PRELIMINARY PROSPECTING REPORT
DUNLAP MINERAL CLAIM GROUP
BIG SILVER CREEK, HARRISON LAKE AREA
NEW WESTMINSTER MINING DIVISION
N.T.S. 92K/12W
Latitude 49°33'N, Longitude 121°48'W

GEOLICAL BRANCH
ASSessment REPORT

11,012

JAMES M. LOGAN
GEOLOGIST

APRIL, 1983
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SUMMARY

The Dunlap mineral claim group is located 32 km. north of Harrison Hot Springs on the east shore of Harrison lake. The claims are underlain by predominantly pelitic sediments of the Lower Pennsylvanian to lower Permian Chilliwack Group. The rocks have been folded and faulted by at least two episodes of deformation and in places impregnated with quartz veins. Preliminary work has outlined several of these structures, mineralization though is too spotty to be considered economic. Panning failed to provide any indication of gold mineralization.

Mapping and prospecting of the claims should be extended southward, and complete coverage of the claims by soil geochemical sampling undertaken. Electromagnetics run concomitantly along the geochemical survey grid is proposed to outline additional structures which may contain mineralization.
INTRODUCTION

A preliminary program of prospecting and sampling was carried out over the Dunlap claim group on the 23rd and 24th of May 1982. The purpose of the investigation was to complete a rapid reconnaissance of the claims, to determine their potential to host economic concentrations of mineralization and satisfy assessment requirements for the year.

The Dunlap claim group consists of five reverted crown-granted mineral claims, situated approximately 32 km. north of Harrison Hot Springs on the east side of Harrison lake. The James McKenzie (1424(4)), John Lougheed (1425(4)), Cecil Dunlap (1426(4)), Alex Crawford (1427(4)), and Wm. Alexander (1428(4)) claims are strung out in a northwesterly direction along the shore of Harrison lake midway between the mouths of Big Silver Creek and Cogburn Creek. The claims extend from the shore of the lake at an elevation of less than 100 ft. a.s.l. up a steep wooded southwest-facing slope to 1,000 ft. a.s.l.

Situated 49°33'N latitude, 121°48'W longitude the claim group lies in the New Westminster Mining Division, N.T.S. 92H/12W.

Access

Access to the claims is via all weather logging roads which follow the east side of Harrison Lake north, crossing the claim group 32 kilometers from Harrison Hot Springs. A less
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LOCATION MAP
DUNLAP CLAIM GROUP

James McKenzie (1424(4))
John Lougheed (1425(4))
Cecil Dunlap (1426(4))
Alex Crawford (1427(4))
Wm. Alexander (1428(4))

DUNLAP MINERAL CLAIM GROUP

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travelled but easily passable 4-wheel drive road departs the main access route on the Wm. Alexander claim and provides access to the lake shore (approximately 400 meters distance).

PREVIOUS WORK

The James McKenzie, John Lougheed, Alex Crawford and Wm. Alexander claims were crown granted October 30, 1921 and the Cecil Dunlap, November 16, 1921 to Catherine Edith Mary Dickson and William Molson Alexander (Report of Minister of Mines 1922). The claims have since reverted and the author acquired them April 5, 1982. A literature search of Assessment files and Reports of Minister of Mines revealed no mention of the claims or anything of the development work located on the claim group.

A shear zone has been exposed and opened for several meters on the Alex Crawford claim just above the beach.

A quartz vein has been explored by a short adit and raise on the Cecil Dunlap claim located approximately 50 meters up the hill from the lake.

GENERAL GEOLOGY

Map 12-1969 indicates the claim to be underlain by rocks of Late Paleozoic Chilliwack Group. The group consists of little metamorphosed pelite, sandstone and minor conglomerate, pyroclastic rock, altered basic volcanic rock known as greenstone,
PLATE I: Carbonaceous shear in phyllitic schists on the Alex Crawford claim. Looking north hammer indicates scale.

PLATE II: Gossan located on Cecil Dunlap claim.
limestone and minor chert (Monger, 1969). Monger (1969) subdivided the group on the basis of stratigraphic and lithologic aspects into 5 divisions of which (his) unit 2c is thought to underly the claim area (subject to re-confirmation in 1983). This unit of pelite, sandstone, and minor conglomerate and tuff ranging in thickness from 150 to 250 meters overlies disconformably (?) Lower Pennsylvanian limestone (2b) and is itself overlain conformably by Lower Permian limestone (2d).

The Chilliwack Group in the Chilliwack Valley has been deformed by at least two phases of deformation (Monger, 1969) and likely the same deformation episodes have affected the rocks underlying the claims. Initial folding and thrust faulting about northeasterly trending fold axis produced overturned tight to isoclinal folds which later were refolded and faulted about northwesterly trending fold axis. This produced the common northwesterly dip of bedding and planar structures produced during the first episodes of folding. Within the claim group limited outcrop, and no marker horizons prevented any structural unravelling.

