (M=0), no fizz in HCL, not conductive,

Thin section

Major Quartz as major vein material , epidote and chlorite selvage

Altered plagioclase phenocrysts in granitoid matrix, now with epidote alteration

Minor

Hornblende altered to epidote and chlorite

Accessory opague patches, not magnetic as expected, presumably magnetite destroyed in vein making event. See host, next sheet.

Texture Relic porphyry texture

Structures

Main rock Granodiorite with vein

Macroscopic veins

shear zone 200/70 pink

cross fractures with quartz veins at 250/vert

Microscopic veins

Chlorite and epidote veins

CLASSIFICATION

ROCK TYPE

Nimpkish Pluton Granodiorite/quartz diorite with vein

Degree of Alteration

Alteration associated with vein formation

SPECIMEN NUMBER F045-2 UTME691488, UTMN 5558558, 590

Hand specimen

granodiorite granite hosting shear zone
magnetic M=3, no fizz in HCL, not conductive, SG = 2.78

Thin section

Major Quartz 25% to 2 mm, a few larger to 4 mm.
Plagioclase 40%dusty with clay/sericite alteration

Minor Hornblende 25% altered variably to chlorite
Biotite 10% altered to chlorite

Accessory opagues
unusual mineral, colorless, high relief, isotropic. Looks like a garnet!

Texture granitoid

Structures

Main rock massive
Macroscopic veins
green chlorite veins

CLASSIFICATION

ROCK TYPE
Biotite Hornblende quartz diorite of the Nimpkish Pluton
Degree of Alteration
Chloritized, possibly deuteric, maybe associated with possible nearby faulting, see previous shear zone/

SPECIMEN NUMBER F050 UTME 69290, UTMN 5556227, 7 22 m

Hand specimen

Rusty vein sampled from blue black fine grained basalt

not magnetic, fizz in HCL, not conductive,

Thin section

Major Calcite, vein fill, all sizes t 1 cm.

Minor, partially faceted quartz crystals, minor part of cockscomb texture

Texture open space fill in tectonically laminated schist

Structures

Main rock Vein
Macroscopic veins
Microscopic veins

CLASSIFICATION

ROCK TYPE

Epithermal vein

Degree of Alteration

Emplaced in fault zone

SPECIMEN NUMBER F083A UTME 696615, UTMN 5554976, 635 m

Hand specimen

Fine grained cherty tuff

not magnetic (M=0), no fizz in HCL, not conductive,

Thin section

Major Quartz fine grained and arranged in layers and fragments of layers possibly with a twinned albite

Minor very small amphibole (tremolite?) grains throughout, and in various proportions

Texture fine grained, layered, sedimentary

Structures

Main rock Layered, fragmental and layered, some layers show cross sections of silicified shells along the bedding plane.

Macroscopic veins

pyrite veinlets, quartz veins

Microscopic veins

CLASSIFICATION

ROCK TYPE

A fossiliferous (?) tuffaceous and brecciated chert

Degree of Alteration

apparently a calcareous component crystallized tremolite in response to the regional metamorphism.

SPECIMEN NUMBER F083A-2 UTME 696615, UTMN 5554976, 635 m

Hand specimen

fine grained grey chert?

not magnetic, no fizz in HCL, not conductive,

Thin section

Major Fine grained quartz, possibly untwinned feldspars (albite?)

Scarce Feldspar (plagioclase) clasts in layering and altered to sericite

Texture sedimentary layering, with scattered feldspar clasts

Structures

Main rock layered tuff

Macroscopic veins

pyrite veinlets, quartz veins

Microscopic veins

opague veins

CLASSIFICATION

ROCK TYPE

Cherty layered tuff with iron sulphide wall paper

Degree of Alteration

The chert is recrystallized into a fine mosaic of quartz with local patches of sericite. This is consistent with low grade metamorphism.

SPECIMEN NUMBER F084D UTME 696621, UTMN 5554980, 632 m

Hand specimen

dark grey gabbro near contact with tuff, contact locally exposed as 260/80

not magnetic, no fizz in HCL, not conductive, SG = 3.13

Thin section

Major

plagioclase phenocrysts and small laths, partially altered to chlorite

matrix is chlorite and actinolite

Minor Opagues and leucoxene

Texture Glomeroporphyritic, diabasic

Structures

Main rock massive

Macroscopic veins

thin 2-2 mm pyrite/iron sulphide cross veins cross veins at 070/70

CLASSIFICATION

ROCK TYPE

Altered glomeroporphyritic gabbro

Degree of Alteration

Chlorite alteration widespread, possibly regional metamorphic effect.

SPECIMEN NUMBER F085A-1 UTME 696611, UTMN 5554982, 625 m

Hand specimen

Fine grained gabbro near tuff, in creek bed

mildly magnetic (M=1), no fizz in HCL, not conductive, SG =3.13

Thin section

Major Plagioclase, 65% glomeroporphyritic, altered

Pyroxene 30% now uralite and chlorite and scattered opagues

Minor Chlorite 5% patches and oxides

Accessory pyrite and magnetite as equisided grains of dust

Hematite/ilmenite laths rimmed by leucoxene

Texture Diabasic with phenocrysts

Structures

Main rock Sparsely porphyritic, massive

Macroscopic veins

Microscopic veins

CLASSIFICATION

ROCK TYPE

Altered sparsely porphyritic gabbro

Degree of Alteration

Chlorite alteration widespread, could be part of a regional metamorphic pattern. Possibly propylitic alteration

SPECIMEN NUMBER F086 UTME 696573, UTMN 5555007, 625 m

Hand specimen

Slickensided gabbro and fault breccia

not magnetic, no fizz in HCL, not conductive,

Thin section

Major Plagioclase 60% altered with dusty alteration of epidote and local chlorite

Pyroxene 35% largely altered to uralite and less chlorite

Minor Irregularly shaped Opagues and cubic opagues (pyrite?)

Texture relic glomeroporphyritic with diabase texture

Structures

Main rock massive with ultramylonite "veinlets" or tendrils

Macroscopic veins

pyrite veinlet

Microscopic veins Compression stylolites were noted, concentrating opagues along the surface, cutting epidote and chlorite

CLASSIFICATION

ROCK TYPE

Pervasively altered, locally glomeroporphyritic melagabbro

Degree of Alteration

Complexly altered, first by regional metamorphism or less likely, propylitic alteration, then by dynamic metamorphism in the form a tendril of severely comminuted host rock.

SPECIMEN NUMBER F087 UTME 695840, UTMN 5555364, 596 m

Hand specimen

2 mica granite with quartz vein and molybdenite

not magnetic, no fizz in HCL, not conductive, SG = 2,72

Thin section

Thin section

Major

Quartz, 35% larger crystals 1 to 4 mm, strained Also fine grained in matrix , rims many of the feldspar grains with a thin (.1mm) rim.

Plagioclase, 25%larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals. Crystals strained and broken

Potash feldspar, 35% relatively fresh, largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite 3% Flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 2% Relict parts of brown to pale beige pleochroic biotite are more less completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate. Crystals broken and healed.

Structures

Main rock, massive

Microscopic veins Network of healed veinlets around broken grains, vein material quartz, albite? And sericite

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Rimming quartz may be indicative of silicification. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER F088 UTME 695751, UTMN 5554602, 598 m

Hand specimen

granite with quartz vein and molybdenite specks

not magnetic, no fizz in HCL, not conductive, SG = 2.67

Thin section

Major

Quartz, 45% larger crystals 1 to 4 mm, locally strained

fine grained in matrix

Plagioclase, 25% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar, 35% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite Flakes at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite Relict completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Monazite, scarce grains of high refractive index, high birefringence are located in the biotite-muscovite-opague clusters.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz seems to rim a lot of the grains.

