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## Prospector's Report

 on part of theFlan-Consolidated Group of claims
(507295 and 513281)
in the
Nanaimo Mining Division
in

092L/01
at

50 deg 07 min North and 126 deg 16 min West
for

Mikkel Schau, owner

February 14,2006
Mikkel Schau, P.Geo.
(Submitted May 14, 2006)

> GESIOGICAL SURVEY BRANCH OQ


## SUMMARY

The Flan-Consolidated Claims cover 1924.86 contiguous ha. and are a post-map-staking consolidation of the legacy Flan Claims, the legacy Xanga Claim Group and newly map-staked staked Flan-more and Flan-west as well Flan-extension. This report applies to Flan-more (507295) and Flan-west (513281).

The property covers most of Schoen Creek drainage and an adjacent ridge to the west, which contains a newly located, altered 2 mica granite body adjacent to a showing of goldbearing polymetallic veins cutting veined and faulted gabbro sills to the east and Karmutsen basalts with local gold bearing polymetallic veins to the west.

Access is currently along active logging roads. Nearest community is Woss located some 30 km WNW on the Island Highway, and there is access to the deep water port of Gold River along well travelled gravel roads and to Port McNeill along the paved Island Highway.

The claim area, has been selectively clear cut. The land claim treaty process has not directly discussed these lands, to the best of my knowledge. There has been no impediment to my claiming or working the land to time of writing. Instead, local people would like there to be more exploration, and possibly mining, to shore up the local economy.

Government and private silt sampling indicate that the 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). On the opposite side of the granite stock, in the southeastern part of group the Flan gold showing (AR26793) is found in veins in a gabbro sill.

The granite stock is locally deformed and intensely altered. (AR 27311). Chloritic alteration, more local argillic alteration and veining of greyish blue quartz with abundant very fine grained pyrite and galena is locally recognized. Ratios of elements indicate that several parts of a mineralizing plumbing system are present. This year, small showings of molybdenite and rhodonite were found in the granite as well. Pyritic veins and extensive argillic alteration associated with shearing in the granite are possibly part of the mineralizing system giving rise to adjacent gold showings. Local anomalous areas of arsenic, often a pathfinder for gold, are present. Although pyrite is widespread in veins, and local arsenic anomalies are present, only anomalous gold values to 110 ppb has been reported in samples assayed for this report. This is much less than the 61 ppm Au that initiated interest in this area. Also of interest is a sample assaying 115 ppb Pd located in the northeast corner of the property in faulted gabbro.

Recommendations for future work include intense prospecting along the "plumbing systems" to find precious metal accumulations. Should the property be optioned, and a modicum of money available, a grid for a geochemical soil/basal till survey should be constructed.
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### 1.0 Introduction:

This report is a prospectors report on new claims in the new enlarged Flan-consolidated Claim Group, focusing on the results of prospecting for precious metals. It has been prepared by the owner of the claims, for himself.

Sampling for precious metals and tracer elements was conducted during a six day field campaign. The work consisted of checking along and sampling interesting new logging road outcrops as well as side trips into the forest and clear cuts to map scarce outcrop.

The work was carried out by Mikkel Schau, P.Geo., and helpers.

### 2.0 Property Location, Access and Title

The Flan-Consolidated Group claims are located in the Schoen Creek valley at the foot of the western flank of Mount Adam, about 30 km east-southeast of Woss, on Vancouver Island B.C. (Figures 1, 2). They are located in the Vancouver Island Ranges, at about $680 \mathrm{~m} . * 2500 \mathrm{ft}$ in partially logged douglas fir forest. The property is in the Nanaimo Mining Division, on NTS $092 \mathrm{~L} / 01$ and is centered at approximately 500740 N and 12616 Q0 W. (Fig. 2, 3).

Access to the claims is via a logging main branching off the Island Highway and continues along 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 showing, but a 4 wheel drive vehicle is needed to enter the claims. The main logging road is the one leading to Gold River, and at a junction marked Schoen, (with the label, "this is not the road to Schoen Lake Provincial Park") the road passes along the south of the Davies River and through the Park into the headwaters of Schoen Creek. This road proceeds upstream along the west side of the creek until, several km along, the required road splits and one ( $\mathrm{SC10} \mathrm{)} \mathrm{descends} \mathrm{to} \mathrm{the} \mathrm{floor}$ of the valley and crosses the creek over a bridge. This road continues upstream along the east side of the creek past another bridge. About a km past this the road splits. This road affords access to the east side of the creek, both north and south. The other fork continues south and passes through some cut blocks before it splits and one ascends the hill by way of a hairpin. This splitting of the road occurs twice more. It is likely that more new roads are or will be availble soon, since area is slted to be logged soon.

The claims, which are 1924.86 contiguous ha., and are, in part, converted legacy claims and in part newly staked are shown in table below:

| Name | Record | Ha. | Anniversary | Date | Year Recorded |
| :--- | :--- | :--- | :--- | :--- | :---: |
| Flan-more | 507295 | 515.905 | Oct 31 | 2007 | 2005 |
| (Old Flan) | 509012 | 165.753 | Nov 18 | 2007 | $2005^{*}$ |
| (Old Xanga) | 509013 | 227.868 | Oct 19 | 2006 | $2005^{*}$ |
| Flan-west | 513281 | 497.218 | Oct 31 | 2007 | 2005 |
| Flan-extension | 529362 | 518.116 | March 3 | 2007 | 2006 |

The claims referred to as old claims, and marked by an asterix were legacy claims converted in 2005. The work reported herein has been applied to claims \# 507295 and 513281.

All claims, which are focused on finding precious metals, are owned 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.

Fig. 1. Location Map of FLAN claims in BC




### 3.0 Previous Work

The general area has had a sparse history of mineral exploration. Previous mapping by government sponsored regional mapping programs conducted by J.E. Muller et al. (1974) (Fig. 4) and made available in digital form by N.W. Massey (1995). Government sponsored regional geochemical surveys indicate that creeks in the Schoen Lake watershed are anomalous, showing values up to 160 ppb Au . (MapPlace, 2000/2003/2006). An adjacent creek valley and a hill crest to the west of the Schoen Creek valley were staked in 1993 and shown to carry anomalous concentrations of several economic minerals, including gold (AR 23546). Those claims have since lapsed.

In 2000 gold was found at the Flan 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 initial assay reports. The granite was recognized in the course of mapping and an area staked to cover the apparent edges of the granite. The current owner is Mikkel Schau, who is himself conducting grass-roots exploration, looking at the possibility of enlarging the showing to become a viable prospect.

The original Flan showing is seen to be a thin, steep, gold-bearing vuggy quartz-pyritechalcopyrite veins cutting steeply across a 30 centimetre thick epidote-chlorite, pyrite, sphalerite, chalcopyrite bearing vein with local development of bull quartz stringers, in a fault zone, cutting a gabbro sill, emplaced in the Paleozoic cherts. White weathered out vuggy veins carry very sporadic gold values (up to 61 ppm Au ) whereas lower anomalous gold values (up to 800 ppb ) has been found in the larger polymetallic vein. On the other side of the creek, similar polymetallic vein with gold (lppm) has been found near an un-mapped granite stock. Currently the showings are local, but if any of the elements, currently found in anomalous quantities, can be found in any substantial quantity and/or grade it is possible that the showings could be converted into a prospect. Previous work done by owner on the legacy claims Flan (now 509012 ) and Xanga (now 509013) has been reported in AR 26793 (Flan) and 27311 (Xanga or Flan-consolidated).

### 4.0 Summary of work done:

Prospecting on claims 200 ha. (Mainly in logged areas)
Preliminary Geology 200 ha . (Mainly in logged areas)
Number of samples assayed (and claimed in this report):
69 rocks by multi-element icp-es and
69 fire assay/icp-es finish for $\mathrm{Au}, \mathrm{Pt}$, and Pd . (Appendix 10A)
8 metallics, total gold (Appendix 10-B)
9 whole rock, majors and minor elements (Appendix 10-C)
As well as appropriate duplicates, blanks and standards 79 sites with magnetic susceptibility determined (Appendix D)

### 5.0 Detailed technical data and interpretation

## 5.1/ Purpose

To better understand the distribution of mineralization, alteration and shear-veining, to map the granite extent, to document and assay mineralization in granite. To develop a strategy to find more veins.

