

SYMBOLS

Limit of outcrop¹
 Quaternary unit boundary
 Field station
 Geologic contact (approximate, assumed, inferred)
 Unconformity (approximate, inferred)
 Fault (defined, approximate, assumed)
 Bedding
 Flow layering
 Foliation
 Fossil sites - indeterminate fauna
 - collection site & GSC catalogue number
 *Age determination site (Age in Ma, station number)
 Bedrock assay sample site²
 Till geochemical sample site²
 Lake sediment geochemical sample site²
 MINFILE location
 New mineral occurrence
 ABBREVIATIONS: quartz vein
 skarn
 * Age determinations on Eocene country rocks at the Wolf deposit are from Andrew (1988). Six new dates from volcanic and intrusive rocks are in progress.
¹ Also includes discontinuous surficial sediment cover.
² Till and lake sediment geochemical results will be released at a later date.

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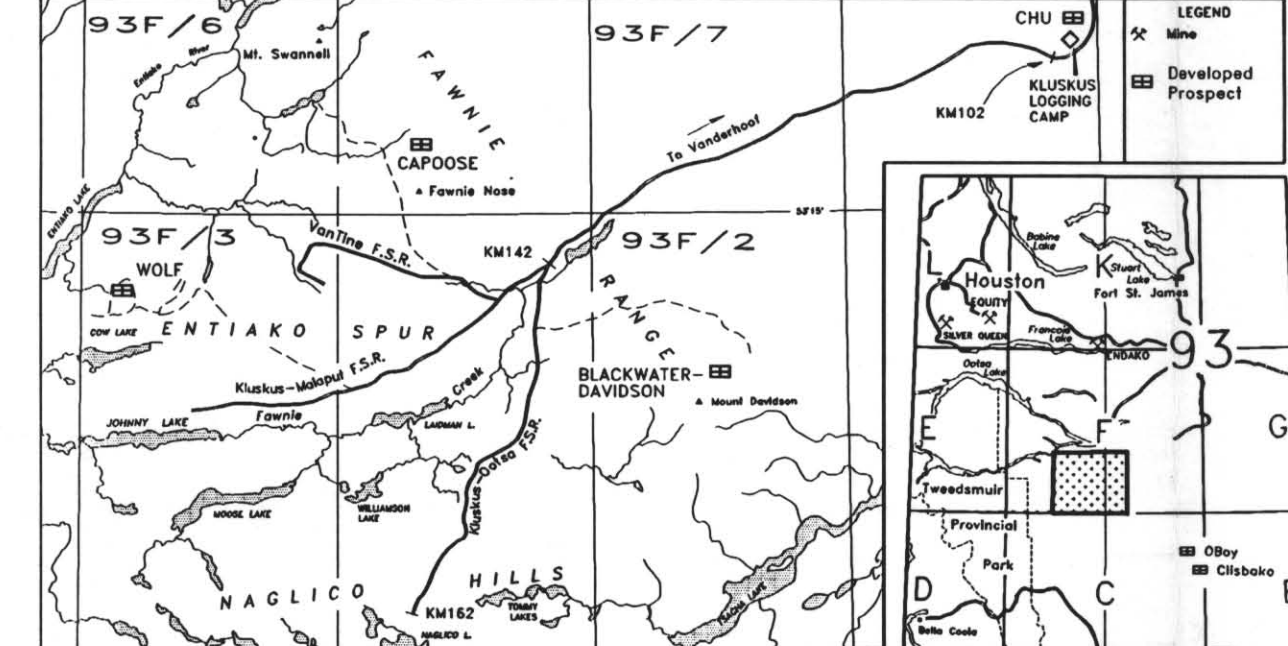
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Assay Results

All values are in ppm except Au which is in ppb.