Structures

Main rock, massive

Major Veins; quartz vein with mm sized flakes of **molybdenite**

Microscopic veins veins of illite and quartz

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER 331666 UTME 695752, UTMN 5554600 ,600 m

Hand specimen
Granite
not magnetic, no fizz in HCL, not conductive,

Thin section

Major

Quartz, 40% larger crystals 5 mm, locally strained also fine grained in matrix

Plagioclase, 30% 2 by 1 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Potash feldspar,25% largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite 4% replaces of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 1% up to 1 mm completely altered to a fine grained mix of opague and green chlorite and mixed with muscovite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

Major veins quartz veins

Microscopic veins quartz and illite veins

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER 331667 UTME 696572 UTMN 5555004, 613 m

Hand specimen

"green vein" w/ sphalerite, pyrite possibly pyrrhotite? And minor chalcopyrite at FLAN Showing

Magnetic (M=4), no fizz in HCL, conductive (8 ohm/3 cm),

Thin section

Major Sphalerite massive, elongate in "vein direction

Pyrite discrete lumps enclosed in sphalerite

Chlorite between sulphide grains

Minor Chalcopyrite patches with sphalerite

Pyrrhotite patches mainly altered to marcasite and hematite flakes

Texture Elongate features suggestive of a vein fill. Silicate patches (Chlorite and quartz mainly define the vein direction, but also define tectoclastic fragments in vein system. The sprays of marcasite and hematite lath alteration are particularly well developed at the interface with the silicates. Perhaps two phases of alteration took place, the first depositing the pyrrhotite the second degrading it.

Structures

Main rock Layered vein

Macroscopic veins it is a part of a thicker (several meter thick) vein.

Microscopic veins Complex relationships. Many vein sets of sulphides and chlorite..

CLASSIFICATION

ROCK TYPE

Complex polymetallic Vein

Degree of Alteration

The alteration of the vein system is propylitic in nature. Marcasite flakes derived from pyrrhotite are themselves altered to hematite scales.

SPECIMEN NUMBER 331668 UTME 696572 UTMN 5555004, 613 m

Hand specimen

Epidote rich section in middle of green vein

not magnetic, no fizz in HCL, not conductive,

Thin section

Major Epidote of various grain sizes, allowing the recognition of various fragments

Minor Chlorite Interstitial

Quartz also interstitial

Texture Cataclastic

Structures

Main rock Epidotized Breccia, with palimpsest fragment

Macroscopic veins It is part of a thick vein, this is an epidotized portion with relic cataclastic fragments

CLASSIFICATION

ROCK TYPE

Vein breccia

Degree of Alteration

Intense epidotization, part of a propylitic vein system

SPECIMEN NUMBER 331670 ` UTME 695753, UTMN 5554603, 598 m

Hand specimen

altered brown colored granite with biotite books and minor sulphide
not magnetic, no fizz in HCL, not conductive,
stained for Kspar, Potash feldspar is abundant (35-45%) and mainly interstitial
Section thick

Thin section

Major

Quartz, 35%, larger crystals 1 to 4 mm, locally strained
fine grained in matrix

Potash feldspar, 45% Abundant, largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Plagioclase, 15% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Minor

Muscovite Flakes 2%, at edges of framework minerals, as replacement of cores of central parts of microcline, as vein fills and as parts of a cluster with biotite.

Biotite Relict 1%, completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues 2% are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite. Some are rimmed by limonite, suggesting pyrite.

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

Microscopic Veins of Kspar and muscovite heal old fractures developed in quartz and plagioclase

CLASSIFICATION

ROCK TYPE

Two mica granite with minor rusted sulphides (sampled to revisit the molybdenite veins

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER 331672 UTME 695463, UTMN 5552573, 594 m

Hand specimen
leucocratic granite with pink vein surface (rhodonite vein?)

not magnetic, no fizz in HCL, not conductive,
stained for Kspar, Potash feldspar largely interstitial

Thin section

Major

Quartz, 35%,larger crystals 1 to 4 mm, locally strained
fine grained in matrix

Potash feldspar, 40%, largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Plagioclase, 20% larger (2-4 mm) well formed crystals with normal zoning, the core is largely obscured by a brownish fine grained mix of clay, illite and sericite. Also as small patches in matrix and as an albite rim around earlier crystals.

Minor

Muscovite 3% Flakes bent and strained, muscovite in veins healing previous cracks in quartz and feldspar at edges of framework minerals, as replacement of cores of central parts of microcline, and as parts of a cluster with biotite.

Biotite 1%, completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite

Texture

Granitic, with clusters of biotite-muscovite-opagues and monazite scattered irregularly through out the inter grown larger crystals and ground-mass Quartz and plagioclase have a tendency to be seriate.

Structures

Main rock, massive

Major veins include pink veins some 2-3 mm in width, none in TS but probably rhodonite

CLASSIFICATION

ROCK TYPE

Two mica granite

Degree of Alteration

The alteration is local and represents a phyllic alteration. Muscovite is in part "igneous" and in part secondary and part of the chlorite and muscovite alteration.
Minerals. There is more muscovite/sericite than chlorite.

SPECIMEN NUMBER 331675 UTME 695457, UTMN 5552633, 594 m

Hand specimen

Brecciated fracture zone formed in gabbro

not magnetic, no fizz in HCL, not conductive,

Thin section

Major Plagioclase, 60% much altered to pumpellyite, local, albite,

Pyroxene 35% is now mainly chlorite and actinolite

Minor opagues 5%, mainly ilmenite/leucoxene

Texture Broken diabasic texture

Structures

Main rock Cataclastic with massive fragments,

Macroscopic veins cataclastic veins

Microscopic veins disrupted chlorite and clay epidote veins

CLASSIFICATION

ROCK TYPE

Broken disrupted gabbro

Degree of Alteration

Greenschist grade regional metamorphism

SPECIMEN NUMBER 331676 UTME 695457, UTMN 5552633, 594 m

Hand specimen

Cataclastic granite

not magnetic, no fizz in HCL, not conductive,

Thin section

Major

Quartz, broken, 45%larger crystals 1 to 4 mm, locally strained also fine grained in matrix

Plagioclase, 25% broken relics I

Potash feldspar, 35%broken largely gridded microcline, as occasional poorly formed larger crystals, more generally in the fine grained matrix mixed with quartz and albite

Minor

Muscovite 5% shredded,.

Biotite shredded and completely altered to a fine grained mix of opague and green chlorite.

Accessory

Opagues are present as small (.5 mm) grains, locally rimmed by leucoxene, and as secondary alteration dust in chlorite and epidote

Texture

Disrupted fragments of fragments, Fabric now cataclastic

Structures

Main rock, cataclastic

Microscopic many generations of veins of epidote and opagues,

CLASSIFICATION

ROCK TYPE

Cataclased Two mica granite

Degree of Alteration

The alteration is associated with a fault zone ie dynamothermal and part of the brittle regime.

SPECIMEN NUMBER 331681 UTME 695457, UTMN 5552633, 594 m
Hand specimen
also part of fault zone, grey fractured zone developed in glomeroporphyritic gabbro

not magnetic, no fizz in HCL, not conductive,

Thin section

Major Plagioclase 65% with local alteration to pumpellyite and albite
Pyroxene 30% now largely actinolite with local chlorite and dusty opagues

Minor Chlorite 5% alteration in matrix and as replacement of mafic mineral

Accessory apatite

Texture Cataclastic, relic glomeroporphyritic and diabasic texture

Structures

Main rock broken, less so than previous samples
Macroscopic veins cataclastic veins
Microscopic veins many Chlorite veins

CLASSIFICATION

ROCK TYPE
Broken Glomeroporphyritic Gabbro
Degree of Alteration
Dynamic metamorphism imposed on prior textures associated with regional greenschist grade metamorphism

SPECIMEN NUMBER 331511 (169A) UTME 693300, UTMN 5555863, 782m

Hand specimen

landslide clast, orange weathering calcite and quartz vein fragment

not magnetic, fizz in HCL, not conductive,

Thin section

Major Calcite/other Manganiferous ankerite?

Quartz

Minor rust

Texture Open space fill textures, coxcomb and colloform textures

Structures

Main rock Vein fill

Macroscopic veins ankerite and quartz veins

Microscopic veins ankerite and quartz veins

CLASSIFICATION

ROCK TYPE

Epithermal vein fill with Manganiferous ankerite -calcite and quartz

Degree of Alteration

Epithermal vein Contains anomalous Hg.