## 5.2/ General Surficial Geology

The claims are situated on the edge of a U-shaped Schoen Creek valley, and the bottom of the valley is covered with till. The ridge is largely outcrop and the western edge repeats the patter of outcrops up high and till in the bottom of the valley. The mapped road outcrops are technically subcrops; a few knobs of bedrock crop out on the lower slopes; only at the upper steeper slopes are cliff forming outcrops abundant.

Striae were noted on the southern most subcrops, where the surficial debris had been washed away, after the road had been pushed through. These striae indicated ice movement was parallel with the valley wall and to the north, down valley.

## 5.3/Regional Geology

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 outcrops now exposed. Observations gained while prospecting in the region after the roads were available, indicate that a small granite stock occurs west of Schoen Creek. The borders of this stock are known in only one place, but its general shape can be deduced from roadcuts in the region.

Regional geology of the immediate area is simple. Daonella beds, a middle Triassic black shale and siliceous tuffaceous cherts are overlain by the Karmutsen basalts, a thick pile of pillowed and massive subacqueous lavas. Intrusive rocks include early gabbro sills, followed by large Jurassic granodiorite plutons. Regional faulting, along which considerable alteration including argillic and hematitic alteration, affected area. Local, later, tertiary dykes and stocks are noted within the same mapsheet.

The geology in Schoen creek is incompletely known, and the deep till cover at the base of the $U$ shaped creek valley precludes a detailed map of even this small claim group. Nevertheless, 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:

## 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.
Middle Triassic (M.Tr.) black shales and cherts up against Karmutsen Basalts Gabbro sills in tuffaceous cherts (c.f. FLAN Showing)
Schoen Creek valley, possibly underlain M.Tr black shales (Daonella beds)
Across the creek, and up the hill,
Unnamed (Schoen) 2 mica granitic Stock (SGS),
Karmutsen felspar phyric basalt flows with shallow west? dip, near top of hill
Nimpkish Pluton intruding the western edge west of the ridge
West

Previous workers reported gold (1ppm) in Karmutsen Andesite (sic, AR23546). They outlined a geochemically anomalous area west of the then unexposed granite, but dropped the claims without follow-up.

The hitherto un-documented presence of a two mica granite stock (briefly mentioned in AR26793 and 27311), presumably not associated with Jurassic Granodiorite, provides a possible source for the gold and other mineralization in the area .

### 5.4 Detailed Geology

The geology of the claim group is relatively simple:
to the east, and uphill of eastern part are cliffs formed in fine-grained gabbro of the sills

The subcrops exposed on the logging roads to the east of the creek are of gabbro, cut by major steeply dipping NS and minor EW faults and veins. Large truck sized talus pieces of Karmutsen pillow basalt locally abundant. Presumably these are from basalt on the East side of a major NS fault mapped along the flank of Mt Adam. The subcrops exposed by logging, show local NS faulting cut by later cross faults and veins are widely distributed.

The area from the road to the creek covered by till overlain by soil and talus. A few 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.

Crossing the Schoen Creek and coming up the western slope, subcrops and abundant talus are of 2 mica granite, widely chloritic, locally phyllic/argillic, veined and faulted. In the northern part of the claims patches of metasediment and metagabbro crop out. The contact between Hb -Hornfels/metagabbro and granite is also marked by a fault in which metasediments are caught up as fragments.

High on the western slope, outcrops of Karmutsen basalts provide talus fragments to lower slopes. There is thus a contact near western edge of claims between metasediments alnd Karmutsen, as shown by Muller (op cit).

The ridge and its western slope is developed mainly on Karmutsen Basalt.
The granite is a two mica granite with partially chloritized biotite and muscovite grains set among approximately equal amounts of microcline, and quartz with minor albite.

Portions of the stock are deformed by small faults sub-parallel to northerly trending steeply dipping regional ones, and these zones, and small subsidiary sets at right angels have been silicified, chloritized and locally epidotized. Ductile faulting, with the foliation merging into the high strain zone are noted in several locations. A later period of cataclastic faulting has also taken place, generating crush zones. The earlier ductile zones carry pyrite, whereas the later crush zones generate fault surfaces on which the sulphides are smeared.

The surrounding granite has been argillically altered to various degrees. Pyrite, and minor amounts of other sulphides are locally present. Veining. is parallel and also normal to foliation; it is marked by chlorite, locally epidote, or quartz with or without small amounts of ankeritic carbonate. The veins are locally mineralized with pyrite and very minor amounts of other sulphides. Adjacent to the veins are argillically altered zones, in which feldspars, mainly plagioclase is reduced to clay or white mica. These zones are also barren. Some veins are a bluish colour and are composed of very finegrained quartz with very fine grained pyrite disseminated throughout. These veins are seen to have elevated lead concentrations.

Chlorite veins cut the ductilely deformed quartz veins, and are cut carbonate carrying veins, and both are cut by the crush zones. The paragenesis and geographically distribution of alteration has not been documented yet.

A few veins, rich in iron and manganese, contain many pathfinder elements. The current state, ie a very dark plastic muck, is presumably due to near surface weathering of carbonate/ankerite/rhodochrosite?. In the southern part, along an east west fault surfaces developed in the granite show several mm thick veins of rhodonite.


### 5.5 Detailed sampling results

### 5.5.1 Previous work

Samples collected prior to claiming ground include some granite samples, and some pyrite mineralized shear samples. They are not included in assessment claims, but are included in text as a help to understand context of the mineralized veins.

Results from the adjacent FLAN group are relevant here, inasmuch as they show the nature of adjacent vein mineralization,. It is realized that mineralization on an adjacent property can not be taken as representative of that on the property under discussion, but it does help focus the nature of the prospecting activity. For the record then these are the results from Flan, updated from AR26793.:

White quartz veins in pyritic gabbro:

| gold: | up to $61.04 \mathrm{gm} / \mathrm{mt}$ |
| :--- | :--- |
| palladium: | up to 16 ppb |
| silver: | up to $15.3 \mathrm{gm} / \mathrm{mt}$ |
| nickel: | up to 36 ppm |
| copper: | up to 5536 ppm |
| molybdenum: | up to 113 ppm |
| zinc: | up to 5489 ppm |

Green polymetallic veins in fault zone in gabbro sill (these values are, in part, updated from AR26793, these analyses are not claimed for assessment and hence are not included in this report):

| 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 |

The two vein sets may have been formed in the same mineralization event, although the quartz rich veins at least post-date, in part, the epidote, chloride, metal sulphide vein. In one sample of the enriched gold bearing rock ( 130 C ) a thin vein of visible gold (softer than chlorite, easy to cut, gold color) is seen under a microscope to crosscut earlier sphalerite and other oxidized sulphide mineralization.

Arsenic, a well known pathfinder trace element, was found in anomalous quantities, as documented in a previous $\operatorname{AR}(27311)$.

### 5.2.1/ Current

Collecting along logging roads made acquisition of samples fairly easy; prospecting in the woods and clearcuts, by contrast, is plagued by scarcity of outcrop. Samples of granite, alteration, and veining as well as some country rock (gabbro/hornblende hornfels) and sheared gabbro were collected, and later selected and shipped to ACME Labs for analyses. This laboratory has a good reputation for providing quality $\mathrm{Pd}, \mathrm{Pt}$ and Au assays, and was selected for this reason

Details of procedures used by ACME ANALYTICAL LABORATORIES (their Geo4 package) are summarized on their assay sheets. Data reported here are analysis of .5 gm samples leached by aqua regia and analysed by ICP-ES (Appendix A). This method reports values of soluble elements (mainly those in sulphide minerals) but only a few easily dissolved silicates and few if any in the hard to dissolve oxides. Therefore values for copper, nickel, titanium and vanadium are minimum values. The data also includes the results of a special method developed to extract small amounts of precious metals Pd , Pt , and Au . ( 30 gms of sample are treated and the elements are concentrated by fire assay and analyzed by ICP-ES.) The methods used by Schau in 2000, prior to staking, are similar. Hence that earlier data is directly comparable.

