

Regional Geology

The Pacific Claims ~~are~~ #s 2, 3 and 4 are centered around Ejas Lake in the Mahood Lake area of the Kamloops Mining District. A north east trending thrust fault lies to the east just off of the property.

The rocks in this area belong to the Fennel Formation of the Slide Mountain Group. They are Mississippian or later in approximate age and consist of ~~gneiss, quartzite, and mica schist~~ ~~gneiss, quartzite, and mica schist~~ More recent intrusions of Intermediate character, ~~and have~~ ~~schist~~ similar to the Rait and Baldy Batholiths of the Cretaceous intrude the older Sediments and Volcanics.

LOWER CRETACEOUS

JACKASS MOUNTAIN GROUP

20 Greywacke, shale, siltstone; minor arkose and lenses of pebble conglomerate

JURASSIC (?)

19 Shale, grit

18 Chert pebble conglomerate, greywacke

MIDDLE JURASSIC (?)

17 Biotite granite, quartz diorite, hornblende granodiorite (phase of 14)

JURASSIC

LOWER AND (?) MIDDLE JURASSIC

16 Porphyritic augite andesite breccia, conglomerate and flows; minor andesite, arenite, flows; 16a, isolated areas of augite and hornblende andesite (may be all or partly intrusive)

LOWER JURASSIC

15 Andesitic arenite, siltstone, grit and breccia; local granite bearing conglomerate; minor argillite and flows; includes minor amounts of 12, 11, and (?) 2

TRIASSIC OR JURASSIC

UPPER TRIASSIC OR LOWER JURASSIC

14 Hornblende-biotite quartz diorite and granodiorite, minor hornblende diorite, monzonite, gabbro, hornblendite

13 13a, fine- to medium-grained, pink to brown and grey syenite and monzonite; 13b, medium-grained, creamy-buff, locally coarsely porphyritic (K-feldspar) syenite and monzonite (13b may be equivalent in age to 14 or 17)

TRIASSIC

UPPER TRIASSIC

NICOLA GROUP (11 and 12)

12 Augite andesite flows and breccia, tuff, argillite, greywacke, grey limestone; includes minor 2, 10, and 11

11 Black shale, argillite, phyllite, siltstone, black limestone

TRIASSIC AND/OR EARLIER

UPPER TRIASSIC AND/OR EARLIER

10 FENNEL FORMATION: pillow lavas, greenstone, foliated greenstone, greenschist, argillite, chert, minor amphibolite, limestone, breccia

9 9a, quartzite, quartz-phyllite, quartz-granule conglomerate, argillite, phyllite, calcareous phyllite, marble, greenschist, greenstone; 9b, dark grey and black argillite, siltstone, phyllite, minor limestone

8 Serpentinite and serpentinitized peridotite

PERMIAN

UPPER PERMIAN

CACHE CREEK GROUP (IN PART)

7 MARBLE CANYON FORMATION: massive limestone, limestone breccia and chert; minor argillite, tuff, andesitic and basaltic flows

UPPER (?) PERMIAN

CACHE CREEK GROUP (IN PART)

6 Argillite, basaltic flows, tuff, chert, limestone

LOWER PERMIAN

CACHE CREEK GROUP (IN PART)