SPECIMEN NUMBER 331512 same location as above

Hand specimen

landslide clast, orange weathering calcite and quartz vein fragment

not magnetic, fizz in HCL, not conductive,

Thin section

Major Calcite/other Mn ankerite?

Quartz

Minor rust

Texture Open space fill textures, coxcomb and colloform textures

Structures

Main rock Vein fill

Macroscopic veins ankerite and quartz veins

Microscopic veins ankerite and quartz veins

CLASSIFICATION

ROCK TYPE

Epithermal vein fill Manganiferous ankerite -calcite and quartz

Degree of Alteration

Contains anomalous Hg.

SPECIMEN NUMBER 331513 (169C) UTME 693300, UTMN 5555863 782m

Hand specimen

landslide clast, orange weathering calcite and quartz vein fragment

not magnetic, no fizz in HCL, not conductive,

Thin section

Major Calcite/other Mn ankerite?

Quartz

Minor rust

Texture Open space fill textures, coxcomb and colloform textures

Structures

Main rock Vein fill

Macroscopic veins ankerite and quartz veins

Microscopic veins ankerite and quartz veins

CLASSIFICATION

ROCK TYPE

Epithermal vein fill Mn Ankerite-calcite and quartz

Degree of Alteration

Contains anomalous Hg.

SPECIMEN NUMBER 331514 (169D) UTME 693300, UTMN 5555863 782m

Hand specimen

landslide clast, beige weathering speckled fine grained calcite and quartz vein fragment

not magnetic, fizz in HCL, not conductive,

Thin section

Major Quartz, as very small grains intergrown with

Calcite/other Mn ankerite as fine grain

Minor rust and clay minerals

Accessory, very small pyrite cubes, possibly arsenopyrite needles,

Texture Fine grained "core" of vein

Structures

Main rock Vein fill

CLASSIFICATION

ROCK TYPE

Epithermal vein fill Mn Ankerite-calcite and quartz, very scarce sulphides

SPECIMEN NUMBER 331519 (177) UTME692835 UTMN 5556490 755m

Hand specimen

Trap

mildly magnetic (M=1), no fizz in HCL, not conductive,

Thin section

Major 65% calcic plagioclase as locally zoned glomeroporphyritic masses up to 3 mm set in a system of lathes to ,7 mm

20% interstitial pyroxenes, locally up to 1 mm.

Minor 15% opague intergrown with the pyroxene.

Texture

Diabasic

Structures

Main rock massive, no veins

CLASSIFICATION

ROCK TYPE

Fresh diabase, is this a later dyke?

Degree of Alteration

Very little

SPECIMEN NUMBER 331514 (169F) UTME 693300, UTMN 5555863 782m

Hand specimen

landslide clast, beige weathering speckled fine grained calcite and quartz vein fragment

not magnetic, fizz in HCL, not conductive,

Thin section

Major Quartz, as very small grains intergrown with

Calcite/other Mn ankerite as fine grain

Minor rust and clay minerals

Accessory, very small pyrite cubes, possibly arsenopyrite needles,

Texture Fine grained "core" of vein

Structures

Main rock Vein fill

CLASSIFICATION

ROCK TYPE

Epithermal vein fill Mn Ankerite-calcite and quartz, very scarce sulphides

Appendix C Certificates of analyses

ACME Labs

A608054

16 Fire Assays of Au, Pd, and Pt

17 ICP-ES analysis of aqua Regia Soluble elements (3o elements)

A608055

11 whole rock analyses of major elements (16 elements)

11 whole rock analyses of minor elements(31 elements)

11 aquaregia soluble sulphides using ICP-MS (14 elements

VAN07002132.1

21 ICP-MS danalyses of aqua regia soluble elements (37 elements) includes ACME labs QA/QC documents

ACME ANALYTICAL LABORATORIES LTD. (ISO 9001 Accredited Co.)
852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEM PRECIOUS METALS ANALYSIS

Schau, Mikkel File # A608054

1007 Barkway Terrace, Brentwood Bay BC V8M 1A4 Submitted by: Mikkel Schau

SAMPLE#	Au** ppb	Pt** ppb	Pd** ppb	Sample gm
331666	23	<3	6	30
331667	26	<3	2	30
331668	282	3	12	30
331669	11	3	5	30
331670	4	<3	<2	30
331672	<2	3	<2	30
331674	14	3	<2	30
331675	20	10	23	30
331676	2	3	7	30
RE 331676	6	<3	<2	15
331677	3	7	2	30
331678	<2	5	<2	30
331679	17	9	17	30
331680	6	7	17	30
331681	3	10	15	30
STANDARD FA-10R	498	477	476	30

GROUP 3B - FIRE GEOCHEM AU, PT, PD - 30 GM SAMPLE FUSION, DORE DISSOLVED IN AQUA - REGIA, ICP ANALYSIS. UPPER LIMITS = 10 PPM.
GROUP 6 AU RECOMMENDED IF >10PPM FOR 30 GM, >5PPM FOR 50 GM.
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

11-22-06 11:47 AM

Data 1 FA ____ **DATE RECEIVED:** OCT 23 2006 **DATE REPORT MAILED:**.....

BRITISH COLUMBIA CERTIFIED ASSAYER Jacky Wang

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GEOCHEMICAL ANALYSIS CERTIFICATE

Schau, Mikkel File # A608054

1007 Barkway Terrace, Brentwood Bay BC V8M 1A4 Submitted by: Mikkel Schau

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ag ppm	Ni ppm	Co ppm	Mn ppm	Fe %	As ppm	U ppm	Au ppm	Th ppm	Sr ppm	Cd ppm	Sb ppm	Bi ppm	V ppm	Ca %	P %	La ppm	Cr ppm	Mg %	Ba ppm	Ti %	B ppm	Al %	Na %	K %	W ppm
G-1	<1	2	<3	35	<.3	3	4	491	1.62	<2	<8	<2	2	49	<.5	<3	<3	34	.44	.067	5	6	.53	186	.10	<3	.86	.05	.44	2
331666	15	2173	9	889	4.1	16	94	575	12.21	8	<8	<2	4	4	13.7	4	<3	35	.08	.007	5	7	.31	20	.01	<3	.98	.03	.05	8
331667	9	1133	8	524	2.3	7	53	522	6.49	8	<8	<2	4	5	6.9	3	<3	23	.07	.005	5	5	.21	25	.02	<3	.79	.04	.08	5
331668	324	3830	<3	136	5.4	34	168	1262	20.06	211	<8	<2	<2	42	<.5	<3	<3	123	.31	.013	4	5	1.20	8	.05	<3	2.60	<.01	<.01	<2
331669	146	444	<3	50	.9	5	31	655	4.05	7	<8	<2	<2	234	<.5	<3	<3	89	1.42	.008	1	2	.43	9	.03	<3	2.12	<.01	.01	<2
331670	5	32	<3	15	<.3	<1	1	432	.71	3	<8	<2	5	5	<.5	<3	<3	3	.06	.004	6	6	.07	23	.01	<3	.36	.04	.08	<2
331672	2	6	<3	6	.3	<1	<1	399	.51	<2	8	<2	5	5	<.5	<3	<3	1	.05	.003	6	5	.06	15	.01	<3	.27	.03	.06	<2
331674	1	11	<3	15	<.3	<1	<1	389	.59	2	<8	<2	5	4	<.5	<3	<3	1	.08	.004	6	4	.06	20	.02	<3	.35	.04	.07	<2
331675	1	368	<3	1288	1.8	50	33	4105	3.99	8	<8	<2	<2	40	16.0	<3	<3	135	1.36	.065	3	55	1.32	12	.28	<3	2.59	.04	.03	<2
331676	1	52	9	111	.3	2	1	620	.53	3	<8	<2	4	14	1.8	<3	<3	3	.22	.008	6	6	.06	31	.02	<3	.44	.04	.10	2
RE 331676	2	52	5	111	.3	1	1	613	.54	2	<8	<2	5	14	1.7	<3	<3	4	.21	.008	6	6	.06	33	.02	<3	.45	.04	.10	<2
331677	<1	33	7	82	.4	1	1	659	.49	<2	<8	<2	5	12	1.6	<3	<3	6	.19	.007	5	5	.07	20	.02	<3	.41	.03	.07	<2
331678	<1	6	<3	11	<.3	1	<1	337	.40	<2	<8	<2	5	8	<.5	<3	<3	1	.11	.004	6	3	.05	15	.01	<3	.33	.02	.05	<2
331679	1	127	<3	623	1.1	24	11	2270	2.31	2	<8	<2	<2	62	4.0	<3	<3	75	1.70	.039	1	26	.76	16	.09	<3	2.82	.03	.04	<2
331680	1	429	<3	887	1.7	37	20	3118	3.00	10	<8	<2	<2	16	10.3	<3	<3	113	1.21	.055	3	36	.99	20	.24	<3	1.54	.08	.05	<2
331681	<1	286	<3	594	1.5	34	18	3506	3.27	5	<8	<2	<2	19	7.1	<3	<3	125	1.38	.058	3	39	1.10	22	.26	<3	1.71	.09	.06	2
STANDARD DS7	20	105	70	386	1.0	51	9	596	2.31	47	9	<2	3	71	6.2	6	5	86	.92	.071	12	178	1.03	379	.11	38	.98	.08	.44	2