The 2006 assays are taken in places where there seemed a chance of mineralization (Fig. 5). The presence of unspecified alteration and pyrite is not a good indicator of mineralization. Inspection of distribution of gold values suggests that the gold is peripheral to the pluton, rather than centered on it (Fig. 6).. Silver is uniformly low (Fig 7) in these samples. Copper is anomalous, in particular around the pluton, rather than it (Fig 8). In previous studies the $\mathrm{Au}, \mathrm{Ag}$ and Cu were interrelated, and there is no data to contradict this finding. Previous work suggested that galena was found with certain pyritic quartz veins within altered portions of the pluton. More such veins were not found this campaign (Fig. 9). Zinc has been noted to be associated with polymetallic veins by previous investigators. Although values were not notable, nothing in this data set contradicts this finding (Fig. 10). Arsenic, a well known pathfinder for gold, is irregularly distributed, and no pattern has been discerned as yet. Its occasional presence is a positive exploration finding (Fig. 11). Palladium is distributed in minor but elevated amounts in both basalts (as expected) and in granite (where it is not expected). The largest reading which is in excess of a 100 ppb , is found in a cataclastic fault zone cutting through a gabbro sill (Fig. 12). Molybdenum is uniformly low, except in a small area previously indicated by moss silt sampling. Here molybdenite grains are seen along the selvages of quartz veins (Fig. 13).





Legend
Lead PPM
Mineral claim boundary
Mineral claim up for renewal

-     -         - Property zone boundary

Road - paved
Road - gravel 2 lane, unimproved Road-gravel 1 lane

Figure 9
Flan Consolidated Claims Lead Values PPM

Map Sheets: 092L 9, 19 Nanaimo Mining District

NAD 83 UTM zone 9





## Legend



Palladium PPB
Mineral claim boundary
Mineral claim up for renewal
ーーー Property zone boundary
Road－paved
Road－gravel 2 lane，unimproved
Road－gravel 1 lane

Figure 12
Flan Consolidated Claims Palladium Values PPB

Map Sheets：092L 9， 19 Nanaimo Mining District

NAD 83 UTM zone 9


Current results are categorized as to target type are shown below:
Polymetallic veins in country rock
As has been mentioned before, the Flan showing is in polymetallic vein in country rock. The highest gold assays encountered came from a pyrite chalcopyrite bearing quartz "cross" vein cutting the gabbro. In 2005 , more samples from thin pyritic veinlets cutting gabbro, physically above the Flan showing contain "elevated" gold values.

Mineralization in Granite.
Previously, blue quartz veins (pyrite-galena quartz veins) were noted in the granite. This year the focus was on veins mainly in the chloritic alteration zone, with poor results. On the other hand, molybdenite has been found along selvages of cm thick quartz veins.

## Alteration

Contrary to previous year, the most prevalent alteration encountered in 2005 was chloritic in nature. More work is necessary before confirming its propylitic nature. Veins of quartz and the adjacent rocks were not strongly mineralized.

Argillic alteration
Samples with anomalous gold are not present in the phyllic/argillically altered granites. They are generally devoid of any interesting metals. Judging from the amount of soluble K reported in the geochemical samples (Appendix 3) several samples contain clays, while others contain white mica/illite.

Quartz veining
Several types of quartz veining are present and while the bluish type seems to carry pyrite and galena, none of them seem to carry anomalous gold values.

Elevated gold (ppb) has been noted in quartz veins along with elevated lead and arsenic.
Manganese rich altered veining
Previously, several locations on the claim group were seen to show veins a few cm thick of plastic black-brown clayey material. Two samples were analysed and they are rich in pathfinder elements.. Sample C116371 shows a Manganese content greater than $1 \%$ and accompanying As of 916 ppm and elevated lead ( 338 ppm ). Sample C116367 carries 8819 ppm

Mn and 5069 ppm as well as elevated lead ( 85 ppm ). In other regions this metal assemblage is considered to be a remnant oxidized assemblage formed in a basic weathering environment. It is possible that ankerite veins may have formed the original material and weathering has converted the material to the black concentrated muck. In 2005 more of this material was encountered and X-Ray diffractometer traces showed that much of the guck was locally (where sampled) chlorite
5.6 Petrographic and petrochemical results (Appendix D):

Fresh granite is a medium grained muscovite biotite granite with about equal amounts of quartz and microcline and minor normally zoned oligoclase to albite. The biotite and mica appear in small clots together, surrounding small accessory monazite and/or zircon and less abundantly, pyrite. The biotite is partially converted to chlorite, the plagioclase core is altered to very fine clay/white mica. Local very thin chlorite veins traverse the rock. In some instances thin carbonate veins cut the chlorite veins. Modal proportions of minerals indicate that it is peraluminous as would be expected from the micaceous nature.

Weathering, and late alteration has locally changed the pyrite to hematite which goes onto stain the clay altered cores of the plagioclase, as well as the chlorite. In some instances the net effect is a patterning of the granite which resembles Liesegang rings.(F016)

Veining by quartz occurred in several manners, some is associated with ductile deformation of the granite, whereby the quartz is progressively recrystallized into a very fine grained rock as the vein is approached. The feldspars are also recrystallized and transformed into very fine albite? and white mica/clay. Another type of alteration seems associated with vein filling, and around these, a halo of argillically altered granite develops. Epidote is very locally developed. Some veins have ankerite associated with them. Whether there is a zonation in the alteration pattern has yet to be established. The most pervasive alteration would be propylitic (Chlorite $+/$ - epidote, carbonate) in nature, with local patches of sericite alteration. Locally oxidation has produced rusty liesegang rings on joint surfaces and elsewhere local development of hematite.

Inspection of easily soluble potash from the assay sheets indicate that great majority of samples have very little available potash, but a few shown in table below have quite elevated values. In the table below only values above $.1 \%$ are noted, the locations can be seen on fig 5 and the location numerical data is given in appendix A. There is little relation ship between amount of K 2 O reported by aqua regia solution methods and the amount reported by complete whole rock analysis. The aqua regia soluble material reflects mainly potassic phyllic species and only a small portion of the K2O tied up in feldspars. Hence the number is a crude estimate of the extent of alteration. A rough guide is that $.1 \% \mathrm{~K} 2 \mathrm{O}$ represents roughly $1.0 \%$ sericite. Hence only a few of the rocks reported below could be considered to be extensively altered (cf F004, F008, and F021B).

Anomalous K2O \% from aqua regia dissolution (see Appendix A)

| Station | K2O $\%$ |
| :--- | :--- |
| F004 | $.55 \quad$ associated with altered Nimpkish Granodiorite |
| F008 | $.42(\mathrm{WR}=1.29 \%)$, in sheared altered gabbro |
| F010B | .12 2-mica granite |
| F011A | .11 vein w/ chlorite in altered 2-mica granite |
| F016 | .13 rusty altered 2-mica granite w/ liesegang rings |
| F017 | .16 very chloritic 2-mica granite |
| F018A | .19 qz vein and phyllic alteration |
| F018C | .12 wall rock to above in 2-mica granite |
| F018D | .11 as above |
| F019D | .14 chlorite rich clay mixture in center of vein |
| F021B | .23 (WR $=2.54 \%)$ hosting 2-mica granite |
| F025 | .12 chloritic altered 2-mica granite |
| F031D | .14 altered 2-mica granite |
| F032B | .10 altered $2=$ mica granite |
| F088 | .11 atered granite |
| F089 | .13 (WR $=3.60 \%)$ altered granite |

The elevated values are found mainly in altered 2 mica granite and seemingly, mainly with chloritic alteration. The breakdown of biotite would yield a phyllic residue such as sericite or illite.

### 5.7 Petrophysical results (Appendix ${ }^{(2)}$

Magnetic susceptibility measurements show that unaltered granites are essentially diamagnetic and generate low to negative magnetic susceptibilities. Mineralization contains some paramagnetic minerals so that the magnetic susceptibilities are somewhat higher than the granite host. Hence in a detailed magnetic survey, the mineralization would show a weak positive response in the granite, and a weak negative response in the gabbro/Karmutsen basalt host

This season readings varied between -0.49 and 45.90 . The most common reading was in the vicinity of 0.51 , ie altered and sulphidic veins in granitic rocks and veins in basalts; the high values are attributed to Karmutsen basalts or magnetic phases of the Nimpkish batholith, and the lowest values to quartz rich 2 mica granites.

Inspection of the aeromagnetic map (cf Mapplace) indicates the area underlain by FlanConsolidated Group Claims is in an area of low magnetic intensity.