The rocks mapped along the lake shore and hillside are predominantly thinly bedded pyritic argillite grading to fissile pyritic phyllites. Mainly grey or blackish, interbeds of green coloured tuffaceous (?) sediments were also observed, suggesting volcanic affinities for some of these sediments. Quartz and pyrite are present as knots and stringers in the more metamorphosed/sheared sections.
PLATE III: Old adit and manganese, hematite-stained quartz vein-filled shear on the Cecil Dunlap claim. Looking north, shovel indicates scale.
The rocks strike N25°W and dip from 45° to 60° easterly. Conformable to the bedding/schistosity or cutting it at small angles are varios shear zones. These vary from tight (several cms.) filled with carbonaceous gouge up to 0.5 meter and filled with quartz and carbonate. It is these structures that present likely hosts for (economic) mineralization.

A 0.5 meter shear zone is exposed along the shore on the Alex Crawford claim. The shear trending 126°/38°E is barren of quartz or sulphides and contains only carbonaceous (graphite) phyllitic gouge and minor iron oxide stain.

A second shear, hosting a 0.5 meter wide quartz vein is exposed in workings and along the hillside on the Cecil Dunlap claim. The vein trends 120°/28°E, pinches and swells and cuts grey fissile to blocky pyritic phyllite. The vein has been driven on for approximately 5.0 meters. The quartz is vuggy to sugary textured and contains traces of iron sulphides and iron and manganese oxides mainly restricted to the vein walls and gouge in the country rock. A 0.75 meter chip sample was taken across the vein but not assayed.

PROSPECTING

Rock and soil material was collected and panned from creeks draining the claim area and also to the area north of the claims (see Prospecting Map for sample locations). Several
Pan sample
Adit
Gossan
Quartz vein
Shear (zone) attitude
Schistosity
Bedding, tops unknown

PROSPECTING MAP
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samples taken to the north (not shown on the map) contained small amounts of heavy minerals (garnet and magnetite and possibly 1 or 2 flecks of scheelite (?)) but further south samples taken from the claim group, contained even less heavy minerals. No colours were panned from any of the samples.

A large amount of hematite stained vegetation and rock was traced up slope to a point where ground water was emerging from a shears(?)/fracture(?). There was no mineralization evident at this location.

CONCLUSIONS

Owing to the presence of shear zones and nearby intrusives the property has the potential to host mineralization. The carbonaceous and pyritic nature of the sediments could also present favourable for precipitation of precious metals from mineralizing solutions. The shear zones containing quartz present favourable targets, indicating they were open/permeable to later solutions. The fissure/vein fillings may be genetically related to quartz diorite bodies located north and southeast of the claims.

Preliminary panning failed to locate any colours or concentrations of heavy minerals and may not be as advantageous to property evaluation as soil geochemical sampling.

It is concluded that the claims should be maintained, prospecting and mapping be extended to cover the remainder of the claims unexplored and that soil geochemical sampling be employed to test for further quartz bearing shear zones.
RECOMMENDATIONS

1. Extend prospecting and mapping to cover the entire claim group
2. Soil geochemical sampling is proposed to test the heavily wooded slopes.
3. A geophysical survey utilizing Very Low Frequency Electromagnetics could be carried out in conjunction with the geochemical survey.
STATEMENT OF QUALIFICATIONS
JAMES M. LOGAN

1. I, James M. Logan, of 4651 West 16th Street, Vancouver, B.C., V6R 3E6, am a graduate of Brock University, Ontario with a B.Sc. (Honours) degree in geology, and am undertaking graduate study in Geology at the University of British Columbia.

2. I have been engaged in mining exploration for 6 years.

3. I have authored the report entitled, "Preliminary Prospecting Report, DUNLAP MINERAL CLAIM GROUP Big Silver Creek, Harrison Lake Area, New Westminster Mining Division" dated April 1983. The report is based on fieldwork conducted by the author.

4. I control, 100% interest in the property.

5. I consent to the use of this report in a prospectus or in a statement of material facts related to the raising of funds.

Respectfully submitted,

James M. Logan
Geologist

Vancouver, B.C.
April, 1983
REFERENCES


B.C. Minister of Mines, Report for 1901.
COST STATEMENT, 1982 PROGRAMME

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<td>J.M. Logan</td>
<td>Geologist</td>
<td>$250/day</td>
<td>23rd, 24th May</td>
<td>$500.00</td>
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Camp cost
2 days @ 15.00/day
$30.00

Transportation
4-wheel drive, mileage, fuel
$105.75

Report
3/4 day, materials, drafting, typing
$275.00

TOTAL $910.75