GROUP 1D - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-ES.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
ASSAY RECOMMENDED FOR ROCK AND CORE SAMPLES IF CU PB ZN AS > 1%, AG > 30 PPM & AU > 1000 PPB
- SAMPLE TYPE: ROCK R150 Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.

11-21-059-919429E0U

Data 1 FA ____ **DATE RECEIVED:** OCT 23 2006 **DATE REPORT MAILED:**.....

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WHOLE ROCK ICP ANALYSIS

Schau, Mikkel File # A608055

1007 Barkway Terrace, Brentwood Bay BC V8M 1A4 Submitted by: Mikkel Schau

SAMPLE#	SiO2 %	Al2O3 %	Fe2O3 %	MgO %	CaO %	Na2O %	K2O %	TiO2 %	P2O5 %	MnO %	Cr2O3 %	Ni ppm	Sc ppm	LOI %	TOT/C %	TOT/S %	SUM %
331666	60.59	10.12	19.19	.58	.48	2.65	2.46	.09	.04	.09	.003	20	2	3.3	.01	6.61	99.60
331669	40.27	22.08	14.26	.88	17.91	.01	<.04	.25	.03	.24	.003	18	3	3.7	.07	.66	99.66
331672	76.27	13.26	.96	.10	.66	4.02	3.93	.07	.03	.07	.002	<5	2	.4	<.01	<.01	99.77
331674	76.24	13.20	1.03	.09	.43	4.26	3.76	.08	.03	.07	<.001	<5	3	.6	.01	.01	99.79
331675	46.61	15.28	12.90	5.36	8.93	2.95	.50	2.20	.19	1.05	.020	89	37	3.6	.01	.38	99.61
331676	76.45	12.45	1.27	.15	1.35	3.17	3.96	.09	.03	.13	.002	<5	3	.8	.04	<.01	99.85
331677	76.42	12.58	1.02	.18	1.16	3.48	3.99	.10	.04	.13	.002	<5	3	.8	.03	<.01	99.90
331678	76.26	13.24	.87	.12	.80	4.07	3.69	.08	.02	.07	.002	8	2	.7	<.01	<.01	99.92
331680	47.34	15.16	13.24	6.00	9.05	3.00	.87	2.11	.18	.90	.020	92	35	1.9	.09	.06	99.78
331681	47.53	15.31	12.97	5.87	8.84	3.09	.92	2.12	.17	.97	.019	74	34	2.0	.11	.02	99.82
STANDARD SO-18/CSC	58.19	14.11	7.63	3.33	6.39	3.70	2.17	.69	.83	.39	.551	52	25	1.9	3.19	4.26	99.89

GROUP 4A - 0.200 GM SAMPLE BY LIBO2/LI2B4O7 FUSION, ANALYSIS BY ICP-ES. (LIBO2/LI2B4O7 FUSION MAY NOT BE SUITABLE FOR MASSIVE SULFIDE OR HIGH BARITE SAMPLES.) LOI BY LOSS ON IGNITION. TOTAL C & S BY LECO. (NOT INCLUDED IN THE SUM)

-

- SAMPLE TYPE: ROCK PULP

Data FA ____ DATE RECEIVED: OCT 23 2006 DATE REPORT MAILED:.....

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

ACME ANALYTICAL LABORATORIES LTD. (ISO 9001 Accredited Co.)
852 E. HASTINGS ST. VANCOUVER BC V6A 1R6 PHONE(604)253-3158 FAX(604)253-1716

GEOCHEMICAL ANALYSIS CERTIFICATE

Schau, Mikkel File # A608055 (a)

1007 Barkway Terrace, Brentwood Bay BC V8M 1A4 Submitted by: Mikkel Schau

SAMPLE#	Ba ppm	Be ppm	Co ppm	Cs ppm	Ga ppm	Hf ppm	Nb ppm	Rb ppm	Sn ppm	Sr ppm	Ta ppm	Th ppm	U ppm	V ppm	W ppm	Zr ppm	Y ppm	La ppm	Ce ppm	Pr ppm	Nd ppm	Sm ppm	Eu ppm	Gd ppm	Tb ppm	Dy ppm	Ho ppm	Er ppm	Tm ppm	Yb ppm	Lu ppm
331666	687.3	3	94.4	.3	12.7	1.4	4.8	59.3	1	67.0	.4	4.8	1.9	41	14.6	35.9	13.2	8.6	18.5	2.06	7.4	1.7	.25	1.70	.33	2.05	.43	1.24	.22	1.12	.22
331669	24.5	2	34.1	.4	49.8	.5	1.7	2.9	<1	1848.4	.1	.1	.3	484	.7	14.3	4.0	1.7	3.6	.53	2.6	.7	.44	.72	.15	.67	.12	.30	<.05	.30	.06
331672	992.6	1	.5	.4	11.5	2.4	6.6	91.8	1	118.2	.6	6.9	3.9	5	1.4	54.0	19.3	15.4	30.4	3.38	11.7	2.3	.41	2.14	.48	3.00	.56	1.80	.30	1.93	.31
331674	961.4	<1	1.3	.5	11.0	2.1	6.5	87.9	1	76.6	.6	8.1	3.0	9	.7	49.5	17.7	13.5	28.9	3.10	11.6	2.6	.32	2.23	.42	2.37	.52	1.68	.27	1.74	.33
331675	225.2	2	44.4	.2	23.8	3.0	9.6	18.2	6	224.6	.7	1.0	.8	382	2.8	113.0	28.1	9.1	23.2	3.46	16.9	4.7	1.65	5.01	.89	5.24	.99	2.55	.36	2.28	.36
331676	1304.6	1	1.7	.3	9.9	1.9	7.5	84.6	1	135.2	.8	6.5	3.1	10	.9	45.9	12.6	9.3	23.4	2.22	8.1	1.7	.28	1.53	.35	1.86	.42	1.31	.23	1.47	.27
331677	1010.7	1	1.7	.3	9.9	2.8	7.4	86.1	1	130.9	.7	5.8	4.7	10	.4	62.1	15.9	8.8	19.8	1.93	7.9	1.7	.24	1.57	.38	2.20	.47	1.53	.29	1.76	.32
331678	1065.9	2	1.3	.3	11.3	2.2	6.9	84.7	<1	107.1	.6	8.6	3.2	<5	.5	49.2	19.3	13.6	29.0	3.30	12.0	2.6	.30	2.54	.47	2.72	.62	1.78	.27	2.06	.33
331680	422.8	2	43.1	.4	18.9	3.3	9.6	30.0	5	249.0	.6	.7	.4	390	3.6	107.4	27.7	7.8	21.1	3.00	16.2	4.3	1.53	4.90	.90	4.92	.98	2.70	.38	2.16	.35
331681	440.9	2	38.6	.4	19.5	3.4	9.6	33.0	4	269.8	.6	.5	.4	392	4.7	111.0	27.6	8.6	21.7	3.23	15.5	4.3	1.51	5.01	.92	5.23	.99	2.79	.37	2.08	.38
STANDARD SO-18	508.6	1	27.1	7.1	17.9	9.8	21.0	28.5	15	412.8	7.2	10.3	16.6	204	15.2	291.8	32.8	12.1	27.5	3.42	13.7	2.9	.83	2.83	.54	3.00	.62	1.81	.29	1.76	.27

GROUP 4B - REE - 0.200 GM BY LiBO2/LI2B4O7 FUSION, ICP/MS FINISHED.
- SAMPLE TYPE: ROCK PULP

Data 1 FA ____ **DATE RECEIVED:** OCT 23 2006 **DATE REPORT MAILED:**.....