### 5.8 Interpretations:

The results are subject to restrictions:
The area is underlain by a thick till layer in many critical localities.
The area has not been exhaustively prospected,
And, lastly, unfortunately, gold is only where you find it.
The mineralization in the country rock, is of two types:
At Flan showing, east of the creek:
I/ Early, green, poly-metallic, epidote-chlorite-sulphide vein with irregular pods of quartz, and tens of cm wide, replacing a fault zone cutting a gabbro sill. Sphalerite, chalcopy rite and pyrite are common sulphides, but analyses suggest molybdenite and galena are present $n$ small measure as well. Gold is variably anomalous.

II/ A later, thin, white weathering, apparently cross cutting, quartz-sulphide (pyrite and chalcopyrite) vein assemblage with local Au concentration. Seems to carry best gold values near the earlier veins.

III/ Later thin carbonate veins crosscut the above and are not mineralized.

West of the creek
A polymetallic vein with pyrite, chalcopyrite, sphalerite, and galena and anomalous gold cuts Karmutsen country rock near the northern and western contact.

In the 2-mica granite the mineralization is of four types
i/ pyrite in altered granite with no elevated gold values
ii/ pyrite, minor galena in quartz veining with elevated gold values (blue veins).
iii/ rusty manganiferrous alteration zones/ex-veins? rich in pathfinder elements $\mathrm{iv} /$ molybdenite bearing quartz veins

## 5.9/ Conclusions:

More intensive prospecting is required. The pathfinder indicators are present. Stream silts and moss mats are anomalous in gold, silver, copper, zinc, lead. The alteration and quartz veining along the edge of a small 2 mica granite stock are present, Chloritized, epidotized, and silicified, regional fault structures and smaller cross veins are present, indicating a passage of mineralizing fluids through a cooling and deforming igneous body Wjdespread chloritic (propylitic?) And local phyllic alteration is noted. Gold is found sporadically in the polymetallic country rock veins. Possibly in preference in the Cu -Agbearing veins.

The new finds of molybdenite in quartz veins is significant. They occur within an area previously noted to be anomalous. More prospecting will probably enlarge the showing.

It can only be a matter of good luck, intensive prospecting, and/or systematic geochemical surveys before worthwhile veins are found.

### 6.0 Future work

From the owner's viewpoint, more intensive prospecting is to be conducted, hoping that a target is exposed. Prospecting up till the present has exposed a number of showings of interest. The area is due for more logging and new road cuts will be opened up, ready to be inspected for more mineral showings.

A company contemplating the Flan-Consolidated claim group could consider a systematic geochemical surveys of soil or basal till. A previous suggestion has been to sample soil along contour lines. This is a worthwhile endeavour. A bio-geochemical survey using bark might be appropriate.

Geophysical surveys, properly calibrated to take into account the various depths of till in region could also be useful.

Exploration drilling could be conducted as follow-up exploration since the area is currently easily accessible to drilling equipment.

No budget is proposed for a company buying the property, or taking out an option agreement.

### 7.0 References

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

### 8.0 Authour'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. I have worked 10 years in southern BC and spent 23 years with the GSC focused on mapping in northeastern Arctic Canada. For the last 11 years I have prospected and explored for PGEs in Nunavut, Nunavik and BC.

I reside at 1007 Barkway Terrace, Brentwood Bay, BC, V8M 1A4
I am currently a BC Free Miner, \# 142134, paid up until September 5, 2006.
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 BSc 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 in question.

### 9.0 Itemized Cost Statement

## Wages:

Mikkel Schau, P.Geo., geologist
mapping (Oct $21,22,23,25,26,27$ ) 5 day $\times 400$ ..... $\$ 2000$
Alec Tebbutt, contract helper
same 5 days @ 250 ..... \$1250
TOTAL Wages ..... $\$ 3250$
Food and Accommodation:
12 persondays, @\$60.
Total Food and accommodation ..... \$720
Transportation:From Brentwood Bay to claims, and local transportation (10\%)automobile $2000 \mathrm{~km} @ 25 \mathrm{c} / \mathrm{km}$ shared with other project/ not included
Analyses:
Acme labs
9 free metallics gold
6 method 4A and B, whole rock, major and trace
69 method Geo4 ICP-ES
69 prep$\$ 1614.95$
Freight ..... \$ 40.00
Magnetic susceptibility measurements 79@\$5/site /inc GST ..... \$ 395
Report preparation(10hrs@\$50) ..... $\$ 500.00$
Telephone (portion of Sat phone rental) ..... 80.05
Total project cost ..... \$ 6600.00

## APPENDIX A Rock Descriptions and partial analysis

For earlier results see AR 26793 and 27311.

2005-6 results, this report
STATION $\quad$ all in zone $9 \quad \mathrm{Ppm} \mid \mathrm{Ppb}$
kind, type, UTME UTMN
Mo $\quad \mathrm{Cu} \quad \mathrm{Pb} \quad \mathrm{Zn} \quad \mathrm{Ag}$ As Au Pt Pd
F004 $6908715559505603.2 \quad 9, \quad 202, \quad 5, \quad 45,<3, \quad 4,4,<2,3$ outcrop Club road
"rusty, quartz vein w/ chlorite"
saw pyrite and minor cpy
host granitic rock w/ biotite
selvage with clay alteration
Nimpkish Granodiorite Pluton
F006 6963975556674562.4
outcrop "lower road, E side of Schoen Cr"
fg gbbr?/basalt
"narrow rusty vein ( 5 cm ),
fine grain, quartz rich, 300/65 strike/dip;
white vein $345 / 75^{\prime \prime}$
"A-black vein $2 \mathrm{~cm} \times 3 \mathrm{~m} . \quad 2, \quad 264, \quad 10, \quad 88,<.3, \quad 8, \quad 4,7,22$
A2-1m below A1; $\quad 5,357,3,101,<3,13,4,6,22$
A3-salvage;
B-white vein, over $5 \mathrm{~m} . \quad 1, \quad 81,<3,84,<3, ~ 97, ~ 7, ~ 3,16$
C-rusty patch to R of $6 \mathrm{~B} ; \quad 7, \quad 721, \quad 8, \quad 59, \quad .5, \quad 49, ~ 6, ~ 6, ~ 24$
D-fg gbbr/basalt w/ po wall paper $<1, \quad 79, \quad 5, \quad 26,<.3, \quad 29,4,4,22$ 132-general;
133-A;
134-B;
135-general
F007 $6965585556690 \quad 513.6$
"end of upper rd, E side of Schoen Cr"
"fault zone, black fg rock;
rusty vein; ladder veins"
A-fault rubble; $\quad 1,471,9,45, .3,11,9,4,118$
B-rusty pod \& vein; $1,398,4,54,<3,<2,20,5,15$
C-main fault $015 / 75 \quad<1, \quad 93, \quad 5,18,<3, \quad<2,4,2,3$
D-ladder vein; $\mathrm{MS}=12$
E-ladder vein;MS=6 $<1, \quad 146,<3, \quad 36,<3, \quad 7,7,5,31$
F-ladder vein with $\mathrm{MS}=12.0 \quad<1, \quad 318,8,36,<3, \quad 2,7,2,25$

F009F $6965685554974628.2<1,165,13,75,<3,11,8,5,13$ outcrop on original Flan sample of rusty gbbr

F010 6957155556101641.6 outcrop "upper road, W side of Schoen Cr"
A shrz w/ 10 cm wide ductile qz vein $1,15,10,17,<3,18,5,<2,4$ B , country rock` $<1,16,6,23,<3,4,3,5,5$

F011 6957015556088634.6
outcrop "upper road, W side of Schoen Cr"
$\begin{array}{llllllllll}\text { A chip across } 1 / 2 \mathrm{~m} \text {. vein } & <1, & 12, & 12, & 14, & <.3, & 6, & 4, & 3, & 2 \\ \mathrm{~B}, \text { country rock } \mathrm{w} / \text { chlorite } & <1, & 22, & 4, & 9, & <.3, & <2, & 4, & <2, & 2\end{array}$

F012 $6957125556052634.0<1, \quad 10,4,11, .3,<2, \quad 2,<2,2$ outcrop "upper road, W side of Schoen Cr" slickensided fault in chloritic granite main shear $340 / 80 \mathrm{sl}$ plunge subhorizontal small cross shear 270/90, sl sub horizontal, chloritic