Field No.	UTM East/North	Au	Ag	Ba	As	Sb	Mn	Cu	Pb	Zn	Sr
LDI 6-1A	342132/5890824	1	0.2	60	<2	7	107	15	41	73	
LDI 6-1B	342132/5890824	1	0.3	47	<2	9	119	<2	35	56	
LDI 6-2	342110/5891022	1	0.1	33	<2	5	101	5	20	59	
LDI 8-5	351768/5893062	1	0.1	54	2	5	1	10	3	9	5
LDI 8-6	351149/5893484	4	0.7	76	<2	5	1	105	39	5	
LDI 12-3	353926/5895233	6	0.3	18	4	3	36	80	787	29	
LDI 26-4	365646/5877296	20	1.1	259	<2	3	<1	13	7	51	12
LDI 27-1A	363984/587260	2	0.2	32	9	3	<1	5	8	44	6
LDI 27-1B	363984/587260	461	12.1	25	16	5	1	14	17	27	4
LDI 27-1C	363984/587260	3740	2.0	81	30	3	<1	27	156	125	6
LDI 27-1D	363984/587260	2935	1.4	82	30	<1	2	28	164	128	6
LDI 27-1E	363984/587260	52	0.4	87	17	3	<1	9	13	34	6
LDI 27-1F	363750/5876700	3342	34.8	31	8	7	<1	25	56	22	31
LDI 27-1G	363750/5876700	2716	34.0	30	5	6	1	43	126	19	13
LDI 27-1H	363750/5876700	660	26.3	46	13	3	<1	7	6	17	5
LDI 27-1I	363750/5876700	976	11.2	87	30	2	1	9	10	15	<2
LDI 27-1J	363750/5876700	952	11.6	91	31	4	1	10	13	16	14
LDI 27-1K	363755/5876725	2449	41.8	54	3	2	<1	3	7	7	16
LDI 31-1	343250/5880855	2	0.2	87	4	<2	1	9	6	62	27
IWE 3-5	348805/5892628	101	6.0	14	12730	79	14	186	321	675	6
IWE 8-1A	358470/5893455	2	0.2	1326	7	2	3	1	92	120	23
IWE 8-1B	358470/5893455	6	0.1	24	10	<2	<1	121	2	51	169
IWE 8-1C	358470/5893455	1	0.3	89	2	4	2	1	90	55	7
IWE 31-1	358370/5893455	3	0.1	426	<2	3	2	3	13	22	11
LDI 22-4	358470/5893455	2	0.2	22	9	<2	<1	4	<2	77	52
IWE 31-5	358500/5893120	1	0.1	130	6	4	1	9	6	16	9
IWE 25-2	363200/5897660	29	21.3	186	<2	6	6202	12	294	140	
TGI 256	343500/5877750	1	<0.1	11	<2	<2	<1	4	13	3	4

Analytical method: ICP-500 sample is digested with 3 ml 3:1:2 HCL-HNO3-H2O at 95 degrees Celsius for one hour and is diluted to 10 ml with water. Au analysis by FA/ICP from 30 g sample.



BCA
 Province of British Columbia
 Ministry of Energy, Mines and Petroleum Resources

Geological Survey Branch
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 (Sheet 1 of 1)

BEDROCK AND SURFICIAL GEOLOGY OF THE FAWNIE CREEK MAP AREA

NTS 93 F/3
 By Larry J. Diakow, Ian C.L. Webster, Victor M. Levson and Timothy R. Giles

Scale 1:50 000

LEGEND
 SURFICIAL SEDIMENTS

- QUATERNARY**
- F** Fluvial sand, pebble gravel and silt and organic deposits; sediments typically stratified and moderately well sorted; shallow water tables common; includes floodplain, terrace, delta and alluvial fan deposits; organics include peat bog, swamp, and marsh deposits. Unit locally includes glaciofluvial, glaciolacustrine, moraine or colluvial deposits too small to be mapped individually.
 - L** LATE PLEISTOCENE
 Glaciolacustrine sand, silt or clay; sediments are well sorted, laminated or thinly bedded and contain ice-rafted stones, normal faults and slump structures; locally kettle; often overlain by organics.
 - G** Glaciolacustrine pebbles to boulder gravel and sand; poorly to well sorted and stratified; often interbedded with glacial debris flow deposits; includes kettle outwash, raised deltas, eskers, kame terraces; associated with moraine deposits in hummocky terrain and fluvial or organic deposits in valleys.
 - M** Moraine diamict; dominantly basal tills and glacially-derived debris flow deposits; unsorted to very poorly sorted, massive or crudely stratified and compact; diamict matrix sandy to silty clay; clasts up to boulder size; flutings and crease-and-sail features common; deposits thin (<1 m thick) on steep upper slopes and thicker on lower slopes; commonly mantled by thin colluvial or glaciofluvial deposits; locally includes areas of exposed rock or thin colluvial sediments.

- SEDIMENTARY AND VOLCANIC ROCKS**
- TERTIARY**
- HOLCENE**
- CV** Basalt flows; black, dense andesitic and vesicular textures predominate; weather light brown; olivine-bearing, some flows contain scarce plagioclase laths up to 1.5 cm long.
- MIOCENE AND PLEOCENE**
- CHILCOTE GROUP**
- O3** Lapilli tuff characterized by 20% quartz, and apyrite and porphyritic lithic fragments.
 - O2** Andesite flows; dark green with a purplish tint; crudely bedded, porphyritic and amygdaloidal textures with plagioclase up to 6 mm long, and amygdaloids (up to 5 mm in diameter) filled with chlorite and opalescent silice.
 - O1** Rhyolite flows; off-white and mauve weathered; massive with minor flow breccia; laminated and spherulitic apyrite to sparsely porphyritic with 3% plagioclase and quartz phenocrysts.