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

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GEOCHEMICAL ANALYSIS CERTIFICATE

Schau, Mikkel File # A608055 (b)

1007 Barkway Terrace, Brentwood Bay BC V8M 1A4 Submitted by: Mikkel Schau

SAMPLE#	Mo ppm	Cu ppm	Pb ppm	Zn ppm	Ni ppm	As ppm	Cd ppm	Sb ppm	Bi ppm	Ag ppm	Au ppb	Hg ppm	Tl ppm	Se ppm
331666	17.4	2025.9	13.9	952	21.0	11.4	15.2	.5	.3	3.9	15.0	.11	.1	3.5
331669	153.9	438.8	4.4	83	5.9	8.9	.4	.3	.4	.7	7.7	<.01	<.1	1.9
331672	1.7	5.3	1.5	9	.6	<.5	.1	<.1	<.1	<.1	1.1	<.01	<.1	<.5
331674	1.1	10.8	3.2	19	.7	.6	.1	<.1	<.1	<.1	<.5	<.01	<.1	<.5
331675	1.1	338.6	2.2	1319	55.6	10.5	16.7	.1	.5	.8	7.5	.02	<.1	1.8
331676	1.4	49.4	6.9	117	1.9	.7	1.7	.1	.5	.1	<.5	<.01	<.1	<.5
331677	.4	35.6	8.2	93	2.4	.6	1.8	.1	.5	.1	<.5	<.01	.1	<.5
331678	.5	5.4	2.5	17	.7	.5	.1	<.1	<.1	<.1	<.5	<.01	<.1	<.5
331680	.6	407.9	3.9	939	44.1	9.4	10.5	.1	.3	.6	2.7	.01	<.1	.9
331681	.3	268.3	2.8	618	38.1	5.0	6.9	.1	.2	.4	1.2	<.01	<.1	<.5
STANDARD DS7	20.4	104.5	66.9	399	53.2	48.1	6.4	5.8	4.9	.9	61.2	.19	4.2	3.9

GROUP 1DX - 0.50 GM SAMPLE LEACHED WITH 3 ML 2-2-2 HCL-HNO3-H2O AT 95 DEG. C FOR ONE HOUR, DILUTED TO 10 ML, ANALYSED BY ICP-MS.
(>) CONCENTRATION EXCEEDS UPPER LIMITS. SOME MINERALS MAY BE PARTIALLY ATTACKED. REFRACTORY AND GRAPHITIC SAMPLES CAN LIMIT AU SOLUBILITY.
- SAMPLE TYPE: ROCK PULP

Data 1 FA ____ DATE RECEIVED: OCT 23 2006 DATE REPORT MAILED:.....

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

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

Submitted By: Mikkel Schau
Receiving Lab: Acme Analytical Laboratories (Vancouver) Ltd.
Received: October 19, 2007
Report Date: December 18, 2007
Page: 1 of 2

CERTIFICATE OF ANALYSIS VAN07002132.1

CLIENT JOB INFORMATION

Project: None Given
Shipment ID:
P.O. Number
Number of Samples: 21

SAMPLE DISPOSAL

SAMPLE PREPARATION AND ANALYTICAL PROCEDURES

Method Code	Number of Samples	Code Description	Test Wgt (g)	Report Status
R150	21	Crush, split and pulverize rock to 150 mesh		
1F	21	1:1:1 Aqua Regia digestion Ultratrace ICP-MS analysis	15	Completed

ADDITIONAL COMMENTS

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

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

CC:

BRITISH COLUMBIA CERTIFIED ASSAYER
Clarence Leong

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

Project: None Given
Report Date: December 18, 2007

CERTIFICATE OF ANALYSIS VAN07002132.1

	Method	1F15	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
331501	Rock	0.59	872.6	12.46	52.2	353	51.2	52.4	345	7.05	72.0	0.1	57.9	0.3	107.2	0.13	0.30	1.12	66	1.01	0.038
331502	Rock	0.56	2008	213.6	92.8	35873	8.6	3.2	227	1.20	41.8	<0.1	20.1	<0.1	5.8	0.79	0.32	55.53	25	0.09	0.006
331503	Rock	2.01	205.1	28.40	82.1	657	50.2	11.4	225	5.11	76.9	0.3	21.6	0.6	15.9	0.47	0.76	1.33	170	0.36	0.080
331504	Rock	0.32	30.23	5.69	30.1	79	19.5	10.8	373	2.27	17.9	<0.1	5.7	<0.1	32.3	0.26	0.18	0.19	126	9.09	0.020
331505	Rock	0.38	192.9	5.35	85.0	298	38.9	20.7	661	4.49	20.0	<0.1	2.1	0.4	40.2	0.53	0.41	0.49	160	1.66	0.079
331506	Rock	0.30	46.37	5.13	25.2	74	3.6	1.4	152	1.06	15.0	<0.1	17.5	<0.1	80.0	0.75	0.21	0.09	29	1.32	0.002
331507	Rock	0.30	23.43	3.10	12.7	47	4.8	3.0	220	1.20	6.4	<0.1	0.6	0.1	106.4	0.37	0.26	0.15	56	1.63	0.035
331508	Rock	0.42	8.53	1.97	19.1	17	6.3	2.8	303	0.87	5.0	<0.1	2.7	<0.1	9.6	0.20	0.08	0.03	36	1.41	0.007
331509	Rock	0.06	4.08	3.52	9.5	11	10.8	4.0	1020	1.34	5.2	0.1	<0.2	<0.1	106.2	0.46	0.09	0.02	9	29.54	0.001
331510	Rock	0.42	195.2	4.44	69.7	155	41.1	20.0	528	3.96	19.1	<0.1	7.6	0.4	72.2	0.35	0.30	0.16	145	1.77	0.074
331511	Rock	0.10	12.64	9.00	104.8	15	39.7	12.5	1478	3.35	15.1	0.4	<0.2	<0.1	178.3	0.99	1.56	<0.02	15	24.73	0.004
331512	Rock	0.06	1.24	4.07	9.6	7	8.2	4.3	814	1.18	4.4	0.2	0.7	<0.1	122.7	0.73	0.07	<0.02	10	27.69	0.001
331513	Rock	0.07	50.31	8.68	46.4	9	42.4	13.1	1239	2.98	21.3	0.4	<0.2	<0.1	170.4	1.16	1.32	0.05	26	24.80	0.003
331514	Rock	0.10	54.10	1.68	27.9	21	246.6	38.7	1413	3.85	93.3	<0.1	0.3	<0.1	108.2	0.20	1.17	0.10	106	10.60	0.010
331515	Rock	0.33	195.6	8.37	16.7	90	8.4	5.5	171	1.25	28.6	<0.1	3.1	0.3	52.6	0.08	0.32	0.03	60	1.74	0.054
331516	Rock	0.39	173.3	1.94	75.5	37	58.6	27.6	1398	6.08	76.5	<0.1	3.1	0.4	70.0	0.29	3.46	0.06	211	7.86	0.042
331517	Rock	0.13	21.28	2.45	46.9	23	229.2	32.7	1237	4.02	96.7	<0.1	2.3	<0.1	137.5	0.16	0.35	0.03	82	9.85	0.008
331518	Rock	0.35	155.9	4.04	95.0	62	35.5	20.3	564	3.63	8.2	0.1	2.3	0.5	31.6	0.29	0.17	0.11	151	1.52	0.063
331519	Rock	0.40	172.2	3.13	32.9	74	22.3	14.2	203	2.37	5.6	<0.1	4.0	0.2	59.4	0.20	0.18	0.08	101	2.17	0.047
331520	Rock	0.29	220.8	2.82	62.7	45	36.9	18.8	436	3.51	7.1	0.1	2.7	0.5	43.3	0.25	0.17	0.12	139	1.70	0.078
331521	Rock	1.22	103.6	1.84	25.1	27	21.5	13.2	329	3.12	3.7	0.2	0.7	1.0	3.6	0.02	0.09	0.03	144	1.41	0.108

