

521183
92I/15W

ELM MINERAL CLAIMS

PROPERTY

CLAIMS: ELM 1 to 8

TYPE: Two Post

SIZE: 8 Units

TENURE NOS.: 219195 to 219200, 218620 & 218621

EXPIRY DATES: 1994-05-03 & 4, 1995-07-27

OWNER: J.D.Murphy
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Kamloops, B.C. V2C 5B4

PHONE: 573-3185

MINERAL INVENTORY NO.: 92INE035

REFERENCES: GEM, 1969, p 240
Exploration in B.C., 1975, p E92; 1976,
p E104; 1984, p 222
MMAR, 1902, p 193; 1967, p 147;
1968, p 173

ASSESSMENT REPORTS: 1124, 1602, 2033

LOCATION

NTS 92I/15W, Kamloops Mining Division
On Criss Creek 25 km N of Savona on the Trans Canada Highway

ACCESS

From Savona, 9.3 km W on the TCH to Deadman Creek road (Forestry Road 55), then N 12.3 km to Forestry Road 54 branching NE along Criss Creek. Follow to 23 km sign, then turn N on inactive logging road to 7 km marker. Continue for about 100m where a disused track turns E then S to Criss Creek and the ELM group, a distance of approximately 2 km.

GEOLOGY

The ELM claims are underlain by Triassic Nicola Group volcanics with coeval diorite plugs, and Jurassic Ashcroft Formation conglomerate. A small granitic stock cuts clastic Nicola rocks proximal to mineralization. Extensive flows of Eocene Kamloops Group volcanics and Late Tertiary plateau basalts, representing the northern limits of the Tranquille Plateau, extend SE from the claims area.

STRUCTURE

The claims are cut by one of a series of step faults, or half grabens, typical of the NW trending structures extending from Afton Mine to Deadman Creek, crosscutting the general NNW trend of the Intermontane belt. The ELM fault is traceable for about 5 km, fading out to the NW and covered by Tertiary basalts to the SE. Ashcroft conglomerates on the SW side of the fault are downdropped into faulted contact with older Nicola volcanics in the footwall. This structure appears to have controlled the emplacement of the small ultramafic unit (listwanite) carrying precious and base metal mineralization. Faulting is mainly Late Cretaceous to Early Tertiary in age, reflecting N-S compression related to northward movement of the Pacific Plate. This suggests a Mid Tertiary age for the ultramafic unit.

Property mapping defined several flat dipping faults or slips striking N to NE, and dipping E to SE at approximately 30°.

MINERALIZATION

The claims contain three areas of interest; the Quartz Zone, the Molybdenum Zone, and the Gold-Silver Zone.

The **Quartz Zone** is a white "bull" quartz vein up to 10m wide, striking NW and dipping NE at 60-65°. This vein has been crosscut two short adits, having an elevation difference of about 25 m. The vein carries heavy, coarse pyrite, scattered blebs of molybdenite, and gives low Au-Ag values. The surface area around the veins and dumps is heavily stained with reddish brown iron oxides,

The **Molybdenum Zone** is exposed in McGee Creek about 200m from the confluence with Criss Creek. Mineralization occurs in sheared, talcose Nicola clastics in contact with the granitic stock. A series of narrow, blue grey quartz veins carrying coarse pyrite and molybdenite, strike N-72-W and dip 78 to 88° SW. Narrow aplite and felsite dikes with similar attitudes carry disseminated sulphides. Molybdenite also smeared along shear planes in the volcanics.

Veining is exposed across a 30 m width for a strike length of 50 m. To the NW the zone is obscured by overburden, and to the SE is offset an undetermined amount by right hand movement on a NW striking fault dipping NE at 66°. Adjacent to the fault, but on the opposite side, is a small exposure of white quartz about 5 m wide. This vein looks similar in all respects to Quartz Zone material located roughly on strike 800 m to the NW and 20 to 40 m higher in elevation. Proving Mo Zone mineralization has a comparable strike length would indicate a deposit of significant economic potential.

The **Gold-Silver Zone** is 35 to 100 m wide and is poorly exposed along a 200 m section of Criss Creek at the faulted contact between Nicola volcanics to the NE and Ashcroft conglomerate to the SW. A small diorite plug intrudes Nicola rocks in the fault footwall. Mineralization is hosted by an altered ultramafic

intrusion yielding a listwanite assemblage of talcose quartz-carbonate mariposite schist, with iron sulphides and a finely disseminated spinel group mineral, distributed throughout. Pyrite is the prominent sulphide, with lesser sphalerite and rare tetrahedrite. The spinel is tentatively identified as chromite.

Quartz-carbonate veins and stringers within the ultramafic host carry some near massive sulphides, including chalcopyrite. These high grade structures are up to 0.5 m wide and 30 m in strike length, and have returned values to 4 g/t Au, 624 g/t Ag and 2% Cu. One such structure, the Hanging Wall Vein, strikes N-47-W, dips 65° NE, and appears to delimit significant mineralization in this direction.

The Molybdenum and Gold-Silver Zones are sub parallel structures with steep opposite dips, indicating a convergence at depth. On strike projections of the structures show a surface separation of about 80 m. The two zones appear both mineralogically and genetically distinct.

SAMPLING AND ASSAYING

Quartz Zone sampling returned no significant values in either molybdenum or precious metals.

A grab sample of float from the **Molybdenum Zone** assayed .56% Mo, which is not atypical. Some representative chip samples from veins ran .105 Mo/61 cm and .215 Mo/30 cm. A continuous chip sample over part of the zone gave a weighted average assay of .07 Mo/7.1 m.