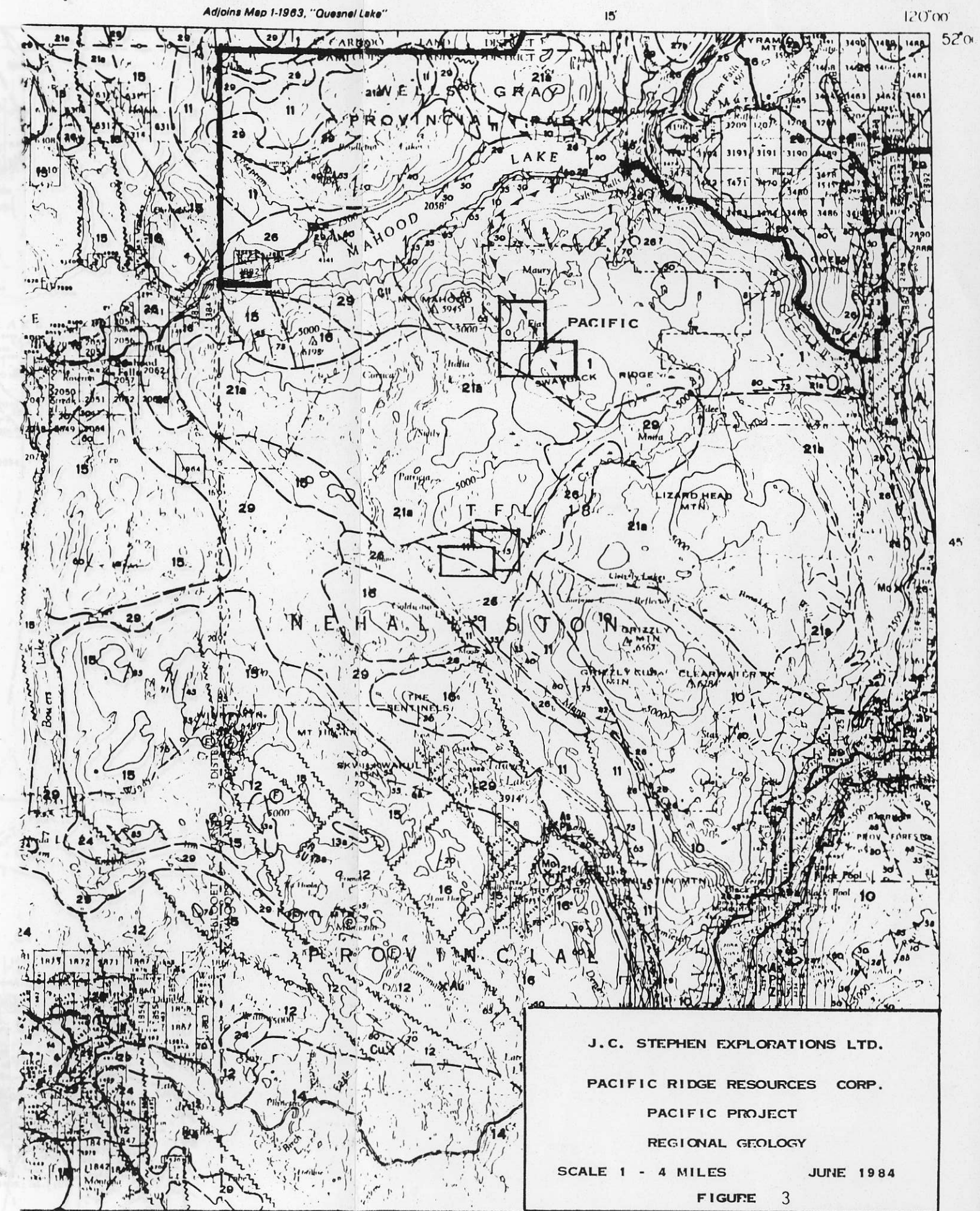
5 Basic volcanic flows, tuff, ribbon chert, limestone, argillite (may be equivalent in part to 6)

PERMIAN (?)

PAVILION GROUP (3, 4)

MESOZOIC

PALEOZOIC



Local Geology

Geological Mapping was carried out Reconnaissance fashion across the property. Detail was hindered by the thickness of glacial overburden which limited outcrop in most areas. ~~Several~~ Flot was sampled in many places as being indicative of local bed rock.

Forty-six Rock Geochem samples were taken concentrating on the most highly altered and mineralized outcrop and Flot that could be found. Samples were sent to Chemex LABS FOR ANALYSIS.

most of the contacts between rock units are either not exposed or are masked by metamorphism and the development of secondary foliation.

The Cretaceous aged intrusions are relatively undeformed and intrude across the major foliation of the area.

Phyllitization, predominantly of the Quartzite, was often complexly crosscutting making accurate strikes and dips difficult to obtain.

Mineralization

Mineralization in the form of Pyrite, often within or associated with Quartz stringers and veins, occurs mainly within the Quartzite and especially the phyllitized Quartzite zones. Bull Quartz veins up to a foot in size wind randomly through the outcrop. Pyrite is usually confined to the edges of the vein at the contact with the host rock and generally occurs as finely disseminated cubes.

Disseminated Pyrite also occurs as fine cubes within the Young intermediate Intrusive as well as the older Greenstone flows. ~~No silver~~

No significant ASSAY results were connected to these mineralized units.

2) Rock Types (cont.)