F014 $6957095555986644.3<1, \quad 38,4, \quad 26,<3, \quad 3,<2,3,2$ outcrop "upper road, W side of Schoen Cr" chloritic granite, 4 cm thick chloritic layer on extension vein $345 /$ steep, sl pl 10 to north main fault 080/50 apparent sinistral sense

F015 $6957045555939629.4<1 \quad 113<3 \quad 16<3<2<2<2<2$ outcrop "upper road, W side of Schoen Cr" 2 mica granite $w / \mathrm{qz}$ veins ad pink edges transition from chlorite green to pink


F017 $6956925555852631.5<1,<1, \quad 3, \quad 26,<3,<2,<2,5,<2$ outcrop "upper road, W side of Schoen Cr" "dark, chloritic granite"

F018 6956975555802622.7
"upper road, W side of Schoen Cr" small vein
F018A $419 \begin{array}{llllllll}41 & 56 & <3 & 20 & 46 & <2 & 10\end{array}$
F018B, $\quad<1, \quad 8, \quad 11, \quad 82,<3,<2, \quad 2,3,2$
F018C $<1 \begin{array}{lllllllll}<1 & 26 & 6 & 35 & <3 & 2 & <2 & 3 & <2\end{array}$
F019 6956945555791617.8
vein "upper road, W side of Schoen Cr"
"rusty, by waterfall;
vein with two quartz layers 120/70
separated by clay layer"
A-1 rock along main vein
2 cm rusty veinlet $\quad<1 \quad 6 \quad<3 \quad 40$
A-2 rock above vein as above $\begin{array}{llllllllll}1 & 10 & <3 & 42 & <3 & 49 & <2 & 2 & <2\end{array}$
B upper quartz calcite vein edge $\begin{array}{lllllllll}1 & 5 & <3 & 28 & <3 & 5 & 2<2<2\end{array}$
B2 as above $<1 \begin{array}{lllllllll} & 3 & 16 & 46 & .3 & 6 & <2 & <2 & 3\end{array}$
C lower quartz calcite vein edge $\begin{array}{lllllllll}<1 & <1 & 41 & 51 & <.3 & 4 & 2 & 2 & <2\end{array}$
$\begin{array}{lllllllllll}\text { D beige clay between sides } & 3 & 184 & 20 & 167 & <3 & 265 & 2 & 4 & <2\end{array}$
This clay (D) has been subjected to XRD analyses: It is made of amorphous material chlorite and quartz
$\begin{array}{llllllllllll}\text { F020 } & 695690 & 5555762 & 621.2 & 3 & 7 & 9 & 18 & <3 & 9 & 2 & 2\end{array}<2$ outcrop "upper road, W side of Schoen Cr"
pinkish alteration along vein of 5 cm width qz and rusty, set in grey granite

F021 6954265554312705.0
vein $S$ side of small creek vein and country rock
A, vein 2.5 cm wide
$\mathrm{B}, 2$ mica granite country rock
$2, \quad 2,<3, \quad 17,<3,<2, \quad 2,<2,<2$

F022 $6954265554312705.0<1 \quad 5 \quad<3 \quad 14<3 \quad<2 \quad 2<2<2$ another vein at 21

F023 $6954265554328702.9<1 \quad 3<3 \quad 16<3<2<2<2<2$ vein 1 m chip sample fz 090/steep, rusty
N side of small creek
F024 $6954475554399701.0<1, \quad 7,13,44,<3,<2,<2,3,32$
pink altered granite
fz 090/80
F025 6954845554503696.5
A chloritic granite $\begin{array}{lllllllll}<1 & 4 & <3 & 45 & <.3 & <2 & <2 & <2 & 27 \\ <1 & 2 & <3 & 19 & <.3 & <2 & 19 & <2 & 25\end{array}$ $\begin{array}{llllllllll}\text { B do- another sample } & <1 & 2 & <3 & 19 & <3 & <2 & 19 & <2 & 25\end{array}$

F031 6955305554465661.4
rusty vein long sideroad off SCMain granite with rusty vein

| A | $<1$ | 2 | 7 | 18 | $<.3$ | 3 | $<2$ | 2 | 27 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| B | $<1$ | 5 | $<3$ | 11 | $<.3$ | $<2$ | $<2$ | $<2$ | $<2$ |
| C | $<1$ | 2 | $<3$ | 19 | $<.3$ | $<2$ | $<2$ | $<2$ | 19 |
| D | $<1$ | 3 | 3 | 12 | $<.3$ | $<2$ | $<2$ | 2 | 8 |

F032 6956585554244625.8

| B | 1 | 5 | $<3$ | 14 | $<3$ | $<2$ | $<2$ | $<2$ | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| outcrop SCMain |  |  |  |  |  |  |  |  |  |
| granite main |  |  |  |  |  |  |  |  |  |

F041 6958205556916542.5
outcrop just off SCMain
gbbr, pilotaxitic texture
$\begin{array}{lllllllllll}\text { A gbbr w/ sulphide specks } & 2 & 398 & 3 & 50 & .5 & 4 & 8 & 5 & 24\end{array}$

| B gbbr w/ texture | $<1$ | 325 | $<3$ | 49 | .3 | 3 | 7 | 3 | 20 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| F042 695795 5556756 574.9 | $<1$ | 173 | $<3$ | 84 | .4 | 7 | 3 | 3 | 11 | | talus old road off SCMain |
| :--- |
| cherty talus w/sulphides and epidote; |
| end of track is just above large hump of gabbro |

$\begin{array}{llllllllllll}\text { F044 } & 695805 & 5556878 & 545.0 & 1 & 255 & <3 & 32 & <3 & 4 & 4 & 9 \\ 7\end{array}$ outcrop old road off SCMain at creek mg gabbro
$\begin{array}{llllllllllll}\text { F045 } & 691488 & 5558558 & 590.7 & 1 & 21 & <3 & 40 & <.3 & 2 & 2 & <2\end{array}$ shear zone Club Rd East shear zone in pink granite shrz 200/70, cross fracture $\mathrm{w} / \mathrm{qz}$ veins $250 / \mathrm{v}$
$\begin{array}{llllllllllll}\text { F048 } & 693209 & 5555982 & 773.9 & <1 & 273 & <3 & 35 & <3 & 3 & 4 & 2\end{array} 26$ pillow basalt Club Rd East "large pillow basalt broken from above, very recent-no snow on it" otc of pillow basalt pillows $11 / 2 \mathrm{~m}$ to $1 / 2 \mathrm{~m}$. across
 "outcrop, road cutting through ridge"
Club Rd East
"in place, solid greeny black \& broken black w/ white veins" yes

| F050 | 692920 | 5556227 | 722.7 | 1 | 5 | 4 | 41 | $<.3$ | 60 | $<2$ | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 15 |  |  |  |  |  |  |  |  |  |  |  | outcrop w/ vein Club Rd East rusty vein $w /$ quartz in blue black yes

$\begin{array}{llllllllllll}\text { F081 } & 696613 & 5554944 & 668.1 & 2 & 366 & <3 & \mathbf{5 8 1} & .5 & 5 & \mathbf{5 0} & 6\end{array}$ outcrop above Flan 1
breccia w/ sulphide blebs
yes

F082 6966205554984634.3 outcrop above Flan 1 "breccia, on N side of outcrop"

F083 6966155554976635.5 outcrop above Flan 1 A gbbr w/ pyrite veinlets
B gbbr w/ sulphide wall paper
C gbbr w/ sulphide wall paper
F084 6966215554980632.2
Gbbr , near contact with sil. tuff contact local 260/80 thin ( $1-2 \mathrm{~mm}$ ) pyrite veins in shears and cross veins

> A-1 pyrite veins 070/70

A-2 pyrite veins $070 / 70$
B broken gbbr w/ pyrite
C Pyrite vein 080/80
D pyrite vein in gbbr
F085 6966115554982625.1
in creek above Flan 1
in gbbr near contact w. tuff

> A

A-2 more pyritic veinlets

F086 6965735555007623.3
beside road Flan 1
near slickenside fault, in
breccia;
F088 6957515554602598.9 outcrop along SC Main granite
w/ quartz veins and molybdenite w/ quartz veins and molybdenite