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Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

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

Project: None Given
Report Date: December 18, 2007

CERTIFICATE OF ANALYSIS VAN07002132.1

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
331501	Rock	1.0	48.3	2.66	8.6	0.088	<1	3.68	0.050	0.04	2.0	3.9	0.03	2.34	<5	3.9	0.82	9.1
331502	Rock	<0.5	60.7	0.18	3.2	0.032	<1	0.38	0.003	0.05	0.1	1.6	<0.02	0.22	89	2.5	1.09	1.5
331503	Rock	3.6	124.6	0.52	18.6	0.416	2	4.95	0.031	0.02	0.5	7.7	<0.02	0.14	165	1.6	0.07	13.4
331504	Rock	0.5	29.1	0.64	3.0	0.166	3	4.87	0.005	<0.01	0.7	3.6	<0.02	0.03	<5	0.3	<0.02	15.8
331505	Rock	3.2	52.3	1.50	20.3	0.472	3	2.48	0.107	0.04	0.2	9.0	<0.02	0.02	83	0.6	<0.02	9.3
331506	Rock	<0.5	16.4	0.04	3.5	0.022	<1	1.55	0.032	0.02	2.9	0.6	<0.02	<0.02	<5	<0.1	<0.02	5.1
331507	Rock	3.4	35.6	0.17	3.3	0.335	<1	0.86	0.005	<0.01	<0.1	2.8	<0.02	<0.02	<5	<0.1	<0.02	4.4
331508	Rock	0.7	15.0	0.33	4.3	0.030	<1	1.32	0.003	0.01	3.4	2.1	<0.02	<0.02	<5	<0.1	<0.02	3.4
331509	Rock	3.9	9.8	0.80	2.0	0.002	<1	0.02	0.003	<0.01	<0.1	0.7	<0.02	0.06	31	0.5	<0.02	0.1
331510	Rock	3.5	53.8	1.28	28.0	0.408	3	2.34	0.148	0.05	0.7	8.4	<0.02	0.04	38	0.3	<0.02	8.3
331511	Rock	1.7	41.4	4.67	6.7	0.004	<1	0.06	0.006	<0.01	0.2	1.5	<0.02	0.05	774	0.2	<0.02	0.2
331512	Rock	1.6	2.3	0.70	2.5	0.002	<1	0.02	0.004	<0.01	<0.1	0.3	<0.02	0.09	31	0.4	<0.02	0.1
331513	Rock	1.7	60.3	3.19	8.4	<0.001	<1	0.08	0.005	<0.01	<0.1	3.1	<0.02	0.08	352	0.3	0.02	0.2
331514	Rock	0.8	272.0	3.52	42.5	0.001	8	0.66	0.013	0.04	0.3	21.0	0.27	0.08	1839	0.4	<0.02	1.3
331515	Rock	2.4	25.8	0.35	10.0	0.276	<1	1.53	0.261	0.03	0.1	3.4	<0.02	<0.02	<5	0.2	<0.02	4.1
331516	Rock	6.4	43.4	2.99	248.5	0.003	5	0.67	0.006	<0.01	0.1	19.3	0.07	0.16	2549	0.5	<0.02	1.9
331517	Rock	0.7	222.1	4.16	44.6	0.002	3	0.98	0.010	<0.01	0.3	16.1	0.05	0.07	425	0.6	<0.02	2.0
331518	Rock	3.6	45.0	1.03	21.4	0.406	1	2.27	0.128	0.05	0.1	7.7	<0.02	<0.02	25	0.5	<0.02	8.1
331519	Rock	2.9	11.7	0.44	10.3	0.171	<1	3.05	0.382	0.04	0.5	2.1	<0.02	0.10	12	0.4	<0.02	6.6
331520	Rock	4.1	45.4	1.12	23.0	0.412	2	2.39	0.142	0.05	0.2	8.7	<0.02	<0.02	14	0.5	<0.02	7.9
331521	Rock	4.5	26.6	0.81	4.1	0.125	<1	0.96	0.195	0.02	0.3	8.5	<0.02	0.18	<5	0.3	<0.02	5.8

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

Project: None Given
Report Date: December 18, 2007

QUALITY CONTROL REPORT VAN07002132.1

	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
Pulp Duplicates																					
331505	Rock	0.38	192.9	5.35	85.0	298	38.9	20.7	661	4.49	20.0	<0.1	2.1	0.4	40.2	0.53	0.41	0.49	160	1.66	0.079
REP 331505	QC	0.40	198.5	5.58	89.2	291	39.3	20.8	677	4.58	19.2	<0.1	2.3	0.4	41.7	0.52	0.43	0.50	166	1.74	0.074
331516	Rock	0.39	173.3	1.94	75.5	37	58.6	27.6	1398	6.08	76.5	<0.1	3.1	0.4	70.0	0.29	3.46	0.06	211	7.86	0.042
REP 331516	QC	0.40	181.3	3.27	78.9	42	62.0	27.9	1450	6.33	79.0	<0.1	3.8	0.4	71.3	0.27	3.60	0.06	221	8.35	0.043
Reference Materials																					
STD DS7	Standard	22.18	114.1	71.65	430.6	850	58.6	10.1	681	2.61	53.3	5.4	60.9	5.0	85.2	6.52	6.80	4.96	92	1.02	0.080
STD DS7 Expected		20.92	109	70.6	411	890	56	9.7	627	2.39	48.2	4.9	70	4.4	68.7	6.38	5.86	4.51	86	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	0.35	3.44	6.77	47.8	34	5.8	4.7	579	1.92	50.9	2.4	0.3	4.5	69.5	0.02	0.24	0.08	38	0.52	0.076
G1	Prep Blank	0.33	2.83	6.47	51.3	37	4.6	4.4	553	1.94	50.2	2.4	1.5	4.6	74.5	0.02	0.25	0.08	37	0.52	0.076

ACME ANALYTICAL LABORATORIES LTD.
852 E. Hastings St. Vancouver BC V6A 1R6 Canada
Phone (604) 253-3158 Fax (604) 253-1716
www.acmelab.com

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

Project: None Given
Report Date: December 18, 2007

QUALITY CONTROL REPORT VAN07002132.1

	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
Pulp Duplicates																		
331505	Rock	3.2	52.3	1.50	20.3	0.472	3	2.48	0.107	0.04	0.2	9.0	<0.02	0.02	83	0.6	<0.02	9.3
REP 331505	QC	3.3	53.5	1.54	19.5	0.485	4	2.54	0.113	0.04	0.3	9.4	<0.02	0.02	85	0.4	<0.02	9.7
331516	Rock	6.4	43.4	2.99	248.5	0.003	5	0.67	0.006	<0.01	0.1	19.3	0.07	0.16	2549	0.5	<0.02	1.9
REP 331516	QC	6.6	45.7	3.11	248.3	0.003	6	0.68	0.008	<0.01	0.2	19.9	0.07	0.16	2649	0.6	<0.02	2.2
Reference Materials																		
STD DS7	Standard	14.6	211.9	1.14	405.5	0.136	45	1.11	0.105	0.50	4.0	3.0	4.49	0.21	218	3.8	1.14	5.1
STD DS7 Expected		12.7	163	1.05	370.3	0.124	38.6	0.959	0.073	0.44	3.8	2.5	4.19	0.21	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	8.9	16.8	0.62	228.5	0.135	1	1.12	0.085	0.57	2.4	2.0	0.41	<0.02	<5	<0.1	<0.02	5.2
G1	Prep Blank	9.1	42.7	0.61	224.5	0.139	<1	1.13	0.093	0.57	<0.1	2.3	0.39	<0.02	<5	<0.1	<0.02	5.3

Appendix D Location

Locations are reported GPS locations using a Garmin 76, and UTM projection using NAD83. They are all in UTM zone 09.. Since the stations are close together, the stations reported herein are shown on maps separated by metres determined by pace and compass in conjunction with the GPS readings. The stations are correctly placed with respect to to each other on maps, but the GPS readings are subject to +/- 10 m error in absolute positioning.