In the **Gold-Silver Zone** a series of grab samples and contiguous chip samples were taken across the area of three short adits on Criss Creek driven roughly parallel to strike. Samples were oriented to give the best approximation of average grade.

Ten grab samples taken at 2 m intervals between Adits 1 and 2 were assayed geochemically, returning values of 17 to 3150 ppm Pb and 1.1 to 4.8 ppm Ag.

Eight chip samples were taken, including the adit faces, and intermittently across the area between adits tested by grab sampling. Aggregate width of chip samples was 6.7 m across a total mineralized width of 38 m. Lead values ranged from 40 to 3510 ppm, silver 1.4 to 20 ppm. Values exceeding 20 ppm Ag were recorded only as "greater than" this value. Three samples fell in this category. Arithmetic averages for the 8 samples were 1316 ppm Pb and 11.2 ppm Ag. No gold, zinc or copper assays were run.

A separate grab sample (#151) from this area, taken across a 15 cm shear with tetrahedrite, assayed 0.55 g/t Au, 624 g/t Ag, .27% Pb and 1.92% Cu.

These samples illustrate the style of Au-Ag Zone mineralization; narrow high grade sections in a wide zone of low grade material. Assay data to date cannot be accepted as a true indication of average grade.

SYMBOLS

Legend area with various symbols and text, including "Elevation", "Geology", "Roads", "Boundaries", "Foot", "Contours", "Streams", "Lakes", "Vegetation", "Buildings", "Power Lines", "Telephone Lines", "Fences", "Other".

N ASTRONOMIC

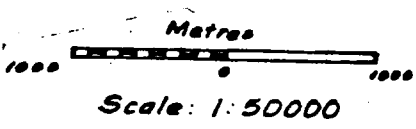
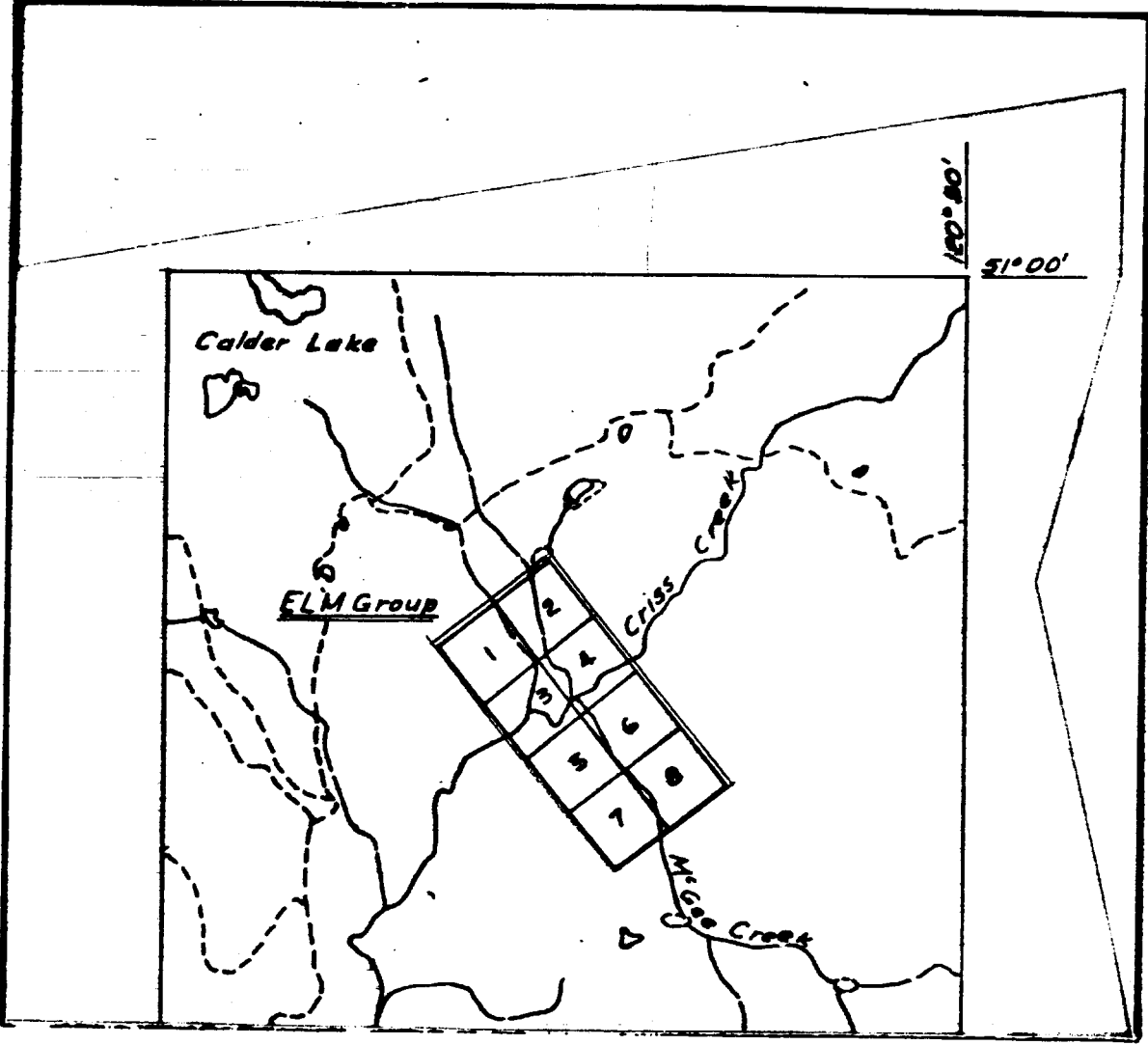


PLATE NO.2		
ELM MINERAL CLAIMS 921/15W		
CLAIM MAP		
J.D.M	1:50000	85-04-22