F089 6957135554506573.3
outcrop along SC Main
granite with quartz vein

| Mo | Cu | Pb | Zn | Ag | As | Au | Pt | Pd |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 215 | $<3$ | 42 | .4 | 3 | 4 | 6 | 24 |


| 3 | 49 | $<3$ | 6 | .4 | $<2$ | 110 | 2 | 25 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2 | 65 | 5 | 28 | .5 | 3 | 2 | 4 | 26 |
| 3 | 58 | $<3$ | 12 | .3 | 3 | 3 | 3 | 21 |


| 2 | 515 | $\mathbf{7}$ | 33 | 1.0 | 27 | $\mathbf{8 1}$ | 4 | $<2$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | $\mathbf{1 0 4 7}$ | 6 | 44 | 2.4 | 20 | $\mathbf{1 0 4}$ | 5 | 3 |
| 1 | 87 | 8 | 48 | $<.3$ | 5 | 2 | 3 | $<2$ |
| 1 | 55 | 6 | 62 | .4 | 24 | $\mathbf{5 9}$ | 7 | $<2$ |
| 2 | 196 | $<3$ | 50 | .3 | $<2$ | 35 | 7 | 2 |

$$
\begin{array}{ccccccccc}
2 & 237 & 10 & 50 & <.3 & 11 & 3 & 6 & <2 \\
3 & 412 & 3 & 28 & .7 & <2 & 89 & 5 & 3
\end{array}
$$

$$
\begin{array}{lllllllll}
<1 & 96 & <3 & 57 & <.3 & <2 & 13 & 2 & <2
\end{array}
$$

$\begin{array}{rrrrrrr}3, & 15, & 5, & 19, & <.3, & <2, & <2,<2,<2 \\ \text { 210, } & 19, & <3, & 10, & <.3, & <2, & 2,<2,<2 \\ \text { 481, } & 40, & 38, & 10, & .8, & 17, & 13,<2,<2\end{array}$

$$
3, \quad 1, \quad 3, \quad 21,<3, \quad 2,<2,<2,<2
$$

Appendix A-2 Gold determinations
`Analysis: -AU : -150 AU BY FIRE ASSAY FROM 1 A.T. SAMPLE. DUPAU: AU DUPLICATED FROM - 150 MESH. NAU - NATIVE GOLD, TOTAL SAMPLE FIRE ASSAY." `ELEMENT,""S.Wt"","'NAu"",""-Au"",""TotAu"""
"SAMPLES,""gm"",""mg"",""gm/mt"",""gm/mt"" as ppb other sample: ppb/FA F018A, $617,<.01, .05, .05 " 50$
F019B2, $75,<.01,<.01,<.01$ " $<10$
F019D, $222,<.01,<.01,<.01 "<10$
F020, $416,<.01,<.01,<.01$ " $<10$
F022, $346,<.01,<.01,<.01^{\prime \prime}<10$
F023, $438,<.01,<.01,<.01$ " $<10$
F083B, $455,<.01,<.01,<.01$ " $<10$
F084-1, 108, <. $01,<.01,<.01 "<10$

## Appendix B Petrophysics Magnetic Susceptibilities of selected locations:

The magnetic susceptibility of a rock is a volume percent average of the magnetic susceptibility of its constituent minerals. The magnetic susceptibility of a mineral is a measure of how it responds to a magnetic field. The common rock-forming minerals are generally not particularly responsive. Minerals such as quartz and feldspar show dia-magnetic magnetism with negligible, negative, magnetic susceptibilities that do not contribute appreciably to the rock magnetism. Para-magnetic minerals such as olivine, pyroxene, amphibole, biotite and garnet, with weak, positive magnetic susceptibilities contribute a minor amount to rock magnetism. Finally, ferri-magnetic minerals such as magnetite and pyrrhotite show moderate to high complex magnetic susceptibilities and contribute largely to the overall rock magnetism. Consequently, magnetic susceptibility can be regarded as a crude measure of the volume of magnetite, and in special, usually self-evident, cases, pyrrhotite, in the rock.

All measurements were performed using a KT-9 magnetic susceptibility meter (manufactured by Exploranium Radiation Detection Systems). This instrument is capable of measuring magnetic susceptibilities in the range $0.01 \times 10^{3}$ to $999 \times 10^{3}$ (dimensionless SI units), which is adequate for all situations except those involving massive magnetite layers or masses. The unit was operated in "pin" mode to minimize errors introduced due to surface irregularities (Exploranium Radiation Detection Systems, KT-9 User's Guide).
:

The magnetic susceptibility of country rock units measured from 20 sites (and 60 measurements) is summarized below (Schau, 2004)

Gabbros are
altered gabbros are
Veins are
(No difference between mineralized and non mineralized veins)
FLAN polymetallic veins at showing 2004 readings at showing (3) . 61 . 84 1.75

In 2004 another 85 determinations from 23 sites show that the granitic body and its attendant alteration would show as a negative magnetic anomaly compared to the nearby gabbro bodies and Karmutsen basalts. Negative values are indicative of diamagnetic substances such as quartz, and clay.
The slightly positive readings are mainly of paramagnetic iron silicates and related iron minerals.

Granite<br>vein and alteration<br>vein with sulphides

about $1.2 \mathrm{SI} \times 10-310^{3}$
about $0.6 \mathrm{SI} \times 10-310^{3}$
about $0.6 \mathrm{SI} \times 10-310^{3}$

Hornfels
About 1.00 SI x $10-310^{3}$
(source Schau, 2004)
New data from 2005 Field work

| WPT | NAD83_E NAD83_NDESCRIPTION |  |  |
| :---: | :---: | :---: | :---: |
| F004 | 690871 | 5559505 | $R$ of quartz vein on quartz vein |
|  |  |  | 3 mL of quartz vein |
| F006 | 696397 | 5556674 | L of narrow rusty vein <br> "above sample 006B, white vein" |
|  |  |  | $2 \mathrm{~m} R$ of sample B and below it |
| F007 | 696558 | 5556690 | black above vein $A$ below A |
|  |  |  | on main fault break ladder vein |
| F008 | 696481 | 5556571 | 3 vein L of shear |
|  |  |  | 2 vein L of shear |
|  |  |  | 1 vein L of shear |
|  |  |  | across shear |
|  |  |  | white to $R$ of shear |
| F010 | 695715 | 5556101 |  |
|  |  |  | A |
|  |  |  | B |
| F011 | 695701 | 5556088 | A-chip across $1 / 2 \mathrm{~m}$. |
|  |  |  | B-country rock |
| F012 | 695712 | 5556052 | chloritic |
| F013 | 695700 | 5555996 |  |
| F014 | 695709 | 5555986 | on chloritic layer |
|  |  |  | main rock |
| F015 | 695704 | 5555939 | on sample |
|  |  |  | 1 ft from sample |
| F016 | 695697 | 5555875 | rusty |
| F017 | 695692 | 5555852 | "dark, chloritic" |
| F018 | 695697 | 5555802 | 1 mR of vein |
|  |  |  | im $L$ of vein on vein |
| F019 | 695694 | 5555791 | at A-rock above vein |
|  |  |  | below vein |
| F020 | 695690 | 5555762 | pinkish |
| F021 | 695426 | 5554312 | at A-vein |
|  |  |  | at B-country rock |
| F023 | 695426 | 5554328 | R of vein |
| F024 | 695447 | 5554399 | on pink vein |
| F025 | 695484 | 5554503 | at sample A. |
|  |  |  | at sample B |
| F026 | 695515 | 5554554 | rusty sample |
| F027 | 695484 | 5552554 | near pink |
|  |  |  | on black with small white veins |
| F028 | 695396 | 5553036 | on black |
|  |  |  | on white |
| F031 | 695530 | 5554465 | $1 \mathrm{~m} R$ of vein-granite |
| F032 | 695658 | 5554244 | granite outcrop on SCMain |
| F041 | 695820 | 5556916 | pilotaxitic gabbro |
| F044 | 695805 | 5556878 | outcrop in place |
| F045 | 691488 | 5558558 | pink in shear zone <br> green in shear zone |
|  |  |  | green in shear zone <br> grey in shear zone, granodiorite" |
| F046 | 693368 | 5555733 | piece in till |
| F047 | 693291 | 5555878 | "on large bouider in creek, |
| F048 | 693209 | 5555982 | middle of pillow edge of pillow |


