

# ATLAS EXPLORATIONS LIMITED

(Ross River, Yukon Territory)

011776

## HESS PROJECT

Geological Map

### VOLE CREEK AREA

N.T.S. 105-N-5, 6, 11 12 & 14 (partly)

#### LEGEND

##### CENOZOIC

###### Paleocene

- 17a Brown and red, limonite cemented conglomerate, plant remains, slide materials and glacial debris.
- 17b Rusty calcareous seepages; varying amounts of enclosed clastic material (travertine or calcareous tufa).

##### MESOZOIC

###### Cretaceous (?)

- 18 "Diabase" dikes: fine to medium grained, dark green, massive to slightly foliated plagioclase-rich rocks.
- 15a Grandiorite; medium-grained granitoid plutonic rocks, varying amounts of biotite and hornblende (minor augite).
- 15b Quartz-monzonite; medium to coarse grained plutonic rocks; biotite and minor hornblende.
- 15c Orthoclase porphyry; medium to coarse grained plutonic rocks; granitic to syenitic.
- 15d Grey augite-hornblende diorite; fine to medium-grained, plutonic and dike equivalents.
- 15e Quartz-muscovite porphyry; "Aplite" dike rocks.

##### PALEOZOIC

###### Devonian-Mississippian (?)

- 9a Chert: finely laminated, green and white chert and associated slates, green chert (Upper Devonian?).
- 9g Red and green slates
- 9f Grey bedded chert (Upper Devonian?)
- 9e Alkaline basalt (?)
- 9d Chert-pebble conglomerate, minor quartzite (Upper Devonian?)
- 9c Phyllite, grey to green, indurated slates.
- 9b Calcareous rocks; limestone, crystalline and argillaceous; calcareous argillite, chert-pebble limestone, minor dolomite.
- 9a Carbonaceous rocks; graphitic slates; black chert; graphitic argillite; poorly sorted feldspathic quartzites (graphitic greywacke) (Mississippian (?) in part; clastic unit).

###### Ordovician-Silurian (?) (Emerald Lake Area)

- 2c Varicoloured slates
- 2b Black, grey or green chert
- 2a Grey argillite (cherty argillite) siltstone, minor quartzite horizons.

##### PRECAMBRIAN

###### Proterozoic

- 2e Chloritic schists, biotite quartzite, phyllite with interbeds of buff sandstone and quartzite.
- 2d Conglomerate; massive, quartz pebbles.

###### "Yukon Group"

- 2c Phyllite and sericitic schists; occasionally gritty.
- 2b Limestone; finely crystalline, banded to massive; minor quartz-pebble limestone.
- 2a Quartzite, feldspathic quartzite, minor sericitic schist, phyllite and slate.

Note: Alphabetical designations ascribed to the various rock-units have no time or sequential significance.

#### MINERAL OCCURRENCES REFERENCE

Metallic		Non-metallic	
Arsenopyrite	Apy	Apatite	Ap
Cassiterite	Cas	Barite	Bar
Chalcopyrite	Cpy	Calcite	Cal
Galena	Gal	Chlorite	Chl
Malachite	Mal	Corundum	Cor
Sorite	Sor	Pyrite	Py
Tetrahedrite	Tet	Quartz	Qz
Sphalerite	Sph	Scheelite	Sch
Pyrite	Py	Scorodite	Scor
Siderite	Sid	Siderite	Sid
Molybdenite	Moly	Tourmaline	Tour
		Vesuvianite	Ves

#### LIST OF SYMBOLS

- Glacial striae
- Esker
- Small bedrock outcrop
- Area of bedrock outcrop
- Bedding, top unknown; (inclined, vertical)
- Bedding, top indicated by arrow; (inclined, vertical, overturned)
- Bedding, top (arrow) from grain gradation (inclined, vertical, overturned)
- Schistosity; (horizontal, inclined, vertical)
- Lineation with plunge
- Geological boundary, observed
- Geological boundary, position interpreted
- Fault; (observed, assumed) spot indicates downthrow side, arrows indicate horizontal movement
- Lineament
- Drag-fold with plunge
- Anticline, syncline with plunge
- Magnetic attraction
- Attitude of slaty cleavage; (horizontal, inclined, vertical)
- Gossan and rust seepage
- Zone of rusty alteration

Geology By: M. E. Coates & Assistants 1968