In some previous assessment reports the locations are reported in NAD27, Most paper maps put out by the federal government were NAD 27 until recently. Care should be taken in positioning samples derived from different reports submitted in different years on the same map.

Appendix E Figures 1 to 6

Figure 1 Location of Flan Consolidated Claims in BC. ScaLle 1:14,074,599 Courtesy of ARIS MAP MAKER

Figure 2 Flan Consolidated Claims claim Map Scale 1:34156 Courtesy of ARIS MAP MAKER

Figure 3 General geology of Flan consolidated Claims modified from fig 4, AR 28382, 1:50,000 scale

Figure 4 Location of assayed specimens, new, 1:20,000 scale

Figure 5 Location of thin section specimens, new, 1:20,000 scale

Figure 6 Location of alteration suites, new, 1:20,000 scale.

Flan Consolidated Claims Location Map

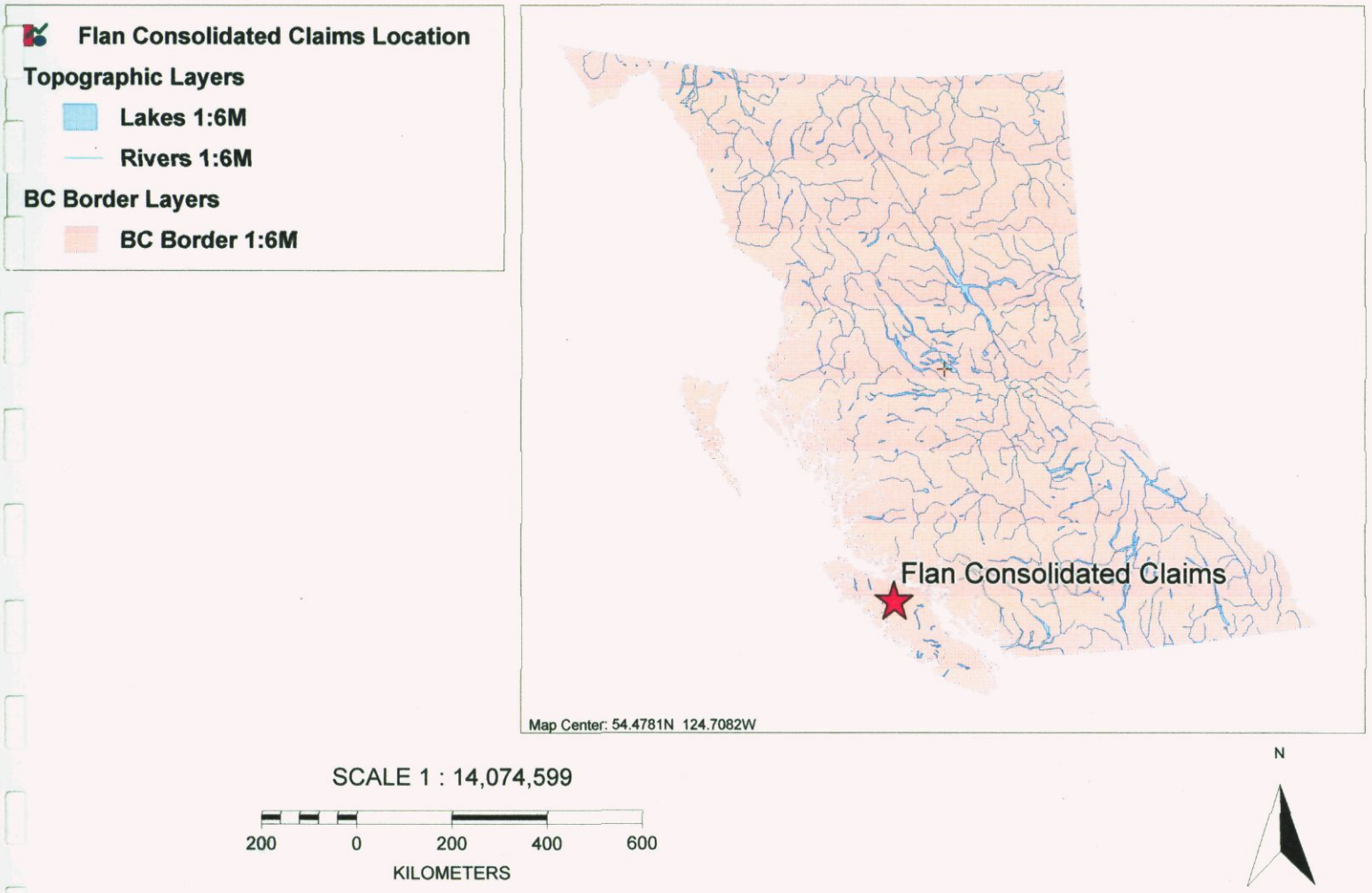


Figure 1

Flan Consolidated Claims Claim Map

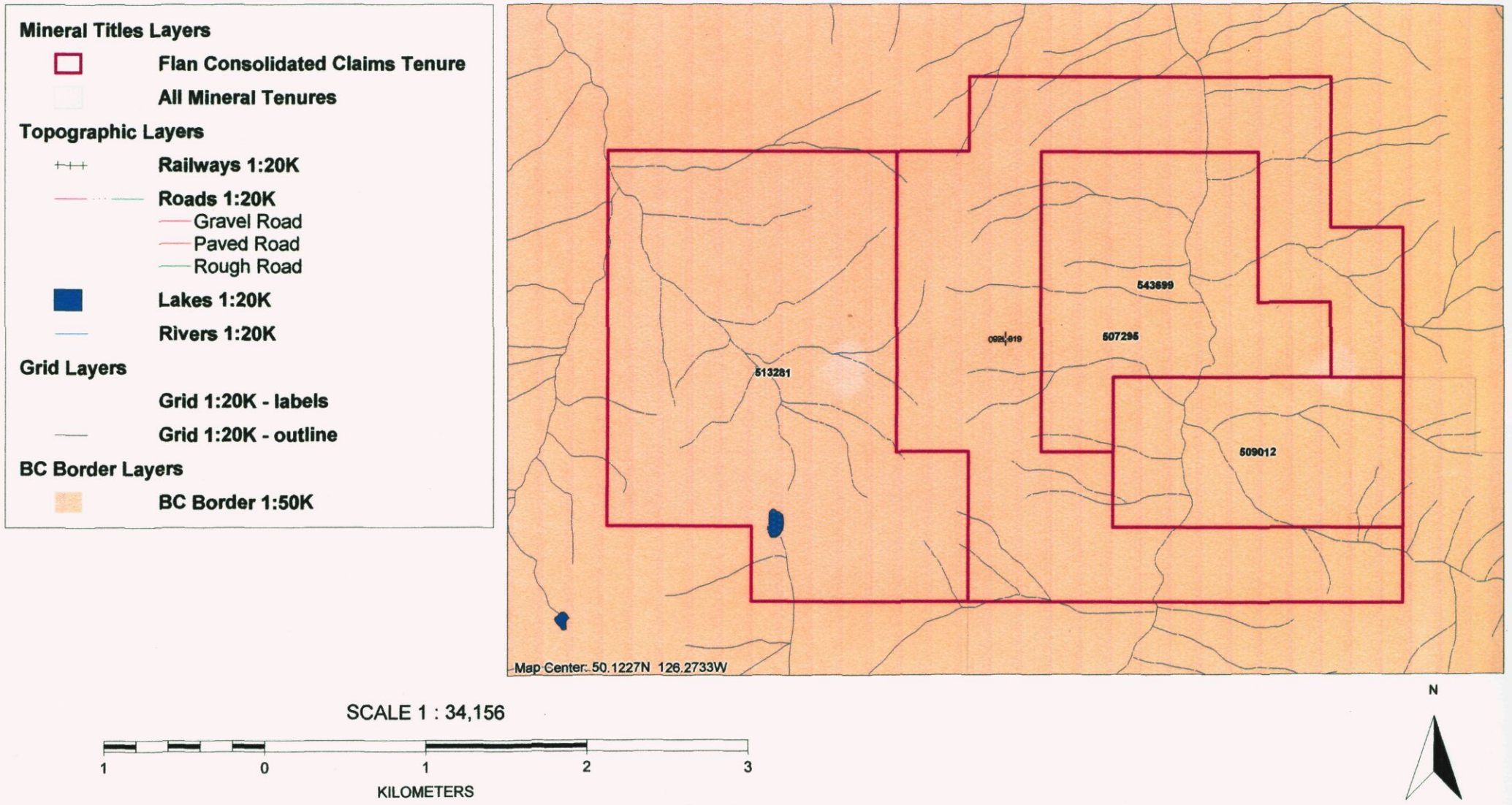
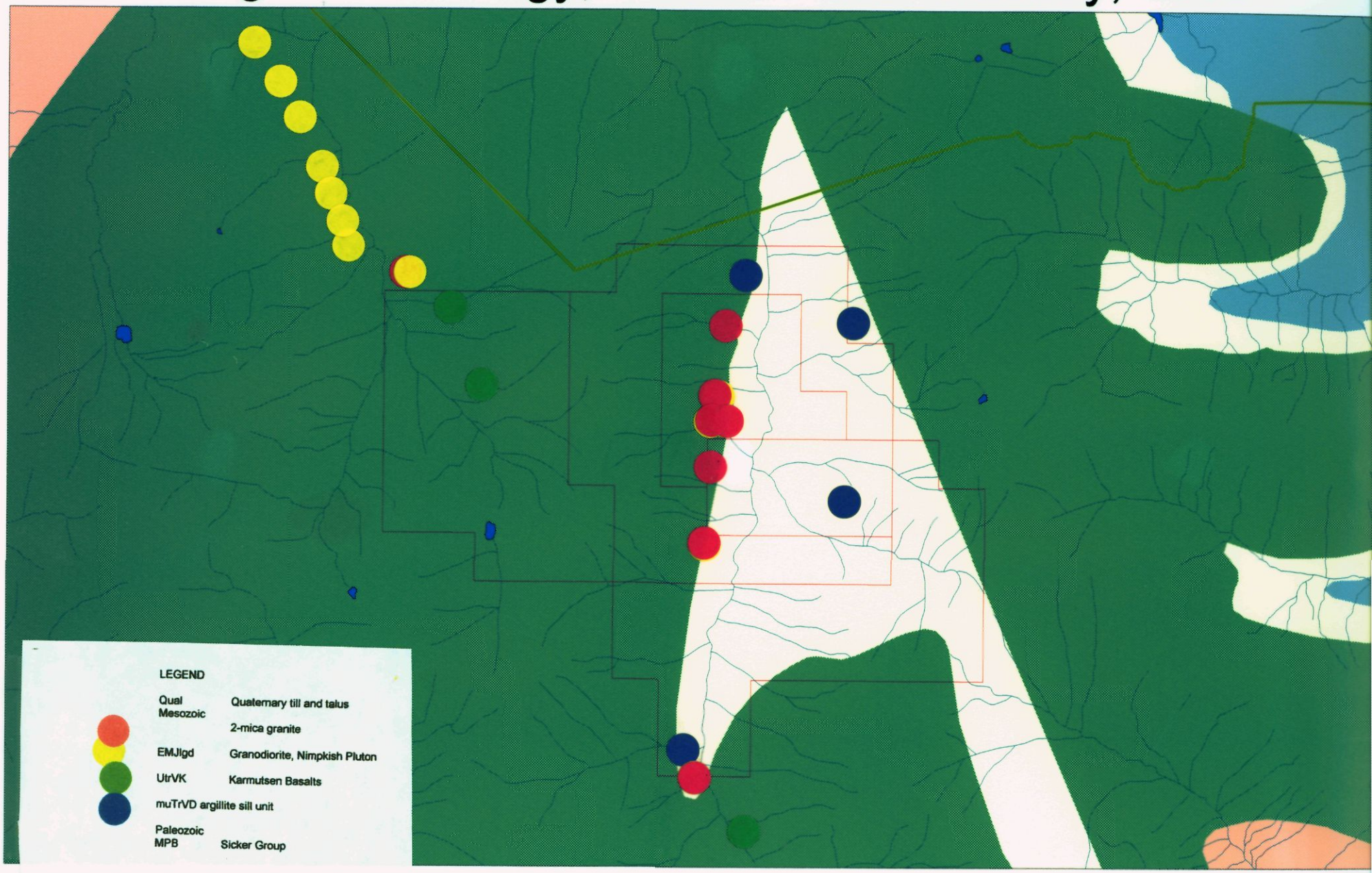


Figure 2

Figure 3 General geology of Flan consolidated;

Regional Geology, modified after Massey, 2005



SCALE 1 : 50,000

1 0 1 2 3

KILOMETERS

N

Figure 4
Flan Claims
Assay Sample Location Map
January 2008

GIS by Alec Tebbutt

693000 m 694000 m 695000 m 696000 m 697000 m

5558000 m 5557000 m 5556000 m 5555000 m 5554000 m 5553000 m 5552000 m 5551000 m

Schoen Lake Park

Tenure #507295

Tenure #543699

Tenure #509012

Tenure #513281

331521
331520
331519
331517 331518
331511,331512,331513, 331515
331514,331516 331510
331508
331509 331506,331507
331501,331502,331503,331504
331505