(5) Fine Grained Diorite:
DARK Fine grained massive ^{Intermediate Intrusive} ~~diabase~~. Visible development of tabular plagioclase and hornblende crystals. Virtually structureless.

d) Older Greenstone flows
Grey-green ^{or black} DARK Fine grained massive intrusive, chloritized giving a greenish tinge. ~~Dark massive~~ Disseminated cubic pyrite. MAY HAVE originally been an ~~intrusive~~ over Diorite but subsequent metamorphism has altered it significantly.

(2) Tuff and Altered Tuff.
Grey-green to black Fine grained with slaty cleavage. Chloritization occurs to varying degrees. Cleavage occurs parallel to light and dark fine bedding. Muscovite green visible along cleavage planes.

(F) Hornblendite
Dark green to black Ultramafic intrusive. Massive structure, coarse grained with hornblende crystals over a centimeter in size.

H. Altered Granodiorite
Medium grained, porphyroblastic, with large glassy quartz augens. ^{and feldspar phenocrysts.} Ground mass tends to be darker and fine grained. Original texture probably altered by thermo-dynamic metamorphism. ~~massive~~ slightly sheared.

ROCK TYPES.

④ Quartzite: Usually patchy, grey, impure and well indurated. Usually massive but often sheared to varying degrees. Phyllitization is common. Most outcrops display some quartz veining up to a foot in size. Quartz stringers are ubiquitous in outcrop. Glassy augens of quartz stand out in some specimens. Cubic pyrite and associated iron stain is common. Muscovite sheen and some hematite stain present in sheared specimens.

③ Silt Stones and Shales.

Dark grey ~~to black~~ fine grained and often highly foliated. Tend to be rich in carbonate. Phyllitized zones become highly micaceous. Quartz veining up to several inches in size occurs in the more altered areas. Cleavage tends to be parallel to bedding.

VOLCANICS

a) Young Intermediate Intrusive

Light greenish grey, ^{fine} fresh, extrusive. Amygdales, fine disseminated pyrite and small amounts of calcite present. Small black blades of hornblende. Massive structureless.

b) Quartz Feldspar Biotite Porphyry

White to light grey porphyry. Quartz appears as distinct glassy augens. Feldspars and Biotite tend to be smaller and more angular. Slight chloritization of the Biotite.

3)

Rock Types (cont.)

F) Chloritic Volcanics

Dark green to grey, massive highly chloritized
fine grained volcanic. Disseminated pyrite and small
stringers of quartz. Some shearing has resulted in
muscovite along foliation

Rock Units

— out crop numbers —

<p><u>Cretaceous</u> RAFT AND BAND Botholiths And similar Granitic Rocks</p>	8	1	Young Intermediate Intrusive	21
	7	2	Quartz Feldspar Biotite Porphyry	15
	6	3	Fine Grained Diorite + Altered Diorite	6, 8, 9, 35, 37, 39

<p>Mississippian or Later Fennell Formation</p>	2	5	4	Tuff + Altered Tuff	1, 2, 7
	4	5	2	Quartzite	3, 11, 14, 16, 17
	4c	5b	6	Phyllitized Quartzite	19, 20
	3	6	7	Altered Siltstones + Shales	12, 13, 18
	2	7	8	Chloritic Volcanics	4, 5, 45, 46
	1	8	9	Older Greenstone Flows	22

1a Quartzite 3, 11, 14, 16, 17 24, 25, 26, 28, 29, 30

1b Phyllitized Quartzite 19, 20 36

2 Altered Siltstones and Shales 12, 13, 18

~~Volcanics~~

3a Young Intermediate Intrusive 21 ✓

3b Qz feldspar Biotite Porphyry 15 ✓

3c Fine Grained Diorite and Altered Diorite 6, 8, 9, 35, 37, 38, 27, 39

3d Older Greenstone Flows 22

3e Tuff + Altered Tuff 1, 2, 7 32, 33

3f Chloritic Volcanics 4, 5, 45, 46, 23, 34, 40, 44

3g Hornblendite 42 X

3h Altered Granitic Diorite 31 X

3i Ball Quartz + Feldspar Veins ^{Quartz} _{Peridotite} 10, 43 X

41? ✓

— M.K. Types
Mineralization
Structure
Alteration

REGIONAL GEOLOGY FIGURE 3.



Most of the contacts are either not exposed or are masked by metamorphism and the development of secondary foliation.

STRUCTURE

Thillitization was often complexly crenulated so strikes and dips were difficult to obtain.