|  |  |  | on white in middle of pillow | 0.00 | 0.40 | 0.13 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| F049 | 692921 | 5556217 | on solid greeny black | 1.16 | 1.23 | 1.21 |
|  |  |  | broken black w/ white veins | 0.65 | 0.75 | 0.74 |
| F050 | 692920 | 5556227 | blue black | 0.57 | 0.87 | 0.81 |
|  |  |  | rusty | 0.46 | 0.75 | 0.56 |
|  |  |  | other rusty | -0.11 | 0.27 | -0.05 |
| F051 | 692866 | 5556435 | karmutsen basalt" | 0.48 | 0.51 | 0.50 |
| F054 | 692267 | 5556791 | rusty area on granite | -0.13 | 0.12 | 0.07 |
|  |  |  | darker part on granite | 2.81 | 3.86 | 3.35 |
|  |  |  | two mica granite | -0.24 | -0.23 | -0.24 |
| F055 | 692012 | 5557167 | karmutsen basait | 15.40 | 18.80 | 16.00 |
|  |  |  | granite | 33.30 | 39.90 | 34.30 |
| F081 | 696613 | 5554944 | breccia, epidote gbbr | 0.22 | 0.35 | 0.26 |
|  |  |  | "breccia, rusty" | -0.09 | 0.31 | 0.00 |
| F082 | 696620 | 5554984 | breccia | 0.28 | 0.38 | 0.29 |
|  |  |  | breccia | 0.25 | 0.31 | 0.29 |
| F083 | 696615 | 5554976 | sulfides in gbbr | -0.15 | -0.05 | -0.07 |
| F084 | 696621 | 5554980 | . 5 m above sulphides gbbr | 0.31 | 0.38 | 0.38 |
|  |  |  | at sulphide samples | 0.54 | 0.98 | 0.76 |
| F087 | 695839 | 5555363 | 2 granite | 0.51 | 0.80 | 0.71 |
| F088 | 695751 | 5554602 | granite | 1.11 | 1.21 | 1.18 |
|  |  |  | granite | -0.27 | -0.13 | -0.16 |
|  |  |  | granite with moly | -0.16 | -0.13 | -0.15 |
| F089 | 695713 | 5554506 | granite with quartz vein | 1.60 | 1.98 | 1.75 |

The results indicate that, on the scale of the claims, the extent of the granite stock would be shown on magnetic maps as a mildly negative area, (as opposed to the expected equivalent or higher values of the cherty country rock (expected to be about . $1 \times 10^{-3} \mathrm{SI}$ units), and that altered faults traversing them, with or without veins, would show as linear magnetic lows. In a more regional sense, Karmutsen volcanic rocks may possibly be confused from the standpoint of magnetic response, with the gabbro, but the 2 mica-granite body of the Flan-Consolidated showing on Schoen creek would be easily distinguishable from both the gabbro and Karmutsen basalt, because of the low magnetic susceptibility shown by these rocks, and also from the regionally pervasive Jurassic magnetite bearing granodiorites, which are an order of magnitude more magnetic than the mafic units. Of interest is the finding that some of the Karmutsen basalts are not particularly magnetic. See for instance the pillow locality.

## Appendix C Certificates of analyses



-AU : - 150 AU BY FIRE ASSAY FROM 1 ATt. SAMPLE. DUPAU: AU DUPLICATED FROM - 950 meSh. WAU - NATIVE GOLD, TOTAL SAMPLE FIRE ASSAY.

- SAMPLE TYPE: ROCK REJECT MIT

Data FA Ill DATE RECEIVED: DEC 212005 DATE REPORT MAILED: Q. 9 . $9 / 06$




GROUP TD - 0.50 GM SAMPLE LEACHED WITH $3 \mathrm{ML} \mathrm{2-2-2} \mathrm{HCL-HNO3-H2O} \mathrm{AT} 95$ DEG. C FOR ORE HOUR, DILUTED TO 10 ML , ANALYSED BY ICP-ES.
( $>$ ) CONCENTRATIOH EXCEEDS UPPER LIMITS. SLNE MINERALS MAY BE PARTIALLY AJTACKED. 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 $>1000$ PR
SAMPLE TYPE: ROCK R150 Samples beginning 'RE', are Reruns and 'RRE' are Reject Reruns.

All results are considered the confidential property of the client. Acme assumes the lidritities for actual cost of the analysis only.



Sample type: RCCK R150. Samples beginning 'RE' are Reruns and 'RRE' are Reject Reruns.



|  |  |  | mins |  |  |  |  | $190$ |  |  | 8. <br> GEO <br> aay. <br> terta |  |  |  |  |  |  |  |  |  | 6.数 <br> (2) k ke ! |  | $10 \mathrm{NE}$ | $(604)$ | $1) 25$ | $3-31$ |  |  | $6049$ | $253$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | SAMPLE\# | $\begin{array}{r} \mathrm{Ba} \\ \mathrm{ppman} \end{array}$ | $\begin{array}{r} \mathrm{Be} \\ \mathrm{ppon} \end{array}$ | $\begin{array}{r} \mathrm{Co} \\ \mathrm{pp} \pi \\ \hline \end{array}$ | $\begin{array}{r} \mathrm{Cs} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \mathrm{Ga} \\ \mathrm{pprn} \end{array}$ | $\begin{aligned} & \mathrm{Hf} \\ & \mathrm{ppm} \end{aligned}$ | $\begin{gathered} \mathrm{Nb} \\ \mathrm{ppon} \end{gathered}$ | $\begin{gathered} \mathrm{Rb} \\ \mathrm{ppm} \end{gathered}$ | $\begin{array}{r} 5 \mathrm{n} \\ \mathrm{pmm} \end{array}$ | $\begin{gathered} \mathrm{Sr} \\ \mathrm{ppm} \end{gathered}$ | $\begin{array}{r} \mathrm{Ta} \\ \mathrm{ppa} \end{array}$ | $\begin{array}{r} \mathrm{Th} \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} u \\ p p m \end{array}$ | $\begin{array}{r} \mathrm{V} \\ \mathrm{ppm} \\ \hline \end{array}$ |  | $\begin{gathered} \mathrm{Zr} \\ \mathrm{ppr} \end{gathered}$ |  |  |  | $\begin{gathered} \text { Pr } \\ \text { ppon } \end{gathered}$ | $\begin{aligned} & \mathrm{Noj} \\ & \mathrm{ppn} \end{aligned}$ | $\begin{array}{r} \mathrm{Sm} \\ \mathrm{pmm} \\ \hline \end{array}$ | $\begin{array}{r} \mathrm{Eu} \\ \mathrm{ppan} \end{array}$ | $\begin{array}{r} \text { Gd } \\ \mathrm{ppm} \end{array}$ | $\begin{array}{r} \text { Tb } \\ \text { ppm } \end{array}$ | $\begin{array}{r} \text { oy } \\ \text { ppon } \\ \hline \end{array}$ | $\begin{aligned} & \text { Ho } \\ & \text { ppri } \end{aligned}$ | $\begin{array}{r} \mathrm{Er} \\ \mathrm{Fpr} \end{array}$ | $\begin{array}{r} \text { rm } \\ \text { ppin } \end{array}$ | $\begin{array}{r} \mathrm{yb} \\ \mathrm{ppm} \\ \hline \end{array}$ | $\begin{array}{r} \mathrm{Lu} \\ \mathrm{ppm} \end{array}$ |
|  | 015 | 792.4 | 3 |  |  | 11.4 | 2.1 |  | 90.8 |  | 113.8 | . 7 | 7.4 | 3.1 | 6 | . 5 | 59.9 | 16.4 | 14.5 | 27.0 | 2.84 | 11.8 | 2.2 | . 35 | 2.07 | . 37 | 2.27 |  | 1.65 | . 24 | 1.86 | . 30 |
|  | 0258 | 937.3 | 1 |  |  | 12.5 | 2.7 | 6.6 | 90.0 |  | 139.5 |  | 8.8 | 3.3 | 5 | . 7 | 74.1 | 18.1 | 16.7 | 31.5 | 3.31 | 11.8 | 2.7 | . 44 | 2.16 | . 42 | 2.51 |  | 1.92 | . 29 | 2.07 | . 35 |
|  | 0418 | 196.4 |  |  |  |  | 5.2 |  | 10.9 |  | 261.9 | 1.2 | 1.8 | . 6 | 570 |  | 208.2 | 45.8 | 17.2 | 41.7 | 5.90 | 29.4 | 7.6 | 2.61 | 8.51 | 1.488 | 8.58 | 1.73 | 4.80 |  | 4.19 | . 60 |
|  | 048 | 62.2 |  | 49.0 |  | 22.7 | 4.1 | 13.2 | 6.8 |  | 262.1 | 1.8 | 1.1 | . 3 | 422 | . 2 | 151.8 | 33.0 | 13.7 | 32.1 | 4.51 | 22.7 | 5.8 | 1.94 | 6.49 | 1.096 | 6.47 | 1.24 | 3.45 | . 48 | 2.96 | . 44 |
|  | STANDARD SO-18 | 497.4 |  | 26.8 | 7.3 | 18.0 | 9.6 | 19.6 | 27.8 | 13 | 406.6 | 7.7 | 10.2 | 16.7 | 194 | 16.0 | 287.5 | 33.6 | 12.6 | 28.0 | 3.38 | 13.7 | 3.0 | . 89 | 2.87 | . 50 | 3.13 | . 64 | 1.89 |  | 1.84 | . 28 |

