



ATLAS EXPLORATIONS LIMITED

(Ross River, Yukon Territory)

HESS PROJECT

Geological Map
of

SWAN LAKE AREA

011777

N.T.S. 105-N-7, 8, 9, 10 & 15 (partly)

- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100
- 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).
- Unconformity -----
- MESOZOIC**
- Cretaceous (?)**
- 18a "Diabase" dikes: fine to medium grained, dark green, massive to slightly foliated plagioclase-rich rocks.
 - 15a Granodiorite: 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.
- Intrusive Contact -----
- PALEOZOIC**
- Devonian-Mississippian (?)**
- 10a Chert: finely laminated, green and white chert and associated slates, green chert (Upper Devonian?).
 - 3a Red and green slates
 - 10f Grey bedded chert (Upper Devonian?)
 - 10e Alkalic basalt (?)
 - 7 Chert-pebble conglomerate, minor quartzite (Upper Devonian?)
 - 10c Phyllite, grey to green, indurated slates.
 - 10b Calcareous rocks: limestone, crystalline and argillaceous; calcareous argillite, chert-pebble limestone minor dolomite.
 - 10a Carbonaceous rocks: graphitic slates; black chert; graphitic argillite; poorly sorted feldspathic quartzite (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 hornfels.
- Unconformity or Fault Contact -----
- PRECAMBRIAN**
- Proterozoic**
- 2e Chloritic schists, biotite quartzite, phyllite with interbeds of buff sandstone and quartzite.
 - 2d Conglomerate: massive, quartz pebbles.
- "Yukon Group"**
- "Bostock"**
- 2b Limestones: finely crystalline, banded to massive; minor quartz-pebble limestone.
 - 2a Quartzite, feldspathic quartzite, minor sefecite schist, phyllite and slate.
- Note: Alphabetical designations ascribed to the various rock-units have no time or sequential significance.

MINERAL OCCURRENCES REFERENCE (By Mineral)

Metallic	Non-metallic
Arsenopyrite ----- Apy	Apatite ----- Ap
Cassiterite ----- Cass	Barite ----- Bar
Chalcopyrite ----- Cpy	Calcite ----- Cal
Galena ----- Gal	Chlorite ----- Chl
Malachite ----- Mal	Corundum ----- Cor
Serpentine ----- Ser	Epidote ----- Epi
Tetrahedrite ----- Tet	Quartz ----- Qtz
Sphalerite ----- Sph	Schistite ----- Sch
Pyrite ----- Py	Scorodite ----- Scor
Pyrrhotite ----- Ppy	Siderite ----- Sid
Molybdenite ----- Moly	Tourmaline ----- Tour
	Vesuvianite ----- Ves

(By Element)

Cobalt ----- Co
Copper ----- Cu
Gold ----- Au
Lead ----- Pb
Molybdenum ----- Mo
Nickel ----- Ni
Silver ----- Ag
Tin ----- Sn
Tungsten ----- W
Zinc ----- Zn

- 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)
 - Lamination 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

SCALE IN MILES

