

## WEEKLY REPORT

ECHO 14. MT. PATTERSON

NEWEX SYNDICATE

104M16W

59° 57' N 134° 25' W

AIR PHOTOS: BC 5501 N<sup>o</sup> 257,259

AUGUST 22-28, 1982

SILTS: 82NXV-45 TO 82NXV-49

SOILS: 82NXC-237

TALUS: 82NXET-167 TO 82NXET-168

ROCKS: 73724 - 73729

GEOLOGY

ROCK UNITS

UNIT 1: LIMESTONE (Cache Creek Gp) (Spec. HAB2-14-3)

The limestone is creamy-grey, non-crystalline, and without any bedding or fossils. Patches of limestone a few meters or tens of meters across are stained red by fracture-controlled ~~hem~~ earthy hematite (Spec. HAB2-14-2). Conglomerate, composed of sub-rounded limestone fragments in a calcite ± hematite matrix, is rare.

The limestone forms large, blue-grey cliffs dissected by numerous gullies.

UNIT 2: CHERT (Cache Creek Gp) (Spec. HAB2-14-4)

The chert is light to dark grey and may be banded. It contains no sulphides. Outcrop is rare and very fractured and rubbly.

UNIT 3: LABERGE SEDIMENTS (Spec. HAB2-14-9, HAB2-14-10)

The greywacke (HAB2-14-10) is grey-green to brown, fine to medium grained and granular in appearance. It is interbedded with argillite, which is black, very fine-grained and contains very fine-grained disseminated pyrite (HAB2-14-9)

Greywacke is weakly silicified, with abundant fine-grained arsenopyrite (?) and rare quartz stringers, over an outcrop 20 meters across (Spec. 73725).

The Laberge sediments strike a little south of east. They are exposed along the lakeshore beneath the volcanic cliffs, but we didn't check the nature of the contact (much of which is covered by talus).

UNIT 4: VOLCANICS (Spec. HAB2-14-6, HAB2-14-1)

Most of the volcanics are of andesitic composition, although more felsic bands occur low in the sequence, outcropping on the shore of Tutshi Lake. Both volcanoclastics and porphyritic, non-vesicular volcanics (flows (?) and dikes/sills) occur. Specimen HAB2-14-1

is typical of most of the volcanics on the hills west of camp. These "volcanics" include a very thick dike 1500m N of camp (striking about  $110^{\circ}/90$ ) and a few sills (or flat-lying dikes) cutting limestone (and presumably others cutting volcanics).

Spec. HAB2-14-6 is a fresh-appearing andesite from a sill (or dike) in the limestone east of camp, and presumably of the same origin as the volcanics around camp. Other andesite dikes in this limestone are very rubbly and folded; they may be older (possibly even Cache Creek volcanics).

Bedding in the volcanics is not obvious, with agglomerates poorly sorted and stratified. However, from the air they appear to dip gently ( $15^{\circ}$ ?) to the north. Contacts with limestone and chert are not altered.

Pyritic, altered zones in the andesite porphyry (eg HAB2-14-1) are common in the three creek valleys west and north-west of camp. These zones range from a few centimeters thickness following irregular fractures (presumably) to irregular patches more than 50 meters long. The andesite is highly altered by quartz and sericite (?) with abundant fine-grained <sup>dissem.</sup> pyrite. Rare quartz stringers cut the pyritic material. No other sulphides are present. (Spec. 73724, 73726, 73727, 73728 ? 73729)

An adit, less than one meter wide, follows some quartz and calcite veins ~~and~~ which contains sparse galena and very rare malachite. It trends  $018^{\circ}$  and is caved at the portal. A few pits expose the veins for about 100 meters uphill. The main vein appears to be coarse, ~~to~~ calcite, at least 30 cm wide, with a little galena near the borders. Thin veins and stringers of quartz and calcite extend into the wall-rock. Some of the wallrock (Spec. HAB2-14-7) is very pyritic, and carbonate-altered. Some is silicious (possibly silicified) - Spec. HAB2-14-8. This is the showing marked on the GSC 4mile map, and has been staked several times: in 1965 by Ed Mueller and 1980 by A. Hureau (OLV 1, or DLV 1, or DLX 1, or OLX 1 claim).

UNIT 5 - Quartz-feldspar porphyry (Spec. HAB2-14-5)

An intrusive porphyry is exposed in two places on the limestone ridge east of camp. Quartz-eyes and slightly clay altered feldspar phenocrysts (and rarer biotite phenocrysts) occur in a fairly hard, light grey matrix.

~~The contact bet~~

The porphyry is slightly sheared immediately adjacent to the limestone which it intrudes, but is not altered. There is no skarn along the contact and the limestone is not recrystallized next to the porphyry.

### ECONOMIC POTENTIAL

The pyritic, altered, volcanic zones may contain precious metals. There is no quartz veining associated with them.

The Pb-Ag showing is insignificant.

The altered greywacke looks reasonably good, but the zone's size is unknown (and probably small). There is no associated quartz veining.

### MISCELLANEOUS

1. The campsite is reasonably good: good drinking water, firewood, and helicopter accessibility. The bugs aren't bad, but would be earlier in the season.
2. The area west and north-west of camp has been prospected and sampled earlier this year. Several old claim posts occur near the Pb-Ag showing and at the south end of the lake we're camped on.
3. It rains a lot here.