GROSP 48 - REE - 0.200 GM BY LIBO2 FUSION, ICP/MS FINISHED.
SAMPLE TYPE: ROCX PULP






Sample type: ROCK Ri50. Samples beginning 'RE' are Reruns and 'RRE' arc Reject Reruns.




GROUP 1 DX - O.50 GH SAMPLE LEACHED WITH 3 HL $2-2-2$ HCL-HKOS-HZO AT 95 DEG. $C$ FOR ONE HOUR, DILUTED TO TO ML, ANALYSED BY ICP-MS. (>) CONCENTRATIOK EXCEEDS UPPER LIMITS. SOME NINERALS MAY BE PARTALIY AITAGK Reject Reruns MAPLE TYPE: ROCK PULP
$F A$ $\qquad$ DATE RECEIVED: JAN 32006 DATE REPORT MAILED:

### 40.06




| SAMPLE\# | Cu |
| :---: | :---: |
| G-7 | ¢. 007 |
| 070 A $072 \mathrm{~A}-1$ | 21.376 |
| 072A-2 | 15.906 4.654 |
|  | 2.272 |
| NO NAME-I ${ }_{\text {STANDARD }}$ | 2.902 .865 |

GROUP TAR - 1.000 GM SAMPLE, ADUA - REGIA (HCL-HNO3-HZO) DIGESTION TO 250 ML . ANALYSED BY ICP-ES. - SANPLE TYPE: Rock Pulp DA



## Appendix D Petrochemical Reports

New whole rock analyses are recorded here and analysed using K-Wares Normative calculation program (Magma). Values differ from Assay sheets, they have been recalculated to $100 \%$. The FeO has been calculated

| Sample\# | F004 | F015 | F021B | F025B | F089 |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| SiO 2 | 67.94 | 75.54 | 73.33 | 75.31 | 74.51 |
| TiO 2 | 0.36 | 0.10 | 0.21 | 0.11 | 0.07 |
| $\mathrm{Al2O3}$ | 16.35 | 13.51 | 14.91 | 13.71 | 14.00 |
| Fe 2 O 3 | 2.55 | 0.72 | 1.09 | 0.74 | 1.48 |
| FeO | 2.01 | 0.44 | 0.73 | 0.45 | 0.94 |
| MnO | 0.08 | 0.1 | 0.11 | 0.08 | 0.16 |
| MgO | 1.50 | 0.23 | 0.44 | 0.18 | 0.34 |
| CaO | 3.76 | 0.60 | 1.83 | 0.92 | 0.66 |
| Na 20 | 3.25 | 4.02 | 4.22 | 4.16 | 3.57 |
| K 2 O | 2.02 | 3.68 | 2.54 | 3.57 | 3.60 |
| P 2 O 5 | 0.09 | 0.05 | 0.06 | 0.04 | 0.50 |
| LOI | 1.02 | 0.21 | 0.19 | 0.50 | 0,02 |

F004 is an example of the Nimpkish Batholith., the dominant plutonic rock type in area. calculated norm
Quartz 0.35, Plag 0.47, Kspar 0.18. (Darker normic minerals: Hy 4.85, Mt 3.71 and IIm 0.68) contains corundum (1.24) in norm. Hence it is classified as peralkaline. This probably due to phyllic alteration, suggested previously)

F015 is an example of the 2 -mica granite and quite distinctive.
calculated norm
Felsic Minerals: Quartz 0.39, Plag 0.04 and Kspar .58. (Darker normic minerals: Hy 0.81, Mt 1.04 and Ilm 0.19). Also contains corundum (1.95) in norm. Hence it is classified as peralkaiine. This corundum is probably due to presence of mica)

F021B is another example of the 2-mica granite and quite distinctive.
calculated norm
Felsic Minerals: Quartz 0.37, Plag 0.18 and Kspar .45. (Darker normic minerals: Hy 1.38, Mt 1.59 and Ilm 0.40 ). Also contains corundum (2.05) in norm. Hence it is classified as peralkaline. This corudum is probably due to presence of mica)

F025B is another example of the 2-mica granite and quite distinctive.
calculated norm
Felsic Minerals: Quartz 0.37, Plag 0.07 and Kspar .56. (Darker normic minerals: Hy 0.63 , Mt 1.07 and Iim 0.21 ). Also contains corundum (1.43) in norm. Hence it is classified as peralkaline. This corudum is probably due to presence of mica)

F089 is another example of the 2-mica granite and quite distinctive.
calculated norm
Felsic Minerals: Quartz 0.41, Plag 0.04 and Kspar .55. (Darker normic minerals: Hy 1.54, Mt 2.14 and Ilm 0.13). Also contains corundum (3.18) in norm. Hence it is classified as peralkaline. This corudum is probably due to presence of mica)

A selection of mafic samples:

| Sample\# | F041b | F048 | F006D | F008 | F021A |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |
| SiO 2 | 49.11 | 48.17 | 50.66 | 43.52 | 72.81 |
| TiO 2 | 3.46 | 2.43 | 2.01 | 2.07 | 0.18 |
| $\mathrm{Al2O3}$ | 12.09 | 13.65 | 15.68 | 12.76 | 14.84 |
| Fe 2 O 3 | 2.72 | 5.84 | 5.01 | $12.76 \#$ | $1.69 \#$ |
| FeO | 16.43 | 8.75 | 6.92 |  |  |
| MnO | 0.26 | 0.20 | 0.17 | 0.19 | 0.11 |
| MgO | 4.53 | 6.29 | 6.02 | 5.22 | 0.37 |
| CaO | 8.26 | 9.59 | 9.94 | 12.07 | 0.62 |
| Na 20 | 2.60 | 3.58 | 2.56 | 1.68 | 3.55 |
| K 2 O | 0.42 | 0.34 | 0.23 | 1.29 | 2.89 |
| P 2 O 5 | 0.31 | 0.22 | 0.20 | 0.18 | 0.05 |
| LOI | 1.30 | 0.72 | 0.6 | 8.1 | 2.8 |

## \# total as Fe 2 O 3 T

F041b is an example of the pilotaxitic gabbro
Quartz 0.07, Plag 0.76, Kspar 0.17. (Darker normic minerals: Di 15.59, Hy 24.21, Mt 3.96 and Im 6.58) contains no corundum in norm. It is said to remble trachybasalt possibly due to some alteration and additional pyrite

F048 is an example of the pillowed Karmutsen basalt.
calculated norm
Felsic Minerals: Quartz 0.30, Plag 0.82 and Kspar .18. (Darker normic minerals: Di 20.94, Hy 9.28, O1 2.80, Mt 8.48 and Ilm 4.62). It is also classified as a trachybasalt.

F0006D is an example of massive gabbro sill
calculated norm
Felsic Minerals: Quartz 0.11, Plag 0.89 and Kspar .00. (Darker normic minerals: Di 13.99, Hy13.81, O1 2.80, Mt 7.28 and Ilm 3.82). It is also classified as a tholeiitic basalt.

F0008 is an example of sheared carbonated gabbro
enriched in Ba 1808 ppm, V 452 ppm , Cu 580 ppm , and As 100 ppm .
F021A is an example altered veining and altered granite (for unaltered rock see F021B.)
contains minor U 8.7 ppm . and only minor changes in rest of composition