- OUTLIER TO THE NORTH AND SOUTH OF COW LAKE**
- Ov** Undivided rhyolite extrusive and intrusive rocks; Lava flows; typically white and porphyritic with 7% orthoclase and 3% quartz; flow laminated and spherulitic; interlayered quartz and orthoclase-bearing tuffs and lesser breccia; subvolcanic porphyritic sills and dikes containing diagnostic coarse-grained orthoclase and subvolcanic quartz phenocrysts; minor tuffaceous siltstone.
 - Om** Dacite flows; coarse-grained feldspar and minor quartz, biotite and hornblende phenocrysts in a flow-laminated groundmass.
 - Oc** Basal conglomerate dominated by cobbles and boulders of hornblende-biotite quartz monzonite; probable provenance is the Capose batholith. Solitary exposure southeast of Entiaoko Lake.

- MIDDLE JURASSIC HAZELTON GROUP**
- NAGLICO FORMATION (EARLY BAJOCIAN TO CALLOVIAN)**
- Na2** Sandstone and siltstone containing distal quartz; grey-green, medium to thickly bedded; polymictic orthoconglomerate interbeds typically <10 cm thick, composed of black and pale green mudstone and, minor, light grey chert pebbles. Poor exposures west of Chipmunk Lake.
 - Na1** Volcanic sandstone, siltstone and conglomerate characterized by abundant plagioclase grains and volcanic lithic clasts; abundant fossils; local gradational contact with banded, white tuff and black tuffaceous siltstone and mudstone containing calcareous concretions; rare limestone. Best exposed east of Fawnie Creek, adjacent to the Klaskan-Oxeta Forestry Service Road.
 - Nb** Basalt and lesser andesite flows containing diagnostic vitreous augite phenocrysts; typically dark green and in places purplish; textural varieties include fine-grained "crowded" to coarse-grained porphyritic and less commonly amygdaloid or massive aphyric varieties; epidote-quartz-calcite are widespread in dikes and veins. These flows are the most widespread and diagnostic unit of the Naglico formation, underlying the Entiaoko Spur and Naglico Hills.
 - Nd** SUBVOLCANIC ROCK UNITS INTERLAYERED WITH FLOWS OF UNIT Nb
 Dacite tuffs characterized by off-white, felsic (?) or blackish (?) fragments in a light green matrix; scarce welded ash-flow tuff; dacite flows sometimes contain sparse quartz and rarely, vitreous biotite; generally narrow and porphyritic; rare flow laminated and massive rhyolite. Best exposed in the Naglico Hills.
 - Na** Andesitic lapilli and finer tuffs, minor pyroclastic breccia, minor debris flows, and rare hyaloclastite; dark green and grey-green; pyroclasts resemble porphyritic flows of unit Nb. Mainly exposed in the eastern part of the Entiaoko Spur and Fawnie Range.
 - Na** Quartz-bearing lapilli and finer tuffs, rare accretionary lapilli tuff, local volcanic conglomerate, mudstone and green, crudely layered to well layered.
 - Nr** Rhyolitic lithic tuffs, variably welded ash-flow tuff, and laminated flows containing diagnostic reworked quartz; off-white and massive. Best exposed at reference section A, and also widespread in the eastern part of the Naglico Hills.
 - Nra** Volcanic sandstone and siltstone derived from unit Nr, medium to thickly bedded.

- INTRUSIVE ROCKS**
- TERTIARY**
- f** Felsite sills and dikes; greyish green; fine grained equigranular, diagnostic vitreous biotite (5%), and sparse plagioclase phenocrysts; weather to porcellanous fragments with conoidal fracture.
- LATE CRETACEOUS**
- qm** Capose batholith: quartz monzonite and granodiorite; pink; medium to coarse grained equigranular to locally porphyritic (ppm); variably chloritized hornblende-biotite (5% to 15%); numerous fine-grained dioritic xenoliths.
 - qp** Quartz porphyry dikes and plugs; pink; diagnostic coarse grained quartz phenocrysts (15%), and chloritized biotite-hornblende (<5%).
 - qd** Quartz diorite; medium grained equigranular; fresh hornblende->biotite (about 30% combined); xenoliths include pyroxene porphyry and fine-grained diorite.
- MIDDLE JURASSIC**
- sp** Augite porphyry plugs, dikes and sills; dark green; diagnostic coarse-grained augite phenocrysts are supported by finer grained, randomly oriented plagioclase.

