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840605

LD-II

Rock samples from Nickel Creek.

LDI-81

June 29/81

In place:

headwaters of Ni Crk site of highly pyritiferous, heavily silicified Inklin. Probably originally a siltstone now largely silicified. Moderately well fractured.

Py as fctr. coatings and as fine - coarse grained disseminations. Two types of pyrite:

1. bronze coloured
2. silvery-grey coloured (asp.?)

In place:

LDI-82. In Crk immediately below waterfall.

4" wide massive pyrite-galena vein cutting Inklin black shales. T. Zanger

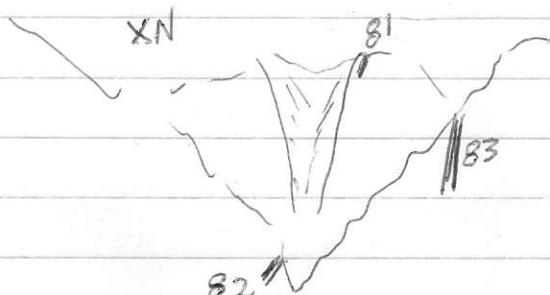
J.P. Angle sampled another vein from this same vein set. These veins appear to be confined to west side of Crk.

In place:

LDI-83.

Highly altered (kaolinized, sericitized) GFP dyke  $\leq 2$  m wide. Yellow-weathering cutting less altered GFP; Inklin sed. on east side of gorge.

Heavily pyritized (coarse blocks; finely divided disseminations). Pyrite is a steel grey colour but coarser ind. & fels more grassy-coloured.



All samples below are float collected near mouth  
of Nickel Cr & deemed to be representative of rocks  
on Soad property.

LDTI-84

Heavily altered & fp identical in texture; mineralogy to  
LDTI-83 (see description above)

LDTI-85 Pyritized breccia. Coarse angular frags of  
Inklin shale in siliceous, moderately pyritized  
matrix. Heavily silicified & shattered Inklin but  
not disintegrated-like in texture.

LDTI-86 Breccia. Fragments of Inklin shale cemented, and  
largely replaced by matrix of calcite. Calcite is  
botryoidal in texture - filling open spaces in rock and  
appears to be a travertine- or hot-spring-deposit  
which has cemented Inklin shales.

The precipitate appears to be composed chiefly of sparry,  
coarse-grained calcite. No silica noted.

LDTI-87 Similar rock to LDTI-86 only in this example  
the fragments are much more voluminous than  
the matrix as opposed to 86 which is 70% (approx)  
ce matrix. Angular frags. are dominantly Inklin  
shales. Tertiary or Pleistocene?

LDTI-88

Very highly altered silicon rock - most probably  
highly altered GFP dyke - containing an abundance  
of fine grained black sphalerite. Sphal. occurs as massive  
fet.-filling material and as fine disseminations within  
the rock. Minor py occurs as x-cutting fet-filling.

Groundmass is fine grained grey-white colour - appears  
to be kaolinated and sericitized.

LDTI-89 Breccia. Fragments of orangey-brown coloured  
Inklinitic calcarenous grit (siltstone) cemented by  
 $\text{SiO}_2$  precipitate (siliceous sinter) as you would  
get in a hot spring deposit. Coarse grained pyrite  
cubes occur in the  $\text{SiO}_2$  matrix - especially  
at the contact of the matrix with the siltstone frags.  
 $\text{SiO}_2$  fills open spaces

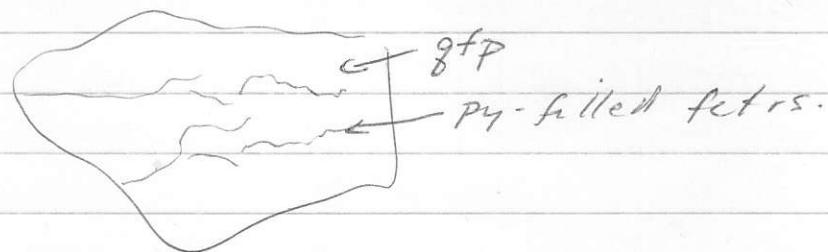


(yellow spots on Hand spec are acid)

Minor cb. occurs w/  $\text{SiO}_2$  in matrix.

LDTI-90

Silicic QFP. Feldspars kaolinized but not as highly altered as previously described specimens.  
Minor biot. clots now altered to chlorite. Rock is cut by hairline fctrs (whispy) which are infilled w/ unidentifiable (too fine grnd) black mineral (fine ?tourmaline?) and v.f. grnd pyrite. Fctrs. appear to be the results of hydraulic fracturing.



LDTI-91 Coarser grained equivalent of LDTI-90

Altered gfp.

Biot → chlorite

play → kaolin + clays

minor hematite red stain in matrix.

Very rusty weathering on weathered sfc. In patches of yellow oxidation (asp ??).

As per LDTI-90 the rock is fchd. in fctrs. infilled w/ v.f. grnd pyrite; fine grnd black (dull lustre) mat<sup>e</sup> p.

LDTI-92

vf qnd extremely siliceous rock, probably dyke rock. Light grey-green colour, sugary-textured w fine qnd plag.fsp. phenocrysts in finer qnd SiO<sub>2</sub> groundmass. Rock is randomly fctrd. w fctrs coated and bordered by vf qnd black mat<sup>e</sup> tentatively identified as vf qnd tourmaline. No other minerals noted.

LDTI-93 Heavily silicified Inklin sediment.

Originally siltstone (calcareous) now transformed to vf qnd light grey-green SiO<sub>2</sub>. Moderately-well fctrd. Fctrs. coated w vf qnd black mineral as described above. Here, black mineral assoc. w f qnd. pyrite.

LDTI-94 Highly fctrd, siliceous, grey/green Inklin shale frags. cemented by open cavts filling cse qnd qtz. Rock seems to have shattered, opened, allowing SiO<sub>2</sub> fluids to penetrate and grow in cavities. No sulphides observed.