331667,331668

331670
331666

331675,331676,331677
331678,331679 331680,331681
331672

N

0 400 m

UTM 9(N) NAD83; scale 1:20000

Assay sample
FSR
rivers
contours 20m
Schoen Lake Park
Claims

Figure 5
Flan Claims
Thin Section Location Map
January 2008

GIS by Alec Tebbutt

693000 m 694000 m 695000 m 696000 m 697000 m

5558000 m 5557000 m 5556000 m 5555000 m 5554000 m 5553000 m 5552000 m 5551000 m

Schoen Lake Park

Tenure #507295

F044B F041B
F042
F006A-3,C,D F007B,F,X
F008

331519(177)

Tenure #543699

F050
F010A,B
F011A,B F012
F014 F015
F017 F016
F019A,B,C,D F018C

331511-331514, 331516(169A,B,C,D,F)

Tenure #513281

F087

Tenure #509012

F086
331667,331668 F085A-1
F083A,F083A-2 F084D

F026A 331666
F088
F025 331670
F024 F031D
F021A,B
F032A

331675,331676,331681
331672

N

0 400 m

UTM 9(N) NAD83; scale 1:20000

Thin section sample
FSR
rivers
contours 20m
Schoen Lake Park
Claims

Figure 6
Flan Claims
Alteration Study Map
January 2008

GIS by Alec Tebbutt

693000 m 694000 m 695000 m 696000 m 697000 m

5558000 m 5557000 m 5556000 m 5555000 m 5554000 m 5553000 m 5552000 m 5551000 m

Schoen Lake Park

Tenure #507295

Tenure #543699

Tenure #513281

Tenure #509012

EV

EV

EV

MV

MV

N

0 400 m

UTM 9(N) NAD83; scale 1:20000

ALTERATION STUDY

COLOUR: Alteration type

Lower Greenschist grade regional metamorphism

Phyllic alteration

fresh

SYMBOL: Rock Type

2 mica granite

Karmutsen Basalt

Nimpkish pluton

chert

gabbro

gabbro/2 mica granite

VEINING

EV Epithermal vein

MV Mesothermal vein

X FAULTED

FSR

rivers

contours 20m

Schoen Lake Park

Claims